

**How are District and School Administrators Enacting EE Policies Within a Rural Ontario
District School Board?**

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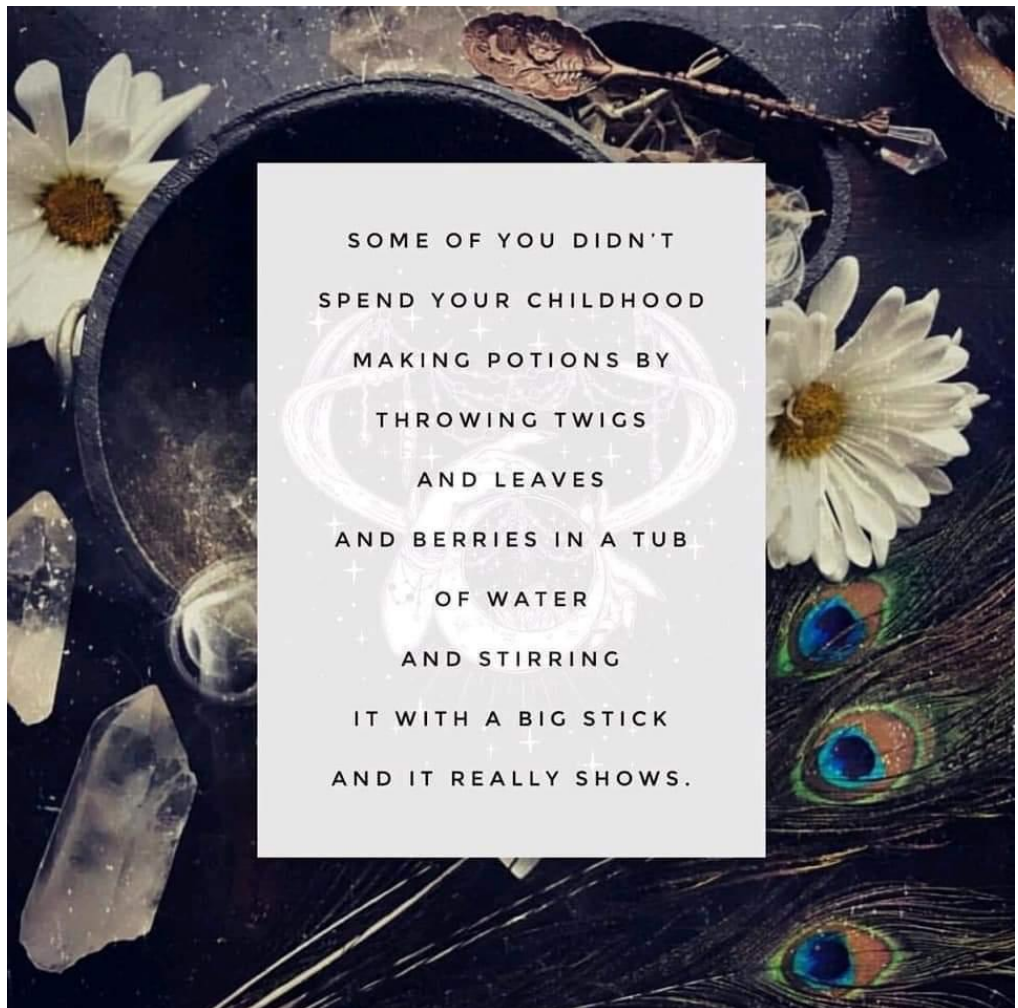
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I would like to thank my ex-husband Jampa for his love and moral support through the many years it took me to complete my Masters' degree. And lately, for taking the kids on countless outdoor adventures so I could work on my thesis.

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has."

—Margaret Mead



Abstract

I used qualitative case study methodology to gain insight into EE policy enactment at one Ontario rural school board. Qualitative research is best suited to explore a problem and develop a detailed understanding of a central phenomenon (Creswell, 2012), in this case how district and school administrators make sense of EE policies and how that sensemaking process impacts policy enactment. A case study is defined as “conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence” (Hancock, Algozzine, 2006, p. 15). Although I could not access schools and district offices, I have been able to collect data through a variety of ways (i.e., interviews, district websites, documents shared by interviewees). Key findings include that participants (district and school administrators) are mostly unaware of the existing EE policy framework; EE is seen as legitimate in schools, yet low priority; EE remains mostly driven by passionate administrators and educators.

Partnership with a rural district school board

I am grateful to the rural district school board that allowed me to conduct this research within their school board. It is difficult to find a site of research and this school board has an interest in this research as they would like to dynamize their EE practices. A conversation took place between its Director of Education, me and my supervisor so as to formulate questions of research that will be of interest and useful to the district.

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Chapter I: Framing The Research

In light of the environmental issues that we are currently witnessing (Canada's Changing Climate Report, 2019; Intergovernmental Panel on Climate Change, 2018; Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services, 2019), schools are well-positioned to foster change through educating young people about local and global dynamics and exploring how we might change our lifestyles. In 2002, the United Nations Educational, Scientific and Cultural Organization (UNESCO) issued a report which includes an "Agenda 21 - Manifesto for Education" stating that "education is critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making" (UNESCO, p. 4).

UNESCO declared in 2005 the United Nations Decade of Education for Sustainable Development (2005-2014). Responding to the need for more Environmental Education (EE) in schools, the Ontario Ministry of Education (OMoE) took important policy steps to make EE part of the mandated curricula. In 2007, the astronaut Roberta Bondar was given the responsibility by the *Ministry of Education's Curriculum Council* to chair the *Working Group on Environmental Education*. Its mission was to "analyze needs and research successful approaches to teaching and learning about the environment in elementary and secondary grades" (Bondar, 2007, p. 3). The report, *Shaping our Schools, Shaping our Futures* (2007), also called the *Bondar Report*, defines a vision for EE in Ontario and presents thirty-two recommendations.

Recognizing the opportunities already in existence in Ontario in relation to EE, the *Bondar Report* noted that "a substantial gap remains, however, between these current practices and a comprehensive approach to EE in Ontario schools. Evidence of this gap exists at every level of the system" (OMoE, 2007, p. 2). The gap between EE policy and practice is not specific to Ontario; it has been noticed and analyzed in various parts of the western world (Stevenson, 2007). The gap has been attributed to several factors, such as the fact that policy discourse is constructed by academics and policymakers "as an abstraction, decontextualized of contexts of practice" (Stevenson, 2006, p. 287). In addition, researchers cite the inherent tension between an EE curriculum that is transformative, action, and change-oriented and an educational system that remains bureaucratic and geared toward the preservation of the social order (Barrett, 2007).

The *Bondar Report* recommended actions for each level of the educational system; for example, Faculties of Education offering EE courses; curricular integration of EE in K-12; school districts developing an EE policy accompanied by in-service training and resources for teachers; providing funding for outdoor education; principals embedding of EE in school improvement plans, as well as the development of accountability measures and feedback mechanisms

(OMoE, 2007, p. 11-15). The *Bondar Report* was followed by *Acting Today, Shaping Tomorrow* (ATST; OMoE, 2009) a policy framework mandating that all school boards develop an EE policy to support capacity building in students to become informed, active citizens who will play a critical role in the development of our society and global environment (OMoE, 2009). As defined in the *Bondar Report* (OmoE, 2007) and taken up in the subsequent EE Ministry documents (OmoE, 2009; OMoE 2011) EE is “education about the environment, for the environment and in the environment” (OMoE, 2007, p. 6), emphasizing the importance of a field-based, integrated approach that fosters action-oriented skills “to effect long-term change” (OMoE, 2009, p. 11). ATST can therefore be situated as promoting a transformative pedagogy, explicitly recommending that school boards develop experiential outdoor learning opportunities, as well as partnerships between schools and community organizations so as to empower youth to participate in debates and actions for the environment.

ATST (OMoE, 2009) also states that EE is a “whole-system responsibility” (p. 18) that requires “leadership support” (p. 16), the implementation of “evidence-based” EE practices and should have a focus on “measuring progress” (p. 22). Reading this document, advocating for cross-departmental collaboration and new initiatives so as to promote innovative pedagogies for EE (i.e., integrated, experiential learning), gives the impression that the OMoE has significant ambitions for the development of EE teaching capacity in Ontario. It is important to note however that the publication of this policy framework was “an externally imposed political process” (Karrow & Fazio, 2015, p. 91) resulting from the OMoE being subjected to the provisions of the *Environmental Bill of Rights* by the Ontario Ministry of Environment through a public petition to the OMoE in 2006. The document also acknowledges that “there is no universal model for the implementation of EE” and that it should be used as a guide, while “specific goals and processes must be defined locally” (OMoE, 2009, p. 4). This dialectic between a government requiring change through a policy document while allowing considerable discretion to local authorities as to how they take it up and implement it, is characteristic of educational policy-making efforts over the last fifty years (Spillane et al., 2002).

As new scientific reports documenting the increasing speed of environmental degradation are regularly making the headlines, it is important to inquire about the impact of ATST (OMoE, 2009). When considering advances in EE in Ontario, it is evident that indicators to monitor the policy implementation referred to in the “measuring progress” section of ATST, such as “Shared inventory of school board practices created” (OMoE, 2007, p. 24), do not seem to be used. In the absence of public reports emanating from Ontario educational institutions about the state of EE, we are left to wonder how this policy framework has been taken up by the various

levels of the education system. Consultation of the OMoE and school districts websites as well as reviewing relevant published research articles, reveals that a number of advances have been made since the publication of *ATST* (OMoE, 2009). These advances include: the integration of EE in the front matter of all curricula; the creation of resource documents to support the integration of EE across grades and subjects¹; the creation of two Additional Qualifications courses (AQs; Outdoor Experiential Learning and Environmental Education); the creation of Environment-focused Specialist High Skills Major (SHSM) for secondary students, and 91% of school districts in Ontario have adopted an Education for Sustainable Development (ESD) policy (Beveridge, et al., 2019). EcoSchool, a voluntary environmental certification program for K-12 schools, has gained momentum and is reaching a growing number of schools and districts across the province. Although it has become an important feature of the EE landscape in Ontario, it is an independent organization, which development is unrelated to these policy changes.

Despite these advances, signs of a persisting policy-practice gap remain. For example, few Faculties of Education have EE-specific courses and when they do, they most often remain electives in Teacher Education programs (CMEC, 2012); teachers report a lack of professional knowledge, especially with regard to learning outdoors (Pedretti et al., 2012); teachers also report lack of time and resources to teach EE; and, research reports that EE remains a low priority in schools (Tan & Pedretti, 2010).

Moreover, a number of limitations exist in regard to the advances mentioned above. Access to the newly created AQs is difficult; variations exist in the content of the existing Ontario ESD district policies with some not even mentioning Outdoor Experiential Learning (Bennett, 2017). Confusion surrounding the term “sustainability” expressed in the often-quoted expression “the path to sustainability and the end place are unknown” (McKeon & Hopkins, 2003, p. 126) translate into districts’ ESD policies which, for some, focus more on district operations (e.g., energy-saving or waste minimization measures) than EE content (i.e., instructional practices) (Beveridge et al., 2019). A number of educators and academics have engaged in action research to reflect and document their own innovative EE practices (Ellwood, 2018; Glithero, 2016; Kerckhoff & Reis, 2014; Martinez & Alsop, 2014; Mnyusiwalla & Bardecki, 2017), however, there is a lack of reporting and analysis on how the policy framework implemented is

¹ In 2011 two “*Scope and Sequence of Expectations*” were published by OMoE, one aimed at elementary schools and the other at secondary. Both documents were subsequently updated in 2017.

characteristic of ESD policies globally (Creech et al., 2008). We therefore run the risk of “cataloguing success stories” (Beveridge et al., 2019, p. 38) rather than monitoring and reflecting on policy implementation.

In a case study exploring EE practices in an Ontario District, Fazio and Karrow (2013) found that while “typical normative teaching and cultural constraints of schools are still evident” (p. 639), teachers and administrators were successfully negotiating these constraints due to their personal commitment to schools and the environment. And indeed, when surveying the literature about EE in Ontario, it is evident that ambitious projects do take place in some districts (Glithero, 2018; Rodenburg, 2017). Nevertheless, it remains unclear how individual actors, at different levels within a district school board, manoeuvre through the existing constraints to support the emergence of innovative practices. It is also hard to know if these initiatives persist through time, or if they are short-lived. This question seems all the more relevant as funding, curricula and policy fluctuate with changes of provincial governments (e.g., changes in sexual education curriculum following Doug Ford’s 2018 election to premier of the province of Ontario) which jeopardize the possibility of implementing large-scale coherent EE programs in the long term.

Researcher Positionality

As a teacher for the Ottawa Catholic School Board (OCSB) for 6 years, I have taken part in various EE initiatives that are common across Canadian schools such as: organizing and promoting recycling and composting programs; reducing single-use plastics through school campaigns as part of EcoSchool certification. I have also striven to integrate EE in my daily teaching in an age-appropriate way, for example taking students outside on a frequent basis in order to foster love of and care for our local environment.

I have found that despite great opportunities (i.e., alignment with various educational priorities; students’ engagement; interest of many educators to develop their EE teaching capacity), the support necessary to build EE capacity (i.e., release time to collaborate on innovative pedagogies, how to assess students’ learning; willingness to pursue organizational change such as uninterrupted instructional time to teach subjects in an integrated way) was often missing.

In my experience, this lack of momentum results in EE relying on the presence of a passionate educator championing the environment within her/his school and district. Moreover, if EcoSchool has acted as a catalyst to engage students in EE, it is mostly being used as standardized guidelines that educators often follow unreflectively, counting the points needed for their school to be eco-certified. While it is positive for students to take leadership in educating their school community and embedding eco-practices in their school, we may miss opportunities

to model locally relevant inquiries and to instill a critique of broader socio-economic phenomena such as consumerism or capitalism that are at the very core of the processes of environmental destruction we are witnessing (Marques, 2020). I see my graduate studies as a continuation of my attempts to promote social and environmental change in schools and therefore, I took the opportunity of my thesis research to investigate how district and school administrators within a district make sense of EE policies/regulations so as to make choices and decisions about them. I researched theories and frameworks stemming from sociology that have been used to study educational policy enactment and identified several key notions that have shaped this study, such as the dialectic between social structure and agency, and the concept of inhabited institutionalism.

Foundational Concepts:

In line with several studies that draw on both neo-institutional and sense-making theories (Coburn, 2001; Marz et al., 2016) to study policy enactment, I conducted an exploratory case study comprising interviews and documentary analysis to obtain a finer understanding of how district and school administrators make sense of EE policies and how that sensemaking process impacts policy enactment, thereby maintaining or disrupting institutional logics and organizational structures. The interplay of sense-making and institutional logics is conceived as an on-going, ever-evolving process comprising simultaneous mutual interactions.

Sensemaking theory, focusing on the cognitive processes of agents when interacting with a policy, has been developed to better understand implementation failure since “conventional accounts” based on the principal-agent and rational choice theories have been challenged as giving an incomplete picture of the situation (Spillane et al., 2002). While this theory allows us to understand how educational actors (e.g., teachers, administrators) shape policy enactment as they interpret, adapt, and transform it (Coburn, 2001), neo-institutional theory helps us to understand how school norms are constructed and reconstructed over time, through social interactions, and embedded within policy and governance structures (Scott, 1995). Neo-institutional theory provides “powerful tools for understanding the complicated relationship between schools and their multifaceted environment” (Coburn, 2001).

When reading *ATST* (OMoE, 2009), it seems a number of assumptions are made throughout the document, such as the assumption that district and school administrators will themselves have similar values (i.e., empowering youth to effect long term change). It is also assumed that administrators have the theoretical and practical knowledge to understand the policy content (i.e., a transformative pedagogy for EE), to make sense of its scope (i.e., organizing cross-departmental initiatives and community partnerships for meaningful EE

opportunities K-12) and to interpret it in a way that is locally relevant, yet in line with its core principles. What interested me was to use interviews to understand how district and school administrators construct meaning about EE, creatively mediating a number of factors (e.g., policy and external messages, personal and professional values, institutional logics and organizational structure) and how, in turn, their sensemaking processes shape their policy enactment, thereby maintaining or disrupting institutional logics and organizational structures.

Additionally, Karrow and Fazio list district support (i.e., funding, partnership with EE organizations, release time and opportunities for professional growth) as well as principal leadership (i.e., commitment, appropriate leadership and activist role of a principal) as top conditions that enable teachers to circumvent school organizational constraints and implement EE (Karrow & Fazio, 2013, pp. 649-650). They call for further research grounded in schools to see how local and biographical contexts influence policy enactment, which is what I am hoping to contribute, through this research project, by studying how district and school administrators make sense of EE policies and how that sensemaking process impacts policy enactment.

The Notion of “inhabited institutionalism”

This research project was inspired by the work of authors who try to reconcile micro-processes (e.g., individual and/or collective sensemaking) with macro-processes (i.e., institutional logics); in other words, considering both agency and social structure, so as to grasp the complex interactions between both (Coburn, 2001; Marz et al., 2016; Powell & Colyvas, 2008;). *Inhabited institutionalism* can be summarized as the study of how institutional logics are mediated, enacted, interpreted and negotiated by actors going about their work, or “the way actors talk back to institutional pressures” (Marz et al., 2016, p. 306). Inhabited institutionalism therefore combines the analysis of macro-processes such as how a policy is being enacted (i.e., institutional logics), with the analysis of micro-processes such as how individuals make sense of the policy text to enact it. In this study the institutional logics being studied are the ones at play across one particular school board, therefore, the word “institution” refers to this specific school board. In a case study focused on mentoring practices in a Belgian school board, Marz et al. (2016) showed that, through the introduction and later withdrawal of financial support for mentoring, the meaning system associated with mentoring shifted, contributing to multiple agendas. The adoption of formal procedures not only professionalized the role of teachers as mentors, but also contributed to whole school improvement. Marz et al. (2016) reported that regulations and normative expectations caused the source of legitimacy of the practice to shift, with administrators and mentors mobilizing themselves to maintain the established mentor practices once the funding was removed. They conclude that “organizations are not only the

instantiation of institutional logics, but are sites where people and groups make sense of and creatively use institutional logics” (Marz et al., 2016, p. 303). It is clear that an exploratory research of EE enactment in a district school board is warranted, and the case study I undertook builds on the preceding studies, although it is by nature limited in scope and temporality.

Social Structure and Agency

The duality of structure and agency (Giddens, 1979) is useful in an analysis of policy enactment as it allows consideration of both the broader contexts of education and how these broader contexts are embedded, mediated and creatively interpreted in individuals’ cognitive processes when they have to make enactment decisions. The structure/agency debate is a “perennial sociological question” (Rigby et al., 2016, p. 295) with a wide range of theories seeing human actions at one end of the spectrum as “heavily socialized (views) where actions are dictated by the social structure” while some others see individual actors as having “unfettered individual choice” (Coburn, 2016, p. 465). Inspired by the work of other scholars (Bray & Russel, 2019; Marz et al., 2016) who do not situate themselves on one side or the other of the spectrum but rather take the notion of human agency as an object of inquiry, the study at the heart of this thesis considered to what extent school and district administrators are agentic when enacting policies, thereby contributing to reproduce or modify the social structure.

Social structure can be defined as “regular patterns that can both enable and constrain individual actions” (Rigby et al., 2016, p. 295). For example, in this research, I identify institutional logics that pertain to EE in the district studied. Institutional logics are part of the social structure; they work to both enable and constrain us. They are defined as “the set of material practices and symbolic systems including assumptions, values, and beliefs by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences” (Thornton & Ocasio 1999, p. 804). Simply said, institutional logics are defining what is right, good, or taken for granted in regard to EE in the school context (e.g., It is considered good for students to know about and take part in recycling and therefore, instructional time is devoted to recycling). Coburn argues that messages in school environments “shape patterns of actions of action and belief within schools” (2001, p. 146) in three different ways: “through regulative means, as incorporated into formal policies; through normative means, as teachers feel pressured to adopt certain approaches to maintain legitimacy; and through cognitive means, as beliefs and practices attain taken-for-granted status as the natural of common-sense way to do things” (2001, p. 146). The notion of institutional logics lends itself well to study administrators’ EE policy enactment, since it is evident that a number of EE practices cannot solely be attributed to direct policy knowledge or an intentional

enactment effort of EE policies, but rather to individual actors' commitment to the environment and mimetic dynamics (Karrow & Fazio, 2013). In other words, EE policies might be evident in practice without the participants being aware of the actual written policy. Therefore, the notion of institutional logics enabled me to study how current practice at this local school board came to be in its complexity.

As for the notion of agency, it has been much researched over the last two decades, with a focus on teachers' agency, as part of an effort to understand reform failures and "innovation without change" (Priestley et al., 2012). The definition of the concept varies in the literature and critics have expressed that it is often conceived as "solely a positive capacity" (Priestley et al., 2012), transforming it in a measuring instrument of successful policy implementation. Bascia et al., (2014), studying teacher agency in curriculum innovation in the Canadian context, describe it as the "capacity of teachers to act within the context of problematic situations" and to engage in autonomous action "within the contingencies of the environment within which such action occurs" (Priestley et al., 2012, p. 196, as cited in Bascia et al., 2014). Scott, adopting a somewhat simpler definition of agency describes it as "an actor's ability to have some effect on the social world -altering the rules, relational ties, or distribution of resources" (2008, p. 77). I use Scott's definition of agency in this study because it resonates with the EE the policy-practice gap, theorizing that educational actors do not just mechanically implement what is expected of them, but that they are reflexive agents, mediating information in accordance with their school contexts and are capable of initiative. As a result, exploring the sensemaking processes at play when participating administrators enact EE policy helps to define the barriers and opportunities existing and perhaps, inform future EE policy-making and policy-enacting efforts.

Research Questions

The overarching research question guiding this study was: How are district and school administrators enacting EE policies within a particular rural Ontario district school board? I adopted a broad definition of EE policies as any formal administrative document emanating from the OMoE or district school board. Using transcribed interviews and document analysis, I researched these two sub-questions:

1. *What are the institutional logics shaping the sensemaking processes of district and school administrators when enacting EE policies, within a rural school board?*
2. *How are the meanings about EE constructed and, in turn, how does this sensemaking process shape district and school administrators' agency to enact EE?*

The first sub-question was addressed through the identification of the institutional logics at play in this rural school board, using Coburn's categorization of how the environment's

messages “shape patterns of action and belief within schools” (2001, p. 146) in three different ways: through regulative, normative, and cognitive means. The second question was addressed through building a personal interpretative framework (Kelchtermans, 2009) for each participant in order to better understand individual participants’ agency toward EE.

Chapter II: Literature Review. The Policy-practice Gap in EE

A gap between policy and praxis has been noticed ever since EE became a part of educational discourses. In 2007, Stevenson wrote:

The gap between policy rhetoric and school practices in environmental education has not only persisted but probably increased over the past twenty years, given the contested advent of education for sustainable development (ESD) as the dominant international policy discourse in this area, and an increase focus in schools on didactic teaching in traditional content areas resulting from narrowly defined accountability measures in many national educational policies. (p. 265)

I surveyed the literature in search of the root causes of what Stevenson has called the “rhetoric-practice gap” (p. 265): how it came about and how it plays out in the educational system. The question of the policy-practice gap in EE is important for several reasons: the existence of a gap between what we preach (the curriculum) and what we do means students are not being adequately equipped with the critical skills deemed necessary to effectively become “environmentally active and responsible citizens [and to] apply their knowledge and skills cooperatively to effect long-term change” (OMoE, 2009, p. 11). It also means that policy implementation is somehow failing, at least to some extent, which has implications such as the inefficient use of taxpayers’ money and the possible public distrust toward the school system due to mismanagement of money or schools not performing their advertised mandate. (Viennet & Pont, 2017 p. 11).

The Policy-practice gap is not Limited to EE

This policy-practice gap is not specific neither to EE, nor to Ontario. Viennet and Pont (2017) report that educational systems are under constant pressure to change and adjust due to “fast-paced economic social and demographic environments” (p. 8). The OECD countries have witnessed an impressive number of educational reforms and there is often little evidence of their effect “because educational impacts are challenging to assess and seldom evaluated” (Viennet & Pont, 2017, p. 8). Bascia and Hargreaves (2000), adopting a Canadian perspective, echo the global concern about the rhetoric-reality gap of educational reforms and ask: “why does educational reform so often fail?” (p. 1). Through a series of case studies centered on how teachers navigate reforms, they conclude that even the policies that considered the work of teachers, in their formulation, “often fail to understand the depth, range and complexity of what teachers do” (p. 3). Given the concerns raised by researchers about take up of educational reforms generally, it is important to better understand the tensions and complexities that impact enactment of EE policies. Interestingly, Fowler (2013) explored the complexities of educational

policies and their impact. He stated that how a particular public problem is handled by a political system should not be only considered through its policies but also through “its consistent patterns of activity and inactivity” (p. 5). Patterns of inactivity seem of interest when considering EE policy enactment, given a documented policy-practice gap. In this study project, I try to understand how administrators form meanings about EE and how this sensemaking impacts EE enactment, thereby maintaining or disrupting institutional logics and organizational structures.

The EE Policy Discourses and the Context in Which They Were Formed

EE emerged institutionally during the 1960s and 1970s through international conferences organized by the United Nations Educational, Scientific and Cultural Organization - United Nations Environmental Programme (UNESCO-UNEP) as a response to growing fears about the degradation of the environment (Kyburz-Graber, 2013). Goals of EE were formulated during the UNESCO-UNEP conference in Tbilisi in 1977, including “to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment” as well as “to create new patterns of behaviour of individuals, groups and society as a whole towards the environment” (UNESCO-UNEP, 1978, p. 24). This declaration reflected what has been situated as a “salvation discourse” (Berryman & Sauve, 2013, p. 134), setting EE as a main instrument to solve environmental problems in a context of crisis and impending gloom. It could be suggested that in such a global context, where making political decisions was challenging (i.e., a forum of nations in different stages of economic development with diverse political interests), that unreasonable expectations were placed on education systems to solve the environmental question.

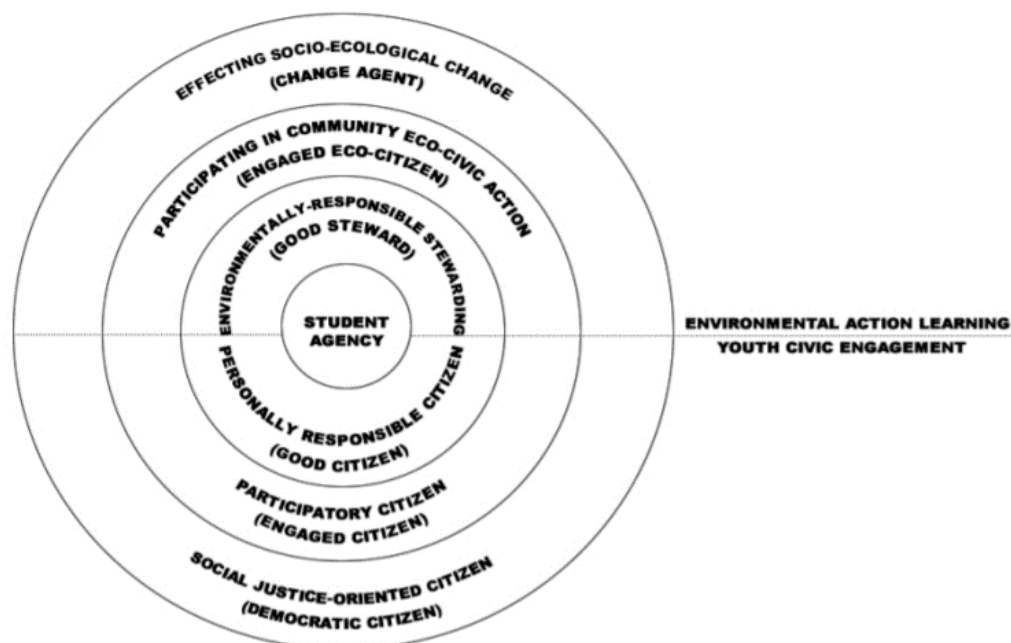
This dominant discourse formed in the years 1970 was characterized by some themes such as “inclusiveness and broadness” (EE as a cross-disciplinary subject so as to encompass the complexities and realities of environmental problems); “problem-solving” (inculcating values, attitudes and skills), that have shaped subsequent discourses in EE (Berryman & Sauve, 2013). This “salvation discourse” has been criticized by some authors who argue that it is “naive” (Brennan, 1976) and “symbolic only” (Campbell & Robottom, 2008) and ask: why would EE succeed where conservation efforts and nature study have failed? This tension shows that the notion of “rhetoric” was put forward early on. The question then already was: how to translate this shift in words into more effective practices?

The 2000s saw a shift from EE toward Education for Sustainable Development (ESD) with UNESCO declaring in 2005 the United Nations Decade of Education for Sustainable Development (2005-2014). The ESD discourse has been seen as a “progressive transition” (Stevenson, 2006) by many scholars on the grounds that it gives a positive orientation to EE

(problem-solving how to become sustainable rather than studying the doom and gloom of environmental degradation); and extends the scope of EE to encompass human and social issues as they pertain to environmental processes (Stevenson, 2006). However, Berryman and Sauve (2013) underlined that the EE/ESD discourses adopted in UN conferences, reports and declarations have been “generalized and pushed, unproblematically, as a universal” (p. 137). They questioned the relevance of EE as an instrument for conservation in the context of a “predefined political agenda” characterized by a “resourcist perspective” (p. 139) where the environment remains an unquestioned source of economic growth.

How EE Policy Discourses Shape EE practices into Teaching Good Stewardship

The fact that sustainability is unquestionably framed as intertwined with economic growth in dominant discourses (e.g., UN 2030 Sustainable Development Goals [United Nations, 2004]) is problematic and results in mixed messages that are difficult for educators to interpret. Although EE policies aim at developing capacity to effect broader socio-ecological change in students, educational resources available do not call into question or examine the root causes of environmental degradation. This tension implicitly constrains what EE activities can be about: it reduces EE to a non-political question comprising stewardship practices (e.g., teaching students to turn water off when brushing their teeth rather than inquiring about why our society keeps mass producing toothpastes that contain microplastics, polluting our water systems). Adapting the “Citizenship Education Framework” (OMoE, 2013, p. 10) with its emphasis on structures (e.g., power and systems within societies) and active participation (e.g., work for the common good in local, national and global communities) to EE (see Figure 1), Glithero (2011) studied the agency of Canadian students seen as eco-civic leaders. Her findings demonstrated that these students, finalists for the Toyota Earth Day Canada Scholarship, had an egocentric perception of their identity, commonly perceiving “the locus of change and action to rest within the individual” (p. 197) as represented in the center of the image. In accordance with *ATST*, Glithero’s findings also suggested that for students to become “change agents” (outward circle of the image), EE pedagogy and school culture need to shift towards “learning as active participation in community-based, change-oriented projects.” Her findings confirmed the critical disconnect between how EE is widely practiced in Canadian schools (i.e., environmentally responsible stewarding), and how it is currently being taken up in recent EE policy and research (i.e., developing capacity to effect broader socio-ecological change).

Figure 1*Three Kinds of Environmental Action Learning*

Note. From Exploring the Development of Student Agency from the Perspectives of Young Canadian Eco-Civic Leaders. By L. Glithero, 2015, unpublished dissertation, p. 55. University of Ottawa.

The policy-practice gap resonates also with the notion of discourses of teaching; a number of authors have attempted to make sense of the difficulty associated with teaching a transformative curriculum comprising action-oriented skills in an institution whose educational discourse has historically had different connotations. For example, Barrett (2007) cites Foucault and the image of the panopticon (similar to a large circular prison where prisoners could be observed at all times) and how institutions, through discourses and technologies of power, generate “oppressive, self-regulating forms of control and constraint” (p. 211). Barrett was skeptical about the potential effectiveness of EE in the current Canadian educational system and argued that the primacy given to the intellect, rationality, and neutrality are fundamentally antithetical to the language of love, emotions, action-oriented, and highly sensory practices that are needed to inspire students. Similarly, Grunewald (2004) expresses that “the institutionalization of environmental education has muted its potential as a transformative educational discourse practice” (p. 72). These scholars speak to the inherent contradiction between schooling, that is associated mostly with social reproduction, and EE that aims at transforming behaviors and society (Barrett & Pedretti, 2006). Such arguments are reminiscent of the old debate between the intended (manifest) and unintended (latent) functions of schooling

(Barakett & Clegghorn, 2007). Schooling as it exists throughout the world is, although ever evolving, often described as a rather conservative institution, a bureaucracy that tends to serve the purpose of preservation of the current social order (Barrett, 2007; Bourdieu & Passeron, 1977; Greenwood, 2010; Stevenson, 2007). Considering this socio-historical context, it seems again that the expectations placed on the educational system in regard to EE are excessively ambitious, or would require a high level of priority, as well as adequate funding and system pressures, in order to actually be taken up in practice, and become an institutional norm.

Other Factors

Other factors are also at play. Stevenson identifies tensions in the EE/ESD discourses, such as the fuzziness of the concept of sustainable development and the fact that educational practitioners have been marginalized in policy-making conversations (2006). Additionally, it is important to mention that the social, political, and economic contexts of educational systems have dramatically evolved since the 1980s which saw a shift in educational policies, a “new policy environment” (Fowler, 2013) that translated into the adoption of “market logics” (Davies, Quirke, 2007) resulting from the global context of neoliberalism. Although the term “neoliberalism” has been widely used and is difficult to define (Dionne & Milley, 2019), it has been characterized as a socioeconomic phenomenon that emphasizes managerialism, performativity, and accountability (Ball, 2013). In Ontario, it notably materialized in the change to the funding formula of school boards under the Mike Harris government (1995-2002), basing the allocation of money on enrollment, thus putting local schools in competition with each other to attract student registrations. It could be argued that EE has not been set as a priority (i.e., allocating funding) by most educational institutions in Ontario because the environment is not a strategic area to invest in, in order to attract students or compete with other actors on the ‘educational market’.

It is apparent that it is largely individuals who are championing EE within their institutions, with the consequence of EE largely disappearing when these individuals leave (Reis & Guimaraes-Losif, 2012). The link between the presence of a highly motivated, environmentally committed teacher and the development of students’ perceptions that they can have a positive effect on the environment has been established (Kerchoff & Reis, 2014). This link was also evident in Karrow and Fazio’s findings that a school principal activist enabled teachers to negotiate constraints and practice EE (2013). This link is interesting when considering the rhetoric-reality gap in Ontario because that dimension of “teacher-activism” has been overlooked in the EE policy implementation — the curriculum can be situated as transformative, but tends to

overlook the fact that not every teacher came to this profession with the agenda of transforming society.

How do Individuals Become Environmentally Committed?

What it takes for an individual to become environmentally committed has been studied and encompasses a wide range of sensory, social and cognitive experiences. At the University of Victoria, Blanchet-Cohen researched the emergence of “environmental involvement” in youth aged 10-13 years. Her findings underlined the complexity of this process, which does not follow a linear path:

The study shows that children navigate across the different structures that impact their lives at a given point in time, strategically figuring their way through significant life influences, beliefs towards nature and age-defined barriers. Children’s agency runs across the six dimensions of children’s environmental involvement identified in the study: connectedness, engagement with the environment, questioning, belief in capacity, taking a stance and strategic action. Combined, the dimensions help understand the nature of children’s environmental involvement, capturing the depth and complexity of children’s environmental stories. (Blanchet-Cohen, 2008, p. 257)

Chawla (1988), reviewing the literature existing on “environmental sensitivity” in the United States, found that although childhood experiences in natural areas tends to be the single most important factor in becoming an environmentally-minded adult, the immediate second factor is the existence of social mediators such as family members, teachers or even books, who/which help the child construct their experience and interpretation of the surrounding natural areas. Chawla defines “environmental sensitivity” as individuals’ environmental interest, concern and action (p. 369).

Paradoxically, while the current EE policy framework attempts to bring this knowledge to schools by advocating for children to experience the outdoors, learn through hands-on activities, and critically reflect on local and global environmental phenomena, it has overlooked the fact that current teachers may not have had these experiences themselves, nor been prepared in teacher education to facilitate these learning experiences for their students. Therefore, discourses about the systematization of the practice EE as a transformative pedagogy appear to be idealistic.

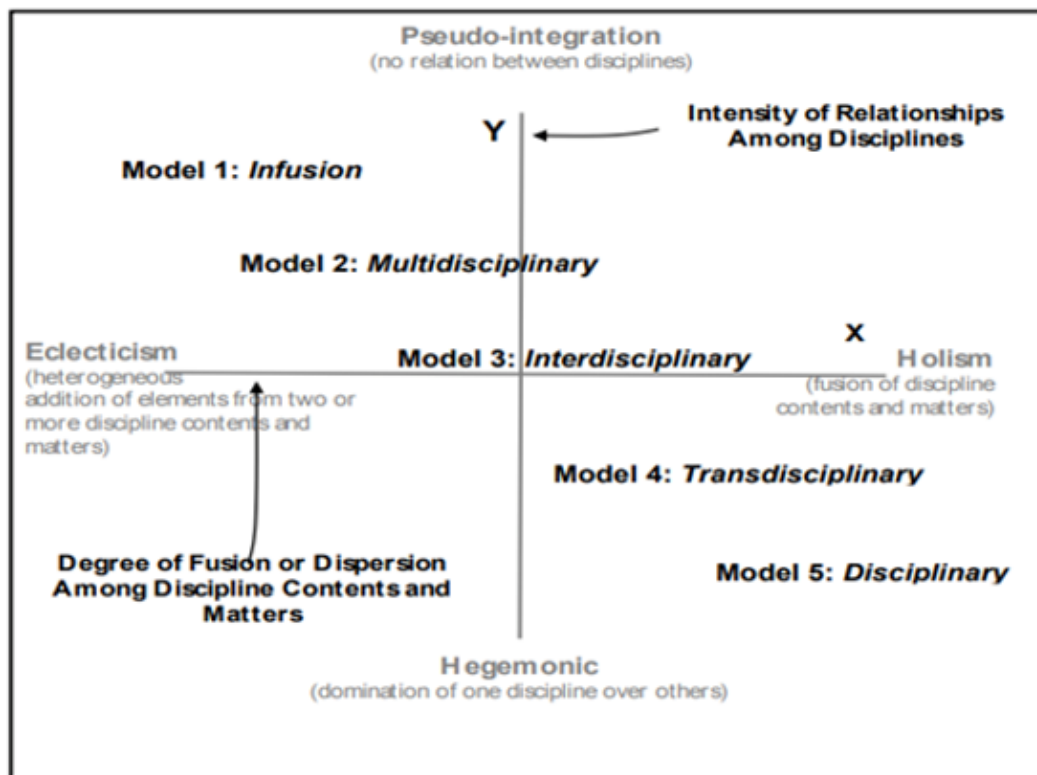
EE in Ontario: History and Curriculum Design

The history of EE in Ontario shows how the current difficulties the province’s educational system has in enacting EE can be traced back through political fluctuations and hesitations. EE had been a part of Ontario curricula before the province acquired its policy framework in 2009,

but, in the absence of a coherent approach to curricular integration, it consisted mostly of learning outcomes as part of *Science and Technology* and *Social Studies* (Bondar, 2007). Since 1965, school boards with over 10,000 students were allowed to purchase land to open Outdoor Education Centers with an overt objective of educating students about the human impact on the planet (Borland, 2011). While some school boards (e.g., TDSB) seized the opportunity, there was no systematic trend to do so (Bennett, 2017). Moreover, the renewed curriculum documents released in 1998 for Elementary and in 1999 for Secondary under the Mike Harris government saw “EE virtually disappear from the elementary and secondary education landscapes” (Karrow & Fazio, 2015). The sole Environmental Science course was eliminated from the Secondary curricula. The changes in the school board funding formula resulted in difficult budget choices, which included the closure of some outdoor education centers. This situation remained unchanged until the publication of the *Bondar Report* in 2007. Fawcett, from the Faculty of Environmental Studies at York University in Toronto noted in an article focused on EE in Ontario, “In Ontario, it took a Canadian woman who went into space, orbited about and looked back at Earth to shake up the institutional establishment, and remind them that environmental education matters” (Fawcett, 2009, p. 104).

Puk (2003, 2006, 2010, 2011) advocated for the development of “ecological literacy” in Ontario schools through several studies about how ecologically literate Ontario teachers and teacher candidates are. He concluded that “the level of ecological consciousness in Ontario schools is rather low (2006, p. 75), concluding that the infusion of EE in science and geography results in a diluted EE curriculum. Shedding a new light on this topic, Karrow and Fazio (2015) analyzed the curriculum design underpinning the “*Scope and Sequence of Expectations*” (OMoE, 2017) as it is described in *ATST* (OMoE, 2009). To better understand the rhetoric-reality gap, they studied how this document answers two questions, political in nature: “What should be taught?” and “How should it be taught?” (Karrow & Fazio, 2015, p88). The first question was easily answered; “EE consists of the knowledge, skills, and attitudes for, about, and in the environment” (OMoE, 2009 as cited in Karrow & Fazio, 2015, p. 90).

Karrow and Fazio turned to the second question, explaining how the model of integration (e.g., EE learning outcomes are added to each subject discipline) has been the response chosen to the “philosophy of holism” and the nature of EE “pervasive throughout school subjects” (Karrow & Fazio, 2015, p. 91). Merging existing frameworks of curriculum theory, they posited that there are 5 types of integrated curriculum models: infusion, multidisciplinary, interdisciplinary, transdisciplinary, disciplinary, as represented in Figure 2.

Figure 2*Poles of Integrated Practice*

Note. From Curricular Critique of an Environmental Education Policy: Implications for Practice. By D. Karrow & X. Fazio, 2015, *A Journal of Educational Research and Practice*. 24(2), p. 94. (Adapted from Lenoir et al., 2000, Poles of Interdisciplinary Practice).

Karrow and Fazio (2015) argued that infusion is applied uncritically in schools and fails to convey “what should be taught”.

[Infusion] falls short of preserving the holistic nature of EE. It takes the holistic nature of EE, carves it up into pieces and inserts these pieces into other curricular areas. ... Paradoxically, it further marginalizes EE through the rhetorical flourish of the original document: EE is only superficially practiced in schools, far from the “educating for about and in the environment. ... Very rudimentary and superficial form of EE is practiced if at all except for some educators who have committed themselves to effectively integrate EE. While it returns EE to the K-12 landscape in Ontario, it exposes poorly coordinated OMoE curriculum implementation efforts and points to the highly politicized character of EE curriculum. (p. 98)

This shallow enactment of EE opens the question of the quality of the policy documents themselves, and whether the curriculum design adopted is coherent with the goals put forward.

When considering the above graph, we can wonder if adopting a different curriculum design, for example the “disciplinary” design (i.e., EE being a discipline in itself with its own methodologies, drawing on content from all subject areas) would be part of a solution to address the rhetoric-reality gap? Karrow and Fazio (2015) attributed this incoherency (i.e., adoption of an infusion model that results in marginalizing EE teaching) in part to the fact that the policy framework (OMoE, 2009) was the result of an “externally imposed political process” (p. 91); the OMoE seems to have been petitioned and obligated to produce a policy document.

The literature as reviewed suggests that the current questions facing EE in Ontario (i.e., how to foster broad socio-ecological change, and how to systematize EE practices in schools) are rooted in the socio-cultural, political, and historical contexts in which EE discourses have been formed and interpreted. Although complex, these questions need to be tackled based on factual knowledge rather than unquestioned beliefs and assumptions if schools are to educate effectively young minds to think critically about environmental issues. Studying the sensemaking through which district and school administrators receive, interpret and enact EE policies, and how in turn, this process impacts policy enactment, will contribute to this enterprise.

Although reviewing exhaustively the policy implementation literature is out of the scope of this thesis, I will summarize here two studies that inspired the design of my research project. Both are based on the assumptions that individuals have significant agency, inquiring through qualitative case study research how they form their interpretation (i.e., sensemaking) of an educational reform and how, in turn, it shapes the enactment of the reform.

Coburn (2001) studies a reading instruction reform in California, the second one taking place in the state in less than 15 years. To get an in-depth understanding of how teachers shape policy, she focused on one urban school involved in the reform and conducted an extensive case study over the course of a school year. Combining repeated semi-structured interviews with plentiful observations of classroom, formal as well as informal meetings and professional development sessions (involving teachers but also school administrators and instructional coaches), she analysed how sensemaking is not only an individual process but also a collective one, taking place in an iterative manner through social interactions. She first coded the data descriptively about the nature of teachers’ interactions with messages from the environment, then moving into interpretive coding as to what processes are at play. For example, one of her findings is that professional learning communities play a crucial role, named “gatekeeping” (2001, p. 154), to discriminate which messages about reading instruction should be explored and which ones should be dismissed, amongst the high volume of messages. Once this first coding was done, Coburn coded the data for content and for teachers’ worldviews. She was

then able to create and compare longitudinal records of conversations on particular messages across different groups, establishing different factors that influence the sensemaking process and how, in turn, it impacts classroom practices (e.g. pedagogical splits along generational lines with like-minded teachers tending to collaborate, creating a diversity of communities that interpret messages differently and have different classroom practices for the same reading instruction methods recommended by the district).

In a similar attempt to study how, through their sensemaking processes, educational actors can shift or thwart educational reforms, Marz et al. (2016) analyse how a reform pertaining to mentoring new teachers, as well as the reform fluctuations and later withdrawal, contributed to increase experienced teachers' sense of professionalism, with a recognition of its positive impact. This translated in mentoring acquiring a new legitimacy, thereby durably modifying institutional logics: once the mentoring subsidies were withdrawn, the school decided to keep a very regimented mentoring plan involving task descriptions and release time for experienced teachers. Marz et al. also focused on a specific school, their study consisting of repeated semi-structured interviews as well as classroom observations and document analysis over a period of 4 years. They first analysed the data descriptively, identifying what were the goals and conceptions of mentoring mentioned, as well as the type of relationships between mentors and new teachers. Using Kelchtermans' "personal interpretative framework" (2009), they then moved into interpretive coding, identifying changes in mentors' "professional self-understanding" and "subjective educational theory": these changes led to evolving mentoring practices and in turn, thwarted policy enactment. The authors conclude that actors actively construct meaning within a shifting policy and have a "considerable degree of agency" (2016, p. 308). Both articles call for more micro-level contextualized research into how educational actors make sense of policy-related messages and how that process shapes policy enactment.

Chapter III: Methodology

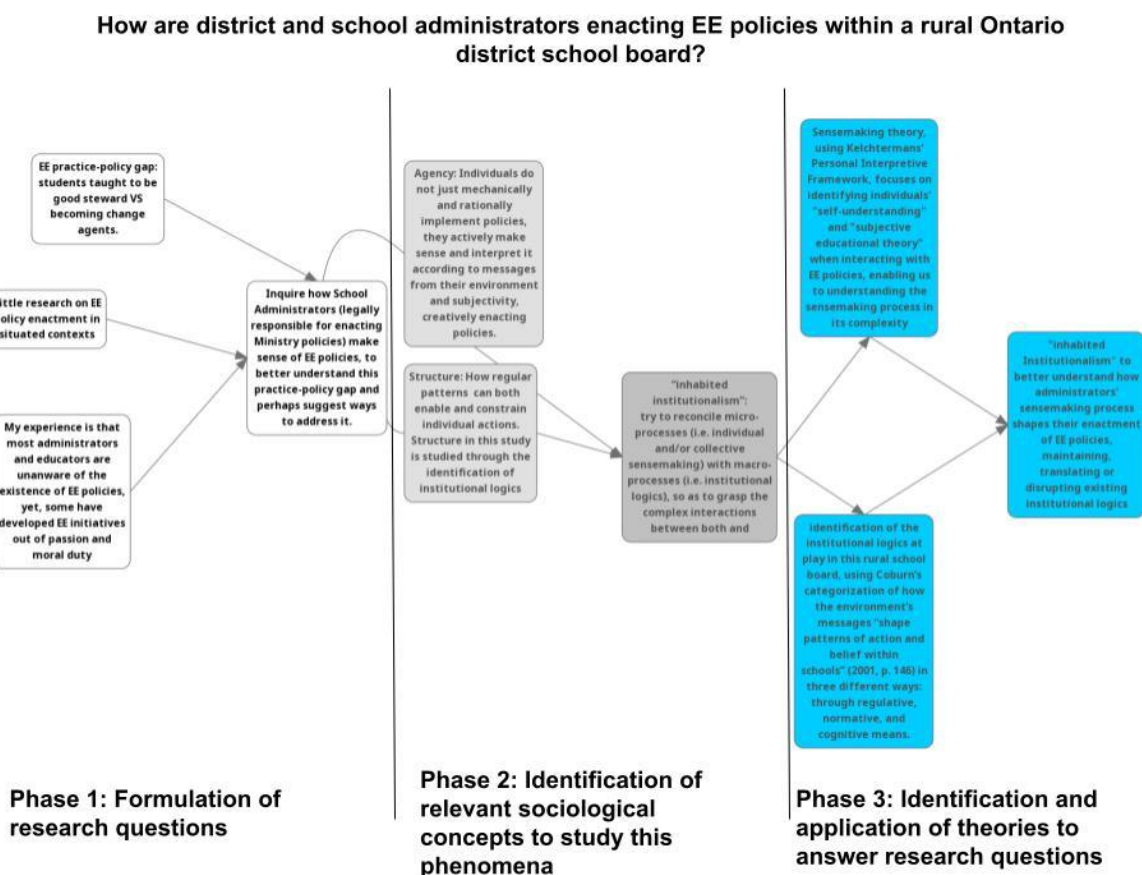
Coburn (2016) summarizes the different theories of policy implementation from principal-agent theories where individual actors viewed as autonomous and rational, to critical theories that focus on power embedded in policies influence actors:

Other theories of implementation (e.g., sensemaking theory, institutional theory) focus on the way that individuals' and groups' interpretations of policy are shaped by cultural ideas available to them in the environment. This approach (e.g., Bridwell-Mitchell 2015; Burch 2007; Coburn 2004; Spillane et al. 2002) investigates how cultural ideas are embedded in social structure, influencing what individuals even think to do as they implement policies in the classroom, and how individuals' interpretations of policy may significantly shape enactment. (p. 465)

This thesis is situated in this vein of research, assuming that teachers and school administrators have some degree of agency, inquiring about their sensemaking process, how it shapes their practices, and how that impacts institutional logics. Coburn (2016) also mentions how different accounts of the nature of human agency informs what researchers pay attention to, as well as inferences they draw from data. Similar to Coburn (2001) and Marz et al. (2016), I used a qualitative case study approach to gain an in-depth understanding of a phenomenon (i.e., how administrators make sense of EE policy and how this sensemaking impacts enactment). A case study is defined as “conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence” (Hancock & Algozzine, 2006, p. 15). Although I could not access schools and district offices, I have been able to collect data through a variety of ways (i.e., interviews, district websites, documents shared by interviewees). Thus, I collected two of the six forms of data recommended by Yin (2014) for case studies: documents, archival records, interviews, direct observation, participant observation and physical artefacts (as cited in Creswell, 2019, p. 162). This thesis qualifies as an “instrumental case study” (Creswell, 2018, p. 98) as it focuses on one question, in one bounded case, to illustrate it. Analysis consisted of document analysis and a thematic analysis based upon Kelchtermans' (2009) “personal interpretative framework”, in an effort to better understand how district and school administrators actively interpret EE policy by constructing their “professional self-understanding” and “subjective educational theory”. Coding the data first descriptively, then interpretively, a picture of institutional logics emerged, as will be described in Chapter IV.

Figure 3

My Conceptual Framework



To study how multiple variables (e.g., policy and external messages, personal and professional values, institutional logics and organizational structure) influenced how administrators make sense of a policy and how, in turn, their sense-making processes shape their policy enactment, I used Kelchtermans' "personal interpretative framework" (2009). Kelchtermans has studied teachers' professional development for over a decade at the Centre for Educational Policy and Innovation in Leuven, Belgium. He created this framework by combining his findings in teacher thinking research and narrative-biographical approach, in his efforts to conceptualize the act of teaching. He used the metaphor of a pair of glasses to describe this framework as "dynamic, contextualized and narrative" in nature and he defined the Personal Interpretive Framework (PIF) as:

a set of cognitions, of mental representations that operates as a lens through which teachers look at their job, give meaning to it and act in it. This framework thus guides their interpretations and actions in particular situations (context) but is at the same time

also modified by and resulting from these meaningful interactions (sense-making) with that context. As such it is both a condition for and a result of the interaction, and represents the – always preliminary – ‘mental sediment’ of teachers’ learning and developing over time”. (Kelchtermans, 2009, pp. 260–261)

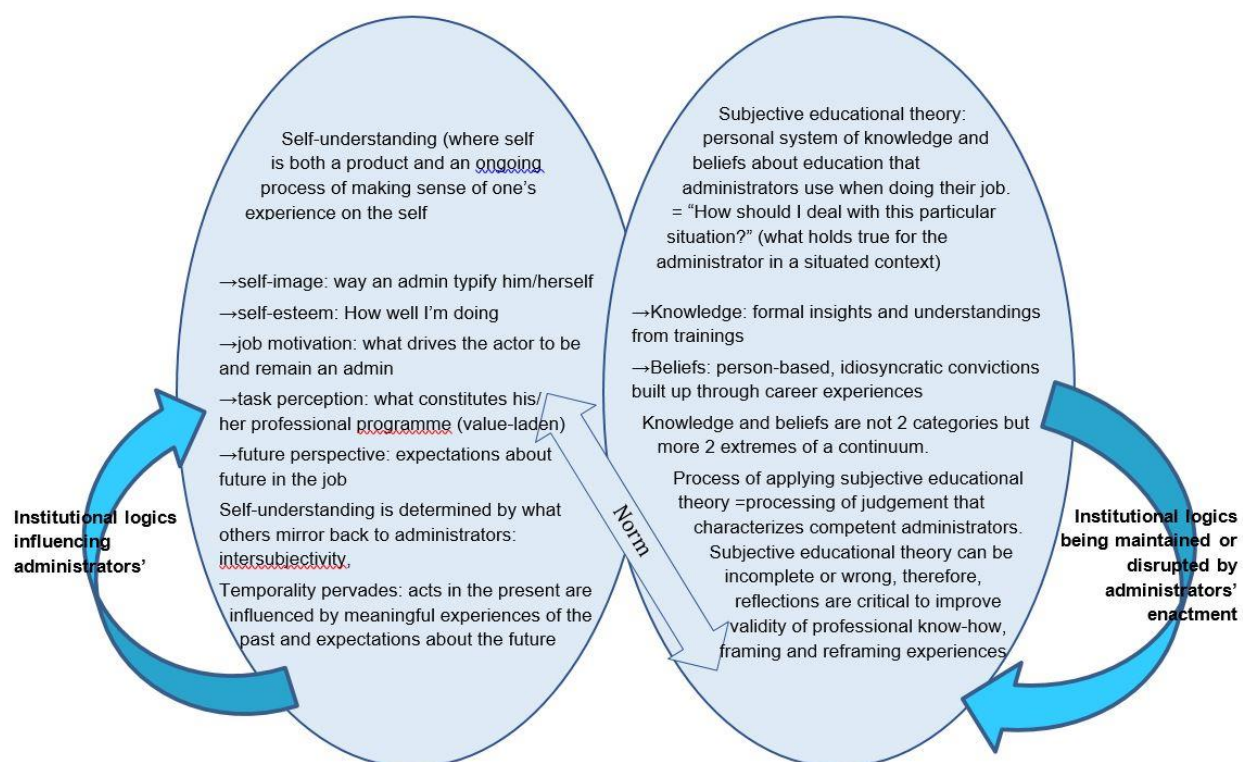
This framework has been used to study the sense-making processes of various educational actors, including administrators (Marz et al., 2016). This framework is relevant to study how administrators make decisions to enact policies for several reasons: first, school and district administrators have been teachers themselves for extended periods of time and this professional experience as educators is at the core of who they are as administrators. Second, Kelchtermans characterizes the act of teaching as an “enactment of scholarship” (2009, p. 257), which is referred to as “subjective educational theory” in the framework, comprising the mastery of a particular set of knowledge, skills and attitudes as well as the acknowledgement of teaching as a relational, social and public act, emphasizing the importance of “self-understanding” in how they enact scholarship, which is relevant also for administrators.

The teacher (educator) wants to be seen by the students in a particular way, but at the same time his/her ideas about him/herself as a teacher are influenced by what others think about him/her. The way teachers understand themselves as teachers thus matters, yet this to a large extent is influenced by how others see him/her or what others say about him/her as a teacher. (2009, p. 259)

This glasses-shaped framework is therefore appropriate to study the complexity of district and school administrators’ sensemaking process and how this process relates to EE policy enactment. I represented the Personal Interpretative Framework in an image (shown in Figure 4), adapted from Kelchtermans (2009).

Figure 4

Representing of Kelchtermans' (2009) Personal Interpretive Framework in the Shape of Glasses



I developed this figure while reading closely Kelchtermans' (2009) article. Although he did not represent the framework visually, he stated that "the metaphor of a pair of glasses provides a good way to capture its constructive, interactionist, dynamic, contextualized and narrative nature" (p. 261). Kelchtermans also explained that, similarly to a pair of glasses that enable clear vision, our self-understanding and subjective educational theory form a lens through which teachers perceive and make sense of social reality. While most of the time, we forget we even wear glasses, there are moments where the lens or frame needs re-adjustment: that's similar to the "norm" in the PIF, where individuals, confronted to a new or complex situation, shift some of their professional beliefs or practices to cope. The PIF therefore enabled me to study participants' sensemaking process as well as how educational change takes place (i.e., impact on institutional logics)

While preparing for my research, my hope was that by constructing a personal interpretive framework for each of the interviewees, I would get an in-depth understanding of their sense-making processes, identifying key variables that influence administrators as they interpret and enact EE policies. Although my experience of using this framework has been

somewhat different from what I expected it to be (i.e., I soon became aware that this ambition would have required several interviews and observations over several months), I have found it helpful to capture and represent the multiple elements that shape school administrators' understandings and beliefs about EE, and how, in turn, their personal enactment impacts the broader level of EE practice. I moved inductively from Kelchtermans' sense-making framework to Coburn's categorization of institutional logics (i.e., regulative, cognitive, normative) by colour coding emerging themes as well as re-reading relevant literature pertaining to this topic. I found Coburn's (2009) use of institutional logics operational for my study because it applies Thornton and Ocasio's framework (1999) to the field of education; more specifically, to a study using inhabited institutionalism.

My use of Kelchtermans' PIF was not an exhaustive account of all factors involved in interviewees' sense-making processes, it was rather an exploration of how a small number of these factors (e.g., task perception, motivation, connection to nature, self-image) interact with each other, contributing to form the interviewees' subjective educational theory and thereby shaping their decision-making process. I added "EE enactment" and "connection to nature" to the factors listed by Kelchtermans so as to capture what constitute their "environmental sensitivity" (Chawla, 1998).

Ethics

I submitted an application to the University Research Ethics Board, including template letters to be sent for participant recruitment and consent. The study was approved provided I would make clear to participants that, since it was a rural school board with a small number of staff, there were limits to anonymity, even with the use of pseudonyms. That aspect was added in the letters of recruitment and consent, and I received a certificate of approval (see Appendix C).

Participants

There were no randomly selected participants. The initial plan discussed with the district and laid out in the thesis proposal was to interview 13 purposefully selected educational actors from across the district. These included: one Grade 12 student, three district administrators (Director of Education; Superintendent of Education, Superintendent of Facilities), four school administrators (two identified by the district as active in EE, two randomly selected), one pedagogical specialist (Experiential Education District Lead), as well as two custodians and two teachers. This large number of participants from a small school district reflected the district's desire to include a variety of voices in the initial phase of the interpretation leading up to the focus group (which had to be cancelled due to COVID measures), so as to better situate their

future EE policy-design efforts. I, as a student-researcher, was to focus primarily on the data generated with district and school administrators for my thesis. The additional informants would provide contextual data which would be layered into the analysis.

When in the fall of 2019, after the district confirmed they were now ready to go ahead with the study, I received a list of 13 participants from an office administrator, what struck me was it was vastly different from the initial plan, including for example only one school administrator but 4 teachers, and seemed incoherent: why was I now supposed to interview two employees from the IT department and the superintendent of Corporate Services? How would that adequately inform my question of research and/or the district's renewed policy efforts? Being very appreciative of the fact I was allowed to pursue my research in such a difficult and tense context due to the pandemic, I set out in 2020 to contact the stakeholders who were part of the initial plan, while asking for clarification from the district about how the list had been put together. Although I never got full clarity about the list, it appeared to be a mix of stakeholders from the board office who were willing to make time for the interview, as well as employees who were members from the rejuvenated EE committee and a student trustee. Reflecting on this situation, I decided to limit the number of stakeholders interviewed to the ones who were part of the initial plan. I also asked permission from the district to request from the school administrator on the list that she refers me to other potential school administrators who would be willing to participate so I would not have only her in this category.

There were 10 participants in this study: 3 district administrators (i.e., Director of Education; Superintendent of Education, Superintendent of Facilities); 2 school administrators (one who is the lead of the rejuvenated EE committee, another she referred me to); 1 pedagogical specialist; 2 teachers; 1 custodian; and 1 Grade 12 student. For the purpose of this thesis, and guided by the research questions and theoretical framework, I am focusing primarily on the data generated from interviews with the administrators. I occasionally include quotes from the 2 teachers, the student and the pedagogical specialist in the "findings" section when relevant, for example, when it confirms assertions made by district and school administrators about EE enactment.

Data Generation

I conducted one semi-directed interview (45-60 min) over the phone with each of the 10 participants so as to gather their perspectives and experiences of EE, in their own words. I recorded these interviews with the recording application available on my laptop. My interview protocol (See Appendix A) comprised 19 open-ended questions designed so that I could remain flexible and open to the conversation being guided by the interviewee (Creswell, 2019). I probed

participants' responses with follow-up questions such as "could you tell me a bit more about that?" when I felt interviewees were "hitting" on something that was relevant to my research questions. Although interviewing had to take place over the phone due to COVID regulations, I felt rather successful at favoring unconstrained expression from the participants, shedding light on the interactions between different variables (e.g., their beliefs about how to promote change and how that influences EE enactment). I strived to establish an atmosphere where interviewees felt comfortable, so as to foster an "active collaboration" (Creswell, 2018, p. 68). Participants all welcomed the opportunity to share and reflect about their professional trajectory, their EE professional knowledge and practice, which was evident through comments such "that is a really interesting question, let me think" or "I'm so glad we are taking the time to do this". They also expressed an interest in reading the final product of the study. I had a technical incident with the recording of a teacher interview which did not work. I had however taken numerous notes during our conversation, so although I did not have the transcription of the interview, I was able to integrate some of the information shared.

Once I had completed the first two interviews, I began to listen to them, jotting down notes about how this passage connected with this question of research or the literature surveyed. I attempted to transcribe the interviews myself, typing as I listened to them on my laptop, but I quickly felt overwhelmed with this very time-consuming task. I had thought transcribing interviews would be an opportunity to really familiarize myself with them, to get intimate with the words spoken. But, as I was working through them, I realized what triggered reflections and insights was to take the time to listen and read the interviews, while the long and arduous task of transcribing them seemed to have little analytical value. I found an on-line service which, for a modest price, delivered very accurate transcriptions of my audio files. From then on, I systematically sent my audio files for automated transcription, then listened to them to become more familiar with them, wrote some notes, and corrected transcriptions when necessary.

Documents and Artefacts

I requested that participants send me documents they felt would be relevant to better understand EE enactment and that they were willing to share, specifying it would remain confidential. I obtained the Administrative Procedure relative to "Environmental Education, Stewardship and Sustainability" in two versions: the one from 2010 and the one drafted by the rejuvenated committee in 2019. I also obtained the "Terms of Reference" of the district's Environmental Committee and a one-page document containing social media links to EE-focused student-led groups. Finally, I obtained a video, a PowerPoint presentation, and a letter

to parents, all related to an elementary panel EE-focused project that took place several years ago. I accessed the district's strategic plan (2016-2020) as well as documents describing outdoor education courses and initiatives taking place in high schools throughout the county, all of which were publicly available. These documents enable me to triangulate data collected from interviewees and deepen my understanding of the phenomenon studied. They also provide insight to the formal discourses of EE within the school board.

Data Analysis

I started to read transcripts and write memos about the interviews as soon as I had completed the interview by phone. I am a teacher myself and a lot of experiences, feelings expressed by the interviewees resonated with me and my own experiences, which created some discomfort; although I was no doubt learning a lot from the interviews, how could I make sure I would not simply form interpretations that would confirm my own convictions about EE? I felt the need to take a fresh start on the analysis and spent a few days re-reading articles I had read for my literature review as well as my methodology book (Creswell, 2019), re-reading the transcripts, to figure out a way to go about the analysis that would not solely rely on insights and hunches.

A particular concern was that I was not able to study EE policy sense-making per se, that is, the cognitive processes of participants, individually and collectively constructing and reconstructing meanings about EE policies in the contexts of their professional practice (Spillane, 2002, Coburn, 2001, Marz et al., 2016). There were two reasons for that: first, I did not have enough data to do this, second, none of the administrators were actually familiar with the EE Policy Framework (OMoE, 2009) or their district's EE procedure, which I somewhat expected. However, Kelchtermans' framework (2009), with its interactionist and dynamic way of examining how different factors interrelates, still allowed me to explore my research questions.

I had a lot of very interesting data and decided to refocus on "the big picture" of this case study, which is: what are the institutional logics at play regarding EE in this specific rural school board? How do administrators' personal and professional trajectories shape their agency toward EE enactment (PIF)? And how, in turn, this enactment maintains, translates or disrupts existing institutional logics. EE enactment is understood throughout the analysis as any professional practice that aims at developing an appreciation of nature and/or a reflection about human impact on nature in students, whether or not these practices stem from knowledge of relevant Ministry documents.

I began the analytic process by constructing a table that would, in one glance, give some important characteristics about each participant, a brief profile of each: e.g., education, In-

service training remembered by interviewees as impactful on their practice, current position, previous position, EE enactment and connection to nature. These characteristics are a mix of elements from Kelchtermans' PIF (2009) and factors that constitute "environmental sensitivity" (Chawla, 1998). This table, which I present in Chapter IV, was modelled after the work of Marz et al. (2016).

I then constructed the PIF (Kelchtermans, 2009) of each administrator, going back and forth between the research article describing this framework and the transcript of each participant, representing it in the shape of a pair of glasses through which each interviewee "sees" EE enactment. I found this exercise fruitful as it allowed me to concentrate on how each person mediates, in their own unique way, a wide range of experiences and contexts, to form their own opinions and dispositions about EE, and how that, in turn, somewhat impacts the district's institutional logics.

I continued the analytic work by coding the data descriptively, color coding recurring themes in relation to EE policy enactment: (e.g., lack of time; outdoor education; EE-related skills, educators' mindset, innovative projects grants, rurality). Once that was done, I went back to the literature defining institutional logics to work on an emerging interpretive coding, using Coburn's categorization of how the environment's messages "shape patterns of action and belief within schools" (2001, p. 146) in three different ways: through regulative, normative and cognitive means. At this point, I structured my findings into main titles and paragraphs, as presented in the following chapter.

Chapter IV: Findings and Discussion

To begin the discussion of the findings, I give a brief profile of each interviewee by providing a table recapitulating participants' current position, EE enactment and connection to nature (see Table 1, as well as an expanded version in Appendix II). I then layer relevant literature to discuss the findings of the study as I report them, so as to answer my overarching research question: How are district and school administrators enacting EE policies in a rural school board? I have structured the following discussion in two parts, corresponding to the two sub-questions:

1-What are the institutional logics shaping the sensemaking processes of district and school administrators when enacting EE policies, within a rural school board?

2-How are the meanings about EE constructed and, in turn, how does this sensemaking process shape district and school administrators' agency to enact EE?

Participant Profiles

Participants in this research project can be identified as keen to promote EE in their district: The Director of Education personally took the initiative to revive the EE committee and accepted with enthusiasm having a graduate student do her thesis on EE enactment. The other interviewees are all members of the rejuvenated EE committee due to their interest and dynamism on the topic, with the notable exception of John², Manager of Facilities, who sent his Assistant Manager to the committee, and the Vice-Principal, Michael, who was referred to me by Mary, Principal and lead of the EE committee, so I could have two school administrators in the case study. Although they were not members of the committee, John and Michael both had networked with Mary about EE enactment in the district and can therefore be characterized as EE promoters as well.

In Table 1, which is a short version of the participant profiles available in Appendix B, I have shaded the five administrators, because they are the key informants in this study which sought to understand how district and school administrators are enacting EE policies in a rural school board. I built their PIF (Kelchtermans, 2009) and wrote an individual narrative for each administrator, using their data to build the emerging findings. I used (and quoted) the other participants' interview data to corroborate or deepen the findings.

² All names are pseudonyms as required by the Research ethics Board, University of Ottawa.

Table 1*The Participants' Profile (short version)*

	Current Position	EE enactment	Connection to nature
Gabriel	•Director of Ed (4 years)	Experience working on the Environmental Sustainability Committee as a Superintendent of Curriculum in an urban board	•Utilitarian. Intentionally spend time outside every day to counterbalance time indoors and on a screen (jog, walk and relax). "I'm not a naturalist"
Paul	•Superintendent of Education (4 years)	•IT support to enviro-focused NPDL projects •administer Ministry grants (i.e., both facilities and curriculum related)	• "I have always been an outdoorsy person". Grew up in the city (Windsor) but sought out the recreational activities (camping, canoeing), now lives on a farm.
John	•Manager of Facilities (10 years)	•EE as part of "efficiencies": try to lessen physical impact on the env. Project of zero-emission school. •EE on school request: naturalization of school yard, butterfly gardens.	•Grew up on a hobby farm, "wandering through forest and making forts" •Always sought out camping and hiking, spending time at the cottage
Mary	• Elementary Principal (3 years)	•volunteered to get her TDSB school accredited (silver), lead an eco-club •Lead for the ESD Committee •gentle nudges to staff "is there another way to do this"	•Always liked the outdoors and appreciated it even more as she grew older
Michael	•Elementary Vice-Principal (2 years)	•Purchased snowshoes for his school •as a consultant, facilitated Enviro-focused projects (release time, expertise, budget)	•Nature has always been important, lives in a very remote area, was in boy scout growing up; used to be a canoe guide; do a lot of canoe and camping.
Natalie	•Numeracy instructional coach (3 years)	•Enviro-ed focused NPDL project: spent 1/3 of her day outside every day with her class for 2 years •coordinates a book club for educators on Learning for a Sustainable Future resources, spaces for discussion and sharing •offers support for teachers who are interested in embedding Enviro Ed in their practice	•Feels very connected to nature, grew up in Northern Ontario, has always had lots of outdoors activities, pays attention to how nature is doing around her; raised her sons similarly
Sophie	•Elementary Science teacher	•Embedding Enviro Ed in her teaching, focus on science (e.g., water quality experiments at the local lake) •Lead for EcoSchool at her school	•Grew up on a lake, always outside playing or swimming
Amanda	•Secondary Science teacher	•Embedding EE in her professional activities, focus on science(classroom) and experiential learning (camping trips as part of extracurriculars) •Lead for recycling at her school	•Grew up in the region snowshoeing and doing outdoors activities with her mother

Research Question 1: Institutional Logics

The first theme that emerged through data analysis is that EE is perceived by the participants as a legitimate part of schooling, however it is not something of formal importance at the system level: administrators are not familiar with existing EE policies and procedures and it is not a topic they regularly discuss, or work on. Identifying institutional logics (Thornton & Ocasio, 1999) enables us to refine our understanding of the “rhetoric-reality gap” (Stevenson, 2009). For this section, I use Coburn’s categorization of how the environment’s messages “shape patterns of action and belief within schools” (2001, p. 146) in three different ways: through regulative, normative and cognitive means.

Regulative Ways EE Enactment is Shaped in This Rural School Board

The “Environmental Education” Administrative Procedure dated from 2010 is no longer upheld by the district and the newly drafted one has not yet been approved at the school board level, therefore, there is currently no EE-related procedure in place. The district’s strategic plan does mention “sustainability” under the guiding principle of “wise use of resources” (District document, 2017, p. 13), but its corresponding commitment to measurement only includes “Energy management and Conservation” (p. 13), making it clear the term “sustainability” (p. 13) does not encompass any elements of EE teaching and learning.

Lack of Awareness of Policy Documents and Lack of Time.

The administrators whom I interviewed were not familiar with Ministry and District EE policy and procedures. Gabriel, current Director of Education, was Superintendent in an urban school board at the time that the *Bondar Report* (OMoE, 2007) and Policy Framework (OmoE, 2009) were released, he is aware of their existence and knows they mandate district school boards across Ontario to develop their own policy pertaining to Environmental Education and Sustainability. He is also aware of the document *Ready, Set, Green* (OmoE, 2007) which gives some concrete examples of successful EE enactment. He is not, however, well-versed in their content (i.e., goals, strategies, actions, ways of measuring progress). Mary, principal and lead of the EE committee, knows of the existence of a Ministry document, that was used to produce the first Administrative Procedures (AP) (district document, 2010), but she has never read the Policy Framework (OmoE, 2009) and does not remember the first AP as very impactful:

So I think I, I did see it, I read it. Um, I don't know that it made a huge impact on me as an AP at that moment in time. We didn't have a lot of time to kind of go through it or to look at, um, the policy itself and look at practical applications of it. Mary, Principal

This confirms findings by Pinto (2015) about how school leaders respond to policy layers in Ontario: in the current neoliberal context, characterized by an unprecedented volume of prescriptive policies, their central role as “meaning-makers” (p. 140) of policies, as the ones

making decisions to enact them, is being challenged. Pinto concludes that school leaders feel “compelled to produce an illusion of policy compliance by way of performativity” (p. 152). When this rural district was sent the mandate to develop their own EE policy, an AP was indeed produced, with strategies and various other elements of language directly pulled from the Policy Framework (OMoE, 2009) and its ambitious transformative goals:

Students should be enabled to develop the knowledge and skills they need to be environmentally responsible citizens and to effect long-term change. (district document, 2010, p. 1)

However, the AP was not accompanied by a district-wide plan (e.g., professional learning to leaders and educators to unpack these statements) that would have translated words into action. The lack of time and constant change of focus is corollary to the lack of familiarity with policy documents. Administrators talk how overwhelmed they are (e.g., “*I don't feel like, uh, there's enough space on my plate, not enough free space on my plate*” Mary, Principal) with multiple portfolios and a constant change of focus, which has also been documented to be a characteristic of the neoliberal context (Hargreaves, 1994, cited in Pinto, 2015, p. 142).

Additional examples of this sense of lack of time included:

I think if I have to be honest, I think I'm doing something. Yeah. Um, could you do more? Yeah, but the problem is like, you know, there's only so much time in the day and maybe that's an excuse, but like, there's a lot of, there's a lot of different portfolios. There's a lot of different things that demand your attention for sure. And, um, and so, you know, I say I'm doing something. **Paul, Superintendent of Education**

I guess my concern is that other initiatives tend to become the more prominent ones on any given day, and you know the priority focus for the provincial government, for school boards, for schools, change over time and so to my mind, one of the element we need to really work on is make sure that environmental sustainability is tied to everything we do, so it never falls off the plate. **Gabriel, Director of Education**

A Reductionist View of EE.

Moreover, most respondents find surprising and/or regrettable the absence of such regulative documents, and when asked questions about what EE initiatives they are aware of, their responses invariably focus on sustainability (i.e., effective use of resources).

Uh, surprisingly very few environmental initiatives. Um, I think, there's some recycling that we do, but it's very, very sketchy, especially to be honest, very little. I can't, I can't even honestly think, anything real that I can tell you. **Michael, Vice-Principal**

There was no, there's still no organizational mandate or pressure to ensure that we're buying efficient vehicles. It's all my research and try to get the most efficient vehicle for our buyer demand. Um, because I know that's the right thing to do. And that may mean that we only buy two vehicles this year instead of three, if there's a greater cost. **John, Manager of Facilities**

This reductionist view is interesting because both Michael and John, as well as all other administrators interviewed, define EE as a legitimate, an important part of schooling that has a strong focus on critical thinking and an indispensable experiential, outdoor component.

*I think it's something that, um, I would define it, I'd like to see it done in a way that, um, allows kids not to only learn about things like, but to experience them in ways that go beyond just getting a meter out and experiencing nature. I think all of that's important too. But you know, just start to really think about, what's happening to the environment and what they can do about it and get hands on with, you know, um, trying to find solutions then do things to try and to try and make an impact or to organize, um, you know, educational, events or things of that nature. Like I can see a very strong experiential learning tied to it. I think it's more impactful that way. We can get people kind of involved in doing, you know. **Paul, Superintendent of Education***

*I would say, um, it's learning in and about the environment within which we live in and how, how it's supposed to function properly and how, how we can learn to live in that environment without harming what's around us and harming herself to learning, to live healthily, I guess, the most healthy way for our environment. **Mary, Principal***

Yet, unless I intentionally probed participants to start talking about these aspects of EE, physical sustainability (e.g., recycling, energy conservation) would systematically dominate conversations. While improved management of resources is indeed mentioned in the policy framework (OMoE, 2009, p. 20), without an accompanying emphasis on EE teaching, the goals enunciated about equipping students with a different set of skills and attitudes “to effect long-term change” remain meaningless. There are several implications to this situation: first, the debate surrounding the relevance of mandating EE instruction in schools as an effective way for future nature conservation efforts, where at the broader level, these efforts are failing, and the earth’s resources remain a major source of economic growth (Berryman & Sauve, 2013). This tension (i.e., trying to teach students to preserve natural resources and ecological relationships in a society that is culturally and economically based on the exploitation of natural resources) is evident through the district’s strategic plan, where under “wise use of resource”, the term sustainability is linked to “economic responsibility”, without any mention of environmental benefits.

We will constantly strengthen the efficiency and sustainability of all operations and infrastructure in the support of both student and staff development, and economic responsibility. (district document, 2017, p. 13)

It is also mentioned by the Director of Education during his interview:

*And I think there, we have to be sensible. We have to be strategic. If we're going to make a proclamation around climate change that's going to massively hurt the economy. It's not going to happen. We have to make some proclamations that the economy can live with and work around that. Once you've got that in place, it will become a part of the norm. **Gabriel, Director of Education***

This inherent contradiction at the heart of EE needs to be exposed and discussed to get some clarity and coherence in EE enactment. The second implication to this reductionist view of EE (i.e., reducing it to improved use of resources) is the interpretation that, in a fast-paced work environment characterized by multiple competing priorities, improving the school building's physical sustainability (e.g., switching all district's lights to LED) is more readily achievable and easier to measure in terms of impact made, than changing the way educators teach (e.g., providing professional development sessions; following up with support in hope that educators take up new practices).

This confusion (i.e., having improved use of resources under the umbrella of EE) is inherent in the Policy Framework which, although it focuses on EE, does mention operational sustainability as one of its strategies (OMoE, 2009, p.20). The district's Administrative Procedures (AP) (2010 and 2019) show this confusion in its choice of words: in 2010, the AP is titled "Environmental Education", although it encompasses both EE and operational sustainability. In 2019, the new draft's title has been transformed into "Environmental Education, Stewardship and Sustainability", perhaps to better reflect the breadth of its content. Nowhere in either documents, are the terms used in titles defined or assigned specific goals. This echoes the fact EE discourses have been conceptualized outside of EE's context of practice (Stevenson, 2007). This is detrimental to EE practices since discourses shape and constrain possibilities for thinking, speaking and acting (Ball, 1994, in Winton and Pollock, 1994, p. 46).

In summary, it is apparent how the broader context (i.e., neoliberalism, "resourcist" view of EE (Berryman & Sauve, 2013)) constrains EE enactment despite the existence of regulative means. In keeping Coburn's categorization of how the environment's messages "shape patterns of action and belief within schools" (2001, p. 146) I now turn to consider how the educational stakeholders within my study are influenced normatively.

Normative Means that Influence EE Enactment

Coburn (2001, p. 146) defines normative means as ways that educational stakeholders "feel pressured to adopt certain approaches to maintain legitimacy". When asked on what occasions they talk about EE, participants reported that EE was not a topic they discussed with their fellow administrators, confirming that this is low priority.

Yeah. Interesting question. Uh, nowhere near enough. So the topic of environmental sustainability, although I think it applies to almost everything we do, uh, doesn't come up frequently enough in our organization. Gabriel, Director of Education

I think that when we were looking at, when I was involved in the committee work, some administrators that were environmentally minded might've had some conversations just about, for instance, um, you know, the single use plastic containers were disappointing to

see. So, you know, there are conversations pop up related to this kind of items, but I'm not having conversations on a regular basis with other administrators about this. **Mary, Principal**

In a context where policies and procedures are not familiar, and EE-related conversations are rare, the source of professional influence seem to be like-minded colleagues and the practices of other districts.

And like, it has to be a natural thing that resonates with the people you're with. And it's happened very much that we were all having an interest in environmental education as a group. And we talked about that stuff a lot and promoted it, uh, certainly with Mary who you've interviewed and passed you onto me, worked with her as principal and the consultants. And we worked together. I mean, our environmental committee is not very robust right now, but we would, we would certainly talk about those things if given the chance. Um, but I would say mostly with select people who share an interest. **Michael, Vice-Principal**

So I would say just in my work with our environmental team, um, looking at, you know, the fact that we didn't really have one and looking at maybe AP from other districts that that would have been my most detailed work on in that area. **Mary, Principal**

Yes, both as a principal and superintendent with the (previous employer). As a system principal and as superintendent, with the release of the Bondar Report and the "ready, set, green" which are resources that accompany the establishment of environmental education in terms of policy and then associate procedures, I oversaw that as part of my portfolio. I was part of an organization, not the one I'm in right now but my previous one, the (previous employer), that put that into place and to be honest I'm very happy that I also started to put in place some of the procedures that we're now getting back to at Renfrew County since I moved there. **Gabriel, Director of Education**

I will discuss administrators' agency and how personal factors influence it in the next section, but what is important here is to see that the Policy Framework (OMoE, 2009), although it did not result in long-lasting change in educational practices, did change the norm: the interviewees not only have personal dispositions which make them agree with the efforts to rejuvenate the EE committee, they know there is an expectation of districts to have some sort of an EE-related plan. It can be interpreted that the release of the Policy Framework in 2009 had more of a normative effect than a regulative effect in this rural board. The consequences of having a low regulative impact are that it has failed at reaching out beyond the ones who have personal dispositions in favor of EE and has a disproportionate focus on improved use of resources.

Cognitive Means that Influence EE Enactment

Coburn defines cognitive means as "beliefs and practices attain taken-for-granted status as the natural or common-sense way to do things" (2001, p. 146). I have already presented verbatim quotations illustrating that participants are well-aware of the hands-on, outdoor nature of EE, with a focus on critical thinking, creativity and problem-solving. What is interesting is that

the ways they define EE is very much in line with what is described in Ministry documents they are not familiar with. These administrators are familiar with EE pedagogy, which has become a part of the “fabric” of education, due to, as will be discussed in the next section, bottom-up dynamics and some incentives initiated by previous governments. Although conclusions cannot be drawn for all administrators from such a small group, for the ones interviewed, EE as an experiential and transformative pedagogy is indeed the “natural or common-sense way to do things”, and therefore they support educators who want to engage in these practices.

*I think that people would know they could come to me with initiatives and I would be supportive in terms of pushing initiatives on my staff. Um, I would be, I'm a cautious, gentle nudger. I know how much, how much they're trying to get our kids reading and writing and doing mathematics. And I want them to focus on their own professional learning as appropriate for them at this moment of time based on the students they have. So, I definitely say I'm supportive if teachers initiate any kind of project they want, I might even, you know, ask them if they need funds, I'd be happy to help, you know, to provide them with funds, to do some kind of learning or some kind of projects. **Mary, Principal***

This is confirmed by Sophie, a teacher championing EE at her school who says through the years, she has always felt supported by her school administrations:

*We have been a gold school now for years. So basically since I moved to (name of the district), I've been involved with either green school or EcoSchool. Green school was an earlier version of EcoSchool, I was involved with that. But, um, and even though we really pursued it deeply, the vice principal, she was a great supporter. We did a lot, so two years we built an outdoor classroom, a forest school and all kinds of, uh, huge projects involving, the forest school had a tool called the river project, really neat stuff has been going on. And, um, and so every week EcoSchool would get an update for us, it provided kind of like, I guess, a framework for how to make your school, like, thinking of all the different aspects of environmental education, stewardship, you know, the professional development piece, the recycling, composting, energy efficiency, like it took all of that and made it into a framework that we had a goal to achieve, you know, something to strive for. **Sophie, Teacher***

*I did mention the one vice principal was very, and, and actually there's been two of them actually that were really into it, like, like my, like my equal assistant, you know, like they were just so into it, just as much as me. Um, and then there were other administrators that were not necessarily into it, but supported it. I've always felt supported. It's great. Yeah. **Sophie, Teacher***

Although supportive of educator practices, participants also reported feeling a loss of momentum over the last 3-4 years, associated with changes in the broader contexts such as a newly elected provincial government, which marked the end of some EE-related grants to school boards, as well as the context of continued environmental degradation globally. John, Manager of Facilities, suggests that “we've come full circle on this” and vice-principal Michael ponders that “we've actually regressed” Michael. Others concur:

*So, um, I have to try and remember, like there was grant money that the government gave us the first two environmentally focused projects in school. I don't think we haven't had that for two, three years. I'm thinking it was never a lot of money, but it did allow us to give schools some money to, you know, pursue different types of things, whether it was starting to get composting programs rolling or, you know, things like nature exploring, um, things like using, um, you know, uh, um, what do you call it? You know, those grow stations, if you're growing vegetables and things like that. **Paul, Superintendent of Education***

*What I think is happening around the globe right now, there's a, there's a, you know, a depressive look at environmental or climate change because we don't seem to be making progress yet. **Gabriel, Director of Education***

In this section, drawing from the literature and particularly Coburn (2001) I have identified the institutional logics pertaining to EE in this rural school board. Institutional logics are defined by Thornton & Ocasio as “the set of material practices and symbolic systems including assumptions, values, and beliefs by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences” (1999, p. 804). It is clear from the excerpts from participants that EE is viewed as an experiential and transformative pedagogy and as a legitimate practice in schools in this rural district, due, in part, to the dynamism of some passionate educators with the help of independent organizations (e.g., EcoSchool, Forest School), and also thanks to the impact of regulations and incentives the provincial government has put in place in the past, which, although they did not necessarily attain the ambitions put forward. Both contributed to making EE part of the norm for these educators/administrators. EE remains, however, the exception more than the rule, and is a very low priority in the policy layers that administrators deal with. EE struggles to emerge as a priority in a context where the use of natural resources continues to be an important source of economic growth and efforts to slow environmental degradation are not yet successful.

Research Questions #2: EE Practices are the Results of Individuals' Agency (Scott, 2008)

To better understand how administrators are, through their daily practice, making decisions that maintain, translate or disrupt EE-related institutional logics, I built their PIF and wrote a short narrative description, trying to focus on how they make meaning about EE initiatives and how this, in turn, shape their agency. For this analysis, I considered as agency any interviewees' decision or action that somehow supports fostering a love of nature in students or instilling in them a reflection on the impact of humans on the environment. I argue that, in a context of multiple policy layers (Pinto, 2015) where EE is a low priority, any such decisions or actions can be considered “talking back to institutional pressure” (Marz et al., 2016, p.306). In this second section, I present this work, then discuss the factors I identify as having an importance on the participants' agency.

Participants' PIF and Agency-focused Narratives

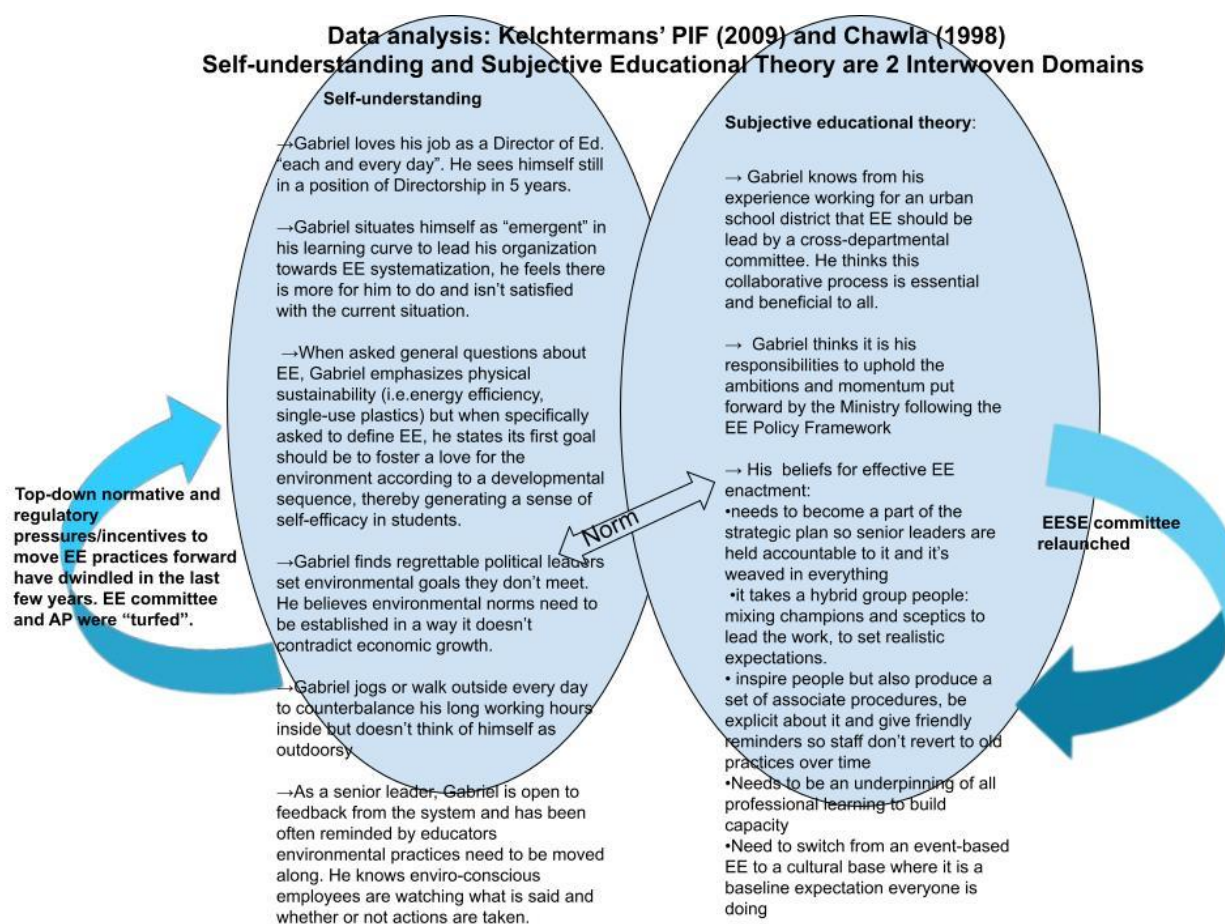
Gabriel, Director of Education, has been agentic in reviving the EE Committee in a context where there was no institutional pressure to do so (see Figure 5). Gabriel's agency comes from two factors: first, he feels a normative pressure to include EE in his leadership of the organization. He has been personally involved in the enactment of the Ministry Framework (OmoE, 2009) when it came out, as he was then Superintendent of Curriculum in a larger, urban board, and co-led the newly formed committee with the Manager of Facilities. He remembers this collaborative effort as a very positive, stimulating experience that enabled the organization to move this portfolio forward. He would like to bring, or revive, this momentum in this rural school board as part of an effort to be a forward-looking leader, perhaps investing in new technologies to facilitate the transition towards more environmentally friendly practices. Second, Gabriel is reflective and self-aware. He is very attentive to the district's staff at all levels of the organization as well as to trends in Education and broader society: he "reads" the situation (e.g., teacher complaints about unsustainable practices, companies successfully integrating environmental protection in their operations) and interprets it is his responsibility to integrate EE in the district's strategic plan. His motivation to advance the common good is in alignment with his professional knowledge and his personal ambitions. He willingly articulates his desire to continue learning about how to lead EE in his organization.

As a Director of Education, Gabriel is extremely busy. His daily experiences are embedded in meetings and administrative work at the district's office. Despite his genuine desire to advance EE practices, he is confronted to the reality that this portfolio more often than not, slips off the radar. He knows EE as an event-based culture is not satisfactory. Although when asked questions, he is knowledgeable about EE as a pedagogy, his spontaneous EE-related thoughts systematically revolve around operational sustainability (i.e., resource management). The examples he gives when talking about strategies to operate the transition to an organizational culture where EE becomes an integral part of daily school operations (e.g., having both EE champions and sceptics piloting this work; making it part of the district goals and measuring progress; implementing associated procedures so it is effective and persists through time) are all resource-focused (e.g., phasing out Styrofoam from PD sessions). I know from previous conversations with Gabriel (who was my point of contact at the district as I prepared my thesis proposal) that, as a Superintendent of Education, in his previous position, he supported an innovative project involving a partnership with the local Forest School: elementary teachers and students were brought weekly to the Forest School for a play-based learning session, then encouraged and mentored to pursue learning in nearby nature at their own school. The goal was

to integrate nature learning in teaching practices, thereby fostering a love of nature in students. When prompted during the interview, he did not mention this experience, which I interpret to be revealing of the hectic pace of his work, as well as the fact Gabriel is not, himself, a nature lover. He has integrated EE as a moral and professional responsibility, but does not have a personal, intimate relationship to this topic.

Figure 5

Gabriel's Personal Interpretive Framework (based on Kelchtermans, 2009)



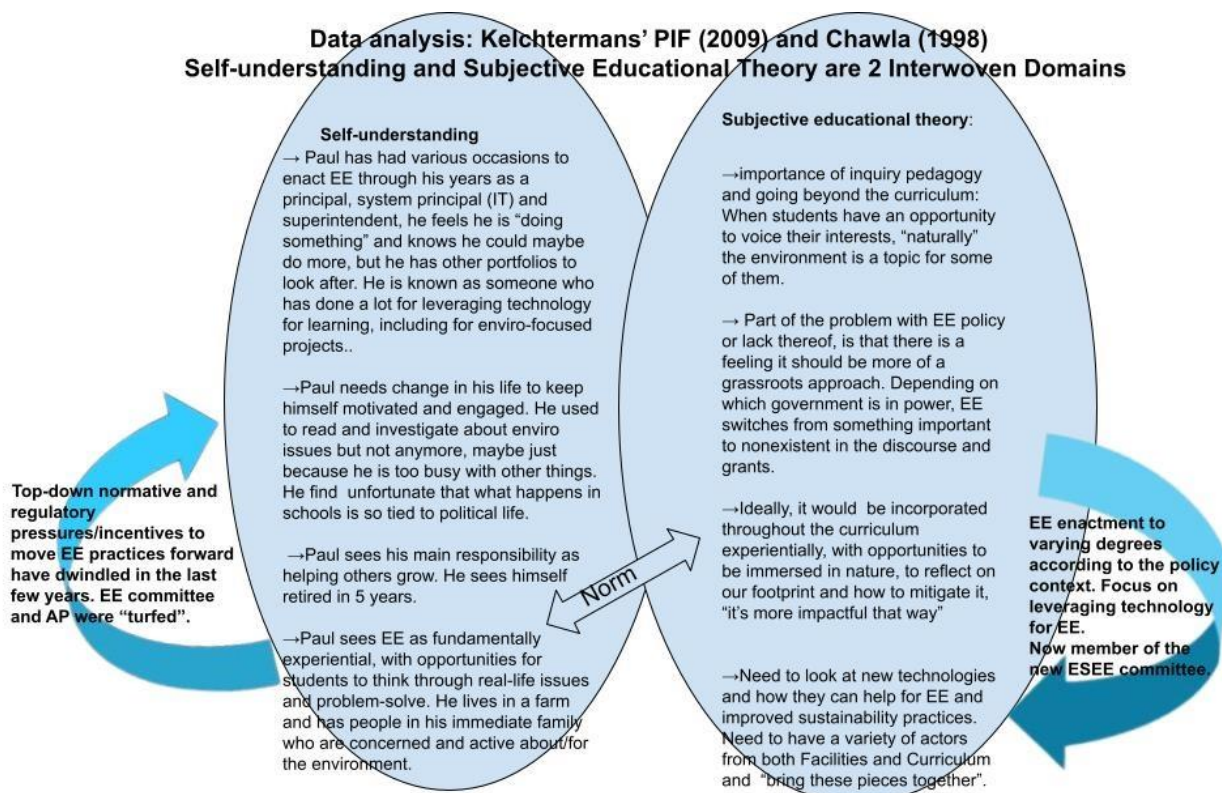
Paul, Superintendent of Education, has been agentic towards EE throughout his career (see Figure 6). As a teacher, he strived to take his students outside and get them involved in community projects. As a school, then district administrator, he supported EE-related initiatives, pushing energy-monitoring projects to his staff, dispersing EE Ministry grants to interested schools, supporting EE-focused inquiries by leveraging Learning Technologies, via the IT department he oversaw for several years. He is interested in how new technologies can help solve complex contemporary problems, whether it's how robotics can enhance an EE student-

led inquiry, or how solar panels could help the district become more energy-efficient. He is seen as the “IT guy” by other administrators. He is now sitting on the rejuvenated EE committee. I interpret his agency to be influenced by two different factors: first, Paul has a personal connection to the natural world. Although he grew up in an urban environment, he developed an interest for the outdoors, worked as canoe guide over several summers, taught on a First Nations reservation and now lives on a farm. His close family is very concerned and active about environmental issues. He does not consider himself an activist but nature preservation is something that matters to him. Second, Paul loves intellectual puzzles and EE offers the possibility to mobilize his skills, think creatively about how to utilize technologies, empower staff through learning opportunities, which is all stimulating and enjoyable. His love of the outdoors and his desire to advance the common good, align with his constant desire to learn as well as his image as a hard-working, innovative administrator.

Paul is down-to-earth and self-aware. In spite of the fact he is identified as a promoter of EE, he does not see himself, or think he is seen as an EE champion. He took the opportunities to support EE practices when they arose, in balance with everything else he needed to do to meet his mandates. Part of this dynamic is a realism that comes from many years of experience and the acute awareness of the fact curriculum is tightly tied to politics (i.e., change in elected provincial governments), which he finds regrettable.

Figure 6

Paul's Personal Interpretive Framework (Kelchtermans, 2009)

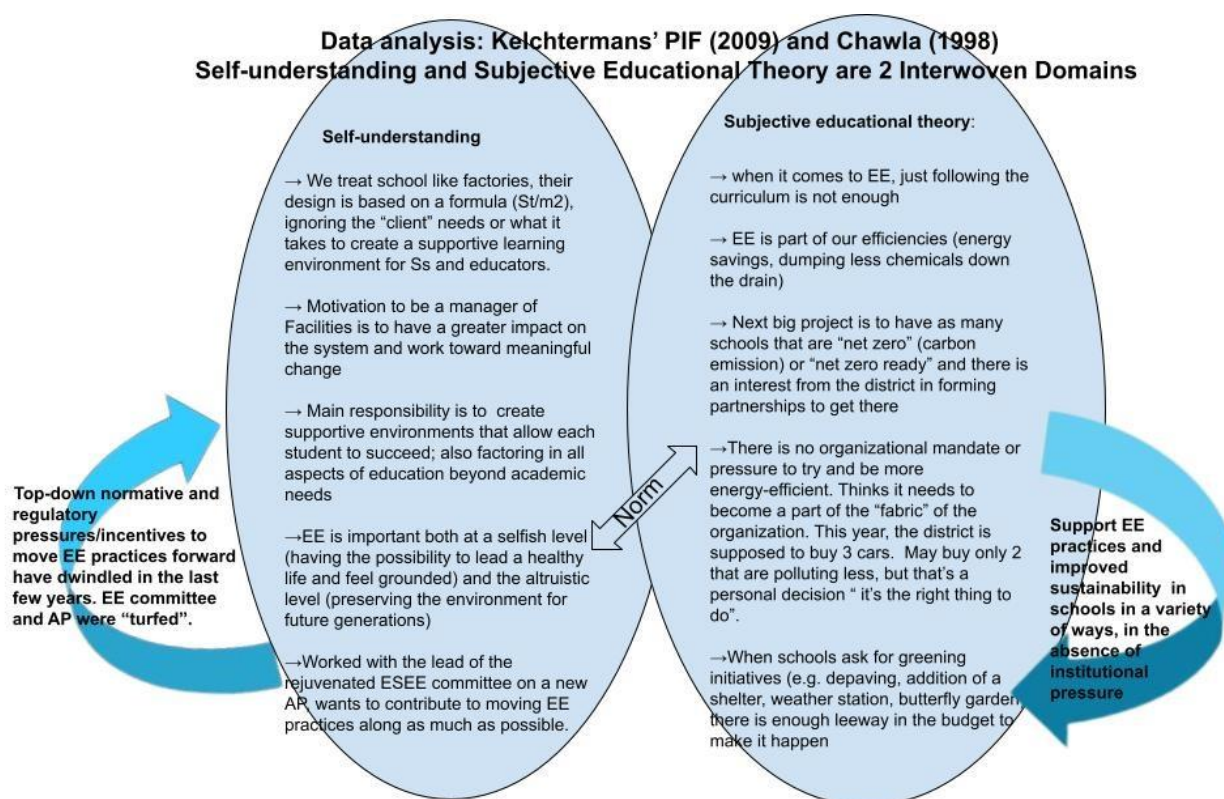


John, Manager of Facilities, is agentic in different ways towards EE: he oversees physical sustainability, for which he took advantage of the provincial government incentives and led an energetic transition that saw the district's provincial ranking move from #37 to #14 in terms of energy efficiency (see Figure 7). Despite the regulative vacuum, he strives to factor in environmental impact when he needs to make purchase choices as well as decisions on school buildings and renovations. John is also supportive of schools' requests to green their yard, develop gardens or other projects enabling more outdoor learning. On his own initiative, he undertook a Diploma focusing on learning environments and integrates these newly learnt ways of thinking about space, in connection with students' learning and well-being, in his work. He would like to integrate more nature in buildings, for example. Although not a teacher himself, John is aware of the transformative nature of EE pedagogy and thinks of ways he can support it via his work. He aims at renovating as many schools as possible into "net-zero" carbon emission schools before he retires. For the first school to undergo this transformation, he has made having a pedagogical aspect a requirement of the energy procurement for vendors. I interpret John's agency to be influenced by two factors: first, his personal, deep connection to nature.

John grew up on a farm, has always made time immersed in nature either camping, or hiking, a part of his life and spends some of his personal time learning about environmental issues. Second, he strongly believes in the possibility of social change and wants to do his part. John did various jobs, changed careers several times, was directly impacted by political decisions (i.e., he graduated a school sport counsellor at a time education funding had been slashed and went to work as a research technician in a mine). He stated having a bigger impact towards change as his first motivation to move up to the position of Manager of Facilities. His interest in advancing EE aligns with the diversity of his skills and the district's orientation to work towards more energy-efficient operations.

Figure 7

John's Personal Interpretive Framework (Kelchtermans, 2009)

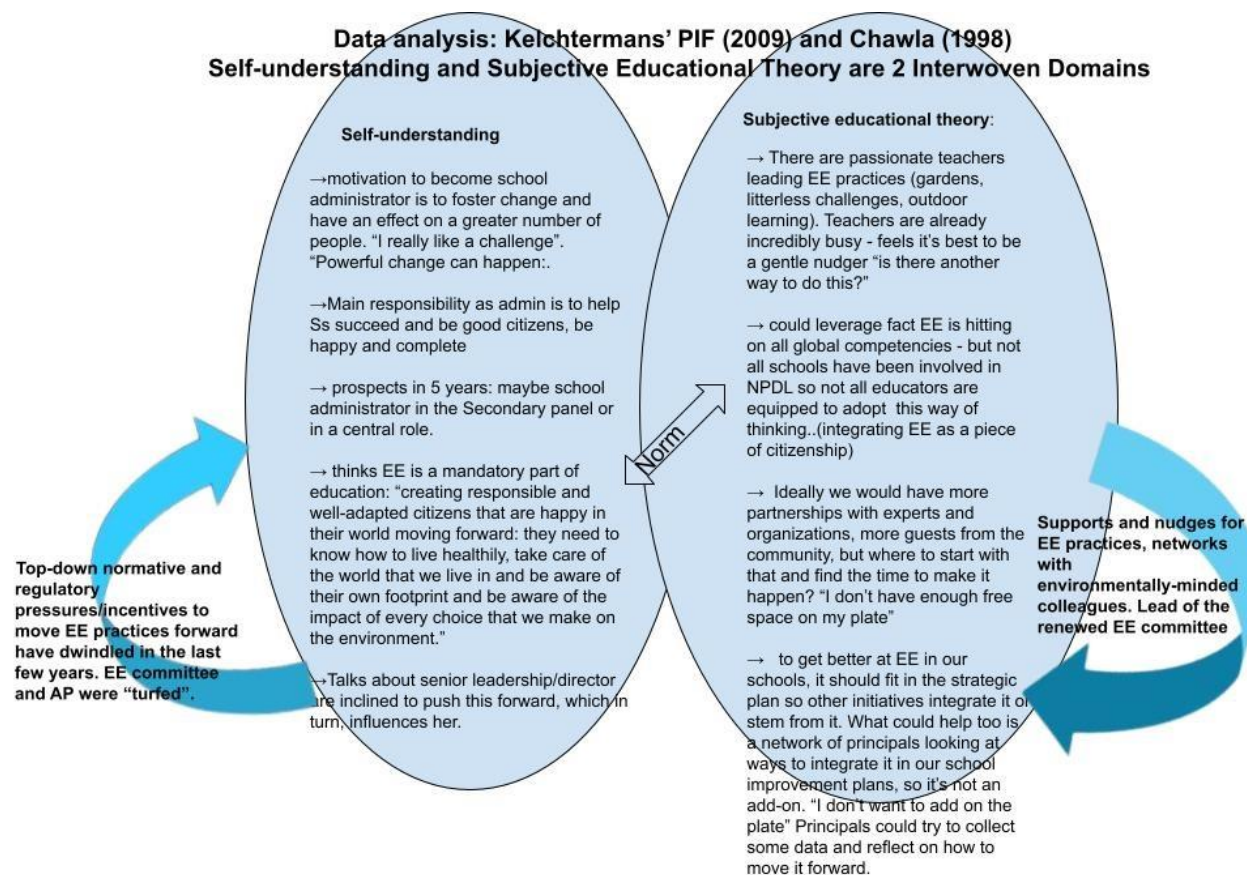


Mary, School Principal, is agentic towards EE in various ways: she supports educators who strive to make EE part of their practices, pushes to staff educator-lead whole-school initiatives, and gently nudges them towards doing things differently if they can (e.g., using nearby nature as a learning environment, using less single-use plastics). Throughout her career, she has had various opportunities to take part in or witness various environmental initiatives (see Figure 8). As a teacher, she volunteered to get her school eco-certified, which she remembers

as a positive and stimulating experience. She has seen many teachers lead projects such as nature-based learning, composting, gardening, bike or walk to school events. She herself was inspired to think about her impact on the environment by one of her teachers, through a recycling project in Elementary school. Mary is interested in the many ways environmental education is connected to health education. She is the lead of the rejuvenated Environmental committee and sometimes has conversations with like-minded colleagues about how the district could or should do to improve its environmental practices. She participated in the effort to draft a new district EE Administrative Procedure and enjoyed looking at other districts' EE AP, discussing it with the other committee members. I interpret Mary's agency to be influenced by three factors: first, a personal relationship to nature. She grew up playing in the woods in her backyard and now lives on a large property, she likes to learn about trees (e.g., identifying their species, learning about their health) and this proximity to the natural world is important to her. Second, Mary deeply believes that social change can happen and wants to do her part. She has held different jobs, lived in South East Asia for several years and perceives how some experiences have the power to change people's attitudes. Third, Mary is driven by intellectual curiosity as well as the symbolic reward and personal satisfaction that constitutes solving a complex challenge, such as integrating EE in the district practices without it being an add-on. She knows she is seen as a dynamic, forward-looking principal. She is also self-aware and knows although she is a promoter of EE, she is not a champion, lacking the time to do more, and being respectful of the fact her staff is already working hard on so many other priorities.

Figure 8

Mary's Personal Interpretive Framework (Kelchtermans, 2009)

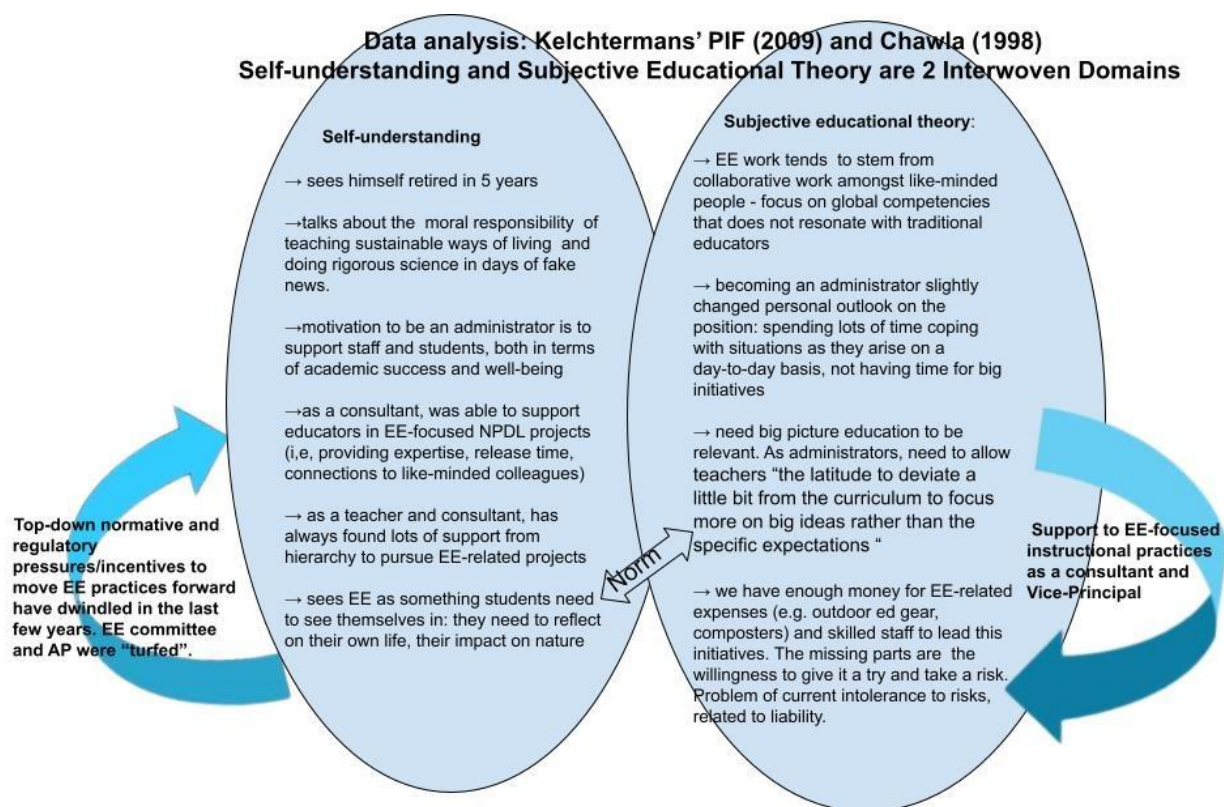


Michael, School Vice-Principal, is being agentic towards EE in several ways: he just bought several thousand dollars' worth of snowshoes out of school funds (see Figure 9). He has no doubt that more could be done to get students to reflect on their impact on the environment and foster a love of nature in them: staff members have indeed skills in this area and schools have enough budget to do more. A few years ago, as a numeracy and literacy consultant, he was part of a group of like-minded people that supported several EE-focused projects such as cleaning up a waterway as part of an initiative called "New Pedagogies for Deep Learning". They provided educators with guidance, expertise, and release time, helping them to network within and outside of the district. He recalls these EE projects as having a lot of support from the district administrators he was reporting to at the time (i.e., system principal; superintendent). I interpret Michael's agency to come from different factors: first, a deep personal connection to nature. Michael grew up in a remote area, was involved in boy scouts, worked as a canoe guide for several years and he continues to put time immersed in nature as an important aspect of his own life. He devotes some of his personal time investigating the

adjustments he can make to have a lesser environmental impact (e.g., house energy efficiencies). Second, Michael is animated by strong intellectual curiosity. He took his time in university, changed his mind several times, graduated as an engineer, only to go back and study education a few years later to become a teacher. He is interested in fostering “big picture education” where helping students make connections between ideas is more important than content mastery. Michael is nearing retirement and evaluates what is missing for EE to be more prominent in the district is “the willingness to try”.

Figure 9

Michael’s Personal Interpretive Framework (Kelchtermans, 2009)



Factors Influencing Participants’ Agency

Factors influencing humans to develop dispositions to care and take action for nature preservation have been identified as comprising a wide range of sensory, social and cognitive experiences, and a path that is not linear but includes: time immersed in nature; a social mediator (e.g., a person, a book) that models appreciation of nature and agency to preserve it; and, a positive relationship between the natural world and individuals’ inner world such as their aptitudes or temperament (Blanchet-Cohen, 2008; Chawla, 1998).

Personal Relationship With the Natural World.

The interview protocol did not allow for a detailed understanding each participants' personal trajectory, but it did explore their relationship to nature and their interest in environmental questions. With the exception of Gabriel, Director of Education, all participants described a strong personal relationship with nature, recalling specific outdoor experiences (e.g., cross-country skiing as a family, playing freely in the woods for hours on end) that connected them with the natural world, as well as life choices in which the possibility of regular immersion in nature was an important part of the life decision-making (e.g., having a cottage, becoming a canoe guide, living on a farm).

*I grew up in a town just over 1000 people and we had a large area of forest behind our house. So, frequently we were in that forest exploring, you know, playing like kids do in the forest, imaginary play as well as doing, um, recreational activities in the forest, like sliding and climbing and things like that. (...) I would say, I've always enjoyed being in the outdoors and kind of, especially as I grew older getting into the outdoors more and part of my daily routine (...). I think it's when I went away to university and had maybe less time in nature that I realized I needed it. You don't notice it till it's gone kind of thing. (...) But, certainly now, I, you know, I do my best to do outside activities every day, encourage my kids to do the same thing. **Mary, Principal***

Personal Dispositions Such as a Passion for Learning, Solving Problems and the Belief an Individual can Contribute to Social Change.

In addition to a joy of being in the outdoors, participants, to varying degrees, can all be characterized as reflective, lifelong learners who have a solid self-concept: they believe in their ability to have a positive impact on people they relate to and to their natural environment. They are cognizant of the organizational, national and international political contexts (e.g., intolerance to risks; political leaders denying climate change; Paris Accord's target not being met; fake news spreading fast) but have developed a "personal system of knowledge and beliefs" (Kelchtermans, 2009) that enable them to persevere, reckoning how they, at their own level in the organization, can leverage the resources they have access to (i.e., budget, knowledge, partnerships) to try and advance what they believe in.

*I really like a challenge and I like, I like change, uh, and I like to be involved in change on the ground as it's happening. Especially some powerful change that can happen" (...) I guess it would help me if there were other principals that wanted to include it, but we could work together maybe in developing, like, how are we going to do, how are we going to fold in environmental education, into our school improvement plan? How are we going to do it? And the things that we're going to do with, it's not going to sound like an add on, I don't want to sound like an add on. I don't want to add anything to the plate, but I want to show them how they can bring out environmental education and make what they're already doing explicit. **Mary, Principal***

I'm not in agreement with that, to pretend to agree and then not meet a single target you set for yourself. So again, I think, and I would say our country is part of that, I don't think

we're, um, you know, we're in any way, ahead of anybody else. I think there are countries actually doing better than we are, but setting unrealistic targets is not helpful. For our organization, I'd rather set up a lower target that I can actually get to. And then, then set my next one, uh, because I think, the track record as a human species on this, isn't good for us, especially in the last 50 years. Gabriel, Director of Education

And I still not, actually, I don't know if this is old administrative procedures that was very deep somewhere or whether it was a new administrator procedure that came out, but the student to teacher or student to adult ratio changed, um, which would have, so this is new, it came to light as I'm now in a system role, but definitely changes the ability to go off beyond the fence line of the school yard, even in those two kilometer radius, um, which, with creativity, you can make work because you can you know, ask for support from another teacher or you can get parents and it's just, it just one more restriction to work around. Natalie, Numeracy consultant

The impact of teachers' profiles and significant life experiences on their practices has been the object of research (Altan & Lane, 2017; Beattie, 2000). It is beyond the scope of this thesis to attempt to draw definitive conclusions about how participants' life and professional experiences contributed to their agency towards EE, however, it seems plausible to interpret that the common denominator of participants (i.e., having varied experiences such as having worked in different fields, having lived abroad or on indigenous land, having multiple qualifications) has something to do with the resourcefulness they demonstrate in finding ways to enact EE in a low priority context.

An Ability to “Read” the Organization to Maneuver and Advance EE from the Bottom-up.

Similarly to findings about the agency of teachers in curriculum-making (Bascia et al., 2014; Priestley et al., 2012), Natalie (sharing her experience as a teacher before her position as a Numeracy consultant) and Sophie, (Elementary teacher) talk about how they were able to secure organizational support, by engaging in opportunities such as New Pedagogies for Deep Learning (“NPDL”, rolled out by the district, with a focus on global competencies, inquiry-based learning) and the Teacher Learning and Leadership Program (TLLP, organized by the OmoE, with focus on teacher’s self-directed learning). These opportunities ensured they had legitimacy and adequate resources in developing their EE practices (i.e., funding, mentoring, support through a professional network). Since upon completion, disseminating the professional knowledge acquired is a part of these programs, via presentations at professional learning sessions and conferences, NPDL and TLLP helped EE gain more visibility and legitimacy district-wide.

And because I had to pull this together to a report, um, and it was moderated at different levels that actually ended up going past, the region and to, um, it was moderated at the national level. And then again at a global level. So we had a lot of light shot on it. So I feel like because of the success of that, when other educators are, um, wanting to tackle

*or dabble in it, or try something out, they're getting more support from their administrators coming from the superintendent because they want to, allow some of that inspired learning to happen. **Natalie, Pedagogical specialist***

This comment speaks to the advancement of EE as a transformative pedagogy is fundamentally a bottom-up dynamic resulting from the agency of passionate educators who leverage educational trends. In this instance, innovative ways of teaching related to what are coined “21st century learning”, to promote something that is important to them. However, it also shows how this grassroots momentum, in turn, impacts the broader level: once EE’s credibility is established and EE champions move up the responsibility ladder, they are able to secure funding for EE, form partnerships, and disseminate support and knowledge to other interested educators. Both Natalie (Numeracy consultant) and Michael (now a vice principal sharing his experience as a Literacy and Numeracy consultant) explain how they have had the support of the senior administrators they report to and are/were able to create EE-focused professional learning opportunity, despite the fact it is not an explicit part of their job description.

Interviewer: *“In relation to what you just said, I wonder who in your role were the essential individuals that, you've been dependent on to, to try and do something for, for environmental education, like, I'm wondering, for example, when you were a consultant, you probably had to report to a system principal or the superintendent, were they supportive of that?”*

Michael: *A hundred percent. We had one superintendent that was really on board with NPDL and like, enviro projects, certainly our IT department, our IT coaches were very, very involved and very instrumental in promoting things of that nature, especially with NPDL. So, I would say between one superintendent and, um, the IT coaches and our own principal. Yes. We got a lot of support for projects like that, especially NPDL. Yeah. It was a big, big deal.*

What is also evident through the interviews is the ability of EE promoters to find allies, identifying like-minded people in the organization who they can count on to advance what they believe in.

This quote, from the district’s numeracy consultant shows it well:

*We have actually our foot in the door right now working with project wild. And we are going to have a sort of a train the trainer type of approach right now, we have enough funding to put two teachers per school, uh, to get involved with project wild. And then another numeracy coach is also leading like the three, um, three numeracy coaches. Um, we share a lot of passion and one has sort of taken the lead on organizing that stuff. She has some personal connections. And so we have some numeracy funding that we are going to run with this through this year (...) other areas of the budget have been used up because we do have a new math curriculum and things like that. But definitely there is support and definitely we have funding and we are going to try our very best to make it work for the educators who are interested. And then hopefully, um, maybe start small this year with our pockets of teachers, but hopefully growing from there. **Natalie, Numeracy consultant***

EE Remains Limited in the System to the Presence of Individual Champions

Although this is an important trait of teachers’ and administrators’ agency, it can be interpreted that EE systematization is limited by the fact it requires individuals who have specific

personal dispositions in favor of it, thus leaving the advancement of EE to chance. This is confirmed by participants who, when asked what are the barriers existing to further EE enactment, mentioned the mindset of certain teachers and administrators. They perceive a difference between “us” (i.e., pro-EE) and them (i.e., not interested in enacting EE as a transformative pedagogy). Pro-EE teachers and administrators speak about the need to change the ways students are taught, mobilizing curriculum documents in support of these practices. They speak about the need to teach in a cross-curricular ways, focusing on students’ competencies rather than content mastery. They are aware their views of education are not shared by all of their colleagues, which they identify as a barrier to meaningful EE enactment.

You know, Enviro Ed is in every curriculum document, in the Foreword, but of course, most people skip that part” (...) There is so much you can do in science, based on the curriculum, but you can also not bother and just do paper and pencil tasks in class.

Amanda, teacher

Yeah. I think, the biggest barrier is the mindset of some educators. I feel like a lot of educators feel overwhelmed with the curriculum documents and what they feel they need to be, needs to be taught. And I think, um, if that mindset could be, um, if we could open that mindset to the fact that using your environmental education platform and the resources that are so natural around in our, in our area, that can actually deepen the learning from the students, that the power of what they are being taught, um, is more enriched and it can all fit in there and it can fit quite easily. And I think it's more the mindset of, that compartmentalization that some, some teachers feel.

Natalie, Numeracy consultant

We used to have a very active environmental education committee that included representatives from all aspects of the organization. It had principals, teaching staff, as well as other staff, custodial staff that looked at, yeah, it was very active, promoting environmental awareness, um, and programs that, tried to either lessen the schools’ impact on the environment or to, actively promote, um, good things like a butterfly gardens and tree planting. And then there were a couple of key people leaving, that were drivers behind that committee. And there was a perception for a period of time that if we just followed the curriculum, kids got their environmental education in grade five, because that was, we were meeting our mandate. And so for a period of time, we didn't have any policy or, or central program or a central driving force behind environmental education.

But I, I would say the biggest thing would be to provide teachers, the latitude to deviate a little bit from the curriculum to focus more on big ideas rather than, I don't know how familiar you are with Ontario's curriculum, but you know, some of the specific expectations in the curriculum they're fine, but I think we need bigger picture education these days. (...) Certainly, those ways of educating, thinking about the different, uh, what's do we call them, the six Cs? Um, certainly I think what NPDL was, it was a change of way of teaching, that those teachers who were going that way and who were interested in it are forever changed. I would think that it doesn't resonate with the more traditional educators.

Michael, Vice-Principal

This echoes the literature that questions the possibility and relevance to institutionalize EE (Barrett, 2007), some scholars seeing EE as fundamentally a grassroots pedagogy with

transformative goals that risk being diluted or silenced when embedded in the school system which remains a conservative institution (Grunewald, 2004). When asked if he had had opportunities to study ecological topics outside of classrooms, the Grade 12 student trustee responded:

I think, um, in math this year we went outside a few times and I recall I was shocked because I didn't know there was math to be done outside, I did not know the outcome of that. Um, so like, but you know, I was shocked. I think probably we're doing the bare minimum in terms of going outside. So I think there could be an increase of everything outside. I think in elementary, like I said, it is a bit better, but even there, I think there could still be an increase in outdoor time whether it's play time or it's education or just an activity outside.

In this section, I have discussed how a number of personal attributes, including personal relationship with the natural world, passion for learning, believing that an individual can impact the social structure, are evident in the participants' enactment of EE. In the context of this school board, the advancement of EE remains a bottom-up dynamic where agentic educators manage to strategically utilize existing educational trends and programs (e.g., NPDL) and resources, finding allies to champion EE, and thereby contributing to EE gaining legitimacy in the organization. In this district, EE enactment remains limited to situations where agentic educators and administrators are championing it, leaving open the question about ways to systematize it.

Limitations

This study represents the situation of EE in one rural Ontario school board and as such provides a glimpse into one school board's experiences with EE. The results are therefore not generalizable, although across other school boards in Ontario there might well be administrators who share similar agency and passion for navigating and negotiating EE across and within the curriculum. It is my hope that the findings of this exploratory study might resonate with administrators in different school board contexts across Ontario the single case does not permit such a claim.

I would like to acknowledge the limitations of this study, many of which have been induced or worsened by the COVID pandemic. The health situation impacted this study directly: my planned field work was first postponed for several months, then altered. But it also impacted the study indirectly since the interviewees, especially the administrators and teachers, were in a situation of unusual stress and fatigue, having little time to do interviews or, for example, locate the documents they would be willing to share. Retrospectively, had I known I would not be able to collect as much data as I had planned, I would have chosen a simpler definition of institutional logics than the one by Thornton and Occasion (2008), since I was not able to study institutional

logics with the depth that their definition entails (e.g., “set of material practices and symbolic systems” (p. 804).

Chapter V: Conclusion

This exploratory study has advanced understanding how district and school administrators, in this rural school board, are able to be agentic towards EE. The PIF (Kelchtermans, 2009) offers a dynamic way to investigate how various factors contribute to an individual acting in a specific way. Chawla, reviewing the literature on sources of environmental sensitivity, notes there are “exchanges between the 'outer environment' of the physical and social world and the 'inner environment' of people's own interests, aptitudes, and temperament” (1998, p. 369). Participants confirmed this when describing their genuine interest for environmental questions as well as, for most of them, a choice of life (i.e., living on a farm or a large property) where they can be immersed in nature. Similarly, analyzing the interactions between participants' various elements of the framework such as self-image, task perception, subjective educational theory yields interesting results, brushing a common picture of individuals who are lifelong learners, with varied life experiences and a strong belief in their ability to have a positive impact on the educational system and students' attitudes. The identification of institutional logics pertaining to EE, as a legitimate, yet low-priority subject of instruction, also shows how these individuals manage to 'read' a complex broader context (i.e., perceived lack of leadership at the international/nation levels; disparities between different districts and schools in terms of EE enactment; lack of time and budget for EE enactment), then find creative ways to support EE practices via other system initiatives. The fact that EE remains low priority echoes Fowler's (2013) statement that a policy needs to be considered through “its consistent patterns of activity and inactivity” (p. 5). It can be interpreted that the EE policy framework has remained largely a symbolic initiative, as it resulted from “an externally imposed political process” (Karrow & Fazio, 2015, p. 91). This thesis is a response to the stated need to study EE practices in context, in order to understand how multiple factors influence the EE policy-reality gap (Fazio & Karrow, 2013, p. 640).

This case study led to four key findings. First, school and district administrators identified as promoters of EE are not familiar with current EE policies, some participants are unaware of their existence. This ignorance brings into question what can be expected of school and district administrators in a context of high volume of policies with multiple, perhaps competing, foci. Second, some educational initiatives and grants (i.e., NPDL, TLLP) have been strategically utilized by passionate educators as a way to secure support, credibility and to leverage funding for their EE initiatives. Thus contributing, in time, to raising the legitimacy of EE practices and spreading them throughout the district. Third, although the Policy Framework (OMoE, 2009) has had minimal regulative influence in this rural district since its publication, there is evidence that it

has had a normative impact in the sense that some administrators felt compelled to adjust their practices so as to “match” other districts they had previous experience with, or knew about. Fourth and finally, the choice of integrating both EE and operational sustainability in EE policy documents, stemming from the “resourcist” EE discourse (Berryman & Sauvé, 2013, p. 139), is causing confusion and, in a context of multiple priorities, results in a disproportionate focus on the efficient use of resources.

The analysis of the data generated (i.e., interviews and documents) reveals a mixed picture, but generally confirms the existing literature: EE remains low priority in schools (Tan & Pedretti, 2010), it is based on individual champions, leaving a vacuum when these individuals move on (Reis & Guimaraes-Losif, 2012). The latter point was exemplified in this rural school board by the loss of momentum that resulted from the departure of two “drivers” of the previous EE committee. Constraints stemming from dominant historical educational discourses emphasizing rationality, neutrality, and learning organized as specific subjects in isolation of the others, are in competition with the conditions necessary to enact EE, such as taking the learning outdoors, in a cross-disciplinary fashion and with an explicit political orientation towards nature preservation. However, passionate educators and administrators, in partnership with independent organizations such as EcoSchool, successfully manage to navigate these constraints, enabling meaningful EE instructional practices to take place (Karrow & Fazio, 2012). EE is now part of curriculum documents (i.e., with the addition of a paragraph in the front matter as well as some specific learning expectations) but remains a peripheral subject. Perhaps, as Fawcett (2009) advocated that EE champions need to work together with other subjects marginalized in the Ontario curriculum: “As a field, EE needs more friends – it needs to look for solidarity with other social movements, and form more alliances” (p. 103).

There is a tension inherent to EE between its origins as a grassroots dynamic cause stemming from teachers’ activism, and the goal of systematization, which results in an unequal or watered-down enactment of EE. This tension has been overlooked in the Policy Framework (OMoE, 2009). Although there is a logic in the argument of utilizing the public educational system as a piece of the puzzle to tackle a vast societal problem (i.e., environmental degradation), there is also a major contradiction, at the Ministry level, in publishing a Policy Framework (OMoE, 2009) that supports the view of teachers shaping students to be agents of change without articulating a plan (e.g., specific professional development budget, mandatory training, monitoring results) that would ensure districts are able to maintain EE goals as ongoing priorities. When contacted about this question, the Education Officer in charge of EE at the Ontario Ministry of Education declined to confirm whether or not the impact of this Policy

Framework was monitored according to the “status”, “facilitative” and “effect” indicators, it laid out in the Measuring Progress section of the document (OMoE, 2009, p. 22-24) (Personal communication with OMoE, 2019). It seems illusory to expect that schooling culture will shift towards “learning as active participation in community-based, change-oriented projects” (Glithero, 2015, p. 197) until EE becomes an explicit part of teacher education programs and in-service trainings, as recommended by the *Bondar Report* over a decade ago (OMoE, 2007).

The importance of school context (Braun et al., 2011) such as local history, school buildings and surroundings, staffing dynamics also needs to be taken into account. In this rural school board, with the exception of the Director of Education, all interviewees had either grown up in the area, or had settled there a long time ago. They speak of their attachment to the region and their intention to stay (i.e., low turn-over). Woods and nearby nature seem to be plentiful around schools, which is a great asset when thinking of developing EE practices. Interviewees also mentioned although their student population is diverse, there is a significant number of students involved in a variety of outdoors activities (i.e., hunting, skiing, ski-dooing, camping, farming) with their families. There is also a number of indigenous students and families in the district who may have a different relationship with nature as well as a different perspective on conservation efforts. All these elements are important factors when considering how to promote EE practices in a locally-relevant fashion.

Further research into individuals championing EE at all levels of the educational system, trying to determine what experiences shaped them, enabling them to be agentic and advance EE pedagogy, could be useful to identify what specific experiences could be integrated in professional development. Similarly, an exploration of how the repertoire of successful leadership practices (Leithwood et al., 2008) can be utilized by administrators to promote EE practices in their school and district could help to pinpoint effective strategies for administrators desirous to do so.

As stated earlier in this thesis, this case study represents a snapshot of EE policy enactment in a specific school board at one point in time and therefore, there should be no attempt to generalize its findings. However, I started this study with the purpose to explore the EE policy-practice gap and to, perhaps, find ways to address it. One line of thought seems to be dividing EE and operational sustainability into separate policy documents, in order to propel the development of EE teaching capacity. Participants in this study have agency regarding EE policy enactment and it is plausible this finding is true in other educational settings, calling for further research in situated contexts.

I have written this thesis in Kuujjuaq, an Inuit community in Northern Quebec where I teach Grade 7 this year. Temperatures (consistently around -10 or -15 degrees Celsius) have been at 10 to 15 degree above average almost every day, exemplifying the fact that poles are warming faster than the rest of the planet, and posing serious threats to what is left of Inuit traditions and ways of life. My students, similar to students I have taught in inner city schools in urban centre in Ontario, do not seem to have an intrinsic interest in learning about or taking action for environmental protection. I very much relate to criticisms of EE as a discourse that has been “generalized and pushed, unproblematically, as a universal” (Berryman & Sauve, 2013, p. 137). In most school districts, there are neighborhoods and schools, characterized by low socio-economic levels, where, as educators, we are spending a fair deal of our time and energy helping students to simply satisfy their basic needs such as being in a safe place, with nutritious food to eat. This tension needs to be considered for effective EE policy-making that is locally-relevant.

My take-away from this thesis work is that although *ATST* (OMoE, 2009) was externally imposed and most administrators are unaware of its existence, it did have some impact in shifting the norm within Ontario school boards (i.e., having an Environmental Policy). However, this shift remains largely symbolic and is blurred by the merging environmental education (i.e., student learning) and physical sustainability (i.e., buildings’ energy efficiencies) in this policy document (OMoE, 2009). The language needs to be clarified and broken down into two different categories (i.e., EE is about student learning; sustainability is about energy efficiencies), with separate goals set for each, so administrators can effectively take action for EE. EE currently remains driven mostly by passionate educators and administrators out of a felt moral obligation, which explains disparities in EE initiatives across the province.

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Appendix A

Semi-structured Interview Protocol

(adjusted depending on the role of the participant)

Date and Time:

Place:

Name and position of the interviewee:

“Thank you so much for accepting to be a part of this study. I’m doing this interview as part of a research project to complete my MA in Education. The RCDSB has relaunched its environmental committee and I am interviewing a variety of individuals across the district about their perceptions of Environmental Education. The interview will be semi-guided which means I will ask some questions but it’s conceived as an authentic conversation between us that can be broader than the sole topic of Environmental Education. I will report back to you in March, I will send you the preliminary findings of the study and invited to a follow up individual or collective discussion. Your identity will be kept confidential in the final report. I know that you’ve been informed about that project, but if you have any questions before we start, please feel free to ask.”

“I also need to tell you that, should you feel uncomfortable during the interview, you may request that we stop at any point in time and you may withdraw your consent that I use the information shared. When you are ready to start, let me know, I will start the recording.”

A: Environmental sensitivity

A1: How are you today?

A2: Can you describe your own relationship with nature /your interest for environmental questions?

A3: Do you enjoy spending time outside? Do you enjoy reading/learning about environmental questions?

B: Self-Understanding

B1: Could you talk to me about your work for the RCDSB: how long you have worked for the district, where and in what position(s)?

B2: What is your educational background? Can you talk to me about your pre-service and in-service education/training?

B3: Could you talk to me about your motivation(s) to become a school/district administrator?

B4: What would you say is your main responsibility as an administrator?

B5: Where do you see yourself professionally in five years? (What are your expectations about your professional future?)

C: Subjective Educational Theory

C1: In your role as (superintendent, principal), what EE policies have you encountered?

- C2: What steps if any have you taken to enact policies into practice?
- C3: What EE initiatives are you aware of in your school board (whether you are personally involved in them or not)?
- C4: Do you personally think that EE is a legitimate part of part of schooling? Why or why not?
- C5: Do you discuss EE policies and practices with colleagues (with whom and on what occasion(s)?)?
- C6: In your role as (superintendent, principal), how do you understand EE? Could you define it briefly in your own words?
- C6: Could you talk to me about the school board/school contexts, for example, its history, staffing, student population, culture, the building and surroundings and how it influences EE policy enactment.
- C7: In your role as (superintendent, principal), who are the essential individuals that you are dependent on for EE enactment (organizational structure)?
- C8: As a (superintendent, principal), could you talk to me about your ideal enactment of EE in your school board?
- C9: Thinking of this, can you speak to how and why this is or is not possible?

D: Self-understanding in relation to EE

- D1: If you had to describe yourself in relation to EE, what would you say? (describe your self-image as an administrator enacting EE)
- D2: When you think of yourself at the beginning of your career in comparison to today, would you say your understanding of EE has evolved, and if so, what do you believe are the causes of this evolution?
- D3: How do you believe others see you in your role in relation to EE?

Appendix B

Table B
Representing Participants' Profiles

	Education	Impactful In-service Training	Current Position	Previous Position	EE Enactment	Connection to Nature	Interest in Env. Questions	Other Meaningful Exp
Gabriel	<ul style="list-style-type: none"> •B-Sc Honours (Queen's) •B-ed (McGill) •Masters Education (OISE) •Master of Public Admin (Queen's) • In-progress :Ed-D (Northwestern) 	<ul style="list-style-type: none"> •Principal Qualifications •Supervisory Officer Qualifications •Rotman School of management for senior leaders 	Director of Ed (4 years)	<ul style="list-style-type: none"> •Teacher (7 years), •EQAO coordinator of English Language Assessment (5 years) •Principal (6 years) •Superintendent (7 years) 	Experience working on the Environmental Sustainability Committee as a Superintendent of Curriculum in an urban board	Utilitarian. Intentionally spend time outside every day to counterbalance time indoors and on a screen (jog, walk and relax). "I'm not a naturalist"	<ul style="list-style-type: none"> •hear about it during general newscast. •once in a while I pick a novel or essay that's env. related. 	
Paul	Bachelor of Kinesiology MA in Kinesiology B-ed	<ul style="list-style-type: none"> •certificate program in interspace bargaining •leading change in the public sector 	Superintendent of Education (4 years)	<ul style="list-style-type: none"> •Teacher (10 years +), James Bay Coast, then local catholic board then RCDSB •HS Vice-Principal (7 years) • HS Principal (5 years) •System principal (IT) (4 years) 	<ul style="list-style-type: none"> •IT support to enviro-focused NPDJ projects •administer Ministry grants (i.e., both facilities and curriculum related) 	"I have always been an outdoorsy person". Grew up in the city (Windsor) but sought out the recreational activities (camping, canoeing), now lives on a farm.	<ul style="list-style-type: none"> 20 years ago, used to be very interested. Not really pursuing this interest anymore, perhaps due to lack of time. Wife and daughter are env. Concerned and active. Surrounded by people who are env. Conscious. 	<ul style="list-style-type: none"> •As a student, worked for an environmentally based outfitting company as a guide (focus on low-impact camping) •taught in Attawapiskat early in his career, lots of time in the woods with local people and other teachers. •visits to grandparents in North Bay, growing up: childhood experiences of freedom in nature
John	<ul style="list-style-type: none"> •2 y. of biology (Guelph) •social service worker program 	<ul style="list-style-type: none"> •certified disability management professional 	•Manager of Facilities (10 y.)	•Educational Assistant	•EE as part of "efficiencies": try to lessen physical impact on the env.	•Grew up on a hobby farm, "wandering through	•"high on my radar", I pay attention to env. issues.	•Did various jobs following 2 years in biology

	Education	Impactful In-service Training	Current Position	Previous Position	EE Enactment	Connection to Nature	Interest in Env. Questions	Other Meaningful Exp
		•Designation from the Association for Learning Environments (school design)		•Research technician in a mine •Health and Safety officer (9 y.)	Project of zero-emission school. •EE on school request: naturalization of school yard, butterfly gardens.	forest and making forts” •Always sought out camping and hiking, spending time at the cottage	• Science and env. podcasts are my favourite	•Dream of being a school support counsellor crushed by lack of job prospects (Mike Harris years)
Mary	•B-Sc in nutritional science (Guelph) •BEd (York)		• Elementary Principal (3 y.)	•ESL teacher in Japan •Scuba-diving instructor in Malaysia (Thailand) •Teacher (10 y.) TDSB then RCDSB •consultant (1 semester) •interim HS Vice-Principal	•volunteered to get her TDSB school accredited (silver), lead an eco-club •Lead for the ESD Committee •gentle nudges to staff “is there another way to do this”	•Always liked the outdoors and appreciated it even more as she grew older	•seek people out to ID trees on her property and learn characteristics of healthy trees	• took part in a recycling program during elementary that had a long-term impact on her
Michael	•10 years of university “doing different things”, graduated an engineer •B-ed	•PDs about Special Education and how to teach reading •PDs about Global competencies (Fullan) and New Pedagogies for Deep Learning, Project-based Learning	•Elementary Vice-Principal (2 y.)	•Industrial construction for a few years •Elementary teacher (12 y.) •Numeracy and Literacy Consultant (5 y.)	•Purchased snowshoes for his school •as a consultant, facilitated Enviro-focused projects (release time, expertise, budget)	•nature has always been important, lives in a very remote area, was in boy scout growing up; used to be a canoe guide; do a lot of canoe and camping.	•very interested: on-line reading and taking to like-minded people about reducing energy use at home and other topics	
Natalie			•Numeracy instructional coach (3 y.)	•Teacher for 24 y. (5 y. in Alberta, 2 y. in Manitoba and 1 y. in Northern BC)	•Enviro-ed focused NPDL project: spent 1/3 of her day outside every day with her class for 2 years •coordinates a book club for educators on Learning for a Sustainable Future resources, spaces for discussion and sharing	•Feels very connected to nature, grew up in Northern Ontario, has always had lots of outdoors activities, pays attention to how nature is doing around her; raised her sons similarly	•lots of information from her husband, geography teacher, who reads a lot and talks to her about it •Also subscribes to email listings such as David Suzuki Foundation	

	Education	Impactful In-service Training	Current Position	Previous Position	EE Enactment	Connection to Nature	Interest in Env. Questions	Other Meaningful Exp
					<ul style="list-style-type: none"> •offers support for teachers who are interested in embedding Enviro Ed in their practice 			
Sophie	<ul style="list-style-type: none"> •BSc (York) •BEd (York) 	<ul style="list-style-type: none"> •Special Ed courses •Science AQs 	•Elementary Science teacher		<ul style="list-style-type: none"> •Embedding Enviro Ed in her teaching, focus on science (e.g., water quality experiments at the local lake) •Lead for EcoSchool at her school •Lead for an enviro-related TLLP project. 	<ul style="list-style-type: none"> •grew up on a lake, always outside playing or swimming 	<ul style="list-style-type: none"> •being a science teacher prompted her to do more enviro learning •involved personally: doing shore clean-ups with her family, interested in organic gardening, etc. 	<ul style="list-style-type: none"> •wrote a youth novel about young people protecting the planet
Amanda	<ul style="list-style-type: none"> •BSc in chemistry •BEd 	<ul style="list-style-type: none"> •various AQs and conferences 	•Secondary Science teacher	•Pedagogical specialist for Secondary	<ul style="list-style-type: none"> •Embedding Enviro Ed in her professional activities, focus on science(classroom) and experiential learning (camping trips as part of extracurriculars) •Lead for recycling at her school 	<ul style="list-style-type: none"> •grew up in the region snowshoeing and doing outdoors activities with her mother 	<ul style="list-style-type: none"> •attentive to environmental issues through newscast and taking steps to lessen her own impact. 	

Appendix C

09/03/2020

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number	S-01-20-5319
Titre du projet / Project Title	How are district and school administrators enacting Environmental Education policies within a rural Ontario district school board?
Type de projet / Project Type	Thèse de maîtrise / Master's thesis
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	09/03/2020
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	08/03/2021

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Floriane TSERING	Faculté d'éducation / Faculty of Education	Chercheur Principal / Principal Investigator
Ruth KANE	Faculté d'éducation / Faculty of Education	Superviseur / Supervisor

Conditions spéciales ou commentaires / Special conditions or comments