# **Conceptualizing Frontline Employee Innovation**

by

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#### Abstract

Public sector organizations are increasingly focusing on their own employees as sources of and drivers for innovation, yet lack an understanding of what innovation means from the perspective of employees themselves. To better understand and thus support employee innovation, this phenomenographical study explored the qualitatively different ways that frontline municipal government employees conceptualized employee innovation. Theoretically, the study was guided by sociocultural concepts of workplace learning that framed employee innovation as a function of everyday learning at work. Results of the study found that, from a frontline municipal government employee perspective, there are four varying ways of conceptualizing what employee innovation is: Thinking Small; Making Life Easier; Having High Expectations; and Going Above and Beyond. There are also four different ways of conceptualizing how employee innovation happens: by Working the System; Fostering Empathy and Collaboration; Making Do; and Connecting Dots. Three main conclusions are drawn from relating these employee conceptualizations to existing organizational development and workplace learning literature. First, the findings complicate conventional understandings of employee innovation. Second, the results affirm and build on ideas of employee innovation as a process of informal and situated workplace learning. Third, the study reinforces the need to intentionally and strategically support employee innovation in the workplace through expansive learning opportunities and initiatives.

# Preface

This thesis is an original work by Alexis Lockwood. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Employee Conceptions of Innovation," No. Pro00066832, December 9, 2016.

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## **Chapter One: Introduction**

## Overview

My original interest in the phenomenon of employee innovation came out of my personal experience working within a municipal government setting. As an adult educator and member of a new corporate innovation office, I helped develop and implement strategies aimed at supporting and growing an organization-wide culture of innovation. Our team drew on private sector concepts and the experiences of other municipal governments to create internal communication plans and design formal employee innovation training programs. Yet, throughout, I was struck by the top-down nature of this initiative. Drawing from sociocultural understandings of the workplace, I began to wonder what it meant to be innovative in different corners of the organization, from the perspective of frontline employees themselves. Over time, my workplace evolved into the site for this phenomenographic study of employee innovation.

The six chapters of this thesis work together to address the question of how frontline municipal government employees conceptualize employee innovation. In this introductory chapter, I explain the rationale and purpose of the study, including its significance, unique contribution, and delimitations. In particular, I briefly introduce sociocultural workplace learning concepts as my guiding framework, and outline the precise research question and accompanying definitions that shape this endeavor. In Chapter Two, I critically review the literature related to this study, including details of my research paradigm, theoretical framework, and methodology of phenomenography. Chapter Three dives into my qualitative research design, methods, and analytical process, including measures for assessing phenomenographic results. Chapter Four presents my results in a concise phenomenographic outcome space, accompanied by detailed descriptions using the words of interview participants. These results lead into a discussion of the

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implications and limitations of my findings in Chapter Five. Finally, Chapter Six concludes with final reflections and recommendations for future study.

## **Statement of the Problem**

Around the world, organizations of every shape and size have declared innovation an essential element of growth, sustainability, and competitiveness (Aasen, Amundsen, Gressgard, & Hansen, 2012; S. Kim & Yoon, 2015). Innovation encompasses a wide range of strategies and actions across sectors, at macro, meso, and micro levels (Anderson, Potočnik, & Zhou, 2014); thus, we see countries pursuing national innovation strategies to advance scientific research (Melkas & Harmaakorpi, 2012); private companies investing in new technology and product development (Organisation for Economic Co-operation and Development, 2005); and non-profit organizations creating more client-centered services using collaborative design processes (Luchs, Swan, & Griffin, 2015). Although there are dozens of ways of defining innovation, most stipulate that in order for a process, service, product, or method to be considered innovative, it must be new, useful, and implemented (Wegener & Tanggaard, 2013; Wihlman, Hoppe, Wihlman, & Sandmark, 2014).

The public sector has not been immune to this innovation imperative. Since the 1980s, there have been increasing efforts to "apply and operationalize" (Wegener & Tanggaard, 2013, p. 82) the ethos of innovation in the public sector. The tenets of New Public Management introduced "market-based mechanisms" (European Commission, 2013, p. 12) to the public sector, in which business-derived performance measures and outcomes were adopted in order to achieve "economy, efficiency, and effectiveness" (Lonti & Verma, 2003, p. 287). The public sector has thus taken up innovation concepts in order to be able to maintain service levels in the face of shrinking budgets, respond to public demands for efficiency and fiscal accountability, and meet emerging citizen needs (European Commission, 2013; Fernandez & Moldogaziev, 2013; S. Kim & Yoon, 2015; Lonti & Verma, 2003).

A challenge with the drive for public sector innovation is that innovation concepts and strategies developed in the private sector cannot simply be transferred to public sector contexts (Arundel & Hollanders, 2011; Wihlman et al., 2014). The public sector has a unique history and role in society, with different drivers, barriers, and contextual factors impacting the nature of innovation (Arundel & Hollanders, 2011; European Commission, 2013). Unlike private firms, public organizations are guided by a politically elected leadership with "high transparency requirements" (Wihlman et al., 2014, p. 163), which must account for multiple functions, diverse stakeholders, competing internal goals, and limited resources that cannot be easily increased (Christensen, Lægreid, Roness, & Rovik, 2007; Wihlman et al., 2014). Accordingly, as Hennala, Konsti-Laakso, and Harmaakorpi (2012) note, public sector innovation may more often involve "social innovations and service innovations rather than technology or product innovations" (p. 256), aimed at providing value to citizens.

The public sector is also purported to lack basic entrepreneurial ingredients for fostering innovation, such as tolerance for risk and failure, high employee autonomy, flexibility and responsiveness to user concerns, and the ability to quickly test and revise prototypes (Commonwealth of Australia, 2010; S. E. Kim & Chang, 2009; S. Kim & Yoon, 2015; Munro, 2015). However, as the European Commission (2013) notes, "There has been little evidence to support the common belief that public sector organizations are less innovative than private businesses" (p. 12). In order to accommodate these unique influences and assumptions, the public sector requires its own conceptualizations, strategies, and frameworks for innovation (Arundel & Hollanders, 2011; Wihlman et al., 2014). With the spread of the innovation imperative, there has also arisen a relatively new focus on employees as an untapped yet "vital source of innovative ideas" (Fernandez & Pitts, 2011, p. 216). Until the 1980s, private industry firms looked primarily to dedicated research and development teams, emerging technologies, and customer feedback to generate new products and practices (Teglborg, Redien-Collot, Bonnafous-Boucher, & Viala, 2012). However, as knowledge became increasing associated with economic success in western economies (Guile, 2003), both private and public organizations began to focus on their employees as "innovation capital [or] innovation assets" (Kesting & Parm Ulhøi, 2010, p. 66). Through this human capital lens, employees from every level of an organization have the potential to provide unique insights, solutions, and creativity that can be strategically managed and diffused to meet organizational goals (Brandi & Hasse, 2012; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Kabir, 2012; Von Hippel, 2005).

This particular font of innovation has been variously termed employee-driven innovation (Kesting & Parm Ulhøi, 2010), practice-based innovation (Ellström, 2010), and workplace innovation (European Commission, 2014). Employees engaging in such innovation draw from their daily practices, tacit knowledge, and experiences, in order to solve problems and make changes in their workplaces (Brandi & Hasse, 2012; Ellström, 2010; Fernandez & Moldogaziev, 2013; Melkas & Harmaakorpi, 2012). These innovative efforts are largely made at an employee's initiative, and may or may not have management support or awareness (De Spiegelaere, Van Gyes, & Van Hootegem, 2014). In contrast to the strategic and budget-based lens of management-driven innovation (Ramstad, 2014), employee innovation happens "continuously and ordinarily as workers engage in their everyday work activities" (Billett, 2012, p. 104). This innovation necessarily involves processes of informal and practice-based learning

(Billett, 2012; Ellström, 2010; Lippke & Wegener, 2014), as employees make meaning of their daily experiences in relation to the people, values, relationships, and organizational context surrounding them (Cairns & Malloch, 2011; Magro, 2001).

Dozens of empirical studies, primarily in the field of organizational development, have examined the phenomenon of employee innovation. This has included looking at innovation in relation to employee motivation, systemic supports and barriers, organizational citizenship, workplace culture, and leadership styles, among others (see Anderson et al., 2014, for a recent meta-review). Despite their variety, these studies of employee innovation tend to share an "overreliance upon large-scale questionnaire designs" (Anderson et al., 2014, p. 1319). For example, of the 165 studies in Anderson et al.'s (2014) meta-review of innovation in organizations, only 10 were qualitative in design.

And whether qualitative or quantitative, a consistently noted gap in the study of employee innovation is empirical research that looks at individual employee perspectives of innovation (Aasen et al., 2012; Kesting & Parm Ulhøi, 2010; Slåtten & Mehmetoglu, 2011; Wihlman et al., 2014); this absence is particularly felt in the relatively under-studied realm of public sector innovation (European Commission, 2013; Fernandez & Pitts, 2011; S. Kim & Yoon, 2015; Lonti & Verma, 2003). This absence may relate, in part at least, to the fact that most studies of innovation rely on frameworks and concepts that have been static for 20 years or more; there exists, ironically, a need for new and potentially contrary theories and models in the study of innovation (Anderson et al., 2014).

Finally, across studies of all types, it tends to be taken for granted that employee innovation is an inherently positive aim (Amabile & Pratt, 2016; Anderson et al., 2014), with studies highlighting benefits such as improved citizen satisfaction, faster delivery of services, improved employee satisfaction, and reduced costs of service provision (Arundel & Hollanders, 2011; Fernandez & Pitts, 2011). However, a blind promotion of employee innovation overlooks potentially negative outcomes of innovation (Arundel & Hollanders, 2011), and washes over "the different opportunities and capabilities of different individuals to flourish in such a regime" (Fenwick, 2001, p. 12). Thus, a rounded exploration of employee innovation also requires paying attention to the power and agency of individual employees as they simultaneously maintain and transform organizations in multiple ways (Fenwick, Edwards, & Sawchuk, 2011).

#### **Unique Contribution**

In sum, employees in the public sector are expected to be a source of organizational innovation, yet little is known about how these employees conceptualize employee innovation. In order to address this gap in the literature, my qualitative, phenomenographical research study explores the qualitatively different ways that frontline municipal government employees conceptualize employee innovation. Rather than working from established definitions of employee innovation, I instead use this exploratory approach to generate new understandings of employee innovation based on the voices of employees themselves. To theoretically guide this study, I draw from sociocultural theories of workplace learning that emphasize the importance of localized context and frame employee innovation as a function of everyday learning at work.

# **Study Significance**

Drawing from the "sociocultural premise that learners and social organizations exist in mutually constitutive relation to one another" (Beach, 1999, p. 106), I specifically relate this study of employee innovation to the unique context of public sector organizations. By better understanding what employee innovation means to frontline employees, public sector organizations will be able to better design, implement, and support effective employee

innovation strategies. Organizational strategy that reflects the unique perspectives and realities of employees has the potential for enhancing employee involvement in organizational problemsolving (Borins, 2001; Jensen, Johnson, Lorenz, & Lundvall, 2007); focusing formal and informal workplace learning activities (Billett, 2001a; Hasu, Honkaniemi, Saari, Mattelmäki, & Koponen, 2014); clarifying role and competency expectations (Høyrup, Bonnafous-Boucher, Hasse, Lotz, & Moller, 2012; Potočnik & Anderson, 2012); and increasing employee participation and engagement opportunities (Fuller & Unwin, 2006; Unsworth, 2003).

#### **Research Question and Definitions**

My precise phenomenographical research question for this study was: *What are the different ways that frontline municipal government employees conceptualize the phenomenon of employee innovation?* Within this question, several definitions are required.

*Frontline employees* are those employees in a municipal government setting that hold non-management and non-supervisory roles. They may work in a variety of settings, from corporate offices to out in the field, but they share the commonality that they do not have formal job-related responsibilities for supervising staff or setting strategic priorities. More detailed participant recruitment criteria are included in Chapter Three.

*Municipal government* is a type of public sector organization. In the Canadian context of this study, there are three main levels of government: federal, provincial/territorial, and municipal (Federation of Canadian Municipalities & International Centre for Municipal Development, 2007). Municipal governments have a "general mandate to plan, manage and maintain communities, infrastructure and land" (Federation of Canadian Municipalities & International Centre for Municipalities & International Centre for Municipalities and maintain communities, infrastructure and land" (Federation of Canadian Municipalities & International Centre for Municipal Development, 2007, p. 2). The municipal government studied here is responsible for serving a mid-sized Canadian city.

*Conceptualize* is a term specific to the methodology of phenomenography, and is further detailed within Chapter Three. In short, the way one conceptualizes a given phenomenon can be thought of as the way one understands it. Phenomenography leads me to use particular terminology, methods, and analytical processes throughout this study.

*Employee innovation* is broadly considered to be the everyday, practice-based ideas and efforts made by employees to solve problems and make changes in their workplaces (Billett, 2012; Brandi & Hasse, 2012; Ellström, 2010; Lippke & Wegener, 2014; Melkas & Harmaakorpi, 2012), with or without management support or knowledge (De Spiegelaere et al., 2014). Since employees draw from their daily practices, tacit knowledge, and experiences in order to introduce new or improved processes, services, or methods into their work (Anderson et al., 2014; European Commission, 2013; Fernandez & Moldogaziev, 2013), employee innovation is understood to be a function of employee learning that is largely situated, experiential, participatory, and informal (Billett, 2001a; Evans & Rainbird, 2007; Hager, 2011; Manuti, Pastore, Scardigno, Giancaspro, & Morciano, 2015). It is important to note, however, that this is a guiding theoretical framework rather than a firmly held definition, since this study is aimed at generating employee-derived conceptualizations of employee innovation.

### Delimitations

In addition to delineating the scope and purpose of this study, it is also important to clarify what I will not focus on. There are several notable delimitations to this study. First, when discussing employee innovation, I specifically exclude the related concept of creativity, which has its own distinct field of study (Amabile & Pratt, 2016).

Second, although I inquire into specific examples of employee innovation, I do not focus on the outputs, outcomes, or organizational impacts of employee innovation. Relatedly, I do not count frequency or attempt to categorize types of employee innovation (i.e. as process innovation, product innovation, and so on). Specific examples of employee innovation are instead used to draw out implicit conceptualizations of employee innovation.

Lastly, since I am working from the qualitative tradition, I do not propose testable hypotheses nor analyze relationships between antecedents, mediators, or moderators of employee innovation. As a result, I do not aim to make generalizable claims about essential practices to achieve particular organizational results. Rather, I use an exploratory approach, grounded in the voices and experiences of frontline employees themselves, to develop a localized and situated understanding of the phenomenon of employee innovation in the public sector.

## **Chapter Summary**

In this chapter, I introduced my personal connection to and rationale for my research interest in the phenomenon of employee innovation. I outlined how organizations, particularly in the public sector, are increasingly focusing on their own employees as sources of and drivers for innovation, yet lack an understanding of what innovation means from the perspective of employees themselves. My thesis addresses this gap in knowledge by using phenomenography to explore the qualitatively different ways that frontline municipal government employees conceptualize employee innovation. Informed by sociocultural workplace learning theory, I proposed that the results of this study would help public sector organizations better support and enable employee innovation activities and efforts. Finally, I closed the chapter with my precise research question, definitions, and a final comment on the delimitations of this study.

In the following chapter, I detail the interpretivist and sociocultural underpinnings of this research, including the workplace learning concepts that theoretically frame this study. I then examine the phenomenon of employee innovation through a critical review of literature, drawing

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from the interrelated fields of organizational development and workplace learning. To ensure this thesis is understood in relation to its guiding methodology, I close the chapter with a description of the specific aims, terms, and limits associated with phenomenography.

#### **Chapter Two: Related Literature**

## Overview

The previous chapter introduced my personal connection to and rationale for a phenomenographic study of how frontline municipal government employees conceptualize employee innovation, including the nature of the problem, my precise research question, definitions, and delimitations. The purpose of answering this research question of how frontline employees conceptualize employee innovation is to be able to help public sector organizations better support and enable employee innovation activities and efforts.

In this chapter, I describe and analyze the philosophy, theory, and literature underlying this exploration of employee innovation. First, I outline the interpretivist paradigm guiding my research design and aims. I then present the sociocultural workplace learning concepts that frame my approach to this research. Thereafter, the bulk of the chapter dives into a review of related literature, including dominant understandings of employee innovation, the unique nature of public sector innovation, and intersections of employee innovation and workplace learning. Finally, given its unique methodological features, I conclude with a review of the aims, terms, and limits within phenomenography.

#### **Research Paradigm**

This study is guided by the methodology of phenomenography. As a qualitative methodology, phenomenography seeks to describe and explore, rather than explain, the world around us (Akerlind, 2005a; Richardson, 1999). More fundamentally, phenomenography is part of an interpretivist tradition that ascribes to the "existence of not just one reality, but of multiple realities that are constructed and can be altered by the knower. Reality is not something 'out there', but rather something that is local and specifically constructed" (Laverty, 2008, p. 13). By

focusing on individuals' descriptions and perceptions, phenomenography operates from a second-order, non-dualistic ontology in which "the only world that we can comprehend is the world as we experience it" (Holiday, 2016, p. 70).

Drawing from this interpretivist lens, phenomenography holds that we continuously reconstruct reality through our social interactions (Lamb, Sandberg, & Liesch, 2011). Phenomenographical categories thus reflect two-way relations between individuals and their worlds (Trigwell & Richardson, 2003), as well as relations between an interviewee and researcher, and a researcher and their own world (Marton, 1996). From this relational view, it follows that phenomenographical research results are not stable conclusions, but are instead snapshots reflecting a certain context, time, and place (Trigwell, 2000).

For phenomenographers, how people perceive their worlds directly informs their everyday actions, beliefs, and feelings (Lamb et al., 2011). For example, according to phenomenographers, how youth conceptualize the environment will influence their actions in relation to the environment, such as recycling behaviors; understanding these conceptions can thus have real implications for creating more effective environmental programming (Loughland, Reid, & Petocz, 2002). Since phenomenographers believe that our perceptions and meanings influence our actions, they place special emphasis on generating research results that are useful and have practical implications (Bowden & Green, 2005; Rossum & Hamer, 2010).

Epistemologically, phenomenography contends that "every object in the world is experienceable in an endless number of ways" (Uljens, 1996, p. 119), but that in order to operate in the world, humans can be "focally aware of only a few aspects of a situation or phenomenon at a time" (Marton, 1996, p. 183). This means that there must be a shared, limited number of ways of experiencing social phenomena, since otherwise we would not be able to communicate, understand one another, or live together cohesively (Marton, 1996). For example, we can pick out a deer from the backdrop of a forest because we are able to differentiate and attend to the shapes and elements that uniquely constitute a deer (Marton & Booth, 1997). And at the same time, there must also be differences in our experiences of phenomena, because otherwise we would all act and respond to the world in identical ways (Marton, 1996).

From the phenomenographical point of view, these different understandings of a phenomenon must also be logically related to one another in some way. Recognizing a deer in a forest, for example, "requires recognizing the relationship among its aspects, or parts, as distinct from a given situational context and assigning a meaning to that relationship. In other words, experience contains both structural and referential aspects" (Holiday, 2016, p. 73). It is from this logic that phenomenographers seek to describe a limited number of categories of description (i.e. referential aspects), as well as relate them to one another (i.e. structural aspects), within an outcome space. The constructivist and interpretive paradigm of phenomenography informs my decisions, analysis, and conclusions throughout this study.

#### **Theoretical Framework**

Theoretically, this study is guided by sociocultural concepts of workplace learning. The field of workplace learning is diverse and encompasses a wide range of philosophies ranging from behaviorist to postmodern (Hager, 2011). Today, sociocultural theory is one of the most dominant frameworks for understanding the nature and processes of workplace learning (Evans & Rainbird, 2007). Sociocultural theory emerges from a constructivist philosophy in which knowledge, roles, and relationships are considered to be socially constructed and unique to an individual within a given time and place (Richey, Klein, & Tracey, 2011; Spencer & Lange, 2014). From a social constructivist perspective, people make sense of the world by subjectively

co-constructing meaning and negotiating power relations with other people (Barakett & Cleghorn, 2008). Sociocultural theory thus aligns particularly well with phenomenography.

Sociocultural theories of workplace learning tend to draw from a few shared concepts: learning as a social process; learning as participatory; and learning as highly shaped by social and organizational factors (Hager, 2011). Rather than being a cognitive, rational, and individualistic process, sociocultural theorists instead frame employee learning as situated, relational, and largely informal (Billett, 2001a; Evans & Rainbird, 2007). The "strong contextuality" (Hager, 2011, p. 14) of sociocultural theories assumes that what a person learns is bound up with the particular environment in which it is learnt. As a result, the everyday innovation of employees must be considered in relation to the people, relationships, values, and expectations within a given organizational context (Cairns & Malloch, 2011; Magro, 2001).

In this study, I also frame employee innovation as a function of informal and practicebased learning, as employees use their daily practices, tacit knowledge, and experiences in order to solve problems and make changes in their workplaces (Brandi & Hasse, 2012; Ellström, 2010; Fernandez & Moldogaziev, 2013; Melkas & Harmaakorpi, 2012). Thus, I draw from the interrelated sociocultural concepts of employee learning as situated, experiential, participatory, and informal (Manuti et al., 2015), in order to approach and interpret the phenomenon of employee innovation. By doing so, I am joining an emerging cohort of researchers who are highlighting connections between employee innovation and workplace learning concepts (see, for example, Billett, 2012; Ellström, 2010; Lippke & Wegener, 2014).

Tied to this sociocultural framework is my position that there are innate power relations "embodied in the wage relationship and wider systems for the management and regulation of employment" (Evans & Rainbird, 2007, p. 3). Thus, an assumption running throughout this study is that the positionality of frontline employees is distinct from that of management. As Wihlman et al. (2014) conclude in their qualitative study of employee innovation within Sweden's welfare services, there are knowledge and information gaps between management that advocates for innovation, and the employees who are expected to engage in it. Since these power dynamics have the potential to result in antagonism, cooperation, consensus, and conflict (Evans & Rainbird, 2007), I bring to this study a critical attunement to employees' agency and non-formal power within the workplace (Billett, 2012; Fenwick, 2001; Foroughi & Durant, 2013).

## **Review of the Literature**

As outlined in Chapter One, I arrived at my precise research problem and associated

study through a flow of logical relationships in the literature (see Figure 1).



*Figure 1.* Logic of the research problem. This figure illustrates the literature connections that led to my precise research problem and associated study.

There are, broadly, two fields of study that I draw from in order to explore the

phenomenon of employee innovation within public sector organizations: organizational

development and workplace learning. In this review of related literature, I first focus on what I

call the innovation imperative, reviewing the phenomenon of employee innovation in general

and the rise of innovation in the public sector in particular. Second, I attend to the idea of employee innovation as a situated and practice-based form of everyday workplace learning.

### **Understanding Employee Innovation**

With the spread of the innovation imperative, there has arisen a relatively new focus on employees as an untapped yet "vital source of innovative ideas" (Fernandez & Pitts, 2011, p. 216). Within this subsection, I discuss various understandings of employee innovation drawn from the organizational development field.

Writing from an innovation management perspective, Kesting and Parm Ulhøi (2010) present employee innovation as "the generation and implementation of significant new ideas, products, and processes originating from a single employee or the joint efforts of two or more employees who are not assigned to this task" (p. 66). This definition is notable for its emphasis on implementation, significant newness, and innovation as non-mandatory activities. The authors go on to add that only radical changes to routines, rather than incremental changes, are considered to be innovation.

Kesting and Parm Ulhøi's (2010) work rests on the idea that all employees have the ability to be innovative. From a knowledge management and human capital lens (Organisation for Economic Co-operation and Development, 1998), private firms ought to tap into this "innovation capital" (Kesting & Parm Ulhøi, 2010, p. 66) in order to gain a competitive edge. In this framework, employees are unique sources of ideas, but lack the strategic information and perspectives of management. Thus, management must create structured mechanisms for employees to provide ideas and be involved in organizational decision-making, in order "to prevent management from creative overload and wasting scarce decision-making capacities on fruitless ideas" (Kesting & Parm Ulhøi, 2010, p. 74).

Brandi and Hasse (2012) also provide a non-empirical conceptualization of employee innovation. However, in contrast to Kesting and Parm Ulhøi's (2010) strictly management-based perspective, these authors consider how employees and managers have differing realities and understandings of employee innovation that are tied to organizational culture.

According to Brandi and Hasse (2012), employee innovation can be understood in three ways. An "R & D approach" (p. 129) sees employees in research and development departments as innovators; other employees are generally not expected to innovate. A second view of employee innovation is as "corporate entrepreneurship" (p. 129). From this lens, management sets the expectation that all employees need to be innovative as part of their daily work, since shared intellectual capital is key to the organization's competitiveness and growth. A third way to view employee innovation is as a bottom-up process in which employees are always innovating, whether or not it is labeled as such. In this bottom-up approach, employees come up with ideas for how to do their work better, based on their specific practice-based learning and subculture within the organization.

In discussing the bottom-up approach to employee innovation, Brandi and Hasse (2012) distinguish between creativity and innovation. Creativity is the ideas and actions of individual employees that arise out of their "practice-based work life" (Brandi & Hasse, 2012, p. 142) and daily learning. Innovation is the creative ideas and actions that go on to be recognized or adopted by the organization. This aligns with Amabile and Pratt's (2016) dominant view that there must be implementation of ideas in order to classify them as innovation. However, Brandi and Hasse (2012) go further to explain that what is adopted as innovative is based on relational interactions within workplace subcultures. Workplace culture represents an amalgamation of values,

the success of bottom-up employee innovation is that managers who use their own particular subculture as the yardstick for innovation may not recognize nor value frontline employee ideas, since they arise from a different subculture context and set of practices (Brandi & Hasse, 2012).

Building on the idea of employee innovation as locally and contextually-defined, Jensen et al. (2007) present two distinct modes that have been used to conceptualize innovation across private and public sectors: Science, Technology, and Innovation (STI) innovation, and Doing, Using, and Interacting (DUI) innovation. Writing from the field of knowledge management, the authors explain that STI innovation is based on codified scientific and technical knowledge, typically gained from formal research and development teams. In contrast, DUI innovation arises from relational and "locally embedded tacit knowledge" (p. 683), which is "acquired for the most part on the job as employees face on-going changes that confront them with new problems" (p. 683). For the authors, DUI innovation relies on employees' localized "know-how" and "know-who" (Jensen et al., 2007, p. 682), thereby complicating the notion that employees' tacit knowledge just needs to be made explicit in order to be diffused across an organization (Beach, 1999).

Jensen et al. (2007) are writing in response to national-level policies and benchmarking that favors measurement of STI innovation, arguing that DUI innovation is also "economically useful" (p. 681). In order to identify ways that DUI innovation can be measured and supported, the authors undertook a quantitative empirical study of firms in Denmark. After defining and statistically analyzing indicators from 2,007 surveys, Jensen et al. (2007) conclude that firms which utilize both STI and DUI innovation, rather than just one or the other, are more likely to create new products. Unfortunately, by using quantitative analysis on pre-determined indicators

derived from the existing literature, this study is limited in its ability to identify unexpected indicators or moderators of DUI innovation among employees.

Jensen et al. (2007) recommend that firms support DUI innovation in three particular ways: implementing "high-performance work practices" (p. 686), such as autonomous teams and problem-solving groups; using more flexible and decentralized structures to encourage a learning culture; and developing close relationships with customers to gain new insights. The authors' conclusions align with findings from the field of workplace learning that call for more expansive and invitational practices in order to support employee participation, learning, and thus practicebased innovation (see, for example, Billett, 2012; Felstead, 2009; Fuller & Unwin, 2006).

Informing the work of Jensen et al. (2007) is the now-classic model of creativity and innovation first introduced by Amabile in 1988 (Amabile & Pratt, 2016). This model is multilevel, with components that link individual creativity and organizational innovation. It was also the source of the now commonly-made distinction between creativity and innovation. Specifically, for Amabile and Pratt (2016), creativity is "the production of novel and useful ideas by an individual or small group of individuals working together," whereas innovation is "the successful implementation of creative ideas within an organization" (Amabile & Pratt, 2016, p. 158). What the authors frame here as creativity is akin to what I call employee innovation, since it operates at the individual rather than organizational level.

In this conceptual model, Amabile and Pratt (2016) describe an "idealized" (p. 164) five stage innovation process that applies at both the individual/small team level and the organizational level: identify a problem, goal, or agenda; gather relevant resources, research, and information; generate ideas and possibilities; select and implement ideas; and assess the success of the ideas. Using a sociocultural lens, the authors hypothesize that how individuals engage in

this five-stage process is directly impacted by their personal motivations, expertise, knowledge, and creativity skills. Innovation at the organizational level is impacted by top-down motivation to innovate, access to task resources (e.g. time), availability of structured processes for innovation activities, and skills in innovation management (Amabile & Pratt, 2016).

A strength of Amabile and Pratt's (2016) model is that it emphasizes multiple levels of factors impacting creativity and innovation. Amabile and Pratt (2016) also treat creativity and innovation as "subjective constructs, socially bound by historical time and place" (Amabile & Pratt, 2016, p. 158); it is stronger for its assumption that novelty is relative and that innovation is not necessarily positive in impact. At the same time, a challenge is that Amabile and Pratt's (2016) work is theoretically-derived, which raises questions about whether or not this five-step and stage-based model truly reflects or informs employee innovation practices on the ground. This classic model has also been questioned for creating a hard and potentially unconstructive distinction between individual ideas as creativity and organizational implementation of said ideas as innovation (Anderson et al., 2014).

#### **Innovation in the Public Sector**

As discussed above, employee innovation has been conceptualized in a variety of ways within the organizational development literature. One commonality across these understandings is that they are primarily derived from private sector contexts. The public sector, on the other hand, has a unique history and role in society, with different drivers, barriers, and factors impacting the innovation imperative in general, and employee innovation in particular (Arundel & Hollanders, 2011; European Commission, 2013). In the public sector, "tight finances and societal pressures are the twin drivers of the almost universal search for better and cheaper public services" (European Commission, 2013, p. 4). Meanwhile, employees in the public sector

operate within a unique milieu of political leadership, multiple functionalities, and competing measures of success (Christensen et al., 2007). In this subsection, I thus present understandings of innovation that are uniquely derived from or specific to the public sector.

The European Commission has been researching public sector innovation since the early 2000s. As the European Commission (2013) outlines, the 1980s saw a new trend within management literature that claimed the public sector lagged behind the private sector in regards to innovation. Concurrently, the public sector began to adopt tenets of New Public Management, which introduced market mechanisms and business concepts to the sector. Today, the authors note, public sector innovation is seen as a means of addressing both "growing budgetary pressures, through more efficient administration or service delivery, and new societal demands, through different and more effective service design" (European Commission, 2013, p. 4).

In order to better measure, present, and encourage innovation across the public sector, the European Commission (2013) undertook development of a European-wide scoreboard for public sector innovation. For this pilot, the authors created a scoreboard with seven innovation dimensions and 22 indicators, and used it to analyze 14,000 responses from surveys conducted in 2010-2012. The overall study had a fairly macro-level policy interest in connecting public sector innovation to national competitiveness, as seen by its focus on how public service innovation can drive better economic business performance. While this study contributes to what Jensen et al. (2007) describe as the strategic STI mode of innovation, it has less to say about highly localized and situated considerations for employee innovation at the micro level.

In framing this study, the authors describe a range of definitions for public sector innovation, noting that it can generally mean "new or improved services or processes" that provide "more efficient administration or service delivery" (European Commission, 2013, p. 18). When proposing unique types of innovation specific to the public sector (i.e. service, process, organizational, and communication innovation), the authors note that during survey testing for a related project, respondents had a difficult time classifying their individual examples of innovation into such pre-set categories (European Commission, 2013). If respondents are not sure what various typologies of public sector innovation mean, this raises questions about the reliability of quantitative studies that rely on classifying and counting said types. It follows that large-scale public sector innovation surveys, such as this one, ought to be complemented by additional empirical research using qualitative methodologies.

Similar to the European Commission (2013) study, Arundel and Hollanders (2011) present quantitative results from the European Commission's 2010 Innobarometer Survey of 3,699 public sector organizations, across 27 EU countries. The authors take the view that "there are significant differences in how innovation occurs in the public sector and consequently it is not possible to directly apply a model of private sector innovation to public agencies" (Arundel & Hollanders, 2011, p. 5). Thus, a strength of this study is that, rather than using a predetermined theoretical taxonomy, the authors use an exploratory approach to better understand how public sector innovation occurs.

From survey respondents, the authors found that three main approaches were used in the public sector to generate innovation: a top-down policy-driven approach, a bottom-up employeedriven approach, and an external knowledge approach. In all cases, innovations were considered to mean new services, process/organizational methods, or communication methods.

According to Arundel and Hollanders (2011), a top-down policy-driven approach means innovation is driven by external legislation, mandates, policies, or regulations. In a bottom-up approach, employees within the organization are able to generate innovation via formal management support, policies, incentives, avenues for trying out new services, opportunities to work in groups, and structured innovation training. Lastly, an external knowledge approach means a public sector organization draws on outside resources or collaborates with other organizations to develop innovation; this includes learning from clients, suppliers, citizens and service users, professional associations, conferences, and other governments.

Arundel and Hollanders (2011) relate their empirically derived top-down, bottom-up, and external knowledge approaches to a suite of outcomes, finding both positive effects such as faster delivery of services, and negative effects like additional administrative costs. This study is notable for its explicit attention to negative effects of innovation, which is often overlooked in the innovation management literature (Anderson et al., 2014). These findings are an excellent reminder that employee innovation activities ought to be considered holistically, with an eye for positive and negative consequences at individual and organizational levels.

Through their analysis, Arundel and Hollanders (2011) found that organizations using top-down policy-driven approaches were overall less likely to produce innovations, and also experienced fewer positive effects from those innovations that were introduced. The authors thus conclude that organizations using bottom-up and external knowledge approaches are more likely to experience positive innovation benefits. As with the findings of Jensen et al. (2007), this suggests a need to intentionally facilitate expansive and participatory workplace learning environments, using strategies such as formalized cross-unit relationships, collaborative projects, and avenues for sharing expertise with people across and outside the organization (Fuller, Hodkinson, Hodkinson, & Unwin, 2005).

In contrast to the above large-scale public sector surveys, Wihlman, Hoppe, Wihlman, and Sandmark (2014) present one of the few empirical studies to explore the qualitative perspectives of employees regarding public sector innovation. Drawing from interviews with 27 employees working in the Swedish welfare system, Wihlman et al. (2014) identified several key supports and barriers to employee innovation. The authors conclude that, from the perspective of employees, public sector organizations can better support employee innovation by focusing on support (i.e. leadership responses to ideas, time to work on innovation, formal idea submission processes); development (i.e. learning opportunities among employees, avenues for employee creativity); and organizational culture (i.e. colleagues' attitudes towards innovation, communication within the organization). Barriers to employee innovation include unclear or lack of formal innovation processes, ambiguous innovation goals, lack of learning opportunities, and not enough flex time to engage in innovation activities (Wihlman et al., 2014). These qualitative results correspond with findings from other quantitative and theoretical studies regarding supports and barriers to employee innovation in the public sector (European Commission, 2014) and private sector contexts (Anderson et al., 2014).

When considering these results, however, it is important to note how innovation was predetermined and framed to participants. Wihlman et al. (2014) borrowed from West and Farr (1990) to define innovation as "the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society" (as cited in Wihlman et al., 2014, p. 162). The authors ensured that all interviewees had a shared understanding of innovation based on this definition. Unfortunately, this means the study directed participants to think of innovation as something new and beneficial, overlooking that employee innovation can also include smaller incremental improvements (Axtell et al., 2000), and may in fact have negative impacts for some stakeholders (Amabile & Pratt, 2016; Anderson et al., 2014; Arundel & Hollanders, 2011).

# **Innovation as Employee Learning**

In the previous subsections of this literature review, I discussed general concepts of employee innovation, followed by more particular understandings of innovation within the public sector context. In this third subsection, I draw from theories and research in the field of workplace learning to introduce the idea that employee innovation can be understood and studied as a form of everyday employee learning.

Billett (2012), a well-known figure in the workplace learning field, builds on the theoretical idea of employee innovation as a socio-relational process of learning. According to Billett (2012), as employees do their daily work, they are constantly learning and "remaking cultural practices" (p. 100) of the organization. Employee innovation happens as individuals solve problems they encounter, take advantage of opportunities, and adapt to changing circumstances in their work environment. Thus, employee innovation can be defined simply as "new changes at work that are advanced by employees themselves" (Billett, 2012, p. 97).

In Billett's (2012) approach, employee innovation hinges on a sociocultural understanding of workplace learning, and requires two key elements: individual engagement and workplace affordances. *Individual engagement* refers to individual employees' personal capacities, interests, dispositions, preferences, understandings, and intentions to actually engage in the workplace. A refreshing element within Billett's (2012) work is his attention to the strengths and abilities of employees to assert non-formal power and "bounded agency" (p. 95), as they decide if and how to engage with management directives or expectations to be innovative.

Individual engagement is influenced by the degree of workplace affordances. These are broader organizational factors that enable an employee to socially participate, and thus learn, at work. This includes "invitational qualities" (Billett, 2012, p. 101), such as the degree of employee discretion, autonomy, recognition, and opportunities for development. At a cultural level, workplaces must protect employees from sanctions related to taking risks, and be able to tolerate error, ambiguity, and failure (Billett, 2012). Notably, the author posits that such affordances vary based on where an individual is situated within the organizational hierarchy; employees in professional lines of work are generally given more affordances than frontline employees, and their ideas are more often labeled as innovative (Billett, 2012).

Billett's (2012) analysis highlights how employee innovation involves a negotiation between individual and organizational factors, with frontline employees having different abilities and opportunities to participate at work and engage in innovation. As noted by Manuti et al. (2015), employee access to workplace affordances, and thus informal learning opportunities, is impacted by their gender, class, and ethnicity. As a result, strategies aimed at facilitating employee innovation ought to consider the ways in which workplaces are "deeply unequal, with those higher up the status and management hierarchy getting more and better opportunities for learning than those towards the bottom" (Manuti et al., 2015, p. 9).

Felstead (2009) conceptualizes how employee learning is shaped at macro, meso, and micro levels. At the macro level, Felstead (2009) contends that productive systems, including manufacturers, regulatory bodies, and governments, can have "direct effect on the forms and outcomes of learning at work" (p. 23). At the meso level, the way work is organized – specifically the amount of discretion, autonomy, responsibility, and trust afforded to employees –

impacts employee learning. Finally, at the micro level, two inter-related aspects influence employee learning: the learning environment and individual learning territories.

For Felstead (2009), *learning environments* are those "bounded networks of social relationships" (p. 27) where employees acquire workplace concepts, skills, and practices. Drawing from Fuller and Unwin (2006), Felstead (2009) contends that learning environments ought to support more expansiveness and employee participation. *Learning territories* are an employee's personal history with and disposition towards learning, which will influence how they understand and engage with their workplace as a learning environment.

A strength of Felstead's (2009) framework is that power is not seen as a finite resource that employers have and employees lack, but rather as a "balance of forces" (Felstead, 2009, p. 31). In the context of this thesis, this means that while an organization may set an expectation for innovation via meso level policies or processes, an employee still chooses to engage or resist at the micro level. Similar to Billett's (2012) idea of "bounded agency" (p. 95), organizational structures and strategies are important but not deterministic of whether or not employees engage in innovation.

Eraut (2004) also writes from the workplace learning field as he examines informal and experiential learning at work. In Eraut's (2004) framework, employees' experiences are intertwined with their informal learning. Eraut (2004) proposes that people informally learn from their experiences by using pattern recognition when they have no time to think; intuition when they have more time to think; and reflection/analysis when they have a lot of time to consider various courses of action. Informal learning can thus be implicit, reactive, or deliberative, and involve learning both from other people as well as from personal experiences, in a range of non-formal and formal settings. Drawing from Eraut's (2004) work, employee innovation activities

that derive from practice-based and informal learning can thus range from unconscious and opportunistic, to highly planned. This complicates prior understandings of employee innovation, such as that set out by Wihlman et al. (2014), which describe employee innovation as being highly intentional.

Eraut (2004) further contends that there are five different types of knowledge within the workplace, all of which can be supported in different ways. This includes *codified* knowledge gained from formal training and organizational texts; *cultural* knowledge that is acquired through social participation; *personal* knowledge that an individual brings to a situation (including everyday know-how and values); different types of technical, procedural, and soft *skills*; and the particular *competencies* that are expected in a given work context. Innovation management is largely concerned with how to capture and diffuse cultural and personal employee knowledge (Kesting & Parm Ulhøi, 2010). However, knowledge management strategies aimed at spreading employee innovation overlook the situated nature of this informal and experiential employee knowledge knowledge. As Eraut (2004) notes, the transfer of employee learning between settings is more complex than simply "desituating and resituating a single piece of knowledge" (p. 255).

Within the sociocultural umbrella, situated learning theories posit that "all learning is context dependent and therefore cannot transfer easily to other situations" (McArdle & Ackland, 2007, p. 109). From this view, learning is a social and participatory process of acculturation (Merriam & Bierema, 2014), in which "the context itself shapes the learning" (Merriam & Bierema, 2014, p. 118). As Wenger (1998) further clarifies:

Participation here refers not just to local events of engagement in certain activities with certain people, but to more encompassing processes of being active participants in the *practices* of social communities and constructing *identities* in relation to these
communities. Participating in a playground clique or in a work team, for instance, is both

a kind of action and a form of belonging. (Emphasis original, Wenger, 1998, p. 4) For Lave and Wenger (1991), situated workplace learning happens through participation within communities of practice. In workplace communities of practice, newcomers gain a wide range of competencies and capabilities through their social interactions and participation with more experienced colleagues, called old-timers (Lave & Wenger, 1991). Drawing from apprenticeship research, Evans and Rainbird (2007) critique and expand on Lave and Wenger's (1991) classic conceptions of learning as social engagement in communities of practice. In particular, Evans and Rainbird (2007) contend that not all workplace newcomers have equitable access to the participatory learning that happens within communities of practice.

For Evans and Rainbird (2007), workplace learning can instead be seen as situated in three distinct ways: *practically*, meaning that individuals need to participate in work practices and groups, have access to formal learning opportunities, and be granted actual time and space for learning; *culturally*, in that learning needs to be consistent with the history and culture of learning in a particular organization; and *biographically*, meaning consideration is given to individual experiences, interests, and the "social and emotional dimensions of learning" (Evans & Rainbird, 2007, p. 14). Similar to Billett's (2012) ideas of individual engagement and workplace affordances, and Felstead's (2009) concepts of learning environments and learning territories, Evans and Rainbird's (2007) conclusions suggest that innovation management strategies need to account for practical, cultural, and biographical dimensions in the workplace, across individual, group, and organizational levels. With their various recommendations to increase opportunities for informal, social, and participatory learning experiences, all of these

authors relate employee innovation to what Fuller and Unwin (2006) term workplace expansiveness.

Fuller and Unwin (2006) developed the concept of an expansive-restrictive continuum as a means of analyzing what makes work environments more or less supportive of employee learning. This model was generated from the authors' empirical research into the different learning experiences of apprentices in the UK steel industry. Using a sociocultural theoretical lens, Fuller and Unwin (2006) wanted to account for how organizational context impacted employees' abilities to socially participate, gain experiences, and thus learn at work.

Expansive and restrictive features generally relate to two broad categories: organizational culture and context (i.e. how work, jobs, and knowledge is organized and managed), and the different forms of participation offered to employees (Fuller & Unwin, 2006). A more expansive learning environment allows employees to cross organizational boundaries; engage in multiple, overlapping communities of practice in and outside the organization; and access different opportunities for gaining new expertise, skills, and qualifications (Fuller & Unwin, 2006). In contrast, restrictive work environments provide little opportunities for employee development, progression, problem solving, or involvement in workplace decisions. As a result, Fuller and Unwin (2006) propose concrete strategies to support employee learning through increased workplace expansiveness, such as use of cross-disciplinary project groups, access to formal employee learning opportunities, chances to pursue new skill sets, and the ability to expand job responsibilities. By understanding employee innovation as a process of employee learning that is situated, participatory, experiential, and informal, organizations can draw on concepts such as workplace expansiveness to frame and strategically support employee innovation in the workplace.

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# Phenomenography as Methodology

In addition to understanding the literature that informs the purpose and need for this study, it is also important to consider its methodological foundations. Since phenomenography is not a mainstream methodology (Tight, 2016), I use the final part of this chapter to provide an overview of phenomenographical aims, terms, and limits.

# Aims of Phenomenography

At its simplest, the aim of phenomenography is to outline the different ways that a group of people conceptualize a given phenomenon (Lamb et al., 2011). Rather than diving into rich individual experiences (such as within phenomenology) or immersing in context and culture (per ethnography), phenomenography looks at the stripped-down, most critical aspects of how a group of people collectively conceptualize a phenomenon within a given context (Prosser, 2000; Trigwell, 2000). Thus, the methodology holds appeal for those who observe that groups of people in the world seem to understand the same things differently (Rossum & Hamer, 2010).

Through an iterative analysis process, the various *conceptions* expressed by a group of people regarding a given phenomenon are synthesized into a few overarching *categories of description* (Tight, 2016). These categories are presented in an *outcome space* (often a table or chart) that not only describes the categories, but also illustrates how they are structurally related to one another. This structural relationship among categories – whether hierarchical, nested, or horizontal – is a key element of phenomenographic analysis (Akerlind, 2005b, 2012; Bowden, 2000; Rossum & Hamer, 2010; Tight, 2016; Trigwell & Richardson, 2003).

### Key Terms

**Conception.** There are many different explanations of a phenomenographic *conception*. Simply, a conception is one way of understanding a given phenomenon, based on "actual experiences and . . . the way [an] individual understands those experiences" (Tight, 2016, p. 153). Less simply, a conception is a "delimitation of, a differentiation within and a selection and organisation of, meaning content of an aspect of the experienced world" (Svensson as cited in Sandberg, 1996, p. 130). Conceptions are teased out of people's descriptions of examples and experiences, since they are often "tacit, implicit, or assumed" (Johansson, Marton, & Svensson as cited in Bowden, 1996, p. 65). Because a person can express multiple – potentially contradictory – understandings of the same phenomenon, a phenomenographer may identify dozens of different conceptions across a suite of research interviews (Uljens, 1996).

**Category of description.** Conceptions are synthesized and grouped into a limited number of categories. Within phenomenography, these are called *categories of description*. Categories of description are "simple, abstract tools used to characterize the conceptions" (Rosário et al., 2016, p. 154); while they should be as "faithful as possible" (Bowden, 1996, p. 65) to conceptions and the research data, they are not equivalent to them. Importantly, a category of description is always developed in relation to other categories, with each category representing a uniquely different way of conceptualizing a given phenomena in a particular context (Francis, 1996).

**Outcome space.** An *outcome space* is "the map of the structural relations of the variation in the way a group . . . experience a particular phenomenon" (Trigwell & Richardson, 2003, p. 4). It is the essential output of phenomenographic research. The aim of phenomenography is not to come up with a grab bag of independent categories (Prosser, 2000), but instead delineate the architecture of variation that defines a phenomenon (Marton, 1996). Thus, the outcome space is often a table or chart that shows both the categories of description and how they are related to one another (Tight, 2016).

### **Phenomenographical Limits**

There are several issues within phenomenography that, depending on one's perspective and philosophy, may be considered limitations. One potential limitation within phenomenography is its focus on discrete, cognitive understandings of phenomena, presented in a neat outcome space. As Marton writes, "The basic unit of phenomenography is experiential, non-dualistic, an internal person-world relationship, a stripped depiction of capability and constraint, non-psychological, collective but individually and culturally distributed, a reflection of the collective anatomy of awareness, inherent in a particular perspective" (Marton, 1996, p. 172). The relatively cognitive-focused phenomenographical aim of identifying and structuring the ways a group of people conceptualizes a given phenomenon means that not all data is treated as relevant. Lack of attention to messy individual experiences, affective dimensions, and explanations for behaviors may turn some researchers off phenomenography.

This structured cognitive-level focus parlays into a second limitation, which is the relatively decontextualized and de-individualized nature of phenomenographic findings. Phenomenography is largely unconcerned with explanations, including explanations of how particular conceptions of a phenomenon may relate to or be influenced by gender, age, income, ethnicity, educational levels, and other demographic differences within a population. Marton and other phenomenographers maintain that phenomenography is highly contextualized in that it looks at the relations between people and their worlds, which are constantly being reconstructed (Marton, 1996). However, Uljens argues that, "even though the conceptions have been understood in terms of man-world relations, both man and world have been forgotten in the course of the empirical analysis" (Uljens, 1996, p. 127). Speaking from an hermeneutic perspective, Uljens (1996) contends that phenomenography is interested in experience but

mistakenly ignores the "social, cultural and historical dimensions within which experience is embedded," overlooking that "the meaning of human experience is possible to determine only as a relation between its content and context (social, cultural, historical)" (Uljens, 1996, p. 127).

Despite the lack of attention to demographically-influenced variations across populations, phenomenography still aims to produce results that are useful and actionable in the world. From a constructivist lens, I find it difficult to see how phenomenographic findings can be fully applied or transferred beyond the original study (Krefting, 1991), without discussion of larger structural and contextual factors. My personal commitment to generating useful results in my own research means that I have explicitly used a sociocultural theoretical framework that connects individual conceptualizations to the larger relational and situational factors in public sector organizations. As Hasselgren (1996) notes, although most phenomenography does not connect results to larger social commentary and context, it is still possible to do so.

Lastly, phenomenography suffers from not having shared understandings or consensus on its definitions and procedures (Richardson, 1999). This can be seen in the frequent use of synonyms for key terms. *Conceptions*, for example, may be interchangeably called understandings, meanings, experiences, and perceptions (Rosário et al., 2016; Tight, 2016). In its imprecise use of terminology, Uljens (1996) contends that phenomenography demonstrates an unclear underlying epistemology; he is further dismayed by how little phenomenography draws from the field of hermeneutics, given that it engages with textual meanings and other essential hermeneutic concepts.

Multiple researchers have also noted that the wide range of analytical processes used by phenomenographers has made it difficult for new researchers to learn and use the methodology (see, for example, discussions by Bowden & Green, 2005; Bowden & Walsh, 2000; Dall'Alba & Hasselgren, 1996). I can speak to this difficulty from my own experience in undertaking a phenomenographic study, as each example of phenomenographic research that I referenced seemed to use an idiosyncratic or adapted set of analytic procedures. This lack of philosophical, definitional, and procedural clarity may be a direct result of phenomenography emerging from early pragmatic studies that did not actually address theoretical underpinnings nor provide detailed methods (Hasselgren & Beach, 1997; Richardson, 1999). The resulting questions and discussions within phenomenography, however, present exciting possibilities to contribute to the definition and growth of the methodology.

## **Chapter Summary**

In this chapter, I introduced the interpretivist and sociocultural underpinnings of this study, including my approach to employee innovation as a process of learning in the workplace. Through a critical review of related literature, I established that employees are increasingly being regarded as organizational resources for innovation; the public sector has a unique context and suite of factors that impact employee innovation; and that workplace learning theories can be used to explore and frame employee innovation as a form of workplace learning. I closed the chapter with an overview of phenomenography as the methodology guiding this study.

This examination led me to design a phenomenographic study that captures the range of ways that frontline municipal government employees conceptualize employee innovation. Thus, in the following chapter, I describe all elements of my research design, including details of the study site, participant recruitment, data collection, data analysis procedures, position of the researcher within the process, and means of assessing phenomenographic results.

### **Chapter Three: Methods**

## Overview

In the previous chapter, I described the philosophy and theory guiding my qualitative study of the ways in which frontline municipal government employees conceptualize employee innovation. Drawing from the fields of workplace learning and organizational development, I critically reviewed theoretical and empirical literature related to employee innovation, including common understandings of employee innovation; unique aspects of innovation in the public sector; and the sociocultural idea of employee innovation as a form of situated, participatory, experiential, and informal employee learning. Finally, I ended with an overview of the aims, terms, and limits of phenomenography as my guiding methodology.

In this thesis, I proposed that further research on frontline employee innovation is needed in order to address an absence of employee perspectives informing public sector innovation strategies. Thus, in this chapter, I describe how I designed this study in order to capture the range of ways that frontline municipal government employees conceptualize employee innovation. I provide details regarding the choice of methodology, study site, participant recruitment, data collection process, analysis procedures, position of the researcher within the process, and means of assessing the quality of this phenomenographic research.

## Methodology

In this study, I conducted semi-structured interviews with 16 frontline employees from across a municipal government organization in order to explore the variety of ways that this particular group conceptualizes employee innovation. Through an iterative analysis process, the various conceptions of employee innovation expressed by the participants were synthesized into a final outcome space, accompanied by detailed categories of description. Phenomenography was used to guide this and all other aspects of my research design.

Phenomenography is interested in presenting the range of ways that a group of people conceptualizes a given phenomenon in a particular context (Prosser, 2000; Trigwell, 2000). Phenomenography is especially well suited to the purposes of this study for two reasons. First, there is an absence of employee perspectives in the innovation literature, particularly in the public sector context. As an interpretivist and constructivist methodology, phenomenography is aimed at generating such situated understandings of phenomena (Prosser, 2000; Trigwell, 2000).

Second, because public sector organizations are highly multifunctional, with many different internal job roles, goals, and activities (Christensen et al., 2007), it is important that studies in this sector do not treat frontline employees as a homogenous group. Phenomenography is fairly unique among qualitative approaches for its emphasis on capturing the variety of understandings held across a collective group of people (Akerlind, 2005a; Richardson, 1999). As a result, phenomenography is able to account for the variety of conceptualizations that may arise due to many different types of workplace contexts in the public sector, from working all day on computers in high rises, to using heavy equipment to clear drainage lines in the field.

The design of this study received research ethics approval from the University of Alberta Research Ethics Board; this included review and approval of my recruitment material (see Appendix A), participant consent form (see Appendix B), and interview guide (see Appendix C). **Study Site** 

The site of my study was the municipal government organization for a mid-sized Canadian city. This public sector organization had over 10,000 employees, and was functionally arranged into several major departments. Employees operated within a structured hierarchy that was accountable to a city manager, who ultimately reported to a mayor and council elected on a four-year cycle. Frontline employees in the organization had their interests collectively represented by one of several unions. The organization provided approval for employees to participate in recruitment and interview activities related to this study.

## **Participant Recruitment**

When I first undertook this research, I was working in a centralized innovation office within the study site. Thus, I benefitted from having a broad-based set of contacts across the organization. To recruit participants, I sent requests to strategic coordinators from all major departments asking for the names of two or more individuals whom they thought would be comfortable sharing their perspectives about employee innovation (see Appendix A). I deliberately secured approximately twice as many referrals as I estimated would be necessary, so that referees would not know which potential participants ended up taking part in the study. In order to be considered for participation, individuals had to meet three criteria: occupy a nonmanagement and non-supervisory role (per my definition of frontline employees); be employed at least one year with the organization; and have permanent employee status. The last two criteria ensured participants had been with the organization long enough to be exposed to organizational expectations, and to no longer be in a precarious probationary period.

Within phenomenography, a demographically or experientially diverse group of participants ought to be recruited in order to "increase the chances of there being as much variation in experience of the phenomena being investigated within the sample as possible" (Akerlind, 2005b, p. 103). Thus, I selected final study participants using a purposive sampling framework (Clark & Cresswell, 2014). In this sampling framework, I ensured participant diversity based on four elements: gender (i.e. representation from both men and women); years of organizational experience (i.e. confirming participants with less than five years and more than 15 years of tenure); department (i.e. having all major departments represented); and union affiliation (i.e. with two major unions being represented, as a proxy for office versus field-based working environments).

# **Data Collection**

In order to explore employee innovation, I recruited frontline municipal government employees for single, semi-structured interviews (Bowden & Green, 2005; Green, 2005; Tight, 2016). I conducted interviews until the full range of ways that participants might conceptualize employee innovation appeared to be represented; I ultimately interviewed 16 different people to achieve this saturation point. The average number of interviews in phenomenographic studies ranges from 15 to 30 (Tight, 2016; Trigwell, 2000).

Interviews were conducted in-person at a time and location of the participant's choosing; all participants opted to schedule interviews at their workplace, although some occurred outside of their working hours. Interviews averaged 45 minutes each, and were recorded with permission. After each interview, I engaged in an additional 20 minutes of reflective writing to capture my initial thoughts and any comments made by participants after recording had ended.

The interview process began with securing informed consent from participants (see Appendix B), before moving into initial contextualizing questions about participants' position(s), history, and tenure with the organization. I then shifted to asking for descriptions of specific employees that the participants considered to be innovative; concrete examples of employee innovation in the organization; how participants or their colleagues went about making innovation happen at work; and what frontline employees were trying to achieve with employee innovation (see Appendix C). I continuously reminded participants to share concrete examples and illustrative experiences of employee innovation, rather than abstract or hypothetical statements (Lamb et al., 2011; Larsson & Holmström, 2007). Throughout the process, I avoided pre-defining or revealing my own conceptualizations of employee innovation (Bowden & Green, 2005), only sharing my notions with those who asked once the interview was concluded.

A key feature of phenomenography is the search for variation in the ways a group, rather than an individual, conceptualizes a phenomenon (Akerlind, 2005b; Larsson & Holmström, 2007; Loughland et al., 2002; Rosário et al., 2016; Tight, 2016). Thus, to intentionally seek out differences in understanding, I asked participants if they thought other employees shared their views. Phenomenography has also been criticized for treating participant conceptualizations as though they were neutral or static (Larsson & Holmström, 2007). To address this concern, I specifically asked participants if their views of employee innovation had changed since they first joined the organization. Finally, in order to better understand the particular subculture and context that each person worked in, I asked participants if they felt an expectation to be innovative in their current role.

### **Data Analysis Procedures**

Phenomenographic analysis involves working from verbatim interview transcriptions (Prosser, 2000), as the researcher goes through rounds of reading, re-sorting, conception checking, and review of borderline cases (Bowden, 1996; Prosser, 2000). Within this process, there are at least six different approaches that phenomenographers use to focus their analysis (Akerlind, 2012). In my phenomenographic analysis, I adapted a *what/how* framework (Lamb et al., 2011; Larsson & Holmström, 2007; Rosário et al., 2016). The analysis process thus entailed reviewing transcripts using three different lenses.

First, I read for *what* employee innovation meant in terms of the explicit and implicit aims, purpose, results, or outcomes within the examples given by interviewees (Larsson & Holmström, 2007). Second, I read for *how* employee innovation happened, in terms of actions, approaches, supportive factors, and activities. I then went on to combine *what* and *how* elements into tentative conceptions, before finally synthesizing them into overarching categories of description.

Within both my *what* and *how* reviews, I pulled back to reflect on and write short summaries of the major ideas expressed by each participant (Lamb et al., 2011). This helped me maintain a broader focus on the interviews as a collective group, rather than getting bogged down in individual nuances (Akerlind, Bowden, & Green, 2005). In order to maintain my focus, with each transcript I repeatedly asked myself:

- How is this participant explicitly defining employee innovation, if at all?
- What must employee innovation mean to the participant, if they are saying this?
- For this participant, what counts as employee innovation?

It is important to note that within phenomenography, it is neither relevant nor methodologically appropriate to count frequencies of utterances, conceptions, or categories, since the aim is to present all possible ways a group may conceptualize a phenomenon, not the most dominant or common ways (Lamb et al., 2011; Rosário et al., 2016). The search for variation at a collective level remains paramount to phenomenographers.

Third, I read for *structural* patterns and connections among my preliminary categories of description. This involved staying connected with and true to the data as presented in the interview transcripts, while seeking some form of hierarchical, horizontal, or nested relationship between categories of description (Trigwell, 2000).

Through my analysis, I synthesized 443 initial codes from 16 interview transcripts into 11 draft conceptions. I then refined these conceptions into a final four *what* categories of description and four *how* categories of description that, together, represent the range of ways in which frontline municipal government employees in this particular context conceptualize employee innovation. When crafting these categories, one of the more notable tensions in phenomenography is between being "faithful to the detail in the data and wanting to create an elegant and preferably parsimonious outcome space" (Rossum & Hamer, 2010, p. 44). When generating my final categories, I decided that they all needed to be "confirmed by the transcription data," as opposed to simply not be contradicted by it (Akerlind, 2005b, p. 119). However, I did find non-critical variations in conceptions that ultimately were not captured within my final categories.

An expectation of phenomenographic analysis is to create an outcome space that can be useful and practical (Bowden, 1996; Bowden & Green, 2005). In fact, the utility of the concise outcome space, accompanied by longer written explanations of categories, has actually come to be considered a measure of the quality of phenomenographic research (Bowden & Green, 2005; Rossum & Hamer, 2010). As a practitioner, this emphasis on pragmatic and useful results was a large part of what initially drew me to phenomenography. Thus, my final *what/how* categories of description were ultimately represented in a simple, non-hierarchical outcome space using straightforward terminology, in order to increase the potential for practitioner utility.

There is a notable debate in phenomenography about individual versus team analysis of interviews (Bowden & Green, 2005; Walsh, 2000). In my experience conducting research as a part-time graduate student, individual analysis was ultimately a pragmatic decision due to limited time, financial, and human resources. However, given the epistemological roots of

phenomenography, I agree with Akerlind's (2012) assertion that both individual and team analysis can make meaningful contributions to the collective discussion, since "any outcome space is inevitably partial, with respect to the hypothetically complete range of ways of experiencing a phenomenon. So, what we are considering when we talk about better or worse outcomes is more or less complete outcome spaces, not right or wrong outcome spaces" (Akerlind, 2012, p. 121).

### **Position of the Researcher**

Much like other qualitative traditions (Clark & Cresswell, 2014), phenomenography emphasizes the position of the researcher within the research process. Phenomenographers are encouraged to engage in bracketing, in which the researcher must be aware of their own beliefs, experiences, and prior knowledge of the phenomenon under study, and attempt to set them aside in order to develop results from the data (Ashworth & Lucas, 2000; Francis, 1996; Tight, 2016). Given phenomenography's interpretivist foundation and belief in the co-construction of meaning, the notion of being able to bracket remains debatable (Krefting, 1991).

Regardless, in order to be aware of and hopefully minimize the impacts of my own preconceptions about employee innovation, I strove for transparency in my methods and rigorous documentation of my process. In particular, I used the following phenomenographic bracketing strategies:

- I worked from verbatim transcripts of interviews;
- I did not use results from previous studies in order to categorize conceptions; and
- I actively sought out key conceptual difference and divergences from established theories in the literature (Ashworth & Lucas, 2000; Rossum & Hamer, 2010).

There are two additional, fairly unique aspects of phenomenographic bracketing that I engaged in during analysis. First, beyond setting aside prior knowledge or theories related to a phenomenon, I endeavored to set aside the overarching goal of identifying structural relationships among conceptions, at least during initial transcript review (Ashworth & Lucas, 2000). Second, and more tricky for me, was setting aside "all notions of cause and effect," however intriguing, since phenomenography has "nothing directly to say about causal connections" (Ashworth & Lucas, 2000, pp. 305–306). Phenomenography remains, at the end of the day, exploratory rather than explanatory.

### **Judging Phenomenographic Results**

A final and essential element of this study's methodology is consideration of how to fairly judge its process and results. Interestingly, despite their positivist origins and extensive critiques of their applicability to qualitative work (Clark & Cresswell, 2014), the criteria of *validity* and *reliability* have maintained a foothold in phenomenography. However, although these historically quantitative terms may be uncomfortable for some qualitative researchers, phenomenographers have re-envisioned them using qualitative meanings and expectations.

### Validity

Phenomenographic *validity* is similar to the more general qualitative standard of trustworthiness (Krefting, 1991), since it addresses ideas of credibility and transferability. In phenomenography, analysis is based on the researcher's understandings and interpretations of participants' descriptions. Thus, in order to assess phenomenographic validity, one must look at the soundness and transparency of the researcher's methods (Akerlind, 2012; Lamb et al., 2011; Rossum & Hamer, 2010). Two specific validity checks are consistently promoted in the phenomenographical literature: communicative validity and pragmatic validity.

**Communicative validity.** Communicative validity is the degree to which research methods and final interpretations are judged as sound by others. As Akerlind (2012) notes, "In a context of multiple legitimate interpretations of the same data, a strong emphasis must be placed on a researcher's ability to argue persuasively for the particular interpretation that they have proposed. There is no longer a search for the 'right' interpretation, but for an interpretation that is defensible" (Akerlind, 2012, p. 124). I used the following strategies to enhance my study's communicative validity:

- I was precise in specifying employee innovation as my phenomenon of interest;
- I used a purposive sampling framework in order to increase my likelihood of capturing the full range of ways in which employee innovation may be conceptualized across the organization in question;
- I took time to build rapport and trust with research participants during interviews;
- I solicited full descriptions and concrete examples during interviews, so that my results were based on experiences rather than conjecture; and
- I avoided sharing my pre-conceived notions of employee innovation with participants (Lamb et al., 2011; Larsson & Holmström, 2007).

It is prudent to note that the common qualitative strategy of member checking is not held to be an appropriate strategy within phenomenography. First, phenomenography generates results by relating all interviews to one another. Thus, a participant considering only their own interview transcript will not necessarily see their unique perspective and words in the collectivelevel conceptions and categories (Akerlind, 2012). Second, per the ontology of phenomenography, a participant's ideas about a phenomenon are always going to be relational and context-specific. Thus, the views that a person shares in an initial interview can and will change as part of a member check discussion. Other than confirming the literal accuracy of transcription, member checking does not have a great deal to add to phenomenography's snapshot of a phenomenon at a given time and place (Trigwell, 2000).

**Pragmatic validity.** Within phenomenography, pragmatic validity refers to the extent to which the outcomes of a study are considered useful and actionable for the population under consideration (Akerlind, 2012). In this case, Lincoln and Guba's concept of transferability may be a more fitting term (Krefting, 1991). Transferability relates to how well findings "fit into contexts outside the study situation . . . [based on] the degree of similarity or goodness of fit between the two contexts" (Krefting, 1991, p. 216). The responsibility for assessing transferability rests with the person seeking to apply qualitative results to another context. Thus, in order to enable transferable comparison, in this thesis I endeavored to be transparent and provide detailed information about my study site, participants, and all decisions and steps taken in the research process (Krefting, 1991).

### Reliability

Phenomenographic *reliability* can be understood as ensuring consistency, dependability, and quality in the research findings (Akerlind, 2012). The most consistently endorsed method of ensuring phenomenographic reliability is through interpretive awareness.

**Interpretive awareness.** Interpretive awareness stresses transparency regarding the research process, and emphasizes how the researcher has dealt with their own subjectivity and preconceptions (Sandberg, 1996). In addition to bracketing strategies outlined above, I also engaged in the following in order to increase my interpretive awareness:

• I ensured all potential participants knew about my role within the organization before deciding whether or not to take part;

- I conducted multiple, careful readings of my entire verbatim interview transcripts to ensure my results truly came from the data and not my own preconceptions;
- I checked that all my final conceptions and categories of description were actually confirmed by the transcript data, rather than simply not being contradicted by it;
- I considered what participants' examples implied or illustrated about employee innovation, rather than relying only on their explicit definitions; and
- I used extensive participant quotes and examples to explain the meanings of my final categories of description (Akerlind, 2005a, 2012; Akerlind et al., 2005; Sandberg, 1996; Walsh, 2000).

# **Chapter Summary**

In this chapter, I described and justified all elements of the phenomenographic methodology that guided this study, including procedures used to gather and analyze data. To help increase the phenomenographic validity and reliability of this study, I closed the chapter with details of the steps I took to address communicative validity, pragmatic validity, researcher bracketing, and interpretive awareness throughout the research process.

In the following chapter, I present the results of my data analysis. Specifically, the many conceptions of employee innovation expressed by participants are synthesized into a few final categories of description, which are presented in a concise, tabular outcome space. The bulk of the chapter is spent explaining and grounding these categories in the words and experiences of the research participants.

# **Chapter Four: Results**

## **Overview**

This phenomenographic study was designed to capture the full range of ways that frontline municipal government employees conceptualize employee innovation, in order to inform the development of strategies aimed at supporting employee innovation in the public sector. In the previous chapter, I described all elements of this research design, including details of the study site, participant recruitment, data collection, data analysis procedures, position of the researcher within the process, and means of assessing the quality of my process and results.

In this chapter, I present the results of my data analysis. I begin with a general overview of the research participants as a group, before presenting the collective range of ways that frontline employees conceptualize employee innovation within a municipal government context. These conceptualizations are presented as interrelated, non-hierarchical categories within an outcome space. The remainder of the chapter provides detailed descriptions of each category in this outcome space, grounded in the words and experiences of the research participants.

### **Participant Details**

Participants in this study represented all major departments within the municipal government for a large Canadian city. On average, they had worked with the organization for eight years. Participants were purposively sampled to ensure representation by gender, years of experience, and type of work environment (see Table 1).

Participant Details			
Gender	Number <sup>a</sup>		
Female	11		
Male	5		
Years of experience	Number <sup>a</sup>		
5 years or less	7		
6 to 14 years	6		

Table 1

15 years or more	3
Primary work environment	Number <sup>a</sup>
Office	13
Field	3
$a_{n} = 16$	

# **Outcome Space**

To generate the results of this qualitative study, I analyzed the views, experiences, and examples of employee innovation shared by this purposively diverse range of frontline municipal government employees. As detailed in Chapter Three, I worked from transcribed interviews to organize dozens of conceptions of employee innovation along two major streams: what employee innovation is, and how employee innovation happens. The final synthesized categories of description are presented here in a non-hierarchical outcome space (see Figure 2).

Ways that Frontline Municipal Government Employees Conceptualize Employee Innovation		Employee innovation happens by			
		Working the system	Fostering empathy and collaboration	Making do	Connecting dots
Employee innovation is	Thinking small				
	Making life easier				
	Having high expectations				
	Going above and beyond				

*Figure 2*. Outcome space. This figure illustrates the non-hierarchical relationships between the range of ways that frontline municipal government employees conceptualize employee innovation.

Rather than representing a consensus across participants, each of these

phenomenographic categories captures one way in which frontline employees may conceptualize

the phenomenon of employee innovation. While some participants spoke to most of these categories, others only spoke to one or two. Regardless, all final categories of description are represented in and confirmed by the interview data (Akerlind, 2005b). For quick reference, a condensed set of categories of description, along with the final outcome space, can be found in Appendix D.

### **Structural Relationship**

Structurally, the four *what* categories and four *how* categories within the outcome space are non-hierarchical and interdependent. In order to fully appreciate how frontline employees conceptualize the phenomenon of employee innovation, one ought to combine at least one *what* and one *how* category. For example, using the outcome space in Figure 2, one combination may be: *Employee innovation is making life easier, and happens by working the system*. Although *what* and *how* categories can clearly stand on their own, they most accurately represent the meaning expressed by participants when used in combination. In the bulk of this chapter, I go on to describe the meaning of these four *what* categories and four *how* categories in detail, using the anonymized words, experiences, and examples of participants themselves.

## **Stability of Categories**

Phenomenography as a methodology has been criticized for presenting participant conceptions of a phenomenon as if they are static and unchanging (Larsson & Holmström, 2007). To address this concern, I included a targeted interview question regarding whether or not employees' conceptions of employee innovation had changed since they first joined the organization. I found that the majority of participants (14/16 or 88%) have changed their views of employee innovation over time, thus reinforcing the notion that these results are only a snapshot of meaning at a certain time and place.

## What is Employee Innovation?

From a frontline municipal government employee perspective, there are four varying ways of conceptualizing *what* employee innovation is: Thinking Small; Making Life Easier; Having High Expectations; and Going Above and Beyond.

# 1. Employee innovation is: Thinking small

Employee innovation within a municipal government means making small, incremental changes within an employee's sphere of influence or scope. As Participant 1IH noted, "[I am] more interested in innovation on a smaller scale, like what can I do in my unit on my portfolio. I'm not convinced that as a corporation there's a lot of buy-in or interest in really supporting innovation. . . . I'll do it in a way that will benefit my portfolio but I don't know if I'd go much beyond that." Thus, innovation is "making those little strides where you can" (Participant 3YP), at a local scale, rather than pursuing large-scale radical or disruptive ideas:

If you're innovative on a small scale, go for it, absolutely yes, you need to be innovative and do those things on a small scale. Don't ever think of being innovative on a large scale, even a medium scale is debatable. Large scale, don't even bother, because you're wrong. It's the overall attitude behind it. Small scales might- a Google Form for example, a small scale, might absolutely do it. . . . Large scale? Not from my level, no. Don't even bother. 'You don't know what you're thinking, you don't know what you're talking about, you don't know what it involves.' No. (Participant 7HM)

As Participant 10DR suggested, employees want to "do small projects, just pilots. People don't have to freak out. We're not going to, you know, crash the [organization's] website or anything. You know, we're not going to completely redesign all of our streets in one go. Just little things." Innovation for frontline employees is more a "way of thinking versus that golden solution that's going to get featured on [the employee e-newsletter].... You don't have to come up with some multi million savings or some really cool flashy news story" (Participant 1IH).

Rather than aiming to influence ideas and actions across the organization, employee innovation happens in smaller pockets and units where frontline employees have influence: "What I didn't really understand at the time [I started with the organization] was, 'Find ways to do this little pocket.' You have complete innovation in this little pocket" (Participant 7HM). Reflecting on how their views of employee innovation had changed over time, Participant 3YP mused:

When I first started, I came in, I think, with sort of big- you know, innovation means like a new Apple product or some giant change that's shiny and new and creates all these ripples, and I've come to realize innovation is also small things. It's changes in how you work . . . and I think too it's also been tempered by this reality that we work in a political environment so you can't make those big bold moves that private enterprises can. (Participant 3YP)

Thinking small means being pragmatic and realistic about what can be achieved by a frontline employee, because "as much as you can come up with an idea as an employee, the littler stuff is always easier. As soon as you get into things that require money? Big bucks, big changes" (Participant 9NS). Small, local changes are more feasible for employees, given that, "you know, there's a lot of paperwork involved with it. You know they- the bigger stuff isn't something that they necessarily want to take on, but the little stuff is fine. And you know if it works really well, that's great" (Participant 9NS). Thinking small can mean creating something new, but it can also involve process improvements and "little adjustments . . . that may be not the craziest thing to do, but in the long run they actually impact quite a bit" (Participant 9NS). As

Participant 9NS noted, "If you consider the fact that, last year my files were a very large six foot drawer, and this year the same files are probably only about four feet. I took about two feet of paper out of the equation. That's pretty good."

## 2. Employee innovation is: Making life easier

Employee innovation is employees trying to make daily working life easier for themselves and their colleagues. After initiating a process mapping exercise, Participant 12LS explained: "It does make my life easier in my role when there is a process that's in place that makes things faster and lessens the phone calls of negative feedback for me, right? No one likes to get a phone call where they're getting chewed out. So reinventing the way that we did this meant that I had a bit of an easier job. So, short term pain, long term gain for me."

*Easier* was variously described as making employees' work activities quicker; fewer steps; less effort; more enjoyable; or safer. Participant 14KW does work that is out in the field. They explained what it means to make life easier in a hands-on, operational context:

There's a lot of equipment pieces, like nozzle heads for your high pressure hoses, that the guys have developed themselves in their garage just because they're 25 year veterans, they kind of know this works, this doesn't, and they've created their own head. It makes their job easier. It still gets the job done, it just makes it a lot easier, whereas you know, they put on the standard head, they may have to flush that line four or five times. If they put on this head, they do it once, they're in and out. So it saves times, but also it's easier on them because they're not going back and forth now. (Participant 14KW)

Other participants described tedious, inefficient work methods and processes as "terrible" (Participant 12LS) and "agony" (Participant 7HM), explaining that, "It boils down to every day how many steps it takes me to get something completed and if it takes me seven steps to file a piece of paper, I'm out. . . . That is just not going to work for me" (Participant 12LS).

By making "things work better, smoother" (Participant 5KN), innovative ideas directly benefit individual employees and surrounding colleagues in their daily work. Participant 1IH, for example, was part of a team impacted by a large-scale relocation to a new facility. Colleagues were not happy about the relocation, so Participant 1IH decided to host facilitated discussions with their team: "So I just thought, okay well like this isn't going to get better, like there's nothing we can do to change the move. That will happen, so all we can really do is work on our response to it and *I don't like working in environments where people are cranky*" (emphasis added, Participant 1IH).

Participant 5KN works in an office setting, and gets a lot of job satisfaction out of helping their colleagues. They often use their years of experience with information technology to help colleagues, without being asked to do so: "It's making much easier to everyone, for [database system] users, especially new ones coming in. So it's easy to use. . . . It makes reporting easy, getting the data download, and it's in the base system so when it's in the system it's more accurate, so people can change and link it to many other things like maps, database downloads. So, saving time and accuracy is much better" (Participant 5KN). Participant 5KN further captured the idea of how innovation can serve the needs of employees themselves:

I'm kind of the go-to person, like with different [assessment] expertises that I have. So usually there is a line up out of my office and they put me in this small zone with another person sharing. Those are fine, I'm not complaining, but that was not a strategic location for me. What I did- one of my colleagues just quit a couple months ago and she was just sitting between two units, so I just moved. I said, 'Okay guys, I'm now sitting here so I can help both teams.' So that's an innovation. It doesn't need to be something expensive, it doesn't need to be something really magical. You just see how the work can be done more easily. (Participant 5KN)

### 3. Employee innovation is: Having high expectations

Employee innovation is having high aspirations and expectations for what municipal government can be and do: "We're this vibrant city, and unless we're growing, changing, evolving, we can't compete with these other big cities, and we ourselves can't be personal greatness if we're not growing and changing and evolving" (Participant 8CH). Participants are frustrated when they "get the answer sometimes that we should reduce our expectations [about what our unit can do]. That is one thing I never like to hear, but I hear many times here" (Participant 5KN). As Participant 4RV said, "Being innovative isn't putting together an annual report. . . . It's the legacy projects that you leave behind that's innovative."

Rather than tweaking what already exists, innovative employees advocate for new, novel, and transformative processes and methods. They want to be part of the first unit, branch, department, or municipality to try something new and "find something that was not there before" (Participant 11DL). Exasperated by negative management responses to new ideas, Participant 10DR asked, "What is wrong with this organization where we have to ask has [this other municipality] done it?" Innovative employees push the organization to go beyond the status quo and risk engaging in high profile projects: "For like the other ninety percent [of projects], let's just, you know, plain vanilla it. But for this ten percent, let's do something that makes you feel fulfilled from a professional standpoint, that you're not stagnating, that you're contributing to the vibrant professional scene that you're a part of" (Participant 10DR).

Having high expectations means seeking to challenge public perceptions that municipal governments are not modern or innovative: "For me, I am always proud to be an [organization] employee, and when you are doing stuff which helps out and bringing out new technology, I always feel proud to say, 'Hey did you know the [organization] is bringing out this technology?' Because usually people think, 'Oh, it's [government] work'" (Participant 15TSJ). Innovative employees believe the organization "can be world class, and just because the way it is- doesn't mean that's the way it has to be" (Participant 10DR). For Participant 10DR:

The expectation is that we're going to develop the things that are cool and new and work right and match the expectation, at least from a digital perspective, of what people expect now.... I'm always amazed and happy when Google or Facebook or Uber or anybody comes out with something and you're like this is so easy, it's so convenient- because, like, the [organization] just can't not catch up to that! (Participant 10DR)

Part of having high expectations for municipal government is that employees want to be proud of where they work. They put effort into building a positive reputation for themselves, their team, and the broader organization. In their communications and design work, for example, Participant 6DM explained what leads them to pitch new ideas at work:

Partially just for my own enjoyment. It's [also] partially narcissistic because it makes me look better. And obviously it's better just to have better products coming out because it makes us look better. . . . I know that if I go and, especially like as a designer, if I go on a website and find a form and it's just a terrible looking form, *it bugs me*. (Emphasis added, Participant 6DM)

For Participant 11DL, employee innovation is "standing out" and being "pioneers when it comes to performance measures and presenting our budget and everything to council." Employee

innovation helps a team be, "if not the leader, at least one of those top four or top five" units within the organization that other colleagues look up to (Participant 11DL). This reflects not just high expectations for the organization, but also for municipal government employees. Participant 8CH, for example, was dismayed to see "how many people come into work and really they're just here to collect a paycheck. I've never been that way. I don't believe in doing anything half-assed. . . . I don't want to be a person that comes here to do nothing. I want to have a legacy that matters. I want to be contributing to the team in a way that will be remembered." At a personal level, then, being innovative helps employees feel challenged and engaged in their work. For example, reflecting on their personal motivation, Participant 1IH wondered:

What's the reason to be innovative in the corporation? Our jobs are completely protected [by a union]. . . . For me, the way I feel when I'm at work is more important. So I need to feel like engaged, passionate, excited, I need to feel happy. I need to feel like I really like and enjoy what I'm doing. So I'm not somebody that's okay with just waiting to get my magic [retirement] number. So that's probably why I try. (Participant 1IH)

Participant 5KN kept trying to improve their work practices, despite "hearing [from my colleagues] that we're paid hours, not paid for quality. . . . I'm not working for the money. My motivation is to learn things. . . . Because in each of these things, with more challenges, I can learn more things from them. So it was for my own education." And, quite simply, "it's fun to work on something cool" (Participant 10DR).

Innovative employees were described as people with notably hopeful and optimistic attitudes; they are exciting to be around, and their attitude is infectious. As Participant 10DR explained, "When I think of somebody who's innovative, I think of like a bit of a disturber. Like somebody who, whenever you talk to them, they're into something, they're doing something that you're like 'That's awesome.' Like, 'We absolutely need to be doing that.' ... I like seeing that in other people because it makes them fun to talk to." Participant 8CH talked about two inspirational colleagues who are "not stuck in the past. There's lots of old boys clubs within the [organization].... And what I like about these two women is that they're constantly growing, changing, evolving." Participant 3YP shared how, when "[my colleague] pitched an idea, the [initial] answer was, 'No we can't do that. We've never done anything like that before.' But then there was a lot of conversations. People started getting excited about it. There was some momentum within the group that was doing it and everyone got on board and was like, yeah this is going to be great." Participant 4RV described a meeting where an innovative employee really engaged their colleagues in developing a new geo-mapping idea: "They weren't just order takers. [The group] really contributed to the idea and elevated it to a whole new level.... It's probably extra work for them, but everyone was really, really excited."

## 4. Employee innovation is: Going above and beyond

Lastly, employee innovation is the effort – time, actions, and ideas – that employees put in above and beyond their expected job. Innovation is, quite specifically, "*not* the things that your supervisor asked you to do" (emphasis added, Participant 10DR). For example, from the technical engineering world of Participant 13ML, if an employee is "trying to remove roadblocks and get tenders out the door quicker, that's just a normal part of your job. You don't consider that to be innovation or innovative." For Participant 9NS, supporting colleagues and fielding calls was "part of the service I'm providing. So is it innovative that I'm doing all that? No, because that's part of what my job is." However, researching and implementing a new software system was innovative because "it was something I was doing on top of my regular duties" (Participant 9NS). More broadly, this means that the introduction of services "that should be inherent as part of a municipal government" (Participant 4RV) are not innovation, even if they are new to the organization.

Considering the lack of formal process or support for employee-driven ideas in their area, Participant 1IH reflected: "I guess that was innovative that I proposed to do [educational workshops] even." Thus, in contexts where ideas from frontline employees are not actively sought out or celebrated, innovation can include even just proposing ideas, whether or not they are actually taken up by management.

Since innovation is "not part of what you've been hired to do" (Participant 10DR), new projects and ideas are "often side of desk" (Participant 10DR) or "pet projects" (Participant 3YP). Employees carve out their own time and space to make innovation happen: "When I have time I plug away at them" (Participant 3YP). Employees thus take advantage of any possible discretion, leeway, or flexibility in their role to be able to think, develop ideas, and try out new methods. Participant 2SH described one particularly innovative colleague who created a new heritage preservation project of his own accord: "If he was just following his job description, he wouldn't have done it. So the [organization] was super lucky to have him, you know."

Since "you only have enough time to do enough things" (Participant 10DR), employees tended to use unpaid hours to develop innovative ideas. For example, when asked how they went about independently creating a new revenue generating proposal and business plan, Participant 5KN admitted, "I work on my own time mostly. . . . Like, I work weekends and nights. Some of those small things like making a flowchart, simple things, I can do fast. But if there is something that I need to think about, how is it going to look, how will they link, what will it impact – those I do on *my time*" (emphasis added).

This means that employee innovation moves the bar for what is considered standard effort and activities within a given role. For example, Participant 4RV explained what made their colleague innovative when compared to other employees: "He doesn't like to do things just for the sake of doing things. . . . So I think it was just being very, very thoughtful about the task at hand, versus just creating a logo and being an order-taker" (Participant 4RV). Participant 2SH shared how a colleague from an entirely different area of the organization called them to offer his expertise: "He's an IT kind of guy, but he had this idea for [our event] that he wanted to help us with- creative outdoor lighting. . . . He just had ideas that were beyond the strict line of business of his actual role." Participant 4RV described several colleagues as innovative because "they *could* work on a bunch of the usual campaigns about not drinking and driving, getting a safe ride home. . . . but [instead they] thought about it in a much grander scale." Employee innovation is the "next level" beyond simply "reacting and being competent" (Participant 4RV).

### *How* Does Employee Innovation Happen?

From a frontline municipal government employee perspective, there are four different ways of conceptualizing *how* employee innovation happens: by Working the System; Fostering Empathy and Collaboration; Making Do; and Connecting Dots.

### 1. Employee innovation happens by: Working the system

Employee innovation happens by understanding and working within existing organizational systems, rather than by fundamentally challenging or changing those systems. Reflecting on how their view of innovation had changed over time, Participant 1IH noted that they had "started caring more about just process, because I learned that you'll get the result you want faster if you follow the [organizational] process. And if you try to like cut corners or be innovative or like suggest things being done in a different way, it often doesn't go over well." Participant 9NS argued that "it's not necessarily a bad thing to have structure, but it's not necessarily a good thing when you're trying to be innovative. And sometimes if you try to smash through it- smash through that structure by being innovative- it doesn't work and you just end up piled under a bunch of stuff, and, you know, dug out and thrown out."

Instead of spending energy on changing internal systems, employees instead learn how to strategically operate within them. Participant 9NS explained how they *sort of* met organizational requirements in order to be able to get new booking software:

We could get everything we wanted out of [the new software], it just wasn't [vetted by the organization]. So I had to do this stupid crazy PIE, which is a Privacy Impact Evaluation- oh my god I hate those things. It now has been on file for two years almost.

. . My point is we did it- we got it done and went through the process we were supposed

to. The PIE was *filed*, it just wasn't *approved*, but whatever. (Participant 9NS) Employees, especially those with long tenure, understand how to use exceptions and beg forgiveness in order to make innovative ideas happen. Participant 2SH explained how they were able to use a new online tool for the first time: "You know, we just kind of ignored a lot of the rules, and just said we're doing it, we'll beg forgiveness. Otherwise we wouldn't have been able to have done it. . . . So part of it is, I think, be willing to break some rules. I think you have to sometimes, because you can get really stuck in procedure."

Key to working the system is understanding and being strategic about how and when to introduce ideas in ways that are effective for different stakeholders and audiences. Participant 10DR described how a colleague was introducing a new idea by "trying to find the incentives for each of the disparate groups and, you know, playing some people off- not necessarily playing people off of each other- but pretty strategically trying to talk to this person at the very top and this person at the way bottom, and like maybe eventually it will make its way to the mid-level managers who are the most skeptical of it." This means understanding that "the legal department will just say, no you can't do it" because their performance metric is number of lawsuits, whereas "the [organization's] metric is, you know, the number of people who are served" (Participant 10DR). Thus, "you have to be strategic about the kind of alliances that you build, because an idea, especially from a bottom level employee, just because it's a good idea doesn't necessarily mean it's going to happen" (Participant 10DR). Also knowing the importance of strategy and timing, Participant 9NS described how they and a colleague engaged in a coordinated effort to convince a supervisor that their innovative idea was in fact his own:

It took us about six months of just sort of [dropping hints, leaving out sales flyers], wearing him down. And finally he goes, 'I have this great idea. We should get a washing machine and dryer,' and we just look at each other and we're like, 'Yeah, it worked.' You know that's the kind of boss he was.... We knew that if we tried to pitch it as a straight up idea, it wouldn't work. (Participant 9NS)

At a personal level, employees leverage interpersonal relationships in order to be able to work the system. Because they rely on working with units across the organization, Participant 3YP focused "very hard on creating a network of friends and like-minded individuals who we can go to for help and support." Participant 2SH described how an innovative employee asked colleagues to store large vintage items for him, while he slowly worked on getting political buyin for his broader heritage preservation idea:

He just got on the phone and started calling everybody he knew who may possibly have a space in a [organization] yard to store [the large vintage items], . . . and he like sent them chocolates and chips or whatever their favorite snacks were to keep them kind of sweet,

just to keep them so they'd take more [items] or find space, for years! . . . He just kept trying to sell the vision and find partners to make it happen because he knew it couldn't happen with just the [organization] on its own. . . . He's stubborn and he perseveres, and he's a patient, kind of plodding, person. (Participant 2SH)

Employee innovation thus happens through patience, and an understanding of how much timing impacts acceptance of new ideas within the organization. It has been over four years since Participant 5KN's idea for a revenue generating initiative was shelved by management; rather than being upset, Participant 5KN "just put it all back in there, and one day someone will, the time will come, there will be budgets, different points of view, and this will be there, available for future."

At the same time, persistence is also important, because "if you take no for an answer, then that project, that innovative idea, it's gone" (Participant 10DR). Understanding the practices and pressures facing their management team, Participant 6DM learned to take a strategic approach to pitching new ideas: "If you throw something out randomly at a table it kind of gets lost on the wayside as, 'That's a great idea, we should look into that for next year.' So we just presented a full communications plan with a business proposal, costs, everything upfront and said, 'Here's the line. Will you sign on it or no?' Because it kind of forced the issue forward."

# 2. Employee innovation happens by: Fostering empathy and collaboration

Employee innovation happens when employees recognize and want to help meet the needs, goals, and priorities of other people. Employee innovation thus hinges on empathy and collaborative relationships with others, because "if I don't know what is the need of my colleague, how can I be innovative to help him or her to find a better way to do it?" (Participant

5KN). Participant 5KN shared how they pursue innovative ideas in order to help fellow employees enjoy their own work more:

I feel that some person is so bored with their job, so I go and show them, okay you can do this like this way, you can use Google Maps to put those things here. It's not innovation for me, but for that person, seeing that things could be done in a different way, and again opening one eye that this is a different way to do, thinking out of the box, then it's going to help this person to move up. Motivate them to do different ways. (Participant 5KN)

Participant 3YP decided to make simple educational booklets that colleagues could use to help citizens understand technical concepts and laws: "I guess I just saw a need. . . . I looked at my colleagues who are going out to public events and people are having these two different conversations [about laws] and there's no common ground. It just seemed like something I could do, so I did it." Similarly, Participant 5KN kept their eyes open for issues and needs in their own team: "I was just passing in front of the desk and this guy was working on a big file and it wasn't fitting. I saw one legal page like this, and another like this, and he is trying to adjust it, and I said why don't you just flip them around? . . . Now it's opening his mind to do things differently. That's why I'm saying it's moving from one person to one, and we learn from each other."

Participants described how they put themselves in the shoes of colleagues and management who may be impacted by new ideas and actions. When introducing a process change, for example, Participant 12LS recognized that "the way you roll things out is very important to make sure that they know that we're actually trying to make their life easier. So . . . we went over, okay, where are the gaps from your area, what are we missing here from you, everybody felt really heard at that point." Participant 6DM explained how important it was that new ideas came "from the bottom up. . . . It makes a really big difference because then people
feel a part of it, they feel like they're the driving force and all of the sudden that vision that was up here, is now starting down here."

Understanding others' needs also includes considering larger political priorities in a public sector context:

[We run] up against the fact that our [municipal] council runs on a four-year cycle. And they have the best of intentions, they are very committed, forward-thinking, most of them. But they are also looking to get re-elected, so that influences the decisions that they make and at the end of the day we are beholden to council. So, you know, when it comes to funding, when it comes to decisions, we have to keep that in the back of our mind too. (Participant 3YP)

With over 18 years in the organization, Participant 9NS described how their views of innovation had changed over time to become more nuanced: "[Now] I understand more the weight that [managers] are under. Because I think when I was younger I might not have understood, by going to say like 'Well, why can't we do [programming] this way?' You know, I understand more now why we couldn't have." Participants even expressed understanding for frustrating processes: "Everyone yells at the municipality for being, you know, full of red tape and slow to respond, but if we didn't have those checks and balances people would be freaked out because we'd just be off doing stuff and they'd have no feeling of control, and I mean that's not a good situation either" (Participant 3YP).

Seeing situations from different perspectives often leads to collaborating and working with others on new projects and ideas. Participant 3YP described how they were working on a new project with a local school. When students in the school wanted to create a public installation, Participant 3YP tapped internal networks for help: "You can't do anything by

yourself, and I think no matter what you do, you always need friends and allies and people that you can call up for advice or, you know, just explore ideas with. . . . With the [public installation], I wouldn't have been able to do any of it without [this colleague from another unit]because I don't know how a [public installation] goes in, not a clue. How do I get a permit? I don't know. So I really leaned on her and she was fantastic." Participant 10DR explained how essential it is to "have an infrastructure of support from a lot of different places":

Nothing ever happens in the [organization] if only one person has a good idea. It always takes- and I'm not even gonna say two- like I think it might be three at least, and one of those should be a councillor, one of them should be a manager, and then one can be somebody else, but that somebody else has to have their supervisor probably on board because they can't pitch totally vertically over like three or four levels of bureaucracy. So, I think a lot more about that. (Participant 10DR)

By empathizing with and understanding the reasons for why things are the way they are, employees are able to better create and get support for their ideas. Describing a colleague who brought in external partners for a new initiative, Participant 2SH explained: "He's a good relationship person, like he could develop the relationships to get the [professional] association on board, and you know, the other community partners . . . and he convinced them it was going to be worth their while."

#### 3. Employee innovation happens by: Making do

Innovation happens when employees try new things using existing workplace resources, time, tools, and materials. Employees hack, borrow, and bootstrap with what's available because "we don't always have the proper tools to do the job. So it's always kind of you're trying to get the job done with what you have. . . . You can't go from A to B. Sometimes you have to go A to

C because B is not available" (Participant 14KW). In one example, Participant 14KW described using duct tape to modify and fit over-sized cutter heads into small spaces. This kind of employee innovation requires individual initiative, creativity, and inventiveness, as solutions are "hodgepodged" together (Participant 14KW) without any requests for additional funds or resources. In another case, Participant 14KW was tasked with figuring out how to apply a new water treatment product to municipal bodies of water. With limited time left in the season, Participant 14KW explained how they accomplished their task:

I would have one boat that we would set up as our barge that would have the mixing station and our pumps on it, then the second smaller boat we would run a line, and then the third boat was basically running bags back and forth from the shore to our mixing boat. So that's where we didn't have the right tools to actually do it, but instead of going out and spending, you know, \$20,000 to rent the machine or something, it was just kind of- you design and make something up as you go that would work. (Participant 14KW) At times, employee innovation happens *despite* management:

There are some [supervisors] in the [organization] who don't like [employee innovation]. You just, you follow kind of the certain set of procedures, and you never vary from it. And that's kind of how they like it. And then there's other ones, again they don't expect [employee innovation], but if you do, and then you get the job done kind of *without bothering them or without creating more work* kind of thing, they do like it. (Emphasis added, Participant 14KW)

When implementing innovative ideas without explicit supervisor knowledge or approvals, employees maintained confidence in their actions because they had thought them through: "I know if I get called into the boss's office, I can back up what I did. . . . Maybe they're not happy with it, but this is my thought process going through" (Participant 14KW).

Participant 7HM described the innovation message from management in their unit as, "Be innovative, but don't push the boundaries to the point of people being uncomfortable and be very careful that you don't change things.' Which is a very odd statement. If you're going to be innovative, you kind of want to go for the changes, isn't that the intention? . . . So it's a lot of battles to be innovative, which is insanely frustrating."

Employees thus make do without requesting additional people, tools, or budgets for their innovation. For example, knowing there was no appetite for spending on software improvements, Participant 5KN instead solved a database problem by modifying "our [existing] software system that is used for linear property. . . . I tweaked it a bit to be able to do valuation for the area." Another employee identified a need for better mental health support for colleagues who faced life-threatening situations on the job. Without a budget for mental health counselors and knowing that "she can't possibly be that resource for everyone," the employee instead "pushed hard on creating a peer support group, . . . with representation from all the different areas within the unit" (Participant 7HM). In order to create an easier annual rollover process, Participant 9NS worked "with the abilities that we had within us. We set it up so we did a Google Form, and that was great because it was something that *we* could innovate" without requiring higher-level approvals.

#### 4. Employee innovation happens by: Connecting dots

Finally, innovation happens when employees see themselves as connected to and influenced by larger social, political, and professional systems. They interact with, influence, and draw from a wide range of experiences and people to inform their work activities. Participant 9NS, for example, kept ripple effects in mind when they made operational decisions about a recreational facility: "I involved my community league that was associated with the facility. I was talking to the curling rink that was associated with that facility, the high school that was associated with that facility. I made sure to make sure that all those different areas knew what was going on because, in my mind, I was part of a greater whole." Participant 4RV shared a story of a colleague who, rather than designing a typical, and entirely acceptable, suite of event marketing materials, instead decided to "tie [the event concept] into what [the organization] is all about, with our [Indigenous] treaty land being a gathering place. [He was] being very thoughtful about the way we represented ourselves to the world."

For Participant 6DM, a systems-level perspective meant individual employees made connections between their work and larger organizational goals:

[A colleague] suggested that we switch to one hundred percent recycled paper. It's not something that had anything to do with their work by itself. It was a [organization]-wide mentality of 'We can be more eco friendly, we can be greener, we can have better public perception,' and it's breaking that wall of- 'This is my box and I can innovate and improve my box,' as opposed to 'I can improve what everybody does by doing this.'

(Participant 6DM)

Meanwhile, for Participant 4RV, connecting the dots meant remembering the fact that municipal government employees are ultimately here to serve the public: "You can be innovative in all kinds of ways, but if the people that live here don't get anything out of that innovation, then it's probably not the best use of time. So I think [an innovative employee is] someone who thinks about their audience, which is essentially taxpayers."

Clearly wanting to connect their work to overarching priorities, Participant 13ML was frustrated that "none of us in our group have been asked to contribute . . . to a ten year plan, a

master plan that's being developed. So I'll send monthly updates to my supervisors and upper management, and one of the comments back was like 'Okay, well, take into consideration the master plan,' and I was like 'I know nothing about the master plan, so how can I take it into consideration?'"

Employees who connect the dots "tend to be really curious and open minded" (Participant 3YP), and have "the perspective that you don't know what you don't know, so just keep asking questions or talking to people. You will figure it out as you go and sometimes things come together" (Participant 2SH). For example, after Participant 2SH was encouraged to cold call a colleague in another municipality:

I'm thinking, 'I don't know why I need to talk to them.' But if they think there's some value there, I'll pick up the phone and call them and just say, 'Somebody told me I really should talk to you and I'm not really sure why but I'd love to, you know, find out why they said that and what I could learn from you.' (Participant 2SH)

To make innovation happen, then, employees look beyond the daily grind to seek inspiration, expertise, and ideas from a wide range of internal and external sources, including citizens, other municipalities, professional associations, and the private sector. For Participant 13ML, going to industry conferences and professional training opportunities, reading cutting edge new theory, and exploring best practices was important "because [otherwise] you get caught in your bubble." As Participant 3YP noted, "Often innovation is just connecting two ideas or asking the question 'why' when nobody's asked that yet." Employee innovation, in one case, came out of employees connecting their work to cultural trends:

Pokémon Go. All the rage this summer. Bunch of girls at the [facility], the program managers, they came up with the idea of a Pokémon night. Charge everybody five bucks

a head. Come on into the [facility] and play Pokémon. . . . They took what was a fad and made it reality within a very short time, in a way that they could. (Participant 9NS)

Inspiration for innovation can also come from employees' diverse life experiences: "If you ever go by a farm, and you see those big crop sprayers with like the booms and stuff out? For [spraying herbicide application on] the large lakes, [an employee] basically built that in the back, a removable system that we can take in and out in the back of one of our boats" (Participant 14KW). Participant 14KW explicitly credited their upbringing on a farm for their do-it-yourself hacks and tool inventions at work.

Rather than forming hard boundaries between their work and personal lives, innovative employees also identify with their dual identities as citizen users of municipal services. Participant 3YP shared memories of "being in high school and feeling so angry and disenfranchised and isolated and excluded from my community [because] nothing there was built for me. I couldn't go anywhere. My friends all lived really far away. It was very isolating, but that's how we built cities." To avoid repeating this mistake for future generations, Participant 3YP now "loves the idea of getting high school students involved in city issues in a way that's really meaningful and tangible." Participant 6DM, through their work as a graphic designer, was "trying to make it better and make it more user friendly or easier to understand, or whatever I can do, to make it easier on the public, because *I'm still public too*" (emphasis added).

#### **Chapter Summary**

In this chapter, I presented the results of my data analysis. I found that, from a frontline municipal government employee perspective, there are four varying ways of conceptualizing *what* employee innovation is: Thinking Small; Making Life Easier; Having High Expectations; and Going Above and Beyond. There are also four different ways of conceptualizing *how* 

employee innovation happens: by Working the System; Fostering Empathy and Collaboration; Making Do; and Connecting Dots. These categories were synthesized into a concise phenomenographic outcome space that illustrates the non-hierarchical and interdependent relationship between elements. The particular meanings of these categories were explained using the verbatim words, examples, and experiences of the research participants. For quick reference, a condensed set of categories of description, along with the final outcome space, can be found in Appendix D.

In the following chapter, I discuss these results in relation to the organizational development and workplace learning literature, contending that my findings have three key implications for practitioners and theorists invested in the phenomenon of employee innovation. I close the discussion with a last note regarding study limitations.

#### **Chapter Five: Discussion and Implications**

#### Overview

In the previous chapter, I presented the results of my data analysis in a phenomenographic outcome space, accompanied by detailed descriptions of the various categories. These results answered my research question regarding the qualitatively different ways that frontline municipal government employees conceptualize the phenomenon of employee innovation. For quick reference, the final outcome space, along with condensed categories of description, can be found in Appendix D.

In this chapter, I discuss the results of this study in relation to existing organizational development and workplace learning literature, with particular emphasis on the sociocultural workplace learning theories introduced at the beginning of this thesis. I present three key implications that are based in the concept of employee innovation as a situated, participatory, experiential, and informal workplace learning process. First, this study complicates conventional understandings of employee innovation. Second, the results affirm and build on ideas of employee innovation as a process of everyday workplace learning. Third, this study reinforces the need to intentionally and strategically support practice-based employee innovation in the workplace through formal processes and initiatives. Finally, I close the chapter with a note on limitations of this research.

#### **Complicating Employee Innovation**

Innovation is a complex concept that has been examined and categorized along several different lines (Anderson et al., 2014; De Spiegelaere et al., 2014). Writing about so-called shop floor employees, Axtell et al. (2000) notes two ways of describing innovation. First, innovation can be described as a *process* made up of stages such as generating, implementing, and spreading

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ideas. Second, innovation can be described based on its *scope*, running along a continuum from incremental continuous improvements, to radical and disruptive changes (Axtell et al., 2000). A third way of understanding innovation is as a *result*; innovation is then categorized into various types, such as process innovation, product innovation, method innovation, and so on (European Commission, 2014). Finally, innovation can be differentiated based on its *source*. Thus, drivers for innovation may be top-down policies or strategic directives (Arundel & Hollanders, 2011); external research, knowledge, and expertise (Jensen et al., 2007); or the bottom-up and experience-based ideas of employees, consumers, and clients (Arundel & Hollanders, 2011; Jensen et al., 2007; Melkas & Harmaakorpi, 2012).

Within this study, it is evident that employees' conceptions do not fit neatly into any one of the above ways of framing employee innovation. Participants considered employee innovation to include a range of processes, results, scopes, and drivers, often in contradictory ways. For example, the idea that employee innovation happens by making small changes within existing internal processes (Thinking Small; Working the System), is at odds with the idea that employee innovation is pushing for radical challenges to the status quo (Having High Expectations). On the other hand, the idea that employee innovation is simplifying or speeding up work activities for one's self and colleagues (Making Life Easier), is closely linked to the idea that employee innovation happens by understanding the needs and priorities of others (Fostering Empathy and Collaboration). This study highlights the inadequacy of using just one lens to depict the complex phenomenon of employee innovation. An implication for practitioners working in the realm of innovation management, then, is to critically question what is to be gained – if anything – by pulling apart and classifying employee innovation in such compartmentalized ways, if employees themselves do not consider their practices in this light.

Thus, the results of this study also engage with and challenge several long-held definitions of employee innovation. In the late 1980s, Amabile developed what is still one of the most widely referenced models of employee innovation in the organizational development field (Amabile & Pratt, 2016). This model considers creativity to be the front-end "production of novel and useful ideas," whereas innovation is the "successful implementation of creative ideas within an organization" (Amabile & Pratt, 2016, p. 158). Employee innovation, through this lens, is ideas that have actually been implemented or adopted beyond the individual employee. However, results from this thesis emphasized that, in practice, employee innovation more often involves working within one's own pocket of the organization to try out local, context-specific ideas (Thinking Small). In this case, innovation is not intended to spread and change existing processes and systems across the organization (Working the System); in fact, from the employee perspective, successful innovation can be making changes without anyone actually finding out about or being disrupted by them (Making Do). Yet, contrary to the frontline employee views in this study, "discourses of public innovation tend to celebrate radical changes at the expense of improvisation, small modifications and everyday openings for innovation" (Lippke & Wegener, 2014, p. 379). This emphasis on implementation reflects top-down knowledge management goals of codifying and diffusing knowledge across an organization (Greenhalgh et al., 2004), more than the perspectives of employees themselves.

Another key element within conventional understandings of employee innovation is that it ought to help achieve organizational goals (Ellström, 2010), or add value to the organization (Wihlman et al., 2014). In the public sector context, this tends to be framed as "public value creation" (Wegener & Tanggaard, 2013, p. 83), or providing value for citizens (Hennala et al., 2012). There are, however, two challenges to this view of employee innovation. First, public sector organizations are multifunctional, with diverse and sometimes competing internal and external goals (Christensen et al., 2007). For example, an overarching organizational goal of meeting citizen needs may be at odds with a department-level goal of reducing costs. Which goals and values, then, should employees align with? Employees in this study initiated innovative ideas in order to add a diverse range of value for a wide range of people, including colleagues, supervisors, citizens, elected council members, and themselves (Making Life Easier; Having High Expectations; Fostering Empathy and Collaboration; Connecting Dots). As Wegener and Tanggaard (2013) note, "Value is a variable concept" (p. 83).

The simplistic idea that employee innovation in the public sector is or ought to be aimed at the public good or serving citizens, speaks to what Anderson et al. (2014) call a pro-innovation bias in the innovation management literature. This bias involves "the presumption that innovation is a desirable characteristic and that positive outcomes will invariably arise from all forms of innovation" (Anderson et al., 2014, p. 1319). However, what helps one individual or stakeholder group could harm another (Amabile & Pratt, 2016). From large-scale survey results related to innovation in the European public sector, Arundel and Hollanders (2011) found that bottom-up employee innovation can actually result in increased administrative costs, slower delivery of services, and user dissatisfaction. In this thesis, employees conceptualized employee innovation as making work activities quicker or simpler for themselves and their colleagues, rather than for citizens (Making Life Easier). Frontline employees also worked *around* organizational systems and processes, capitalizing on loopholes and meeting bare minimum requirements, in order to make innovation happen (Working the System). It is doubtful such perspectives and behaviors would be seen as aligning with overarching management goals. There are practical implications of this more complicated view of employee innovation that is drawn directly from employees' perspectives and experiences. For public sector management intent on developing a structured process and system to support employee innovation, the concept of adding value must be specifically defined within context. Does added value, for example, relate to reduced costs, positive citizen experience, a more pleasant work culture, or alignment with political priorities during an election year? Such expectations need to be relevant and relatable to employees regardless of the nature of their roles, or else customized for the different subcultures within multifunctional public sector organizations. Further, in a public sector context where employees are regulated by and subject to performance measurement activities (Christensen et al., 2007), management must ensure that frontline employees know how their innovation efforts are being assessed and judged, whether in relation to, for example, external benchmarks or financial targets.

#### **Affirming Innovation as Practice-Based Learning**

As noted, the results of this study complicate several conventional understandings of employee innovation within the organizational development literature. At the same time, the words of participants also affirm and build on notions of employee innovation as a function of learning that is largely informal, situated in social participation, and shaped by social, organizational, and cultural factors in the workplace (Beach, 1999; Billett, 2001b; Evans & Rainbird, 2007; Guile, 2003; Hager, 2011).

In this study, situated and participatory learning is evident in the finding that frontline employee innovation in a municipal government setting happens by Working the System, Fostering Empathy and Collaboration, Making Do, and Connecting Dots. A common thread across these four categories is that they rely on cumulative employee experience gained over time in the workplace. A newly hired employee in the municipal government setting of this study will not, for example, immediately recognize the idiosyncratic way to pitch an idea to their supervisor, know who to call in another unit for insider information about the politics of a new idea, or understand which formal processes actually have flexibility within them. The research participants' innovation arose out of the need to solve problems and address opportunities in their daily work (Ellström, 2010; Felstead, 2009), using the situated knowledge generated from their daily experiences and participation in workplace activities (Eraut, 2004; Evans & Rainbird, 2007).

Since informal learning occurs through action and interaction in the workplace, and does not necessarily require conscious awareness or intentional reflection (Eraut, 2004; Manuti et al., 2015), frontline employees with longer tenure would appear to be at an advantage for engaging in employee innovation. With more time and experience under their belts, longer-term employees have theoretically gained better understandings of the public sector context and developed networked relationships across the organization, allowing them to be pragmatic and thoughtful about the potential impacts of their efforts (Fostering Empathy and Collaboration), and understand that there is limited discretionary time and resources for them to work with (Going Above and Beyond; Making Do).

Classic approaches to situated learning propose that new employees learn on the job by interacting with these more experienced old-timers in non-formal communities of practice (Lave & Wenger, 1991). Evans and Rainbird (2007) build on this classic concept of situated learning through communities of practice, by contending that employee learning is situated across multiple levels: biographically, practically, and culturally. Thus, in order to effectively support employee innovation that emerges from highly contextualized and participatory engagement at

work, practitioners need to consider not only the attitude and skills of individual employees, or their personal relationships with more experienced colleagues in communities of practice, but also the larger organizational culture and context that allows for everyday learning in a more systemic fashion.

Greater understanding of how to support participatory, social, and experiential learning may be gleaned from workplace learning concepts of expansiveness. Eraut (2004), for example, concluded that four main types of expansive work activities support situated informal learning: working in groups and teams, working with others in order to observe tacit knowledge, taking on challenging work tasks, and interacting with clients/users in order to learn about problems and co-create solutions (Eraut, 2004). The overall conclusion for Eraut (2004) was that strong managers are the most important factor affecting informal workplace learning, as managers monitor the health of the group climate, give feedback, and attend to how work is structured. Similar to Eraut (2004), Jensen et al. (2007) also conclude that internal organizational "project teams, problem-solving groups, and job and task rotation, which promote learning and knowledge exchange" (p. 684) can support employees' innovative performance.

At the same time, employee innovation also happens by employees seeking new inspiration, expertise, and approaches from outside their normal work context (Connecting Dots); questioning the status quo about what a municipal government can and ought to be (Having High Expectations); and engaging in innovation despite pushback from colleagues (Making Do). These conceptualizations challenge the idea of informal employee learning as arising simply from a social and participatory learning process within and between organizational colleagues. For example, in a critique of Lave and Wenger's (1991) classic community of practice theory, Fuller et al. (2005) argue that if old-timer colleagues influence newcomer employees into adopting *established* values, methods, and beliefs in a given context, then how can such situated theory account for employees changing, challenging, and moving beyond established workplace practices? This also highlights a competing internal logic within employee innovation, in which employees are expected to learn how to reproduce and maintain existing work systems and processes, while at the same time also seeking to improve and transform them (Billett, 2001a).

Strategies for facilitating employee innovation thus ought to seek out and formalize expansive workplace features that enable employees to engage with new ideas, people, and artefacts both within and beyond the organization (Fuller & Unwin, 2006). Billett (2012), for example, emphasizes the importance of enhancing employee learning by increasing management support for what he terms workplace affordances, including employee autonomy, discretion, recognition, and opportunities for formal and non-formal development. However, it is important to note that such affordances are also influenced by "hierarchies, group affiliations, personal relations, workplace cliques, and cultural practices" (Billett, 2001a, p. 67), as well as by each employees' personal capacity, interest, understanding, and intentions in the workplace (Billett, 2012). In other words, it is not enough to consider just the localized environment or the individual learning territories of particular employees; instead, individual and structural perspectives must be considered in tandem, while also recognizing that there may be larger social factors impacting opportunities for employee learning that are beyond the control of any given organization (Felstead, 2009). From a sociocultural perspective, there is a need to draw from multi-level workplace learning approaches to facilitate the everyday learning of frontline employees in the public sector (Amabile & Pratt, 2016; Anderson et al., 2014).

### **Supporting Employee Innovation in the Public Sector**

The organizational development literature describes a wide range of management-driven methods and strategies aimed at enabling employee innovation. Fees and Taherizadeh (2012), for example, advocate that after management has identified those "tangible and intangible, human and non-human resources that are possessed or controlled by the firm" (p. 189) – which includes the practice-based learning of frontline employees – it ought to then deploy strategies to manage and maximize their value to the organization. Such strategies may include formal employee training in innovation processes, intentional work designs that mix diverse professions in project teams, and deliberate use of particular leadership styles (Anderson et al., 2014; Fees & Taherizadeh, 2012; Huang, McDowell, & Vargas, 2015; Kesting & Parm Ulhøi, 2010).

Although participants in this study volunteered examples of these types of managementdriven factors and strategies across individual, group, and organizational levels (Axtell et al., 2000), it is prudent to reiterate that this phenomenographical study was not designed to investigate hypotheses about the antecedents, mediators, or moderators of employee innovation in the public sector. What the results of this study do propose, however, is that employees ultimately choose whether or not to engage with the innovation imperative (Billett, 2012), regardless of what management or overarching workplace structures allow, encourage, or reward. In fact, frontline employees were more often engaging in employee innovation *despite* municipal government management strategies and organizational procedures (Having High Expectations; Going Above and Beyond), through the use of their practice-based experiences, relationships, and social capital (Working the System; Fostering Empathy and Collaboration; Making Do). Perhaps most telling is that, although all study participants engaged in employee innovation, only nine out of 16 participants said they felt an expectation from their employer to be innovative. This is notable given that the site for this study had a centralized innovation office explicitly tasked with supporting employee innovation across the organization. Part of supporting employee innovation in the public sector thus involves recognizing that it happens with or without requirement, driven by the initiative and agency of employees.

I do not contend, however, that there is no need for active and intentional managementdriven activities to promote and guide employee innovation. In fact, there are significant equity concerns with relying on informal workplace learning alone to support employee innovation, because not all employees have equal access to workplace affordances and expansive learning opportunities (Felstead, 2009; Fuller et al., 2005). Vallas (2003), for example, found that racialized employees had limited ability to develop informal relations and skills at work, while Gustavsson and Eriksson (2010) found that women experienced less expansiveness at work than men, including limited access to strategic networks and informal mentors. Rather than being a benign panacea, situated and participatory workplace learning experiences are bound up with power dynamics, divisions of labor, organizational culture, and the wider socioeconomic climate (Fuller et al., 2005). Contemporary human capital theory, which drives the innovation imperative and relies on employees' practice-based knowledge (Kesting & Parm Ulhøi, 2010), brings an assumption of meritocracy that can wash over these differing realities in the workplace (Foster, 2006).

At the same time, it is important not to assume that employees are "oppressed learning creatures" (Fenwick, 2001, p. 12). It is evident that frontline municipal government employees in this study exercised autonomy and power as they simultaneously maintained and changed their workplace practices (Thinking Small; Making Life Easier). Billett (2012) frames this as a

process of "bounded agency" (p. 95), in which frontline employees take action and make changes while simultaneously being controlled and regulated by others.

In the organizational development field, such employee agency tends to be studied under the umbrella of organizational citizenship behavior, with management strategy aimed at encouraging so-called extra-role and discretionary effort by employees (Morrison & Phelps, 1999). In this study, there is clear evidence that employee innovation in the public sector involves a notable degree of extra-role and discretionary effort (Going Above and Beyond); employee innovation is unambiguously understood as the time, effort, and ideas that employees put in above and beyond their expected job. Activities that are a regular and expected part of the job are specifically *not* seen as innovation by study participants. This employee understanding of innovation is directly at odds with rising human resource efforts to codify innovation as an employee competency and performance expectation (Potočnik & Anderson, 2012); if employee innovation is those efforts that are outside of one's job, how can they at the same time be expected as part of one's job? Further, if innovation necessarily means extra-role time and efforts, then it is also problematic for organizations to expect employees to engage in innovation without compensation. This finding underlines the need to intentionally engage in "social intervention for true equality" in the workplace (Foster, 2006, p. 300), rather than relying on ad hoc informal learning processes.

Fuller and Unwin's (2006) expansive-restrictive continuum offers practitioners a way of thinking about how to structurally support employee innovation in a public sector context. Fuller and Unwin (2006) consider how the organization of the workplace impacts employees' abilities to engage in learning that is largely informal, situated in social participation, and shaped by a range of social, individual, and cultural factors. In this framework, *expansive* learning

environments are those which enhance employees' workplace participation (Felstead, 2009; Fuller & Unwin, 2006). Expansive environments allow employees to gain a wide range of experiences across an organization; cross boundaries into new non-formal communities of practice; access both formal and informal learning opportunities; have responsibility for autonomous problem-solving and decision-making; and diversify their competencies, knowledge, and job activities (Felstead, 2009; Fuller & Unwin, 2006; Manuti et al., 2015). In contrast, restrictive workplaces are "characterized by limited work tasks, by the exclusion from decision-making, by an individual management of knowledge and job-specific skills and by isolation and individualism" (Manuti et al., 2015, pp. 7–8).

Practitioners can draw from a wide range of expansive workplace learning strategies to create a more hospitable environment for frontline employee innovation, including use of crossdisciplinary project groups; access to formal employee learning opportunities in and outside the organization; chances to develop new and unrelated skill sets through work (Fuller & Unwin, 2006); opportunities to collaborate with colleagues in groups and teams; the ability to take on challenging new work tasks; formal avenues for interacting with clients/users (Eraut, 2004); opportunities for job and task rotation (Jensen et al., 2007); and the ability to exercise autonomy and discretion in daily work activities (Billett, 2012). At a broader level, organizations also ought to develop the ability of supervisors to create invitational learning climates within their teams (Eraut, 2004), accompanied by an overarching organizational tolerance for error, ambiguity, and failure, as well as protection for frontline employees who take risks to introduce changes in their daily practices (Billett, 2012).

However, regardless of how many expansive learning features (Fuller & Unwin, 2006) or workplace affordances (Billett, 2012) may be strategically designed into a public sector organization, it is essential that practitioners also recognize the role of individuals' dispositions, identities, and agency in employee innovation. As evidenced by the words and experiences of participants in this study, management-driven attempts to lever and control employee innovation through top-down strategies alone overlook the more complicated reality of what employee innovation is, and how it actually happens, on the ground.

#### **Study Limitations**

In addition to the intrinsic limits of phenomenography as a methodology, there are several other limitations that impact the conclusions of this study. The first relates to recruitment and sampling. Participants in this qualitative study were referred to the study via strategic coordinators who worked in the organization in question. These referees identified potential participants in a variety of ways; some sent out a general email asking for volunteers, while others asked specific individuals to take part. Thus, potential participants were limited to people known by these strategic coordinators. This is a concern for all non-random and convenience-based sampling. Nevertheless, I am confident that my purposive sampling framework and thorough analytical process generated an outcome space that accurately represents the range of ways that frontline municipal government employees conceptualize employee innovation at this particular time and place.

A second limitation of the results of this study is that they are based on a current organizational reality, rather than abstract or future-focused ideals. Results were drawn from actual examples and experiences of employee innovation that have occurred in the workplace, which means that the results do not encompass what the phenomenon of employee innovation might ideally or hypothetically mean to participants, if circumstances were different. This is a question that I became curious about during the course of the study; however, it was not within the scope of my study design. A related limitation is that participants shared examples of not only their own employee innovation, but also those of colleagues. When describing examples of innovation initiated by other employees, participants were undoubtedly limited by their secondhand understanding of when, how, and why certain actions were taken. As with all self-reported data, there is the potential that conceptions of employee innovation generated in this study may be partial or selective.

A final limitation of this study is that there was limited existing empirical research based on qualitative employee understandings or experiences of innovation in the workplace, particularly in a public sector context. Non-empirical conceptual frameworks and quantitative research that investigated pre-determined variables and definitions of employee innovation largely formed the basis for my thinking related to this study. However, as a result, the exploratory results of this study shed new light on an understudied area and expose questions for future study.

#### **Chapter Summary**

In this chapter, I discussed and drew connections between my study findings and the existing organizational development and workplace learning literature, with particular emphasis on the sociocultural workplace learning concepts that frame this study. I proposed that the results of this study have three key implications for practitioners and theorists interested in frontline employee innovation in a public sector context. First, I proposed that this study complicates established understandings of employee innovation developed out of both private and public sector contexts. Second, I contended that the results of this study affirmed the idea of employee innovation as a form of situated, participatory, experiential, and informal workplace learning. Third, I argued that this study reinforces the need to intentionally support employee innovation

in the workplace, drawing potential strategies and approaches from the sociocultural workplace learning literature. Finally, I closed the chapter with a discussion of the limitations of the study.

In the following and final chapter of this thesis, I conclude with an overall summary and reflections regarding this phenomenographical study of frontline employee innovation, and introduce several opportunities and recommendations for future study.

#### **Chapter Six: Reflections and Recommendations**

#### **Researcher Reflections**

I undertook this study out of my personal experiences as an adult educator working in a municipal government that was actively implementing employee innovation strategies. Amidst the flurry of top-down strategizing in our centralized innovation office, I paused to wonder how employees themselves understood this innovation imperative. After digging into the literature, it became evident that employees across the public sector were expected to be a source of organizational innovation, yet little was known about how frontline employees conceptualized employee innovation. Thus, my purpose for this study was to gain a greater understanding of employee perspectives, in order to better design and support employee innovation strategies.

To address this gap in the literature, I designed a qualitative, phenomenographical research study to explore the qualitatively different ways that frontline municipal government employees conceptualize employee innovation. Rather than working from established definitions of employee innovation, I instead used an exploratory approach to generate new understandings of employee innovation based on the voices of employees themselves. I framed my approach using sociocultural workplace learning theories, looking at how employee innovation could be understood as a function of everyday learning. In my design and conclusions, I worked from the assumption that the frontline employees who implement strategy have different perspectives than the management that sets it, while drawing from the sociocultural understanding that innovation concepts generated from the private sector cannot simply be transferred across to the public sector context.

In my results, I found that the phenomenon of employee innovation can be complicated and contradictory. For frontline municipal government employees, employee innovation can

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variously mean Thinking Small, Making Life Easier, Having High Expectations, and Going Above and Beyond. This innovation can happen by Working the System, Fostering Empathy and Collaboration, Making Do, and Connecting Dots. These categories variously portray employee innovation as a process, result, scope, and driver, with different aims and means. Within phenomenography, this diversity of perspectives is to be expected, since its aim is not to reach consensus but rather to capture the full range of ways that a collective group may conceptualize a given phenomenon (Tight, 2016).

I also concluded that employee innovation is bound up with informal and situated employee learning, as employees draw from their personal experiences and knowledge gained within particular workplace contexts, in order to initiate changes at work. However, while employees exercise their agency in making innovation happen via informal avenues and relationships, practitioners must recognize that "sites of informal learning, such as the workplace, are also deeply unequal" (Manuti et al., 2015, p. 9). It is not enough to simply contend that employee innovation will happen equitably of its own accord. Thus, I drew a third and final conclusion that it is incumbent on practitioners to work from employee understandings of innovation, such as those presented here, to develop and strategically support expansive workplace learning features that broadly enable employee innovation in a structured way.

#### **Recommendations for Future Study**

Because of its highly exploratory methodology, the results of this study present several tantalizing opportunities for future study. For example, all frontline municipal government employees in this study were unionized. With its relatively high threshold for employee termination, unionization would seem to facilitate risk-taking and innovation by public sector employees, at least in comparison to non-unionized environments. However, multiple

participants within this study reiterated the idea that municipal government employees are afraid of proposing or implementing innovative ideas for fear of political backlash and repercussions from their employer. Thus, an intriguing future line of study would be qualitative exploration of how public sector unionization and employee innovation are understood in relation to one another.

As this is a phenomenographical study, I explicitly did not contend with questions of *why*, such as why frontline municipal government employees may or may not engage in innovation. There is ample quantitative research assessing various antecedents of employee innovation in the private sector (Anderson et al., 2014); however, these studies can only confirm or not confirm the relationships between pre-determined, presumed variables. Innovation research would thus also benefit from more qualitative theory-building studies that ask frontline employees themselves what drives, supports, and disables their innovative efforts (Anderson et al., 2014; Melkas & Harmaakorpi, 2012; Morrison & Phelps, 1999; Slåtten & Mehmetoglu, 2011). As Anderson et al. (2014) conclude, major theories in the field have existed for 20 years or more with little development or counterpoint theories; it is time for "more, and more radical, theory-building contributions" (p. 1318).

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# Appendix A

# **Recruitment Email to Departmental Contacts**

[Subject line:] Employee innovation at the [organization] - Research referral

Dear [departmental contact name],

I am a graduate student in the Faculty of Education at the University of Alberta, and am conducting research for my graduate thesis that looks at how everyday employees within a municipal government setting understand innovation.

I'd like to request your assistance identifying [organization] employees who may be willing to participate in a single, one-hour interview regarding their experiences and thoughts related to employee innovation.

Would you be willing to **suggest two employees** from your area who meet the following criteria?

- They are in a non-management and non-supervisory role,
- They have worked with the [organization] for at least one year,
- They are a permanent employee, and
- They are open and willing to share their thoughts related to employee innovation in a municipal government setting.

I ask that you please first confirm with the employee that they are willing to be contacted by me with more information about the research study. I would then follow-up with additional details, and seek their informed consent to participate.

An information letter is attached that you're welcome to share with potential participants. Note that:

- The one-hour interview would be scheduled over the months of November-December 2016, at a time and location of the employee's choosing (if they prefer to conduct the interview during work hours, they would simply be asked to ensure they have supervisor approval).
- Employees would be under no obligation to participate in this study. If they choose to participate, their name, specific responses, and the fact that they participated will never be shared with their supervisor, colleagues, or any other employees in the [organization]. Their participation in this study will be kept entirely confidential.

Please let me know by [date] if you are able to provide the names and contact information (email and phone) for two employees who meet the above eligibility criteria.

I can be reached at [researcher phone and email] with any questions or for more information about this research study. In addition, you can also contact my research supervisor, Dr. Heather Kanuka, Professor in the Department of Educational Policy Studies at the University of Alberta, at [supervisor phone and email]. Note that the plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, please contact the Research Ethics Office at 780-492-2615.

Thanks so much for your support,

[Researcher name]

### **Appendix B**

### **Participant Information Letter and Consent Form**

Study Title: Employee Conceptions of Innovation

Researcher	Supervisor
Alexis Lockwood	Dr. Heather Kanuka
Graduate Student (Master's Degree)	Professor
Department of Educational Policy Studies	Department of Educational Policy Studies
University of Alberta	University of Alberta
[Researcher phone and email]	[Supervisor phone and email]

Thank you for your potential interest in participating in this study. The information provided below is intended to give you an overview of the study (otherwise known as my thesis) and an outline of what participation in the study consists of.

### **Background and Purpose**

Organizations around the world, including governments, are actively encouraging employees to be more innovative as part of their daily work. My research looks at how everyday employees within a municipal government setting understand employee innovation.

You are being asked to participate in this study because you are a [organization] employee in a non-management and non-supervisory role.

This research is important because surprisingly little is known about how everyday employees, such as yourself, understand and define innovation – particularly when it is expected by their employer. By learning more about what innovation means for employees, municipal governments will be able to better support employees in being innovative.

I received your contact information from the [organization] as someone who fit the eligibility criteria for this study. This study is part of my thesis research towards my Master of Education degree at the University of Alberta, and has been approved by the Research Ethics Board at the University of Alberta.

### **Request to You**

You are being invited to meet with me for a one-hour interview, during or outside regular work hours, at a time and location of your choosing. (If you prefer to do the interview during work hours, please ensure you have secured supervisor approval). Interviews will be scheduled during November-December 2016.

At this interview, I will ask you a series of open-ended questions regarding your personal experiences and ideas about employee innovation within the [organization]. The interview will be audio-recorded, with your permission.

For this study, I will be conducting interviews with approximately 20 different [organization] employees who are in non-management and non-supervisory roles across the organization; the project will be completed by Fall 2017.

### **Voluntary Participation**

You are under no obligation to participate in this study. Your participation is completely voluntary.

During the interview, you do not have to answer any questions that you don't want to. Even if you agree to be in the study, you can change your mind and withdraw. If you withdraw after the interview has taken place, your data can be removed from the study up until the point that I begin analyzing the interview data in the last week of December 2016.

# **Confidentiality & Anonymity**

Your name, your specific responses, and the fact that you participated in this study will never be shared with your supervisor, colleagues, or any other employees in the [organization]. Your participation in this study will be kept entirely confidential. Anything you share will be grouped with other interview responses and made anonymous, with specific details removed so that you cannot be identified. *Addendum:* Recorded interviews will be anonymously transcribed by a professional transcriptionist. The transcriptionist will not have access to your individual name, and will sign a confidentiality agreement.

The results from this study will be included in my thesis, and may also be shared in other publications such as academic journals, or presented at academic conferences. You will never be personally identified in any publications or presentations related to this research.

I am the only person who will have access to your individual name and original interview responses. All electronic data will be kept on a password protected and encrypted laptop computer and external hard drive, kept in my secure private office. Data and materials will be kept for five years following completion of my thesis, and then will be destroyed confidentially by September 2022.

# **Benefits**

Participation in this study will help organizations better understand how everyday employees understand and respond to the call to be innovative as part of their daily work. I hope that the information we get from doing this study will help organizations such as the [organization] to design better ways to support employee innovation.

You will not receive any personal or professional benefits from participating in this study.

# <u>Risk</u>

The risks associated with this study will not be greater than those encountered in everyday life. There may be other risks to participating in this study that are not presently known. If I learn anything during the course of the research that may affect your willingness to continue in the study, I will tell you right away.

### **Further Information**

If you have any questions or concerns, please feel free to contact me or my supervisor at any time. If you are interested in seeing a final version of my thesis once it is completed, you are welcome to contact me directly for an electronic copy.

Note that the plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

### **Consent Statement**

- □ I have read this form and the research study has been explained to me.
- □ I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact.
- □ I agree to participate in the research study described above.
- □ I am giving permission for the information I share in an interview to be included in Alexis Lockwood's thesis, and any potential publications and presentations resulting from this study.
- □ I will receive a copy of this consent form after I sign it.

Name of Participant (printed)	Signature of Participant	Date
Name of Person Obtaining Consent (printed)	Signature of Person Obtaining Consent	Date

Protection of Privacy: The personal information requested on this form is collected under the authority of Section 33 of the Alberta Freedom of Information and Protection of Privacy Act and will be protected under Part 2 of that Act. It will be used for the purpose of conducting academic research. Direct any questions about this collection to: FOIPP Liaison Officer, Office of the Provost and Vice-President (Academic), 2-10 University Hall, Edmonton, AB T6G 2J9; tel (780) 492-3920; fax (780) 492-1438.

# Appendix C

## **Interview Guide**

## 1. Introduction

# 1. Overview

- □ Purpose of interview within research project
- □ Semi-structured format
- □ Approximate length
- 2. Written informed consent
  - □ [Indicate written consent completed]
- 3. Oral consent to proceed
  - □ [Indicate oral consent received]
- 4. Permission to audio record
  - □ [Indicate permission to audio record]

# 2. Initial Contextualizing Questions

- 1. How many years have you worked with the [organization]?
- 2. Can you tell me about your current role at the [organization]?

# 3. a) Primary Questions

- 1. Think about someone you've worked with here or elsewhere whom you'd describe as innovative. In your view, what does it mean to be innovative as an employee?
- 2. Can you describe a specific example of a [organization] employee being innovative whether something you've done, or someone you've heard about?
  - a. [Probe if yes] Concrete details: Who, what, when, where?
  - b. [Follow up if no] Can you describe a time when you or another employee figured out a better way of doing their work?
- 3. Do you feel an expectation to be innovative in your work?
  - a. [Follow up if yes] How does this affect the way you do your work?
  - b. [Follow up if no] Are [organization] employees, in general, expected to be innovative?
- 4. Do you think most [organization] employees share your views about employee innovation?
- 5. Have your views about employee innovation changed over time?

# 3. b) Generic Probes

- 1. Can you tell me more about that?
- 2. Can you give me an example?
  - a. [Probe if yes] Concrete details: Who, what, when, where?

# 4. Closing Questions

- 1. [Summary of discussion]
- 2. Before we finish, is there anything you'd like to add?

## Appendix D

## **Outcome Space and Categories of Description (Condensed)**

Ways that Frontline Municipal Government Employees Conceptualize Employee Innovation		Employee innovation happens by			
		Working the system	Fostering empathy and collaboration	Making do	Connecting dots
Employee innovation is	Thinking small				
	Making life easier				
	Having high expectations				
Emp	Going above and beyond				

*Outcome space*. This figure illustrates the non-hierarchical relationships between the range of ways that frontline municipal government employees conceptualize employee innovation.

### What employee innovation is...

1. Thinking small

Employee innovation is making small changes within employees' spheres of influence. Innovation is little steps and incremental changes that fix or improve what already exists, rather than radical or disruptive ideas. Innovation happens in special pockets or subsections of the organization, often as pilots that are not intended to scale. Being innovative means being pragmatic, realistic, and local in scope.

2. Making life easier

Employee innovation is trying to make life easier for oneself and for colleagues. *Easier* can be understood as making work activities quicker, fewer steps, less effort, more enjoyable, or safer for an employee. Employee innovation has direct and immediate benefits for individual employees in their daily work.

3. Having high expectations

Employee innovation is having aspirational ideas about what a municipal government and public servants can and should be. It means advocating for modern, novel, and transformative processes, methods, and technology. Employees want to be the first team, department, or

municipality to try something new, which may mean going beyond the status quo to risk engaging in high profile projects. This hopeful, prideful, and optimistic attitude is exciting and infectious to be around.

4. Going above and beyond

Employee innovation is the time, effort, and ideas that employees put in above and beyond their expected job. New projects and ideas tend to be on the side of their desk, developed during non-working hours or when they can find time. Employees take advantage of any available discretion, leeway, or flexibility to be able to pursue non-required activities and ideas. Activities and ideas that are a regular and expected part of one's job are not innovation.

### How employee innovation happens...

1. Working the system

Employee innovation happens by understanding and working within existing organizational systems, rather than by fundamentally challenging or changing them. Innovation is accomplished through the strategic use of relationship networks, understanding how to get exceptions, and begging forgiveness. A feature of this is being patient, persistent, and politically strategic in proposing ideas at the right time, without necessarily being asked for them.

### 2. Fostering empathy and collaboration

Employee innovation happens by understanding and empathizing with the needs, goals, performance measures, constraints, and priorities of colleagues, management, and citizens. By building relationships with others and having empathy for their different positions, employees can more effectively get buy-in and support for their ideas. Employees see intrinsic and strategic value in working with others to create and implement new ideas.

3. Making do

Employee innovation happens by doing what is necessary to get a job done, using the tools, resources, budget, and materials that are at hand. Employees hack, borrow, and bootstrap in order to keep operations going on a daily basis, without disturbing their supervisor or requesting additional resources. They are creative and inventive, often under their own initiative.

4. Connecting dots

Employee innovation happens by employees seeing themselves as part of larger systems that they can learn from and contribute to. Employees seek new inspiration, expertise, and approaches from a wide range of internal and external sources, including colleagues, other organizations, professional associations, and the private sector. They are curious and openminded, considering connections between their dual identities as public servants and citizens.