EXPLORING EXPERIENCES OF MEANINGFUL ENGAGEMENT

IN PREPARATION FOR A COMMUNITY OF PRACTICE

by

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ABSTRACT

Exploring Experiences of Meaningful Engagement
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The failure of standard, command-and-control policies to make sustained headway against increasingly complex environmental problems has prompted scholars to examine a shift to new ways forward, to a participatory approach in the way that we learn, teach, conceptualize, and interact with our green and built environments. There has been growing interest in what are known as "Communities of Practice" (CoP) as one way to increase the effectiveness of participatory, collective work for sustainability. CoP theory rests on the assumption of a predisposition for human beings to desire to be meaningfully engaged with one another, and that individuals who are socially engaged with others produce sustained collective output. However, the lack of robust guides for moving from theory to practice presents a problem to organizations seeking to successfully employ CoPs. In preparation for facilitating a CoP amongst a network of environmental and sustainability education (ESE) leaders in Washington State, this case study asked: "what are the common elements of meaningful engagement in collective ESE-related activities among potential CoP members, and can those common elements be focused on during CoP facilitation to help bridge theory and practice?" Through use of the psychological phenomenological method, this study identified specific process-based values attached to a sense of "meaningful engagement" between participants, namely "sense of success/achievement" and "sense of responsibility/engagement," leading to or stemming from a "paradigm shift" and a supported by "sense of being connected to something bigger than themselves." These values suggest a process-based context for supporting CoP facilitation and may be helpful in providing similar organizations with some conceptual tools to overcome the theory-to-practice barrier in facilitating participatory engagement in their push to generate critical community knowledge, co-discover solutions to shared organizational opportunities, and approach sustained participatory-based solutions to our shared and ever increasing environmental challenges.

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Introduction

It is generally accepted that the environment of the earth has been heavily

degraded by human activity, especially over the past century. Moreover,

contemporary science shows that our ability to effect our environment is

increasing faster than we have the ability to understand or mitigate the possible

effects (Senge, 1994). Moreover, while our technical understanding of

environmental problems has increased dramatically over the past decades, the

global response to these problems has so far been slow and insufficient (Solomon

et al., 2007). The failure of singular government bodies or standard command-

and-control hierarchies to make cumulative, sustained headway has prompted

scholars to examine new ways forward, and this study is an exploration of one of

those methods. There is a rising cultural belief, especially since the 1970s

(Leadwith and Springett, 2010), that any one scientific discipline, legislative

body, or individual cannot sustainably address or mitigate even local

environmental issues on their own (Gardner, 2007). Multi-person (usually

voluntary) participation is needed in order for local and global cultures to

approach sustained solutions to environmental challenges. As a consequence,

environmental change is increasingly becoming tied to social change, a shift in

the way that we learn, teach, conceptualize, and interact with our green and built

environments.

In response, there has been growing interest from diverse sectors of

society to put into practice what are known as "Communities of Practice" (CoP)

as one way to increase the effectiveness of participatory collective impact for sustained environmental change. CoPs are defined a group of individuals "informally bound together by shared expertise and shared passion for a joint enterprise" (Wenger, 2000, p. 139). CoP literature defines "community" as a group of individuals who participate in a shared practice via shared norms and values, and CoPs are considered "participant-driven" because their norms, values, goals, and output are co-defined by their members rather than imposed by management. CoP theory is gathering recent attention because it promises to produce innovative solutions to complex social and organizational challenges while engendering a sense of community and social healing among its participants, with the belief that its successes radiate outward into society at large (Senge, 1994). CoP theory rests on the assumption that social and organizational change via participatory practices can be leveraged through the predisposition of human beings to "form and maintain social bonds" (Walton et al. 2012, p. 513) , and that individuals who are socially engaged with others produce sustained collective output through their CoP.

However, widespread CoP facilitation for sustained collective environmental impact has been difficult to achieve. While much literature exists on CoP theory, less literature exists on exactly how to apply the theory in specific contexts, and the lack of robust guides in moving from theory to practice presents a problem to organizations who seek to engage them successfully. Yet, supporters point to isolated successes and argue that such groups are indeed possible, but that good and targeted facilitation is necessary in order to make the theory align with

the community, to make it work (Hadar and Brody, 2010; Murrell, 1998; Niesz, 2010; Smith, 2001). Facilitation, or guided development practice, is a powerful social and organizational too but itself requires investment and energy, and successful facilitation of CoPs requires knowledge of the context (i.e., the specific community) as well as robust technical and organization-related skills (Murrell, 1998; Yakhlef, 2010). Therefore, intentionally developing CoPs inside of organizations can be a difficult, knowledge dependent, and time-intensive task.

With this need for knowledge of context as its point of departure, this study examines the foundations of CoP theory and possible routes for addressing the theory-to-practice problem through exploring a case study of environmental and sustainability education (ESE) leaders (stakeholders such as informal educators, local non-profit representatives, curriculum developers, superintendents, etc.) who are networked through an ESE support organization in Washington State known as "E3 Washington." E3 Washington functions as a convener and supporter of the statewide ESE field, to assist diverse stakeholders in achieving collective impact to "build a system of education for sustainable communities" (E3 Washington, 2009, para. 1). The organization is interested in creating a CoP inside of its educator leader network to leverage its scarce resources in the pursuit of achieving its vision, believing that empowering teacher educators to meaningfully engage with their colleagues will enhance the their learning and capacity, which will then cascade down to their students and will promote innovative solutions to broad challenges in the field itself. Given that forming a successful CoP from this group requires contextualized knowledge

about the group, this study was directed at uncovering common pathways for participatory engagement through exploring common experiences of "meaningful engagement," a concept identified from the literature to be a central driver of a successful CoP experience. The specific research question in this study was: a) is there a common understanding of meaningful engagement between members of E3 Washington's educator leader community, and b) can that common experience be contextualized within Community of Practice (CoP) theory to help make facilitation E3 Washington's educator leader group more strongly engaged and successful over time?" For this purpose, this study utilized the psychological phenomenological method, discussed in greater detail in the Methodology chapter. It is hoped that this study will help inform E3 Washington's specific CoP theory-to-practice challenges as well as inform the broader environmental education field about translating CoPs from theory to practice, by uncovering qualitative interview data that uncovers a shared socially situated mechanism of engagement among a potential environmental education CoP group. This research is an effort to contribute to a much-needed social shift towards participatory practice and collective impact that can successfully move towards mitigation and solution of the complex environmental challenges of our time.

From the results, this study found that the participants interviewed did indeed share a common perception of "meaningful engagement" in the individual group-situated ESE-related activities they experienced. Participants identified social concepts such as *A Sense of Success/Achievement* and *A Sense of Responsibility/Engagement,* leading to or stemming from A *Paradigm Shift* and a

sense of being *Connected to Something Bigger Than Themselves* as key facets of meaningful engagement in group-situated, ESE-related activities. This finding is significant because, though the individual experiences of each participant varied, common aspects of their experiences exist that meaningfully engaged them in their related ESE activities. This suggests that diversity of stakeholder background is not a significant barrier to successful CoP development in this case and identifies specific process-based values on which participants of E3 Washington's educator leader CoP may meaningfully engage moving forward.

The remainder of this thesis will present and defend its findings by first exploring the literature that informed this study. In order to fully inform the reader as to why this particular study is important and timely, particular attention will be paid to the multifaceted allure of CoPs, their history and development, their foundations in social and psychological science, and the specific barriers to practice. The literature review will continue with an expanded exploration of E3 Washington and its interest in CoP theory, as well as popular guidelines for CoP facilitation, to assist the reader in understanding that the results of this study (i.e., common expressions of meaningful engagement) are not ends in themselves, but a piece of the puzzle that will help bridge the gap between CoP theory and practice for E3 Washington and hopefully perhaps informing the wider literature's search for practice-based solutions toward CoP development. Psychological phenomenology, the research method chosen for this study, will be presented in detail in order to fully understand the critical terms and tools, rationale, significance, potential challenges of the method. Following this, the interview

process, participant selection criteria, and research design will be described before presenting the results and analysis of the data, which will also reflect on the literature for validity and context. Finally, the discussion section will present the findings in a multifaceted light, pausing to comment on the successes and limitations of this study, questions for further development, and lessons learned.

Literature Review - Building Understanding

This chapter is intended to give the reader the necessary background and history behind the concepts utilized in this paper, in order that the reader may meaningfully understand and interpret the results. The literature review will begin by describing the definition, history, and theoretical bounds of Community of Practice (CoP) theory. The history of CoP implementation in two of the major areas this study examined (the contemporary business and educator communities) will be covered, so that the reader has a firm grasp of the "fit" in these areas for CoP implementation and the importance of overcoming the theory-to-practice challenges associated with it. The literature review will then deepen by exploring the psychological and social foundations upon which CoP theory is founded, so that the social-based results of this study will be relevant and meaningful. Having provided a thorough foundation on CoP theory, its definition and bounds, challenges, and possible solutions, this literature review will reference the CoP facilitation guidelines found in the literature, since facilitation is the method by which E3 Washington (and perhaps related organizations) may "operationalize" the findings of this thesis.

The Appeal of Participatory Practice

A Community of Practice (CoP) is known in the literature as a group of individuals "informally bound together by shared expertise and shared passion for joint enterprise" (Wenger, 2000, p. 139). It is a discrete organizational unit of

people who share a common goal, interest, or language and participate together in perpetuating it over time. The idea of community "is as old as humanity" (Clegg, 2006, p. 55), and CoPs have a long history that precedes society's desire to intentionally create them in the modern business setting. Historically, CoPs came together on their own, outside of social or business mandates. Historically, businesses and organizations such as E3 Washington did not attempt to create them within their own organizations. Examples of CoPs include unions of community craftspeople, clubs, and social circles (Amin and Roberts, 2008), from gangs to fraternal orders, who convene to share ideas, innovate solutions to shared challenges, and nurture their field's identity (Kulkarni et al., 2000). CoPs would historically create their own leadership hierarchies and create their own goals, agendas, and physical outputs. In this way, CoPs are considered "participant-driven" because their norms, values, goals, and output are co-defined by their members rather than imposed by management, and participants might remain connected to each other simply through the shared passion for their work (Niesz, 2010). The shared passion that Wenger (2000, 2002a, 2002b) and Niesz (2010) referenced, which is at the heart of successful CoPs, expresses itself as field knowledge, skill mastery, and community cohesion (Amin and Roberts, 2008).

In order to account for the seemingly spontaneous aggregation of individuals joined in a mutually supportive shared practice (resulting in a CoP), modern researchers theorize that CoPs nurture an intrinsic human desire to "form and maintain social bonds" (Walton et al. 2012, p. 513). Researchers such as Wenger (2000), Niesz (2010), Senge (1994), and Snow-Gerono (2005) have

written that CoPs naturally occur because they create social meaning and a sense of belonging as well as providing, creating, and securing the tools and the support that members require in order to better execute their work. Recent research suggests that people will participate in CoPs for the opportunity to reflect, connect, and find a deeper meaning in their work through the "material meaning" they generate (Niesz, 2010) and out of an innate desire to develop their personal sense of being meaningfully connected to their peers and their greater world in general (Snow-Gerono, 2005).

It is believed that a sense of meaningful engagement with one's peers provides supportive contexts that "help people feel safe to explore their environments and pursue their interests…" (Walton et al., 2012, p. 514). Moreover, "meaningful engagement" has been identified from the literature as a way to help engage collaboration in pursuit of a larger vision because it is thought that identifying with community participants' major desire to be meaningfully engaged strengthens their commitment and output (Passy and Giugni, 2000). In other words, through meaningful engagement, CoPs can provide an opportunity for individuals to increase their sense of personal and professional well-being. Scholars believe that traditional CoPs need no intentional external inception because individuals naturally want to belong to a community, and want to be at the core of it (Yakhlef, 2010), and when fully committed, people become deeply engaged. This engagement, its social benefit, and organizational output, is what makes CoPs so appealing to contemporary organizations, and is what has been driving recent desire to intentionally create them. Specifically, E3 Washington, as

an ESE support organization devoted to nurturing field-wide knowledge, skill mastery, and community cohesion as a route to achieving increased capacity for ESE across Washington State, fits this profile, yet, there is more to understand about the business/professional world's interest in creating CoPs as well as the tensions that are created in trying to manifest them intentionally. Understanding these challenges will help E3 Washington and related organizations to be better armed to address and overcome them. This literature review will explore these topics, both broadly and with special attention paid to E3 Washington's home field of education.

Participatory appeal in the business world. Given that businesses and organizations are often tied to their bottom line, CoPs are enticing because they can be sustainable, cost-effective, and "potentially transformative" (Snow-Gerono, 2005, p. 243) for their participants and the field where they practice. Granted, scholars are not claiming that a sense of meaningful engagement necessarily translates to increased revenue. There are other factors at play, and it will be helpful to understand the specific business challenges that CoPs are thought to be able to address. CoPs are thought to be especially useful in environments where problems and solutions are complex and nonlinear, where the community is more likely to produce informative solutions than a managing entity would be, and where sustained individual commitment is a key to success.

It is believed that CoPs are exceedingly efficient at producing ground-based knowledge because they can organically synthesize group knowledge from

a diversity of participant sources. This is key because contemporary society is increasing its ability to understand the complexity of problems faster than we can address or manage them, confronting us with what Senge (1994) has called a knowledge challenge. Acquiring "knowledge" in this case can lead to mastery over internal efficiency in the workplace, a cohesive vision of the workforce, leverage over specific social or economic challenges, or all of the above. The acquisition of knowledge is key because knowledge is linked to innovation which often leads to organizational success (Smith, 2001). In other words, in scholars' vision of the workplace, it is believed that our ability to perceive problems and complexities predetermines our ability to manage them for clear answers and over-all success (Senge, 1994). Because of this persistent knowledge challenge, businesses see a need to "become more intentional and systematic about managing knowledge" (Wenger, 2002, p. 6) in order to succeed, and CoP theory is thought to address that complex need through the mechanics of participatory engagement.

Knowledge production can occur within CoPs because CoP social structure, in theory, allows their members to co-define their realities and ask questions in ways that traditional command-and-control hierarchies do not. Kulkarni et al. (2000) believed that this happens because knowledge-making is nonlinear and dynamic, in opposition to standard linear business models which do not allow institutions or their members the freedom to stop, question, and/or systemically manage their practices to check and define themselves against operational, cultural, or managerial momentum. In other words, the inability to

create new knowledge through properly interacting with the knowledge production system may end up systemically producing incomplete or faulty information, perpetuating or worsening the "knowledge challenge." However, properly facilitated CoPs' interrogatory natures can allow participants to reexamine ingrained assumptions and operational realities, to generate critical knowledge on deeper levels, and innovate and adapt to challenges (Snow-Gerono, 2005). Therefore, this structure is seen to be effective at generating critical knowledge about operational unknowns, and is therefore valuable for organizations facing knowledge challenges, such as those in the environmental arena especially.

Moreover, CoP theorists believe that social participatory practice is a necessary key component of social knowledge acquisition because "new information and ideas emanate not only from individual learning, but also from interaction with others" (Hadar and Brody, 2010, p. 1642). Given that innovation is generally interlinked with new knowledge, and that knowledge is often co-generated (as we shall see below), CoP theorists believe that innovation can organically arise from learning that occurs as a result of interactions with others. CoP practice is seen as a new paradigm because in traditional hierarchies, a managing entity generally sets the boundaries on learning and interaction with others, and assumes that leadership alone has the professional skills and knowledge to acquire solutions and mandate action. However, social theorists such as Ali Yakhlef have written that knowledge making takes place in social settings and "ultimately comes to count as knowledge for a community" (2010, p.

41), which means that if management or other community members are disconnected from the social process of knowledge production, the knowledge-dependent innovation system can break down. CoP theory asserts that, when multi-level, nonlinear learning is engaged, innovative solutions to complex problems and organizational unknowns are much easier to achieve. CoPs are more likely to produce informative solutions *and* foster greater engagement than a disengaged managing entity might otherwise be able to do, especially when sustained individual commitment is a key to success. "The basic rationale is that in situations of rapid change [such as with environmental issues], only those [organizations] that are flexible, adaptive and productive will excel. For this to happen, it is argued, organizations need to discover how to tap people's commitment and capacity to learn at all levels" (Smith, 2001, para. 8). For these reasons, nurturing the social component of the knowledge acquisition process is an important aspect of CoP theory.

Participatory appeal to the field of education and to E3 Washington. In the education field, knowledge production and reception are often the measures of organizational success. Educators are especially sensitive to their ability to foster critical learning, and this literature review has found that educators have special interest in developing participatory methods for education as part of a shift from traditional "lecture-style" teaching methods to frameworks that value community and inquiry. The belief is that fully making the shift to a community-based, participant inquiry stance that allows for co-learning and discovery will

sustainably enhance learning for educators and students alike (Snow-Gerono, 2005). This section will explore that interest by touching on the concepts of cooperative learning and educational leadership.

The recent recognition of the need for socially based change in the education system is occurring from the "ground up" because some educators believe that systemic change towards socially engaged learning revolves around educators themselves (rather than upon administrators or students, specifically). Hadar and Brody (2010) have written that in order to change the program, you need to change the teachers. Empowering social meaning through targeted knowledge generation effects learning and behavior resonates through society. For example, Chawla has written that if "educators understood the type of experiences that motivate responsible environmental behavior, they would be better able to foster the development of an informed and active citizenry" (1999, p. 15), which is one of the key rationales behind exploring methods such as CoP facilitation for environmental organizations like E3 Washington.

E3 Washington believes that a facilitating a CoP amongst its educator leader network can be a potentially supportive structure for that specific group, which would resonate outward to the organization as a whole and the ESE field statewide. Educator leaders such as those in E3 Washington's network are roughly defined as educators who engage and collaborate with other education professionals in order to study and improve their field (Snow-Gerono, 2005, p. 421). They can be teachers, students, or administrators, and E3 Washington believes that they may thrive as a facilitated CoP because educator leaders are

shown to be generally predisposed towards the type of socially supported

participant learning and social enhancement that CoPs can empower. For

example, Niesz (2010) and Snow-Gerono (2005) have written that teacher

learning and development is best supported in sustained peer groups that value

participant interaction and social support as a central part of the evolution of the

education system. These teachers are often passionate about learning and thinking

due to the nature of the field (Hadar and Brody, 2010), and because passionate

individuals generally desire to share and co-create their passions with others

(Amin and Roberts, 2008). Therefore, E3 Washington believes that situating a

CoP in its educator leader network well prove fruitful because the ESE field's

educator leaders are predisposed to nurture their field's identity through CoP-

based groups.

Educator leaders generally value cooperative learning (which can be

defined as learning that takes place in settings that value and foster learner

dialogue and co-inquiry) because it increases individual learning, retention, and a

motivation to continue to learn (Walton et al., 2012). Cooperative learning also

assumes a greater measure of group cohesion and attention to social acceptance

than traditional instructional methods, and social acceptance has also been shown

to positively effect learning and a desire to learn. For example, learners who are

more accepted by their peers do much better in class, which influences the quality

of their self-esteem and their relationships with other students (Clegg, 2006). In

contrast, not belonging is very demotivating in education settings (Walton et al.,

2012). Realizing this, an increasing movement in the education field is seeking to

leverage the social aspects of learning as part of the needed shift toward participatory paradigms in education. Participatory communities of educator leaders are generally poised to spearhead that shift, and value the support that CoPs provide (Niesz, 2010). In sum, many educator innovators believe that in order to ensure a shift from traditional lecture-style teaching to participatory learning and meaningful engagement, classrooms need two curricula; one that is based in the textbook, and another, called the "cultural code curriculum" (Yakhlef, 2010, p. 45), that is designed to create and ensure a level of base support for student engagement that leads to increased and sustained learning. This is important because socially-based learning environments can strongly support the learner engagement critical for the development of sustained learning. Learning environments with a level of social literacy and psychological support can be so critical because engagement is shown to be socially constructed and psychologically rooted. This literature review will explore that relationship further in order to continue to set the context of this study.

The Psychological and Social Construction of Meaningful Engagement

In the literature, the positive products of CoPs benefit society in a variety of ways, from healing endemic social disconnectedness, to empowering individuals and groups to manifest the change they seek to create in their world. It is believed building these groups is valuable because they can meaningfully engage each participant and the community to which they belong (Krach et al., 2010). More specifically, Snow-Gerono (2005) showed that, in studies of formal

educators (participants in a professional development school partnership), participants became very excited and worked with dedication when they felt meaningfully connected with each other. Participatory practice theorists have also found that success in achieving sustained participatory process occurs by breaking what can be referred to as a social isolation barrier (Wenger, 2000; Senge, 1994; Niesz, 2010; Snow-Gerono, 2005). By way of explanation, Walton et al. wrote that "cooperative activity is [psychologically] critical to human welfare" (2010, p. 514), and that "among the most powerful human motives is the desire to form and maintain social bonds" (2010, p. 513). In order to properly prepare for facilitating a dynamic CoP informed by this study's results, this literature review will the psychological and social roots of engagement and connectivity in a CoP, as well as explore why isolation-vs.-engagement is an underlying factor of CoP success.

Connectivity is psychologically rooted. The sensation of meaningful engagement between individuals, which can be linked to cooperative activity in participatory theory, was shown in this literature review to be rooted in the human psyche. This section will outline the rationale behind the belief in a common mechanism of a human desire for social engagement.

Cooperative activity, which is "doing things together," is strongly connected to a sense of the community, of community acceptance (Walton et al., 2012). Community acceptance is analogous to inclusion, which is articulated as salvation from alienation, and scholars find that freedom from alienation is a "driving force in society" (Hadar and Brody, 2010, p. 1649). This means that

desire for inclusion, for a sense of meaningful engagement, can be considered a

driver of social interaction. For example, a recent study by Clegg showed that,

among students, a sense of not belonging is linked to "loneliness, emotional

distress, psychosocial disturbance,…predictive of depression…anxiety and

suicidality…[and] identified as contributive to a number of different mental

illnesses" (2006, p. 59). On the other hand, Clegg also wrote that "a sense of

belonging was found to be associated with psychosocial health [and]…identified

with better school performance and adjustment" (2006, p. 59). Further studies

have shown that there are neurological roots to explain Clegg's (2006) findings,

that a desire for belonging is processed in the pleasure-based mechanism in the

brain. For example, Krach et al. have written that in neurological imaging studies

in humans, that "social reward is processed in the same subcortical network as

non-social reward and drug addiction" (2010, p. 1), and that both social and non-

social reward is linked to the same neural network and forms the primary pathway

for effecting human behavior (Krach et al., 2010). These studies suggest that

feeling meaningfully connected to others is biologically and psychologically

rewarding itself, is a major contributor to overall human mental health and

wellbeing, and is a persistent human desire.

      "For [the philosopher] Wilheim Fredrich Hegel, alienation was the

profound estrangement that he observed between self and world. This

estrangement manifested itself in numerous ways, among them the estrangement

of spirit and nature, human desire and social institution" (Clegg, 2006, p. 55). In

effect, the social drive to want to belong is psychologically created, because

individuals simply want to feel connected to others and be at the core of a community (Yakhlef, 2010), but it does not explain why alienation is a persistent theme in human psychology. Studies seem to show that failure to successfully engage, and the social tension that is created because of it, unfolds in the social context. Failure to successfully engage at social belonging, as we will explore below, can systemically occur because it is in a constant state of reconstruction and negotiation.

Connectivity is socially constructed. Despite its psychological origins, the predisposition for humans to feel reward in being meaningfully connected to others is anchored and developed in the social context. Given that facilitated participatory engagement also unfolds in the social context, a brief exploration of the link between the social and social construction of connectivity is warranted so that its relationship to facilitated participatory engagement in CoPs is clear.

Social belonging is articulated in the complex negotiations that take place with other humans that establish boundaries and hierarchies of interaction (Walton et al., 2012). Tension between human desire for social bonds and the success at articulating that connection is created because humans have different personal beliefs, which are psychologically articulated, but share the social tools to connect and learn, which are socially constructed. The two are distinct, but inextricably linked and constantly being redefined. Studies suggest that without others, there can be no real learning, that people add social knowledge to their self-knowledge from the present and the past, to create themselves over time

(Passy and Giugni, 2000). Our goals and inclinations are not built solely by ourselves, but are tied to our considerations of others. Given that our perceptions are mutually constructed, our sense of reality encompasses and is co-built with those who we value (Walton et al., 2012), or sometimes against those who we do not. We are so rooted in this co-development process that other people's goals become our own with minimal ties that start with tiny cues, because people want to be coherent and congruent. Generally, we want to feel aligned to each other in order to create acceptance and safety (Passy and Giugni, 2000).

In sum, aptitude with the social and psychological constructions of engagement in facilitated CoPs are important to possess because the ability to successfully focus on the construction of engagement between community participants is important for CoP functionality. As we become increasingly isolated from our peers and a sense of community connection, we become increasingly unable to receive, build, and generate relevant information, which means that our ability to produce information and to participate becomes hampered. This occurs because a person "is neither a coherently bounded individual, nor a set of anonymous practices, but individuals-in-interactions; individuals who are co/inter-dependent on one another's knowledge" (Yakhlef, 2010, p. 45). Failure to meaningfully connect in the social-belonging and knowledge-making process can eventually create psychological distress as well as social breakdown in a cascading effect, and if an intentional CoP is meant as a vehicle for successful engagement and meaning making, then the ability to focus on balanced construction of engagement is key. Therefore, one ultimate goal of

this thesis was to suggest a common experience of meaningful engagement that could serve as "common ground" for sustaining CoP connection for organizational, social, and individual well-being in a targeted community of professionals.

However, the absence of a fully informed system for sustaining CoPs through building positive social participant bonds means that conceptual understanding is not an end in itself, but only a descriptive step that can support facilitation of pioneering participatory practice. Moreover, dynamic social fluidity is not the only problem or challenge that facilitators of intentional CoPs face. This literature review will continue by identifying the operational challenges in moving from CoP theory to practice.

Problems and Challenges Facing Intentional Communities of Practice

Over the past twenty years, CoP use in many fields has been rising steadily as the successes of CoPs have become empirically evident in the literature (Jeon et al., 2011). For example, case studies exist that detail the transformative business successes of companies that have been successful at creating isolated, innovative CoPs in their workforce, even in high-level organizations such as Royal Dutch Shell, Kyocera, Ford, and the Boston Celtics (Senge, 1994; Smith, 2001; Wenger, 2000). Unfortunately, many organizations face a lack of clear guidelines from the published literature as to how to specifically make these knowledge shifts happen (Yakhlef, 2010), and CoP culture itself faces challenges such as individual access to information within social hierarchies, personal and cultural learning ability, social justice and group

equality, etc. However, some critics claim that the results are not conclusive, charging that these examples to not specifically explain how their CoPs co-generate knowledge or shift professional practice (Niesz, 2010). Organizations who attempt to create CoPs without taking the time to develop a contextualized understanding of the social and organizational environment in which they are to be built can end up undermining the conditions necessary for their success. Researchers believe that current participatory theory has difficulty articulating common powerful practices because of the different ways that different communities interact and build meaning (Smith, 2001; Jeon et al., 2011). General targeted theory recommendations for participatory communities can lose applicability, break down, or not apply from group to group, and all that is left is the general conceptual theory, which can be of limited help in getting beyond the theory-to-practice challenges referenced throughout this literature review. Therefore, one of the aims of this study is to contribute to the literature base by providing a targeted study of how one particular participatory community develop successful participatory practices, by exploring the process based (social and psychological) elements of their participatory engagement. Overall, the literature suggests that implementation of CoPs within existing organizations faces two categories of problems that limit the critical thinking and intentional human connection they require in order to flourish. These problems include organizational/business hierarchy challenges and social barriers embedded in cultural norms. This section will explore both sets of challenges in order to inform the reader of the barriers that this research is meant to help address.

Organizational challenges. Researchers believe that focusing on community connections and setting a safe environment in which to connect are the first steps in developing a CoP (Hadar and Brody, 2010), but CoP development challenges begin with these first steps as well. One of the first problems with intentional CoP development is the conflict between a CoP's need to independently grow, and its parent organization's need to achieve specific pre-determined goals. The development of an intentional participatory community is usually "goal-directed, determined by social, professional, and political interests" (Yakhlef, 2010, p. 41), but participant-driven groups are historically guided by the goals or interests of their members (Walton et al., 2012). Despite that the broad vision may be the same (as in the case of environmental stewardship) these possibly conflicting sets of goals may need to be resolved in order for CoP success over the long term, which can be a social and organizational challenge. For example, E3 Washington's 5 Statewide Goals (Get Together, Lead Green, Build Support, Go Out, & Connect Up [E3 Washington, 2009, para. 1]), were originally informed by its stakeholders and can be said to still ensconce the personal and professional goals of the members its educator leader network. However, its broad goals cannot be said to reflect individual stakeholder goals precisely (i.e., what does "get together" specifically mean from person to person?). Discovering a common experience of meaningful engagement may help support commitment for collaboration, which may help effect the desire of participants to integrate their individual goals for collective organizational

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movement. Moreover, a community's ownership of the participatory process, which is a driver CoP success, is more real and lasting when the process is built by the participants, rather than being imposed on by management of from outside of the group (Snow-Gerono, 2005).

Secondly, the business world can be a very problematic place in which to intentionally create a participant-driven community because the stereotypical "rush" of businesses to achieve success (profit) can conflict with the idiosyncratic nature of CoPs (Smith, 2001). Oftentimes, companies who have rushed to achieve knowledge sharing and innovation through building a CoP have destroyed the delicate conditions for CoP success (Amin and Roberts, 2008). The broad concept and discipline of a CoP is diluted and blurred in this rush (Amin and Roberts, 2008; Thompson, 2005). Much in the way that knock-off versions of an original, innovative product might soon flood a market, many companies are rushing to implement these groups without really understanding their function, form, or how to properly facilitate them, which can "cheapen the market." Some say that the traditional pressures of capitalism and consumerism are at fault (Clegg, 2006), that the rush to make money or sell products cannot ultimately sustain the self-directed social conditions necessary for participant-driven communities to thrive. It is argued that the ideals of CoPs, such as co-learning, group consensus, social well being, and identity co-construction (Wenger, 2000) are largely incommensurate with the short-term demands of the capitalist system and the contemporary Western business model (Smith, 2001). In some ways, a participant-driven community inside of a corporation can sound like an

oxymoron, and indeed some amount of facilitation is necessary to isolate an intentional CoP from the managerial pressures of the parenting organization.

Social challenges. In addition to a number of organizational challenges to successful intentional CoP facilitation, a number of social challenges also exist (Snow-Gerono, 2005). This subsection will explore those challenges in order to better support the results of this study. From a social standpoint, the rewarding nature of human connection is well documented (Clegg, 2006) such that entire organizational guidelines have been written to leverage them (Senge, 1994; Wenger, 2000, 2000a, 2000b). However, the language of facilitation that currently exists for CoPs can tend to be jargonistic and idealistic, which can present problems of accessibility for individuals or organizations who are new to participatory concepts. For example, Senge has written that in order for us to integrate the complexity of life into systemic social solutions, we need "to see interrelationships rather than seeing things, for seeing patterns of change rather than snapshots" (1994, p. 68). He argued that we must move from visualizing linear relationships to picturing more interrelated, systemic balances, and cultivating a deeper understanding of the reasons why we act the way that we do (called "mental modeling"), so that conversations result in real, new learning, rather than perpetuating ingrained (old) knowledge (Senge, 1994). Other examples of high-level CoP language can be found through Snow-Gerono (2005) who referenced Klark's (2001) guidelines of good conversation necessary for facilitation of a CoP, which are: "an articulation of implicit theories and beliefs;

perspective-taking; developing a sense of personal and professional authority; reviving hope and relational connection; an antidote to isolation; reaffirmation of ideals and commitments; developing specific techniques and solutions to problems; and learning how to engage with students in learning conversations" (Clark, 2001, p. 173). From these examples, one can imagine the high level of conceptual aptitude and theoretical familiarity required to utilize the literature fully. Organizations and facilitators who are not trained or versed in CoP theory may have a difficult time successfully supporting group members to engage, which becomes especially problematic because CoPs are leveraged on participant buy-in. This means that E3 Washington and/or similar organizations may need to take the extra step of acquiring or training CoP facilitators before they can successfully utilize the community-specific insights that studies such as this thesis find.

Further, some theorists argue that the broad success of intentional CoPs are implausible because social and personal barriers prevent some individuals from "opening up" to the shared personal engagement required (Smith, 2001). For example, in addition to the "minimal cues" that are shown to start engagement (Walton et al., 2012), Baumeister and Leary have said that in order for social connection to be created and sustained, "people need frequent personal contacts or interactions with the other person…[and they] need to perceive that there is an interpersonal bond or relationship marked by stability, affective concern, and continuation into the foreseeable future" (1995, p. 500). Maintaining these kinds of connections amongst professional colleagues can take a tremendous amount of

effort and engagement because some individuals in a professional setting are there merely because they want a job, and not for social connection (Smith, 2001). CoP theory assumes that the individual desire for human connection is always present and accessible, but sometimes the opportunities for meaningful engagement simply may not exist given the situation at hand. In this case, E3 Washington and organizations preparing to facilitate intentional CoPs must develop strategies that do not depend on a complete percentage of engagement, in order to be prepared for community members who are resistant to personal engagement to or are simply not interested in participating.

In sum, the organizational and social challenges outlined in this section are neither small not simple to unravel, nor are they comprehensive. This literature review is not intended to address each aspect of the CoP theory-to-practice problem, but simply identify a few of the major challenges related to this thesis' question. Given that skilled individuals who have the tools and capacity to navigate these challenged may be required to guide an intentional CoP from creation to full functionality, the next section will discuss theoretical guidelines for facilitation found in the literature.

Guidelines for CoP Facilitation

The next section of this literature review will explore some of the theoretical guidelines that exist for CoP facilitation so that the reader has a sense of some of the structure by which E3 Washington and future users of this study might implement its findings. As mentioned previously, facilitation is necessary

because CoPs "require focus, engagement, and leadership in order to flourish" (Hadar and Brody, 2010, p. 1643). Focus and leadership can require comprehensive theoretical knowledge, full community awareness, and a specific leadership skillset as well as a cultivated sense of feeling voluntary for the participants involved (Snow-Gerono, 2005). In the past twenty years of theoretical development of participatory theory, many scholars have suggested extensive tools for facilitators to utilize in the development of CoPs (Hadar and Brody, 2010), but this literature review will not explore the practices and procedures of facilitation, as they are an exhaustive field to themselves and are not in the scope of this research. However, this section will touch on the definition and conceptual practice of facilitation in order to set context for the reader regarding how and why the study's results might be used.

Facilitators, or individuals trained in the art of fostering group co-participation, can be necessary to achieve success in intentionally built CoPs. Facilitation is "the interpersonal process by which an individual is enabled to explore opportunities and learn without being directed" (Murrell, 1998, p. 303). It is an essential element to the formula of a successfully built CoP because it (a) protects the development of a participant-driven community from outside organizational pressures (such as traditional capitalist business models of the linear-learning paradigms of traditionally run educational systems); (b) translates the jargonistic and highly specialized language of CoP theory into a language that the local lay community speaks; and (c) integrates the parent organization's broad goals with the individual goals of CoP participants. Overall, facilitation

encourages people to reflect, feel safe, and engage in the process of new meaning making and identity building (Jeon et al., 2011; Murrell, 1998), and hopefully building shared knowledge to overcome shared challenges in a virtuous cycle - the more that participants engage, the more learning and sharing occurs, and the more success encourages engagement. Through facilitation, a group reinforces itself as knowledge and meaning is generated (Wenger, 2000, 2002b), perpetuating itself over time. This is meaningful because working towards sustained participatory engagement is one of the goals of facilitated participatory practice. Moreover, research shows that successful CoPs require a high degree of group engagement in order to ensure intended knowledge building, because, while people don't necessarily need to participate to learn, merely participating doesn't guarantee learning (Yakhlef, 2010).

Facilitators are empowered individuals. Murrell advised that "a facilitator [needed] to be a 'real person' who was comfortable with self-disclosure and was able to use a variety of strategies… promoted and allowed safety, trust, enjoyment, listening, sharing and even non-participation" (1998, p. 306). These last guidelines are critical because the communities we belong to need to touch us in order to feel real (Yakhlef, 2010). One of the most important functions of a facilitator is to provide opportunities for participants to reflect on their community, their values, and their goals through participation and dialogue. Through talk and reflection, community participants explicitly co-create meaning, co-create value, and find common truths of their reality (Niesz, 2010). Common truths, of course, are the tools that people use to co-build and make success in

interacting in their world; the tools guide group meaning. The success of those tools makes learning (Yakhlef, 2010). Therefore, reflection and talk are the gateways to learning, and successful facilitators help to allow that process to develop.

Summation of the Literature Review

The fields of research that were referenced in this review are varied, from environmental issues, to environmental justice, to CoP theory, to human sociology and psychology. This literature review has attempted to provide the reader with some familiarity with the concepts, terms, and rationales used by this study in pursuit of addressing the theory-to-practice problem of creating intentional CoPs in contemporary organizations. This summation section will provide an overall assessment of where the literature in this field has been, the most important things it has accomplished, lessons learned, and next steps.

Environmental science has shown us that the quality of our shared environments has been deteriorating at an increasing rate. New, innovative methods at tackling these challenges may be necessary to overcome them by shifting how we as a global culture interact with our green and built environments (Barr et al., 2011; O'Brien et al., 2013). Since the early 1990s, emerging theories such as CoP have been focused on increasing participatory engagement for sustained collective impact amongst businesses and other organizations (Senge, 1994; Wenger, 2000). As more information is gained, the critiques of the theory have become more precise, and new research has emerged to answer these

critiques (Smith, 2001; Amin and Roberts, 2008). The field of human sociology and social psychology provide the groundwork for CoP theory; research in these areas is well chronicled since the 1900s and has provided material to support the claims of the social and psychological power of meaningful engagement (Baumeister and Leary, 1995; Clegg, 2006; Krach et al., 2010; Walton et al., 2012). Within the past ten years, studies have become increasingly aimed at understanding how participatory theory is applied in local contexts, especially education (Kulkarni et al., 2000; Snow-Gerono, 2005; Niesz, 2010; Hadar and Brody, 2010, Yakhlef, 2010).

The literature referenced in this review has also provided researchers with clues on moving forward on developing strong and successful participatory practices in a few important ways. Firstly, it has grounded the movement by connecting social psychology to the phenomena of participatory engagement. Secondly, it has helped give organizations of all sizes and capacities powerful conceptual tools for moving forward in the face of complex social and environmental challenges. However, the literature has also warned of lessons learned the hard way, that organizations cannot rush the innovative change-making CoPs can provide, and must be prepared to let them develop at their own pace (Senge, 1994, Smith, 2001; Thompson 2005, Yakhlef, 2010). Therefore, CoP practice in organizations requires contextualized understanding as well as strong facilitation, and too much "management" may destroy the delicate conditions necessary for their success. CoP facilitation requires a delicate balance between convening participants and energizing them forward, and allowing group

momentum, output, norms, and styles to develop organically. Moreover, a facilitator is integral to the success of an intentional CoP because of organizational and social barriers at play, because the language of CoP interaction can be technical and jargonistic, and because some CoP participants may require assistance in reflecting on meaning making and how it is connected to their world.

In the view of this thesis, what is needed is to continue gathering and describing contextualized success and failures of intentional CoPs in order to help paint a larger picture of how they function in action. Continued research into the nature of facilitated CoPs will, by trial and error, elucidate powerful practices and, hopefully, begin to paint a picture of commonality and a general theory-to-practice canon for facilitating participatory engagement. However, a word of caution: facilitated CoPs should be a supporting aspect of organizational behavior, but not a "new paradigm" or singular model for change. Organizations who use CoPs to further their vision should not rely on them as a robust mechanistic engine of change, but rather as an idiosyncratic organism that will produce fruit if tended over time. This is mainly because CoPs have been shown to be powerful forces for renewal and engagement but grow best when unconstrained and free from certain organizational and social pressures. Moreover, by nature of the co-learning that unfolds in participatory practice, the output and development of CoPs are somewhat unpredictable. There is a danger that organizations who look to this model as a "sole savior" for addressing organizational challenges may invariably put too much pressure on them to succeed in predetermined ways, which can undermine the conditions for their success in the first place.

Finally, this thesis was designed as a case study whose goal was to describe a localized understanding of the process-based commonalities of meaningful engagement that exist between members of one potential intentional CoP, such that those elements can be focused on for sustained participatory engagement over time, guided by the lessons learned from the literature. The next section, Methodology, will outline the methods and research design that were used to develop this study's findings.

Methodology

Introduction

        The central research question of this thesis was two-fold. It asked a) is there a common experience of meaningful engagement between members of E3 Washington's educator leader community, and b) can that common experience be contextualized within greater CoP theory to help make their localized CoP more strongly engaged and successful over time? In order to explore these questions, this study selected ten of the forty members that E3 Washington is interested in convening into what it calls a regional leadership community of practice (RLCoP), and interviewed them in order to uncover their most powerful experiences of "meaningful engagement" in sustained, group situated ESE-related activities (such as those that E3 Washington's RLCoP would focus on). Their individual answers were then composited together to uncover a common experience of meaningful engagement in order to answer the central question of this study. The rationale for this approach was that this study sought common elements of meaningful engagement, which are predicated on belief and meaning. The belief is that because common meaning is a key part of the knowledge building and social connective process, finding common meaning amongst respondents will allow E3 Washington to successfully focus on those common elements of meaning as it builds its RLCoP. Success will help work for greater meaningful engagement over time. Given that this thesis searched for aspects of lived phenomena rather than attempting to reduce observations to laws and quantitative data, the psychological phenomenological method was chosen as the

preferred inquiry approach. This chapter first will describe the study group of E3 Washington and its rationale for participating in this study. Next, the history, rationale, and challenges behind phenomenology will be outlined, including key terms and processes associated with phenomenology and why each was important to the successful execution of this research. This chapter will then conclude with an overview of this study's research execution, including brief descriptions of the interview participants.

Introduction to E3 Washington

E3 Washington is a statewide organization that attempts to bring diverse stakeholders together to work via collective impact to raise the capacity for environmental and sustainability education (ESE) across Washington State. Its network functions as a social tool to share ideas and resources, connect for professional development, leverage support for funding, and to hold special events and programs geared towards the success of its mission. Its educator leader base is comprised of about forty leadership-level individuals who participate in ESE in their local communities, are networked through E3 Washington's website, and are loosely coordinated for collective impact, assisted by E3 Washington staff.

E3 Washington volunteered to participate in this study for two major reasons. Firstly, E3 Washington seeks to leverage participatory engagement in order to achieve its organizational mission, and CoP theory represents one of the most thoroughly developed participatory approaches available. Secondly, E3

Washington believes that its members are participating in a shared enterprise (i.e.,

working to build capacity ESE) for a common goal (to make ESE a more

significant part of their local communities), and that many of them face similar

organizational and informational challenges, such as limited resources and

capacities. In other words, E3 Washington believes that certain groups of

individuals within its member base, such as its regional educator cohort, may

constitute potential CoPs and is interested in exploring the possibility of

empowering them through facilitated CoP practice. Through participating in this

research, E3 Washington hopes that the results will assist them in building an

educator leader CoP within its network, to convene, share ideas, support one

another, and raise the capacity for ESE across the state through leadership in

collective impact and participatory support. The members involved in this study

were selected according to various criteria outlined later in this chapter.

Introduction into Phenomenology

Phenomenology, the methodology used in this study, collects aspects of

lived phenomena as they are experienced by the individual, and analyzes them

with specific techniques designed to examine participants' subjective reality while

controlling for bias as much as possible (Murrell, 1998). Phenomenology is useful

because ethnographic studies such as these deal with lived subjective experiences

that cannot be objectively reduced to facts. They deal with contextualized group

meaning and knowledge-making (Giorgi, 2011), where there is no universal truth

but constant subjective refinement. Edmund Husserl first developed

phenomenology in 1910, in response to the increasing growth of predictive theory in turn-of-the-century sciences. He felt that science needed to get "back to the things themselves," rather than attempt to fit reality to scientific laws and equations. Phenomenologists believe that, in order to have a reliable model of lived phenomena, one needs to understand the phenomena as they are experienced (Murrell, 1998). Phenomenologists build a mosaic picture of reality by describing the essential individual aspects of lived phenomena and the commonalities between them. It is a non-reductionist method (Giorgi, 2011), in which "the various aspects of everyday life and activities are seen as parts of a whole, with no clear-cut separations between them" (Passy and Giugni, 2000, p. 130). The research is also interdisciplinary (Niesz, 2010), because it requires the researcher to gather information and incorporate realities from across theoretical boundaries.

A phenomenological approach is very suitable for this study because the goal is to translate the responses of individuals in as unbiased a way as possible in order to discover a common definition of "meaningful engagement" within the aspects of their lived phenomena. Scholars believe targeted research is necessary in order to find such commonalities because people don't necessarily share personal beliefs (i.e., meaningful connection) out-of-hand (Yakhlef, 2010). Ultimately, common human methods of interacting with the world can be found (Clegg, 2006), and an accurate definition of meaningful engagement amongst this particular group can help provide the understanding necessary to bridge the theory-to-practice challenge during CoP facilitation.

Challenges of Phenomenology. Despite its advantages, there are certain challenges associated with the phenomenological method. Firstly, the method suffers from a certain lack of methodological uniformity. The absence of uniformity has resulted from tension between the two main schools of phenomenology: the Duquesne School, based on the work of Husserl himself, and the Dutch School, based on the work of Martin Heidegger (Murrell, 1998; Clegg, 2006). Phenomenologists from these different schools disagree on certain basic tenets of the method. Chiefly, there is disagreement as to the function of bias in research. Husserl asserted that a researcher needed to isolate and manage for bias, while Heidegger believed that bias was an important tool to be utilized in the reconstruction of lived experience. This singular discrepancy is the point of origin for differing and sometimes conflicting phenomenological approaches, and because these two differing paradigms are practiced concurrently, "the basic principles of phenomenology are often cited correctly but they are not fully understood nor are they always implemented correctly" (Giorgi, 2011, p. 360). In order to execute a solid study, I chose to explicitly follow the precepts of the Duquesne School. While both schools have their merits, the Duquesne School's method of isolating bias was chosen because explicitly incorporating bias into the study would have increased the complexity and size of this thesis, which was prohibitive under the timeframe available.

Yet, challenges of execution still exist. Any scientific method requires a certain level of skill to practice effectively, and this thesis represents my (the researcher's) first foray into phenomenology, so an increased amount of study

was required. As Hadar and Brody (2010) pointed out, researchers who aren't practiced at recontextualizing thinking will not be able to do it properly, and there are three major reasons for this. Firstly, this type of research works with emotion (Niesz, 2010), which is an exceedingly subjective realm (Murrell, 2010). It is not a linear or even static science. Secondly, the stories received by the phenomenologist during interviews are third hand. They are experienced firsthand in the moment, recalled secondhand when processed and stored in memory, and related a third time during an interview. Therefore, it takes a certain amount of skill to isolate the essential elements of the story from potential artifact. Lastly, it takes a lot of research to uncover the true essence and linkages of the interviewees' lived phenomena (Giorgi, 2012) because people are complex individuals with complex motivations for why they act and feel the way they do. Therefore, this thesis research required extensive periods of study and careful management to ensure that I was properly executing previously unfamiliar methods.

However, like all scientific methodologies, the act of practicing hones its development and can lead to potentially surprising conclusions (Ramsey, 1997). Despite some initial challenges with the theory and the difficulty of practicing unfamiliar science, phenomenology is better suited to this thesis than other methods because it values an expansion of experience and common lived phenomena over a reduction to mechanistic laws, accepts subjectivity and complexity over linearity and simplicity, and seeks to examine experiential data in its own context. A review of the phenomenological the terms and processes that

were followed during data collection and analysis are discussed next.

Description of Terms and Processes

This section will discuss a number of technical phenomenological terms as well as present the methods used in this study. It should be noted that many different researchers have developed their own steps and procedures for phenomenological studies, and though some methods can be conflicting (as referenced above), this study sought a variety of steps and guidelines aligned with the Duquesne School in order to more fully inform its own particular methodology. Three sets of procedural steps stood out in particular and are included below (see Figure 1): Husserl's five research principles and Collaizi's six procedural steps as written by Murrell (1998, p. 304) and McNamara's eight principles of interview preparation as written by Turner (2010). This study followed the majority of these recommendations during the interview preparation, collection, and analysis of this thesis' research, with a few exceptions (described below). This section will briefly explore those principles before turning to specific terms of processes used in this study.

McNamara's eight principles for preparing a phenomenological interview are useful in helping to ensure proper, professional, and thorough data collection (Turner, 2010). McNamara recommends interview spaces with as little distraction as possible, where the interview purpose, format, time, and nature are clearly explained to the participant. McNamara also recommends including giving the participant the opportunity to ask clarifying questions, and that the researcher take

notes in a reliable (non-mental) format to help preserve the accuracy and depth of responses. Husserl's five research principles as referenced by Murrell (1998) are helpful in allowing the researcher to focus on the complex underlying subjective experience of the participant and avoid focusing on the objects of the story being told. This technique allows the full story to unfold without judging or quantifying the experience, to help the researcher to stay as "detached" as possible so at all times to refrain from inserting the researcher's own subjective bias into the story being told.

Figure 1: Phenomenological research principles utilized in this study

Research principles from Husserl's phenomenological philosophy (Murrell, 1998):
1. Concentration on subjective experience in a world of objects.
2. Analyzing human experience in the complexity of its context.
3. Giving a fuller and fairer hearing to the phenomena than more scientific enquiry would allow.
4. Using interviews, written reports and diary excerpts to collect information related to the phenomenon from those who have experienced it.
5. Retaining an element of objectivity, from a detached standpoint, by "bracketing" the researchers' personal thoughts before and during collection and analysis.

McNamara's (2009) eight principles for the preparation stage of interviewing (Turner, 2010):
1. Choose a setting with little distraction.
2. Explain the purpose of the interview.
3. Address terms of confidentiality.
4. Explain the format of the interview.
5. Indicate how long the interview usually takes.
6. Tell them how to get in touch with you later if they want to.
7. Ask them if they have any questions before you both get started with the interview.
8. Don't count on your memory to recall their answers.

The six procedural steps in Collaizi's phenomenological data analysis method (Murrell, 1998):
1. The written description and interview transcripts are read in order to gain a feel for them.
2. From each written report and interview transcript, significant statements and phrases are extracted.
3. Meanings are formulated from these significant statements and phrases.
4. The formulated meanings are organized into clusters of themes.
5. The results of the data so far are integrated into an elaborate description of the phenomena.
6. The researcher returns to the respondents with the exhaustive description. Any new relevant data that are obtained from the respondents are considered in the fundamental structure of the experience.

Finally, Collaizi's six procedural steps are instructive in data gathering and analysis (Murrell, 1998). Collaizi recommends that interview transcripts should first be read broadly to gain a holistic feel for their contents, then parsed into significant phrases onto which relative meaning is attached. After this process is completed for all interviews, the relative meanings can be aggregated into similar themes, which can then be woven together to give a sense of the overall phenomena being described. Collaizi further recommends that the transcribed and translated data be offered to the original interview participants for their comment, and that any new data received from those comments are treated with the same weight as previous data collection. I chose to offer translated data to the study's participants, and the responses I received were treated according to the methodology's recommendations. In addition to these conceptual procedures, phenomenological literature recommends a variety of tools to ensure accurate and reliable data gathering and analysis. The following is a discussion of certain key tools this study utilized, including *bracketing*, *description vs. translation, unconstrained recall, free imaginative variation*, and others.

  Bracketing. According to the Duquesne School, bracketing serves to protect elements of the research, such as design, interview flow, data analysis, and study conclusion from as much researcher bias as possible (Murrell, 1998). Prior to executing segments of the research, the researcher will list (or "bracket") out their expectations, such as what they intend to find, why they are doing the research, etc., in order to explicitly identify any biases that they are carrying into the experience. The researcher should maintain bracketing control throughout the

research process, so that they will be able to check their actions and processes. Giorgi (2012) recommended two major guidelines for bracketing: firstly, do not judge how you view a phenomenon, but simply record it as presented; and secondly, do not use past, outside, non-given information to elucidate or support the experience that you are presented with, but take only what you have. Yet, the method recognizes that complete elimination of bias is impossible because the researcher, in viewing the experience, must use his or her subjective faculties to interpret the receive and make sense of experience (Giorgi, 2011) Therefore, bracketing serves to protect as much of participants' lived phenomena from researcher bias as possible while allowing for certain unavoidable subjectivities.

Translation, and description vs. interpretation. Phenomenology utilizes translation as a means to convert raw interview data to a form that can be compared against one another. Translation is defined as describing an experience in different but equal terms, and phenomenology defines two differing types of translation: description and interpretation. Description is favored by phenomenology and is the process of accurately reducing lived phenomena to their essences. By contrast, interpretation is defined as recontextualizing lived experience into another value-dependent format (Giorgi, 2012) and is avoided in Duquesne phenomenology. For example, description of the lived phenomena of an airborne dogfight might read, "pilot A, noticing pilot B drifting left, executed a thirty-two degree turn to follow, aware that such an action was a dangerous maneuver," whereas an interpretation of the same scene might read, "pilot A closed in on the target heedless of the danger." The difference can be subtle, but

description endeavors to preserve the essence of lived phenomena as objectively as possible. Giorgi (2012) gave five steps for transcribing interviews descriptively rather than interpretively:

1) Experience the whole. Understand what the responses are like.

2) Start again. At each transition in the interview, make a cut.

3) Transform/translate these parts into their psychological value, a relative assignment of worth according to what is being studied.

4) Use free imaginative variation (described below) to get an essential structure of the experience.

5) Use the essential structure as a lens to help clarify the raw data.

The above guidelines are useful to avoid unintentional data corruption during data collection and analysis.

Semi-structured interviews and unconstrained recall. Whereas structured interviews are guided questions that must be answered in a linear sequential fashion, semi-structured interviews start with a core and follow-up questions, but allow for new and spontaneous questioning or the omission of pre-defined follow-up questions. This format allows the researcher to adapt to the interview, such as following unexpected and potentially valuable lines of inquiry, and connecting to participants in their own idiom (Snow-Gerono, 2005). The informal structure allowed in a semi-structured interview also allows information to flow freely and for a less complex interview design (Turner, 2010). This freedom is allowed because even though memory can be weak on the factual details of lived phenomena, memory can be highly accurate on "high-importance"

events. These events will be recalled naturally, and unfold naturally when allowed to do so (Chawla, 1999). In other words, this study is designed to explore the unknown in an expansive fashion, and the semi-structured interview is appropriate because it is "designed to evoke descriptions, not to confirm theoretical hypotheses" (Clegg, 2006, p. 63).

Unconstrained recall is a partner to the semi-structured interview, and is a psychological method whereby "people are allowed to develop their own account of the past at their own pace" (Chawla, 1999, p. 16). Research has shown that interviews conducted with unconstrained recall are far more accurate and rich than interviews that require individuals to remember specific pre-defined aspects of lived phenomena. Moreover, "constrained recall," or pre-formulated questioning, can be based on biases of what the researcher thinks is important. However, unconstrained recall can be more difficult to use than other methods. For example, some participants may be allowed to explore concepts that others are not prompted to consider. As a result, some interview segments and themes may not line up with other interview segments and themes or may be tangential, which may weaken the qualitative potency of the full dataset. Ultimately, the ability to manage these risks and successfully align and analyze interview data obtained through unconstrained recall rests on the capacity of the researcher (Turner, 2010) but is generally seen as worth the effort/risk, because freely explored and unbiased responses are critical to studies such as this one. Specific to this study and to E3 Washington's needs, it is believed that the common definition of meaningful engagement that is drawn from the interviewees'

responses must be as reflective of the community as possible in order for

facilitation strategies developed from that definition to be accurate and successful.

   Sample size and selection. "Small, non-random, purposive samples are the

standard in this type of research" (Clegg, 2006, p. 65) because the

phenomenological method is seeking to expand on the knowledge of lived

phenomena one small step at a time. This study chose ten participants due to size

and time constraints, attempting to construct a sample representative of the

diversity of E3 Washington's educator leader community; of age, demographics,

professional experience, from formal and informal education sectors, and from

those regions of the state in which E3 Washington is currently focusing

development (Benton/Franklin, King, Kitsap, Kittitas, Olympia Peninsula,

Spokane, Thurston/Mason, and Yakima, which are roughly analogous to state

counties) (E3 Washington, 2013). Twelve individuals were ultimately selected.

Two declined to participate. This thesis followed the phenomenological research

conventions by specifically selecting members of the population under study that

were likely to have had powerful experiences to share (Chawla, 1999), which was

determined by the amount of time each participant had spent within the E3

Washington network, their level of current engagement as leaders in local E3

Washington regions, and by the history of success of, and commitment to, their

individual work.

   Free imaginative variation. According to the phenomenological method,

once the interviews have been performed and the data collected, free imaginative

variation is used to reduce a participant's responses to their critical essence

(Giorgi, 2011). This process allows participants' data to be compared against one another in the most essential and simple terms, such that patterns are easiest to identify. Free imaginative variation works in tandem with the description/interpretation dynamic and proceeds as follows: a particular interview segment, or excerpt, will be broken up into its component emotional or factual components, and each part will be systematically removed or altered to see whether the essential experience of that segment is still described. Free imaginative variation ends when a segment can no longer be reduced of parts without altering the essential description of the experience. When this process is complete, the segment is ready be coded.

Open coding. Open coding is a process used by phenomenological research to identify and aggregate meaningful themes from transcribed interview data (Chawla, 1999). "Codes" are defined as markers for the important themes of the lived phenomena under examination, and open coding is the process whereby codes are created and applied freely to an individual's translated experiences without trying to fit a particular experience into a particular category. Rather than creating a code library at the outset of analysis, one creates codes as the data is analyzed, to let patterns emerge naturally. For example, a phenomenological study of colors of flowers might include "red," "pink," etc. as codes attached to transcribed interview excerpts, where excerpts can be defined as relevant sections of a transcript that encapsulate a particular thought or expression, such as "I walked out of the back door and noticed that all of the roses in the box were red." Proceeding through interview excerpts, the researcher would create codes as they

occurred, rather than attempting to imagine codes beforehand. During *Open Coding*, Giorgi (2011) warned researchers to practice care, and not immediately link by association to what the researcher wishes to see. *Bracketing* is necessary to identify potential biases and avoid the coding of what researchers think they see (such as relationships between transcribed data and a possible code), rather than what exists.

    Data verification. For this study I decided to allow respondents to comment on their translated data to verify that I had arrived at an accurate essence of their lived phenomena from their point of view. In the literature, the degree to which this step is necessary is debatable. To ensure researchers' proper bracketing and to review for successful free imaginative variation, some scholars advocate allowing other phenomenological experts or the respondents themselves to verify translated data against the original data. However, others believe that outside experts, who themselves are operating with bias, may apply another layer of subjectivity to the study, and/or that respondents may not understand the process of description and therefore corrupt the translated data themselves (Giorgi, 2011). Scholars recommend limiting bias by limiting data exposure because humans don't always understand why they do the things they do (Yakhlef, 2010). For this study, I chose to verify translated interviews (and not the coded excerpts) with respective respondents before moving to coding and analysis in order to provide a check against my own work but to limit the data to outside exposure.

Methodological Execution

Given that this thesis' study group and the theoretical background, processes, and tools of phenomenology have been reviewed, this section will describe the process of execution. For this study, the interview format and interview questions were developed through coordination with Evergreen State College Internal Review Board; the Executive Director of E3 Washington, Abby Ruskey; and questions were adapted with approval from the work of Dr. Joshua Clegg (2006). The questions used are included in the appendix. The participants in this study were comprised of ten environmental and sustainability education leaders in the E3 Washington network who have been included in the early stages of E3 Washington's regional educator leader CoP, termed a "Regional Leadership Community of Practice" (RLCoP). E3 Washington believes that these individuals have the potential to form a CoP within the organization because they participate in region development for E3 Washington. As of this writing, region development for E3 Washington is defined as: a) helping to convene local E3 meetings between diverse stakeholders (education, business, agency, tribal, etc.) in local regions to inform regional local E3 region plan-building. E3 region plans are strategic planning documents consisting of goals and strategies for building capacity for ESE among local stakeholders into 2013-2014 and beyond. Given that each region plan reflects back to E3 Washington's statewide goals and structure, and because regions' plans are analogous to one another (due to analogous stakeholder needs across the state), E3 Washington believes that this group of regional leaders reflect much of the basic definition of a CoP, or sharing "shared passion for joint enterprise" (Wenger, 2000, p. 139). For this interview,

prospective participants were selected according to their familiarity and past experience with E3 Washington, and the possible relevancy of their experiences of meaningful engagement in leadership in ESE related activities, as referenced earlier. Again, this process assumed a certain amount of bias but was allowed because previous work done in phenomenology allows non-random selection in order to address the need for depth-of-responses in limited-scope studies (Chawla, 1999). E3 Washington's Executive Director and I engaged in a series of meetings to decide how to best balance the participant pool's diversity between male and female respondents, gender, professional history, age, etc., such that the respondent pool was a balanced cross section of the larger leadership group and would have relevant stories to share. I sent out initial email invitations in late January of 2013. Each respondent in this survey volunteered to participate. In order to respect the privacy of invitees, this study did not send more than two follow-up invitations. Participants were given interview numbers and pseudonyms to protect their identity. The ten respondents who participated were diverse: split between business sectors and across professional levels. The group included four formal education individuals, including two public school district administrators, one school district specialist, and one teacher. The group also included six informal educators (individuals employed or aligned with an organization whose mission overlaps with education), such as one state business representative, four representatives from non-profit organizations of varying size and scope, and one local entrepreneur. A brief profile of the respondents is included below:

Chris

- informal educator with a small/medium-sized organization

- local community organizer and entrepreneur with a focus on environmental justice and environmental responsibility

- working with other leaders to inform E3 Washington's programmatic development at a statewide level

Jessica

- informal educator

- local community organizer and educational leader for multiple organizations

- working in partnership with E3 Washington along with other colleagues in her region to implement parts of her region's E3 plan and integrate that plan with other regions

Matt

- formal education district supervisor

- business professional with a focus on environmental justice, environmental responsibility, and cultural competency

- an educational leader, working with other leaders to inform E3 Washington's development at a statewide level

Jen

- informal educator

- local community leader who focuses on place-based education and service learning

- working with other E3 Washington colleagues in her region to develop and implement parts of her region's E3 plan for connecting formal and informal educators through shared community assets

Ann

- formal educator
- local community organizer and leader
- involved in working with her E3 Washington regional colleagues to develop and implement parts of her region's E3 plan for connecting formal and informal educators through shared community assets

Mary

- an informal educator
- local community leader and organizer
- working with regional E3 Washington colleagues to overcome inter-organizational barriers for better networking at local and statewide levels

Sue

- formal educator
- local community leader
- working with E3 Washington to implement parts of her region's plan and to overcome challenges to organizational collaboration

Tim

- formal educator and district director for a small school district

- working with regional E3 Washington colleagues to implement
  parts of his region's plan for increased connections between
  community learning opportunities and schools

Michael

- formal educator and district director for a large school district

- working with regional E3 Washington colleagues to implement
  parts of his region's plan for increased connections between
  community learning opportunities and schools

Luke

- informal educator with a medium/large organization

- focus on place-based education and service learning

- working with regional E3 Washington colleagues to overcome
  challenges to inter-group and inter-regional collaboration

Each interview lasted between forty-five and sixty-two minutes at varying locations around Washington State, in varying settings determined by each participant to maximize comfort, including office buildings, meeting rooms, and pubic spaces. According to the precepts of the phenomenological method, I conducted a session of bracketing before each meeting to identify and sequester my biases and presuppositions. Each interview was conducted in a semi-structured fashion, recorded on a digital audio device. Each interview began with

the same core question: "think about an time where you were involved in a sustained, group situated ESE-related activity that powerfully impacted you, professionally or personally, in a transcendent and lasting way. Try to place yourself in the context of that experience and then recount it is if you were telling a story." The interview was guided by pre-determined follow-up questions but relied on unconstrained recall so that relevant and unexpected lines of questioning could be pursued in each interview. Interview questions may be found in the appendix. I took no notes during the interview so I could concentrate wholly on the questions asked, and remained as neutral in my posture and engagement as possible, so as not to overly influence the participant. Given that the interview process was intentionally not uniform, content was not uniform. In practice, some respondents spoke very quickly, while others spoke very slowly or haltingly. Some respondents required time to verbally process their responses, which resulted in data that was not directly applicable to this study's main question. I attempted to give each participant ample time to fully understand the study's purpose and to do some mental preparation before I arrived to conduct the interview, but some participants were far more prepared than others, resulting in interviews with varying depths of content.

After each interview, the data was transcribed manually to retain a word-for-word written account and then was translated according to the guidelines of phenomenological methodology (i.e., using descriptive free imaginative variation to condense each respondent's thoughts to their most essential elements). Translation resulted in a condensed, semi-objective, third-person account of each

participant's shared experience, formatted in a way that could then be cross-analyzed for codes and themes. Before coding began, I emailed each participant a copy of her or his translated data for comment or corrections if necessary. I only received returned comments from three participants (one without comments and two with clarifying comments). I incorporated those clarifying comments into the analysis.

An open coding system was used through Dedoose, a web-based data management program. The coding process focused on words and phrases that conveyed personal opinions (i.e., "I believe," "I feel," "I think," etc.), or that indicated meaning (i.e., "meaningful," "surprising," "gratifying," etc.). Open coding was used for each transcription because this study did not assume to know how each participant defined personal meaning. Therefore, a new code was created for each excerpt where a relevant code did not already exist, and existing codes were attached to each excerpt where appropriate. This process was repeated through each interview. Upon completion of coding, I reviewed and eliminated any codes that were tagged three or fewer times, and collapsed codes that were similar or analogous.

Dedoose's "code application" and "code co-occurrence" functions were used to identify the most "popular" (and therefore meaningful and/or relevant) codes and to find coding patterns among them. I established a metric for code application, which did not account for the number of times a code was mentioned per interview, only that it was shared between all interviews. This was done because this study searched for base commonalities and was not necessarily

concerned with how "heavily" a concept was coded per interview. As a result, some manual work was required to sort skewed data, because some codes were unevenly tagged across interviews (i.e., where certain participants mentioned a particular coded concept more times than others did). According to the metric, a code was *central* to the study if it was shared by all participants, *meaningful* to the study if it was shared by at least eight participants, and *not significant* if shared by less than eight. A similar scheme was applied to code co-occurrences tagged to the same excerpt: a code relationship was *central* to the study if shared by all participants (i.e., code co-occurrence A x B occurred in at least one excerpt in each participant's translated data), *meaningful* if shared by at least seven participants (changed from eight above because there were no codes shared by eight), *weak* if shared by at least six, and *not significant* if shared by five or less. Finally, I graphed out code applications and code co-occurrences according to their filtered frequency and analyzed the pattern that emerged. I used a color-based system so that the patterns were easier to identify. These patterns and the story that they tell are explored next, in the Results section.

Results

The purpose of this research was to contribute to a much-needed shift towards effective participatory practice in addressing contemporary environmental issues by working to address the CoP theory-to-practice problem in a local context. This study's local research intended to discover a common experience of meaningful engagement amongst educator leaders in E3 Washington's regional network, in order provide specific process-based recommendations as E3 Washington begins to facilitate its RLCoP. This chapter will begin with a brief outline of this study's significant findings before continuing to detail the code results that informed the major discovery of significance. Significant codes and code co-occurrences will be isolated and broken down in further detail to describe the full findings from this study.

Participants shared their stories of a time when they were meaningfully engaged in a group-situated, ESE-related activity that powerfully impacted them, personally and professionally, in a transcendent and lasting way. The results uncovered shared process-based aspects of meaningful engagement, and most responses were powerful, including participants' attachment to environmental and sustainability education themes. Responses indicate that eight out of ten participants are still connected to the field or activity that powerfully impacted them. For example, two participants are still involved in the specific project that they described in their interview, six are involved in a similar professional pursuit, and two describe themselves as not connected to what meaningfully engages them at this time. Respondents' stories were varied. The lengths of their experiences

varied from as short as two weeks to as long at ten years. Some participants talked about one specific instance of meaningful experience, while others mentioned one or more vignettes in a detailed story of meaningful engagement. The total experiences shared fall into the following categories: conferences, specific moments in time, project-based periods, and summative stories of curriculum/school development.
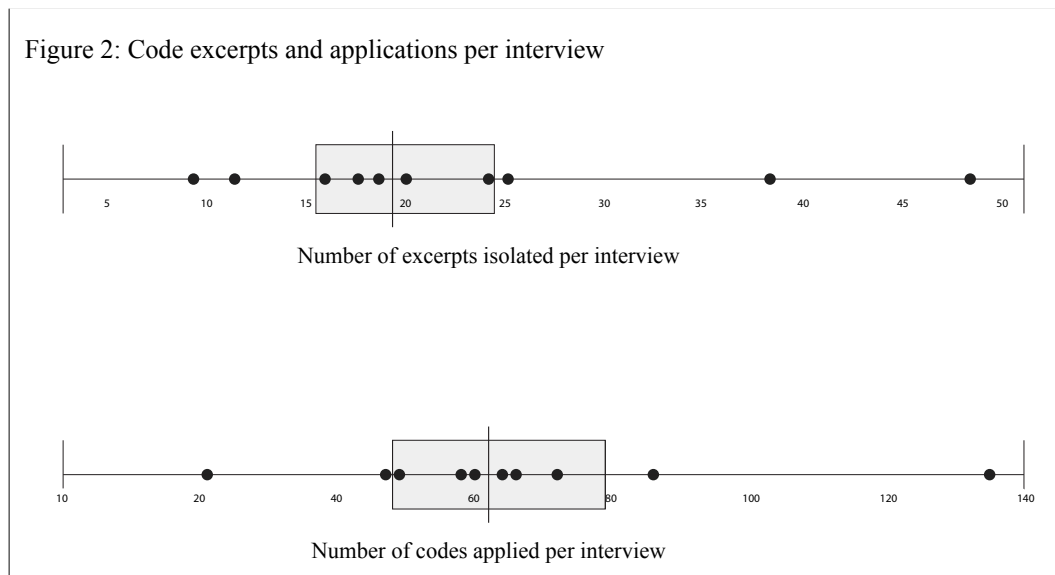
The results indicate that of the thirty-two different elements (codes) related to "meaningful engagement" described amongst participants, one particular quartet of code co-occurrences was significantly linked throughout the data: *A Sense of Responsibility/Engagement, Sense of Success/Achievement, Paradigm Shift*, and *Connected to Something Bigger*. This significant commonality suggests that there was indeed a significant common experience of meaningful engagement shared by the participants of this study. Interestingly, this relationship was broadly articulated as a non-linear cycle, meaning that although each code theme strongly informed the others, participants experienced the relationship in different orders of occurrence. One participant's particular experience was articulated as a sense of success or achievement in breaking traditional barriers in education, learning, and/or environmental literacy/awareness that led to a shift in perspective of professional capacity. This, combined with a sense of responsibility/engagement towards learning and/or environmental achievement, led to a sense of being connected to something larger than oneself. Other permutations of this significance will be discussed later in this chapter, and though code and code co-occurrence results informed this study's

conclusions but it is important to note that the general synthesized (and resultantly non-linear) story is what is of most importance in finding shared elements of meaningful connection amongst the group studied. The results section will next continue with an expanded description of the codes uncovered during analysis.

Code Results

   Code definitions. Coding was the mechanism used to isolate definitions of "meaningful engagement" from respondents' translated interviews. Codes were applied to interview excerpts, which were reduced via free imaginative variation, extracted from translated interviews, and then collected into interview "documents." Code counts reflect the number of times a particular code was used per document. Each translated interview contained sixty-six code occurrences on average with a range of forty-seven to eighty-six per interview (excluding outlier interviews of twenty-one and 135 code counts) (see Figure 2).

   The respondent who was coded the least did not directly answer many of

Figure 2: Code excerpts and applications per interview

Number of excerpts isolated per interview

Number of codes applied per interview

the interview questions, so some of that respondent's coded answers were not aligned with the group and therefore discarded during code filtering. The respondent who was coded the most repeated responses multiple times so their applied code count was artificially high. Excerpts were tagged with one to ten individual codes, or 3.5 on average, resulting in three to four code-occurrences per excerpt on average. The range of length for an excerpt was between ~50 to ~1500 characters; the average excerpt length was ~150 characters (see Figure 2).

Code counts and results. From the data, thirty-two codes were shared by at least four respondents, the minimum recognition criteria (see Figure 3). Of those thirty-two codes, seven codes were shared by all ten respondents, and an additional two codes were shared by nine respondents. Those nine codes emerged as central to the study. They usually occurred in groups with each other, and represent what this study counts as relevant elements of meaningful engagement in participants' ESE group related experiences. These nine codes are "*Paradigm Shift,*" "*Sense of Success/Achievement,*" "*Sense of Responsibility/Engagement,*" "*Connected to Something Bigger,*" "*New Personal Learning,*" "*Sense of Community,*" and "*Co-Learning*" (shared by all 10 participants) plus "*Self-Questioning/Interrogating*" and "*Different from the Familiar*" (shared by 9 participants).

Figure 3: List of codes shared among respondent interviews

- Being Connected Emotionally
- Being Connected to Something Bigger
- Being Supported / Enabled by Others
- Breaking Through to What's Important
- Breaking Traditional Barriers
- Change Making
- Co-learning
- Connected to Factual Data
- Connecting with People
- Different From the Familiar
- Diversity
- Enabling Others
- Hope, Wonder, and Curiosity
- Individual Experience that is Emotional and Factual
- Love of the Outdoors
- Making Education Real

- New Personal Learning
- Not Being Prepared
- Notable Emotions / Observations
- Paradigm Shift
- Place-based / Hands-on Learning
- Residual Connections
- Science / Fact Based
- Seeing Others earn
- Self Questioning / Interrogating
- Sense of Community
- Sense of Responsibility / Engagement
- Sense of Success / Achievement
- Sharing Stories
- Shift in what is Important
- Teaching with the Standards
- Vulnerability / Openness

The results of the coding process seem to minimally suggest that, in general, the participants were influenced by a sense of success and achievement in an endeavor they were engaged with and felt responsibility for, such that success led to (or was precipitated by) a shift in their understanding. Additionally, participants felt that these experiences connected them to a sense of something bigger than themselves or their immediate sphere of influence, and that new personal learning and a sense of community had been developed, sustained, or made possible through their experiences. Finally, participants generally felt that these experiences are, by nature, different from the familiar, and involved a certain amount of self-questioning and interrogation of their or their organization's practices and assumptions. A detailed explanation of the nine central codes is provided below, beginning with individual codes and moving to this study's most significant code co-occurrence.

Code Occurrences

Paradigm shift: Participants suggested the concept of a *paradigm shift* when referring to an occurrence that opened their eyes to a different way of being or to a different idea of what was possible, including breaking conventional wisdom or standard practices in an unexpected way. For example, Sue, a science educator, believes that "once you break conventional wisdom, and you have a different way of being, things break open…it was like, this whole idea of…welcome to a different world. It can exist."[1] For her, re-creating that kind of paradigm shift for students is "one of the hallmarks of [her] career." Jessica's experience is more personally located: she feels that her views on the possibilities for community collaboration were perhaps "very narrow," that her experience of engagement "opened her eyes up." Her point of view on the collaborative possibilities in her community was changed; because of her experience, a big lesson for her is not to take what can happen for granted. She continues to work to re-create her experience for others. Other participants also felt meaningfully engaged when re-creating a paradigm shift for others in addition to experiencing it themselves, which is perhaps to be expected in a field of educators. For example, Michael, a district administrator, is excited when sees his students make the connection between their learning, their environment, and their communities, and when they move from compliant learners and teachers to committed learners and teachers.

Sense of Success and Achievement. Participants expressed a *Sense of Success and Achievement* as achieving targeted goals and objectives (usually

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[1] All quotes from interviewees are taken directly from their interview transcripts.

learning) or being connected to the achievement of group goals, both of which

were powerful for participants. Luke, a high-level informal educator, remembers

that "at the time it just looked like an open field. And we knew what our charge

was, and there wasn't anybody saying that it wasn't our charge, and we ran with

it. And I think we made—I know we made some real significant difference and

impacts." Participants also co-located their meaningful feelings of ESE success

within their community or colleagues. For example, "this was about transforming

education to real [sic]," says Sue. "These kids weren't just studying about

something for the sake of studying about it; they were producing good data for the

system. They were participating in science and improving their world." Ann, a

local teacher, is similarly personally moved by her success in empowering her

students: "They were hugely empowered through the program and I get into that,

that's good stuff." Additionally, successes such as these are often tied to a sense

of leadership. Michael believes that his sense of success, which is similar to

Luke's, is defined as "true leadership. It's setting priorities and then making

things happen...[even though] it's not necessarily me setting the priorities." He

also believes that feeling connected to success "was probably more meaningful

than when we actually got [the physical reward for their success], because at that

moment, I had heard these teachers and these students communicate what a great

learning experience this was for them." On the other hand, Matt, a high-level

company leader, relates how his success was community-related but far from

personal:

> … it felt very gratifying, rewarding, and uplifting. You know, in
> terms of having gone through the process, worked through some of

the issues and challenges, and also having built a level of
understanding among folks who didn't have a good appreciation for
it. So, all of those things were very important to me. It wasn't just
my own personal gratification; it was just knowing that I had helped
a number of professionals [in the group] and within the organization
with a better understanding and a perspective about the importance
of this issue, to this [organization], and the stakeholders that they're
serving.

Sense of Responsibility/Engagement. Responses coded to a *Sense of*

Responsibility / Engagement centered on participants' emotional stake in the

outcomes of the community, or encouraging others to have a similar emotional

investment. In the responses, environmental and sustainability education was a

background theme. For example, Jen, an informal educator, wants people to find

their own learning, to be curious, to come self-engaged and come to conclusions

for themselves. She is gratified and feels engaged by watching others engage and

succeed through her assistance. She says, "when they are given a challenge, and

made to feel like what they are doing matters, many of them will meet and exceed

that challenge." For Ann, her similar sense of engagement was powerful. "I lived

to show up for those kids" she says, "and I lived to make that program go, and I

lived to develop it further." Other responses were more personally located. For

example, Luke spoke directly to personal feelings of responsibility to the project

and to others:

While you have that [organizational] ember, with the traditions and
mission, you've got that in your hands, at that point in time. And
it's a precious thing to have the opportunity to be able to hold it.
And it's in your hands. How willing are you to make sure that it
flourishes? What are you willing to commit to, so that while that
thing is in your hands, you're doing everything you can

professionally, emotionally, [so that] when you're ready to release, it is actually brighter and stronger than when you got it?

From the responses, it seems that a *Sense of Responsibility / Engagement* is connected both to the personal and to the community, and arises from a combination of emotional responsibility to the task and group engagement with others.

   Connected to Something Bigger. For the participants in this study, a sense of being connected to something bigger was related to witnessing that they and their actions affect or are related to more than just themselves. For example, Jessica did not originally believe that she was surrounded by many like-minded individuals in her community, but "it was very enlightening…to see that people do come together, and there are a lot of people in this community that want to see something happen, and that they're willing to work together to make that happen." Similarly, Chris was engaged in a conference on environmental issues and was opened up to the true scope of the environmental issues at hand, that the environmental issues that he and his colleagues were wrestling with were far larger than he'd previously thought. On the other hand, some participants felt meaningfully engaged and connected to something bigger through transferring learning to others. For example, Ann's connective experience is related to helping her students learn, and expand their horizons. She feels connected in translating learning for them, specifically about things that they "hadn't stopped and thought about." Tim also believes that transferring learning was connective. In sum, it seems clear from the results that *Being Connected to Something Bigger* was predicated on community connections and acquiring or transferring knowledge.

New Personal Learning*. New Personal Learning* was identified as individual learning that enabled participants to engage with the community or with their professional work in a new way that is attached to success or increased capacity for learning. For example, Chris believes that his retreat experience "invited me to think in a more systemic way at the interconnections of things. It's invited me to have the courage to take on issues that I have not traditionally cared about, or have felt are too overwhelming." Similarly, Tim feels enlightened through what he terms "whole new learning" and connects it to being able to be a more developed person, reflecting that "any time one can be enlightened, I think you're probably a better individual." Mary also resonates with the idea of increased perspective and capacity to learn. She feels highly engaged when she is "in a group process with people around a sustainable topic, and we're reading a lot of different perspectives on that topic and we're all bringing our questions and bringing our ideas, recognizing our shortfalls as well, in that process." From the results amongst this group of educator leaders, it seems that new personal learning is valued and generally connected to a sense of community and/or increased capacity to learn more.

Sense of Community*.* From the results, participants believed that a sense of community involves being engaged with colleagues or students in a in a way that ties their works together. Jessica references being connected to the group specifically, saying that "it was really neat to see that this group was able to bring together all these different people to work on one project, and to get it to work." Ann specifically notes that her students were her community, tied through their

co-learning. Tim also believes that meaningful co-work with is students is very engaging; he feels strongly connected when he and his community are "embracing a real issue, a world problem, on a local scale, and attempting to engage staff and students in those issues, to develop stewards that can be able to take on those challenges." As referenced earlier, a sense of community is also often co-located with other elements of meaningful engagement as defined by this study's results. Although there is no significant aspect from the results that speaks to *creating* community, it seems clear that community connections are important for supporting other elements of engagement throughout the results.

Co-Learning. Co-learning was defined as learning that is reciprocated by and co-generated with others. Experiences of co-learning allowed the participants of this study to feel more meaningfully engaged with one another. For example, Matt feels that he has developed answers to organizational challenges alongside his colleagues, in a meaningfully engaged way "they [feel] gratified, and they could say 'well here's the work that we've been doing along these lines, and it's very consistent, and aligned, with what the agency itself is doing.'" Tim and his education colleagues co-developed a mission and vision for his district that was informed and built in coordination with the district's residents, leaving him feeling very engaged. He feels that it was very powerful that a diverse set of individuals was exploring how to create the school mission together. Sue elaborates, by expressing that she learns from her students on a weekly basis, which keeps things new and meaningful between she and them. From the results, it seems that *Co-Learning* is important not only because it generates new

knowledge, but because it tends to either create feelings of closeness and empowerment within the community or emerges from a result of feeling close and empowered within a learning community.

      Self-Questioning/Interrogating. From the results, nine out of ten participants explicitly expressed a willingness or a need to self-question their present realities in order to spur growth and change. Tim believes that "it is always important to pause, think, and reflect," and Michael is "always looking for continuous improvement." Respondents seem to feel that reflection allows them to understand how they are integrated with their community and the challenges they face. For example, individuals like Matt and Michael both routinely use self-questioning guidelines to help them be better leaders, as do Mary and Chris, who value self-questioning in order to develop better tools to successfully engage with their colleagues and students. Similarly, teachers such as Sue and Ann interrogate their approaches to teaching and learning in order to make them more successful for them and their students. Participants' individual experiences of co-learning were not explicitly aligned with one another but do strongly suggest that self-questioning is a valued way to move forward towards successful engagement with themselves, their communities, and the professional challenges they face.

      Different from the Familiar. Nine out of ten participants expressly noted that their particular ESE-related experiences were meaningful in part because they were different from their normal day-to-day experiences, even though their individual experiences varied in specifics as well as duration. For example, Chris, Sue, and Luke relate occasions in which their physical surroundings and daily

tasks were so different from the norm that they were almost "out of space in time," which allowed them to engage differently by disengaging from familiar routines. For others, their different surroundings allowed them to grow through new awareness. For example, Jessica, Sue, and Ann were exposed to different professional practices, such as in the change and empowerment that could occur in formal education and in witnessing the power and possibility of collective impact in action. Chris also realized new personal empowerment through his retreat experiences. Tim and Michael; however, feel engaged through unexpected district learning, which disengaged them from familiar experiences and primed them for new systemic learning. Responses for this particular code were varied but all linked to seeing the world in a different way. Given this commonality, it seems that *Different From the Familiar* is also linked to *Paradigm Shift* in meaningful engagement because it primed participants for a substantive perspective shift.

The Most Significant Code Co-Occurrence

All of the central themes discussed above co-occurred together in various combinations throughout participants' responses (Figure 4).

Figure 4: List of significant codes and code co-occurrences[2]

Central common codes
- **Paradigm shift** (10)
- **Sense of success and achievement** (10)
- **Sense of responsibility/engagement** (10)
- **Connected to something bigger** (10)
- **New personal learning** (10)
- **Sense of community** (10)
- **Co-learning** (10)
- **Self of questioning/interrogating** (9)
- **Different from the familiar** (9)

Code co-occurrences

  Central code co-ocurrences
- Sense of responsibility/engagement x Sense of success/achievement (10)
- Sense of success/achievement x Paradigm shift (10)
- Paradigm shift x Sense of responsibility/engagement (10)

  Meaningful code co-occurrences
- Paradigm shift x Different from the familiar (8)
- Sense of success/achievement x Being connected to something bigger (7)
- Being connected to something bigger x Paradigm shift (7)
- Being connected to something bigger x Change making (7)

  Weak code co-occurrences
- Change making x Paradigm shift (6)
- New personal learning x Paradigm shift (6)
- Self questioning/interrogating x Paradigm shift (6)
- Sense of community x Sense of success/achievement (6's)
- Self questioning/interrogating x Sense of success/achievement (6's)
- Self questioning/interrogating x Sense of responsibility/engagement (6)

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[2] The number in parenthesis indicates in how many interviews the item occurs.
Colors are intended to assist in visual grouping.

Code co-occurrences are paint the most interesting picture of meaningful engagement among participants because the existence of code co-occurrences suggest that meaningful engagement is made up of interrelated factors that affect and support one another, rather than the existence of one or two single dominating concepts. Alone, individual codes tell us about the general attitudes of meaningful engagement from person to person, and single code commonalities tell us about certain shared aspects (i.e. *Sense of Responsibility/ Engagement*, *Paradigm Shift,* etc., in this case) but individually they paint a rather shallow and two-dimensional picture of participants' lived phenomena. Code co-occurrences, on the other hand, allow us to connect aspects of meaningful engagement into three-dimensional

pictures of depth and nuance, allowing for complex stories to emerge. This study found three central code co-occurrences, four meaningful code co-occurrences, and six weak code co-occurrences (Figure 4). Full analysis of each code co-occurrence would be enormous and is outside of the scope of this limited thesis, and in some ways is not necessary for the purposes of this thesis question, which was to isolate the single most powerful definition of meaningful engagement for facilitation in practice. Therefore, the top co-occurrence relationship of *Paradigm Shift, Sense of Success/Achievement,* and *Sense of Responsibility/Engagement* will be explored next.

***Paradigm Shift, Sense of Success / Achievement, Sense of Responsibility / Engagement,* and *Connected to Something Bigger*.** The top three commonly coded experiences, *Paradigm Shift, Sense of Success/Achievement,* and *Sense of Responsibility/Engagement* were heavily interrelated across participants, which suggests that this relationship is central to meaningful engagement. Overall, this relationship is characterized by a sense of shifting one's perspective (or shifting the perspective of others) through collective success related in a mutually engaged goal, activity, or concept. Additionally, eight out of ten respondents explicitly connected a sense of being *Connected to Something Bigger* to the relationship above, so can be considered a major supporting aspect. In other words, organizational success through being meaningfully engaged leads to a shift in understanding, and encourages participants to perceive that they are meaningfully connected to something bigger than what they were previously. Tim, a district

administrator, encapsulates this relationship when he describes his sense of

success and being connected to something bigger than himself by supporting his

teachers and students to be engaged in seeing a new way of teaching and learning.

He relates:

> It's really exciting for me, as an educational leader, because you have teachers that are really committed to this hands-on learning and so that's really exciting me, to see that it is not just me that's committed to it, you've got all these teachers that are in the classroom that are excited about it, and can't see teaching any other way than teaching this hands-on learning for kids… It feels very gratifying…that's where the transcendent part comes in.

In other words, Tim feels meaningfully engaged because he is succeeding at the

work to which he feels responsibly connected. Through that work he is connected

to a circle larger then himself and is shifting paradigms in education. Michael

feels similarly to Tim except that his vision of success is also explicitly connected

to his community at large. For example, his work is most meaningful, and he feels

most meaningfully engaged, when he is able to see his students doing real

research and being competent with the material to a point where they start to put

their learning into a social context and begin to ask their own interdisciplinary

questions in the community. To him, it means that he and the district are

accomplishing a significant portion of their mission to produce learners with the

skills and abilities needed to positively impact their world. In other words,

Michael feels that he is succeeding at fostering environmental stewardship by

engaging others in learning to a point that shifts learner paradigms for seeing their

world, and is thereby successfully connecting himself and his students to the

greater community. Perhaps more succinctly, Mary, an informal educator, feels a

powerful "sense of wholeness" from feeling like she is an active participant among a number of parts that are working in a coordinated and connected way. She looks for things that will bring her and her colleagues to a place of commonality, and feels that her increased understanding means that she can connect and integrate better. It seems clear from the responses that success in engagement with others, related to a paradigm shift and a sense of being connected to something greater than themselves, forms the foundation of commonalities amongst the respondents in this study, and that each participant is drawn to community-based engagement in which success involves putting new learning into action in a coordinated way, either for themselves or for others; usually both.

While the experiences above are compelling, they do present a certain limitation. The four codes above occur in participants' stories in different ways, so the mosaic of their values is non-linear and therefore somewhat general. For example, a *Paradigm Shift* can occur either before or after a *Sense of Responsibility/Engagement*, and between other codes in various permutations. In order to describe a common story that answers the thesis question, we must accept a somewhat non-linear and general mosaic. However, a degree of imprecision might be a fair price to pay for a common four-way connective story in the first place. This trade-off will be discussed in greater detail in the Discussion section, but first the Analysis section will continue by touching on common themes not raised during coding.

Other Common Themes

Other common themes exist that did not emerge as significant codes because, in some or most responses, they were not attached to value statements that triggered coding. They were noticed during analysis through the metacognition of the researcher, and are included here for their possible significance. In these cases, they were not explicitly referred to across all respondents, and so are somewhat more generalized, but were clear themes nonetheless. They are included here because of their commonality (and therefore possible significance). These common themes include *Being a Captive Audience, Sharing Stories, and Breaking Traditional Barriers*. This section will pause to briefly examine each.

Captive Audience. From the research, nine out of ten respondents described their powerful experiences within a context of being a "*Captive Audience*" in some fashion. They described in situation that allowed or forced their focus to be directed a precise experience in a manner that is not standard or usual in their personal or professional environment. For some, it was indeed explicit. For example, Chris believes meaningful paradigm shifting experiences require a "multi-day, or even just a one-day period of being able to really have an individual experience with other people…that has an emotional component and factual data." Michael seems to agree, but was not explicit, saying "it was powerful to witness people getting together, focusing in on, and developing his district's mission statement through asking some very intentional questions, dialogue development, and sharing beliefs" in a focused retreat environment. Sue,

meanwhile, remembers her "professional development boot camp" experience to initially be quite discomforting, like "a bunch of junior-high kids…hauled off somewhere," although she feels that because of the clear focus that resulted, her group was able to interact together such that "the rest of it didn't matter. And you were clear the whole time, your purpose to be here and to learn how to be outdoors, doing citizen science." Luke feels similarly, that through an intensive retreat, his cohort bonded emotionally and professionally in a way tat perhaps would not have occurred otherwise. It seems that being in a place that allowed full attention in the moment helped to catalyze important moments of meaningful engagement for this set of respondents.

*Sharing Stories***.** *Sharing Stories* was a value explicitly noted by three respondents, but implicitly referenced by another five, and is connected to the idea that sharing stories generates meaning, which encourages engagement. Respondents generally felt that the ability to relate to the story that was unfolding within their experiences allowed them to engage. For example, Ann believes it is pivotal for students to connect to the question—especially in their own language—of "why" they are learning about a particular subject. It gives them a validated way for them "to hook in." Chris is explicit about his belief in the power of sharing stories, saying that stories and storytelling are key to being able to understand the issues, to understand a shared reality, and to confront them with courage. "When we can tell the story, then we know; we're in a relationship with the problem…. I feel like storytelling leads to consciousness." Ann, who believes in co-empowerment through learning, believes that "we've all got stories to tell,"

and Sue believes that "we lose when we don't share this way." More generally, storytelling seems to be an essential element of participants' powerful experiences. This seems to echo Niesz's (2010) belief that sharing stories allows participants to connect over the meaning they generate, and may also be explained by education as a profession, which relies on the ability of educators to verbally foster meaning making through discourse.

Breaking of Traditional Barriers emerged as a theme shared between all participants to varying degrees. Sue believes that the traditional classroom teaching style is "totally frustrating," but that new ways of teaching can open students up to "amazing possibilities" and still teach to the standards. Jen believes similarly and shares that she had to overcome certain barriers so that her students could successfully learn, including convincing the learners of her neutrality and helping them overcome potential resistances to the environmental-education-related project at hand. Michael feels similarly, that "being engaged with school and learning… could be an entry point for those kids, to really be a life-changing experience for them." Meanwhile, Ann evaluates her barrier-breaking experiences personally. She says that the teachers "were very limited. They were not creative about how they did it at all. I love to dream up ways to engage. I'm about engagement. So the administrators got excited … because I was showing them another way to do business." Showing people "another way" also resonated with Matt, who believes that he came to more fully learn how to "work so that people feel heard, engaged, and respected" through helping an agency begin to organizationally re-learn how to do business by interrogating the cultures and

customs that had become "entrenched" in the system." Overall, *Breaking Traditional Barriers* seems to be centered on a certain degree of freedom from traditional systems so that learning and engagement can occur in a new way. Additionally, *Breaking Traditional Barriers* seems to be socially rooted in the community, connected to breaking collective barriers, or barriers for others.

Summation

The phenomenological method was useful in during analysis in uncovering root commonalities and was helpful and instructive in avoiding personal bias. Bracketing required that I stay conscious of the way in which I was making linkages, and not forcing linkages simply because I might be interested in them. For example, there was a mildly implicit emotional connection that wove through each participant's response but was only explicitly coded in two responses, and implicitly referenced in three others. Therefore, it could not be counted as a significant code of common theme in this study.

Overall, the results from this study were diverse, with thirty-two coded themes shared by at least four respondents, nine central code occurrences, three un-coded common themes, and one central code co-occurrence. Most significantly, *A Sense of Responsibility/Engagement, A Sense of Success/Achievement, and Paradigm Shift,* supported by a sense of being *Connected To Something Bigger* were shown to be significantly shared between all respondents and encapsulate the strongest common definition of meaningful engagement among participants in this study. Even though the particular stories

that gave rise to those feelings were varied, the results suggest a common mosaic of meaningful connection and give a synthesized picture in which these major elements are connected non-linearly. The Analysis section will break down these results somewhat further and explore their connection to the literature in order to ground the results in participatory theory literature and provide a measure of validation to support the findings' applicability for E3 Washington and the wider CoP field moving forward.

Analysis

The purpose of this study was to discover common elements of meaningful engagement among a selection of E3 Washington's potential RLCoP members as a way to help address the theory-to-practice challenges in utilizing participatory approaches in contemporary organizations. During facilitation, this study may help E3 Washington to make its RLCoP more connective and successful over time by leveraging the social connections described in this study. That success, and this study's methodology may also enrich the broader literature on making the shift in society to participatory practice for sustained collective impact in addressing contemporary environmental issues. Analysis of this study's results shows that while the collective mosaic of participant responses was not concentrated in any one single theme, many of the themes identified are congruent with major parts of the literature that upon which this study was built. This suggests success. In order to illustrate, this chapter will begin by examining conceptual congruencies to the literature such as "encouraging connectedness" and "commitment and output," and will then move to the organizational congruencies of this study's findings to the literature, such as "community" and "knowledge formation." The Analysis section will conclude by identifying some concepts in the literature that were not specifically addressed by this study.

Social and Psychological Congruencies to the Literature

This study explored elements of meaningful engagement shared by participants in individual, group-situated, ESE-related activities. Therefore, the results are socially or psychologically based because meaningful engagement is a personal feeling. This study's results should be verified with the social and psychological tenets of participatory theory, to provide a check that the findings resonate with the theoretical framework. A check is important because, if the findings aren't congruent with theory, then the underlying theory cannot be expected to help support the findings in practice. This section will explore congruencies in "encouraging connectedness," "commitment and output," "connection and performance," and "focus and leadership."

Encouraging connectedness. Krach et al. (2010) have said that meaningful engagement in communities can heal social disconnectedness, and Walton et al. (2012) believed that the kind of social connection and improvement promised by CoPs is shown to be important for personal wellbeing in a wide variety of ways. Those ideas are reflected in this study. For example, Ann and Chris relate how meaningful interaction brought them and their community closer (i.e., in the case of Ann's students and Chris' peers), not only to one another but closer to finding solutions to shared challenges. Sue and Michael, both formal educators, were excited that such connections could, in Michael's words, "be an entry point for those kids to really be a life changing experience for them." Similarly, the theme of *Breaking Traditional Barriers* reflects Michael's words and underscores how meaningfully engaging via new avenues provides

meaningful professional and personal enhancement. For example, Mary, Jessica, Jen, and Chris all discuss how encouraging connectedness in their community encouraged the community to make change, and Mike and Matt both believe that collective learning leads to a greater understanding of the challenges involved, a greater capacity to succeed, and, ultimately, social reward through the social value of being connected.

Commitment and output. Passy and Giugni (2000) asserted that identifying with community participants' major desire to be meaningfully engaged strengthens participant commitment and output, and Niesz (2010) wrote that people will participate in community-based groups for the opportunity to reflect, connect, and find a deeper meaning in their work through the "material meaning" they generate. All of the participants in this study felt meaningfully engaged via their work experiences. Unfortunately, we cannot say whether their desire to be engaged strengthened their output, or whether their output strengthened their desire to be engaged, but we can say that the study's respondents did indeed participate in their communities to connect, reflect, and find a deeper meaning in their work as suggested by Niesz (2010). The code of *Self Questioning/ Interrogating* reflects this, in that participants valued self-reflection as a way to develop themselves and their communities, personally and professionally. For example, Tim, Mike, Sue, and Ann felt proud and connected to the work that their students had accomplished through their leadership, and Jen and Matt felt similarly connected through their committed work to help colleagues co-learn. Finally, Ann and Sue both were especially committed to the

increased output, such as learning, comprehension, and engagement, that resulted from empowering their students in place-based co-learning.

Connection and performance. Snow-Gerono (2005) has said that connection and engagement occurs out of an innate desire for participants to build themselves and their communities, and Walton et al. (2012) believed that through interaction, colleagues work much better and improve performance. These assertions resonate with participants' stories. For example, Matt, Tim, Mike, Jess, Jen, Ann, and Mary operated out of a desire to build their communities, from Tim's belief in environmental stewardship, to Jessica's desire to convene local stakeholders for community action, to Mary's desire to be in the middle of collaborative and systems-thinking conversations. All participants noted an increase in work output because of or resulting from their connection. Indeed, connection and performance can be powerfully linked. For example, Luke believes that the goals and objectives that he set for himself and his team developed in "ways that were beyond the scope of what [he] would have imagined." Luke's belief was echoed by Jen. Meanwhile, Jessica was powerfully impacted by the collective impact that she witnessed during her conference, and engages to continue that work daily.

Focus and leadership. Finally, Hadar and Brody advised that CoPs "require focus, engagement, and leadership in order to flourish" (2010, p. 1643), and this is reflected in participants' stories as well. For example, Luke recalls that the innovative success of his leadership team was possible only because of their ability to create their own leadership; that without co-creating strong guidelines

and guiding principles to propel their work, they would not have succeeded in forming and maintaining a cohesive unit. Tim and Michael reflect that their ESE-related work requires constant effort, that without focusing and engaging the other individuals in their district, the group meaning and momentum is lost. Ann relates how her highly successful program quickly fell apart when she was no longer able to directly lead it, but Jen relates how through her leadership, many of her students not only became engaged in the learning but "actually changed their definition of community."

Organizational Congruencies to the Literature

In addition to social and psychological congruencies of the results to the literature, organizational congruencies exist as well. This section will touch upon those congruencies, such as "community, communication, and knowledge formation," "cooperative learning and breaking isolation," and "passion for learning and thinking."

Community, communication, and knowledge formation. From the literature, *Community, Communication, and Knowledge Formation* are key organizational aspects of a meaningfully engaged participant-driven community, which is reflected in this study's results. For example, Hadar and Brody believed that "new information and ideas [i.e., knowledge] emanate not only from individual learning, but also from interaction with others [in community communication]" (2010, p. 1642), which is reflected in participants' responses. For example, Sue and Ann both relate that they *and* their administrators learned

how to innovate within their local education system through collaboration and dialogue, some of which was difficult or challenging. Chris, Sue, and Jess describe mutual learning experiences that unfolded in a conference and resulted in new learning that may not have otherwise occurred in isolation, and Matt and Mary believe that co-interaction with their colleagues generated new and meaningful knowledge that would not necessarily have been developed through isolated professional development exercises. Returning to the literature, Kulkarni et al., (2000) found that conversations such as the ones that Hadar and Body (2010) say are necessary require communal development and communication in ways that are not possible or effective in standard, hierarchical business models, and Yakhlef (2010) wrote that knowledge reception is based on collaboration and participation. Ann and Sue agree that changing their system to a more participatory format in order to advance co-learning was ultimately necessary and highly valuable. Sue believes that "once you break conventional wisdom, and you have a different way of being, things break open. And I guess that's probably one of the hallmarks of my career." Mike and Tim both believe that their programs sometimes struggle against the prevailing social environment in their districts, sometimes requiring them to work to alter the system for change so that effective communication and learning can occur. Further, Matt believes that a large portion of the success of his work was in learning how to guide his colleagues to adapt and change the formal organization in which they were working, in order that critical learning could occur.

Cooperative learning and breaking isolation. Additionally, participants' meaningfully engaged experiences were shown to be generally centered around the increased engagement that came from cooperative learning, which seems to echo the belief of Walton et al. (2012) that cooperative learning increases learning, retention, and a motivation to continue to learn. For example, Tim recalls seeing students and teachers move from compliant learners and teachers to committed learners and teachers when they collaboratively make the connection between their learning, their environment, and their communities. Further, Ann and Sue recall that their teacher-student co-learning dramatically increased engagement. For example, Ann remembers that a school board administrator "actually articulated that she's 'learning from me.' And I was learning from my kids, because they were actually picking me up and moving me." Ann's experience is intertwined with the concept of breaking isolation barriers between students and teachers, which is reflected in Hadar and Brody (2010) belief in the power of breaking the isolation barrier as a force for development. Ann joins Sue, Chris, Jen, and Jess, in telling their own different stories of development through overcoming isolation, which are all in turn linked to the community connections that are forged through co-learning. Those stories are not uniform, so their responses vary (for example, Chris' development was fairly personal while Jessica's development centered around others), but each story is congruent with social and personal development that occurs in breaking isolation barriers via co-learning.

Passion for learning and thinking. All of the formal educators in this study echoed with Hadar and Brody's (2010) belief that teachers are usually passionate about learning and thinking. This is reflected by the common theme of *Self Questioning/Interrogating,* and participants' willing desire to engage in self-reflection for development. Tim uses the term "enlightened" to refer to his personal practice of thinking about learning, and Michael specifically references his desire for his district to be a "Learning Organization." It is possible that these responses are connected to Snow-Gerono's (2005) studies of formal educators showing that participants become very excited and work with great dedication when they are meaningfully connected. Indeed, Sue says that her school "made magic" through her meaningful engagement, Luke passionately recalls "moving the needle" in his organization, and Mike's describes his dedication to his district's development as "transcendent."

Concepts Not Addressed

Not every concept from the literature was reflected strongly in this study. For example, Walton et al. (2012) believed that cooperative activity is strongly connected to a sense of the community and of community acceptance, but this was explicitly reflected in only two participants, and of those two, one cited it as a potential challenge. For example, Jen recalls that her colleagues actually "changed their definition of community" through collaboration, but Luke recognizes the belief of Walton et al. (2012) as a potential challenge, saying that "we gravitate towards [community acceptance in cooperative activity], and put this kind of

pressure on ourselves to have that be the feeing, and at the same point in time

we're also trying to run these non-profit businesses that are really, really hard

right now…there's some tension in there, for certain." In other words, Yakhlef's

(2010) claim that individuals simply want to belong at the core of a community

can be inferred through the code *A Sense of Community*, but participants did not

articulate a desire to simply belong. Additionally, some important concepts from

the literature, such as the origins of social connectedness and the specific

organizational benefits of CoPs do not significantly arise in the data, but this cold

be because the scope of the interview questions were geared to uncover moments

of meaningful engagement rather than systemic aspects of connection in society.

This suggests that while this study is congruent with important concepts of

participatory practice, it is not a comprehensive reflection of the theory as a

whole. These limitations, in my opinion, do not detract from the small but

significant discoveries that this study has made and the value that the findings can

have in helping to inform the wider literature.

Summation

In sum, the collective responses from participants in this study are

generally congruent with multiple findings from the literature on key social,

psychological, and organizational CoP concepts, including collective learning and

cooperative activity. The data seem to be therefore validated by key elements of

the literature, implying methodological success. While the overall story painted

by this study's responses does not suggest uniform content-based mechanisms of

meaningful engagement amongst the group, it does paint an overall picture of

process-based engagement, which is meaningful for moving forward (i.e.,

attempting to address the theory-to-practice gap in the literature). Moving

forward, there is room for much discussion about the respondents' common

identity as a learning community, how the data may apply to CoP facilitation in

the future, and what kinds of research may be useful in future studies of this or

similar professional communities. The Discussion section will explore these

concepts next.

Discussion

Overall, this study succeeded in identifying a common set of elements of "meaningful engagement" between survey respondents among group situated, ESE-related activities. This discovery helps to uncover at least a part of the mechanics of community engagement that might be fruitful to focus on in developing a regional leader CoP in E3 Washington. Through targeted facilitation, it is quite likely that this study will provide a useful guide. However, this study does have its limitations and leaves a few unanswered questions. This chapter will discuss limitations and questions from the preceding chapters and touch on lessons learned.

One of the major limitations of this study is that it cannot say whether the participants of this study, and E3 Washington's regional leadership network by extension, represent or are pre-disposed to connect as a CoP. Despite that each participant in this study shared a common experience of meaningful engagement that originated from their own local CoPs, it is beyond the ability of the phenomenological method to suggest any degrees of success for E3 Washington's RLCoP in the future. It can be dangerously easy to jump to conclusions because the existence of a shared experience of meaningful engagement between participants that is also congruent with key literature concepts can unfairly suggest that they will be predisposed to meaningfully engage with each other, which may not be the case. One must stay within the bounds of what this study can provide, which is a process based definition of meaningful engagement

among participants. Despite that success of E3 Washington's RLCoP cannot be guaranteed from the findings of this study, the findings are significant because they can be used within participatory facilitation guidelines to help work for that success.

As mentioned earlier, this study can only accurately comment on the *process* of shared meaningful engagement (i.e., ideas, emotions, themes, etc.) and not the *content* (i.e., actions, activities, frameworks, etc.). The reason for this is because the individuals who were interviewed came from different content-based worlds (i.e., classrooms, boardrooms, outdoor settings, etc.) and shared experiences that were spread over different time periods. Some participants honed in on one specific experience that spanned a period as short as a two-weeks, but most shared stories that lasted multiple years, over more than one specific type of content-based engagement. Therefore, the data on *what* participants did is varied and therefore not significant from a qualitative point of view. Yet interestingly, there was content-based commonality between members of the same field (i.e., district-level formal educators spoke about classroom visits, curriculum development, and celebrations of student achievement). The sample size in this study for such breakout groups is too small to be qualitatively useful, but it does suggest questions for future studies. For example, are there common content-based mechanisms among like colleagues that could complement the data obtained in this study? At what point do colleagues' work circles no longer overlap in a content-based way? Perhaps a large or more targeted study would find commonalities that this small study did not. Even so, these observations seem

to suggest that E3 Washington is attempting to make an aggregate CoP out of network representatives from other individual CoPs (such as teachers from classrooms, principals from schools, and nonprofit executives from local organizations). In fact, this seems to fit with E3 Washington's organizational model, which has been to convene local leaders in local groups across the state, organized under the E3 Washington vision, for individualized and mutually resonant ESE capacity building. Such an observation reinforces the idea that future phenomenological studies focused on more targeted specific aspects of the E3 Washington network may yield interesting results.

In this study, the strength of each individual coded theme per respondent was not considered to be of relative importance because this study was focused on finding the greatest common shared picture of meaningful engagement in their individual ESE-related experiences. For example, it is significant to know that each participant's experience was catalyzed or cemented by a *Paradigm Shift* in understanding, but the power of that shift per individual is of less importance in this case, even if the paradigm shift experience was central to some and merely a supporting factor for others. This knowledge raises an interesting idea, that even though there are core commonalities among this study's participants, those commonalities are not uniform and should not be relied to be during CoP facilitation. In other words, assumption of uniformity is likely to undermine success because a CoP must feel relevant and real to each participant involved, and over-concentrating on a particular element not pivotal for all may create a feeling that the host organization is attempting to push an agenda or not listening

to its members needs. Therefore, as organizations utilize knowledge of their members' engagement to facilitate CoPs, they must remember to focus on subtle base commonalities in order to engage the most members, and not focus on certain strong or singular aspects in the assumption that they will magically produce strong engagement.

The interview process, as might be expected, suffered a few flaws and inconsistencies. For example, even though questions were emailed to respondents days before each interview with a request that they read and prepare, some did not. As a result, some respondents were prepared with well-reflected answers and insights, and others needed to verbally process "off the cuff." Therefore, those who were better prepared for their interview or simply spoke more quickly than others seemed to share a greater volume of their experience, which sometimes resulted in a heavier code count and may have therefore skewed the code results. Additionally, using unconstrained recall meant that interviewees were able to wander; I let them explore their stories because I didn't want to interrupt the flow of what they felt was meaningful to share. As a result, one participant's interview was comparatively weak, which notably impacted the depth of the available data due to the small sample size of this study. Therefore, I find myself wondering whether or not I would have inserted an unacceptable level my bias into an interview if I had interjected to keep the interview "on track." Is such a sacrifice worth the possible increased uniformity of data in a small sample such as this? I believe that experiencing these questions has brought me to more fully understand the methodological disagreements that different phenomenologists struggle with.

Nevertheless, despite the difficulty in judging how much more informative or accurate more tightly guided interviews would have been, I suspect that the interview questions themselves could certainly have been made somewhat more specific in order to draw out more uniform experiences. For example, would setting experience parameters (i.e., asking only for experiences of two weeks or less, or experiences of one year or longer) have drawn out different commonalities or more precise answers of common engagement?

During analysis, coding was subjective in a way that I was not expecting, and I have gained a greater understanding of and appreciation for the threat of bias in phenomenological research through that challenge. For example, I found myself having to restrain the impulse to stretch the applicability of codes in order to make a qualitative connection. I had to mind the line between translating and interpreting; occasionally I came close to unintentionally interpreting participants' lived phenomena because I desired that the data be meaningfully informative. Bracketing was a constant and useful exercise. The processes of collapsing/combining similar codes to condense and enrich the common picture and applying the same code to different content-based stories also presented unexpected challenges, because in this dual process, precision of the original experiences was somewhat lost in the combined story. For example, the code for "paradigm shift" lost some of its precision in being applied to multiple, unique paradigm-shifting experiences, even though the importance of a shift in perspective was still represented clearly. Because I needed to cast a wide net through my given responses in order to achieve code commonality, there are a

few degrees of qualitative uncertainty between the commonality of a code and the specific nature of the code itself from person to person. This small study is handicapped from digging deeper and it seems that a future focus on one sector of education leaders (such as school principals), or one specific mechanism of experience (such as conferences and events) would be fruitful. It would be interesting to conduct individual studies geared at extracting more data; for example, to ask what defines a specific "paradigm shift" for each participant, and would pinpoint understanding echo this study's combined story?

Lastly, the problems and concerns raised in the results and analysis of this study seem to echo some of the critiques of participatory theory. Critics argue that participatory theory isn't broadly applicable, because at a high enough granularity, the content-based mechanisms of engagement are no longer congruent; all that is left is the process, the psychology. That seems to bear out in this study, because in order to find common, process-based commonalities amongst study respondents, I had to sacrifice some amount of resolution. Similarly, there are no specific content-based commonalities that this study can identify to suggest for facilitation of E3 Washington's regional leadership CoP, which would be very helpful.

Though certain literature critiques remain relevant and challenges for future implementation remain, none of these limitations detract from the fact that this study has revealed strong, process-based commonalities of meaningful engagement amongst survey respondents that are congruent with key psychological, social, and organizational concepts and references in the literature.

This is key because for groups such as E3 Washington because targeted knowledge of the home community is necessary before participatory theory can be applied there. This study also represents success at utilizing phenomenological methods to uncover a common element of meaningful engagement amongst a diverse set of ESE stakeholders and is therefore successful at gaining a piece of critical contextualized knowledge about the nature of individuals who may compromise E3 Washington's RLCoP. Hopefully, these findings will be of use to E3 Washington and the greater field of research in participatory practice, in working to overcome theory-to-practice challenges and to make the much needed shift towards participatory practice for collective impact on the complex environmental issues faced by contemporary society.

Conclusion

This study has succeeded at describing a common expression of meaningful engagement between a selection of individuals that comprise a potential intentionally facilitated CoP. Having found a common expression of meaningful engagement in this particular professional community is significant because it shows that this study has successfully, if only in part, described contextualized knowledge of key experiences that give rise to desire for meaningful and sustained participatory practice. It further suggests that these individuals are enough alike that a CoP facilitated amongst them, and based on the findings, may strongly succeed. This research is one of many that are being done around the world as a way to help inform the theory-to-practice gaps that exist in participatory theories such as CoP, and this study contributes to that expanding body of knowledge. Ideally, the findings of this research and its research design can help inform other studies that are working to address this question in other professional communities. This success represents a small step towards understanding of the larger picture, which is a much needed shift towards participatory practices and collective impact currently believed to be the best and most effective ways of addressing the myriad complex environmental issues facing contemporary society. In essence, despite questions and weaknesses associated with this small study, this study is significant in presenting just one small piece of the larger puzzle, contributing to a mosaic that informs the whole in working for sustained solutions to environmental challenges in diverse fields.

This study was leveraged on the social and psychological desire for educators to form professional collegial communities in order to feel connected to one another, develop professionally, and innovate solutions to shared challenges. Operationally, this study interviewed ten members of E3 Washington's forty-member regional educator leader network, in order to help lay the foundations for facilitation of a regional leadership community of practice within the community, which is something that is new to the organization. Additionally, this study represents the first social or psychological survey of that member base, recognizing that identifying with participants' major desire to connect strengthens the commitment and output of individuals and the group as a whole. Through the research, this study identified four major interconnected psychological elements of meaningful engagement between the individuals interviewed, interwoven to create a non-linear tapestry of engagement. One possible strategy for operationalization could be as follows: to convene potential members in a focused environment (such as regular robust meetings) and define a group project, activity, or focus that they could all feel responsible/engaged in completing, and guide and support them through incremental successes over time. More social elements of engagement identified in this study, such as paradigm shifts and feelings of being connected to something larger than themselves, may need to be allowed to emerge organically through their social interactions, co-learning, and output. Throughout, targeted facilitation by the convening organization may be necessary to keep the CoP focused and aligned.

This study recognizes that its findings are not full answers to larger questions involving the content-based nature of participatory methods, the specific content-related aspects of meaningful engagement across E3 Washington's regional educator leader network, or how to specifically integrate these findings into facilitation methods. Further studies into the content-based mechanisms of meaningful engagement amongst this community will provide substantial clarity and balance to the process-based commonalities described in this study. However, in sum, successful facilitation requires specific knowledge of the community context, which this study has, at least in part, provided. The process-based conclusions that this study have drawn are congruent with prevailing literature and may provide a promising process-based mechanism for engagement of the educator leaders in E3 Washington's network. This may make its RLCoP members more meaningfully co-engaged, and ultimately more innovative, transformative, and sustainable over time. In a broader context, this study may be helpful in informing similar organizations with some conceptual tools to overcome the theory-to-practice barrier in facilitating participatory engagement at large, designed to generate critical community knowledge, co-discover solutions to shared organizational opportunities, and approach sustained participatory-based solutions to our shared and ever increasing environmental challenges.

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Appendix

Interview Questions for Thesis:
"Exploring the Experiences of Meaningful Engagement
in Preparation for a Community Of Practice"
Aaron Zimmer, Spring 2013

Core question: "Think about an time where you were involved in a sustained, group situated ESE-related activity that powerfully impacted you, professionally or personally, in a transcendent and lasting way. Try to place yourself in the context of that experience and then recount it is if you were telling a story."

Context—Set the Stage
When and where did this take place?
Describe yourself at this time.
Who are the other major figures in this story?
What was your relationship to them? Describe them.
What events or relationships led up to this experience?

Experiences—Share the Story
Were there any particularly important events in this experience - events that caused you to feel meaningfully engaged and/or changed in a positive and lasting way?
Tell me the story of these events.
What, specifically, were you feeling or thinking during this time?
What was your attitude to the other participant/s?
What attitude did the participant/s have toward you?
What was it, specifically, that made you feel like you were meaningfully engaged in a positive/lasting way?
What was it, specifically, that tipped the experience from meaningful to transcendent?

Evaluations/Integrations—Summing up the Story
Was there any clear point at which this experience ended?
What did you think and feel when this experience ended?
How did you and the other participants respond to these events after they had ended?
How do you and the other participants feel about this experience now?
Do you see this experience differently now than you did at the time that you had the experience? How so?
Do you feel like there is anyone or anything to specifically account for this experience?

Additional Questions—Shifting Contexts
Try to describe this experience from the perspective of another participant.
Have other people commented on this experience either at the time or later? What were their comments?
How did you feel about those comments at the time? How do you feel about them now?
Have you had other experiences like this one? How often and in what contexts?
What similarities and differences are there between these experiences?