Implementation of the Bondar Report: A Reflection on the State of Environmental Education in Ontario

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Abstract

The 2007 Bondar Report, Shaping Our Schools, Shaping Our Future*, generated a vision for environmental curricula in Ontario. It has been the basis for the mandated framework introduced in 2009 by the Ministry of Education for environmental education (EE) in all Ontario schools. Based on our research and personal reflections, this paper provides a summary of the recent developments concerning EE curricula in Ontario's schools. It also identifies the key institutional elements which contribute to and influence the course of EE implementation and focuses on their role in the development of environmental curricula in the province.*

Resumé

Le rapport Bondar de 2007, Préparons nos élèves – Préparons notre avenir*, proposait une vision pour intégrer l'éducation environnementale au curriculum ontarien, vision qui a servi de base à la Politique d'éducation environnementale pour les écoles de l'Ontario adoptée par le ministère de l'Éducation en 2009. À partir de nos recherches et de nos réflexions personnelles, nous faisons dans cet article le point sur l'évolution de l'éducation environnementale dans les établissements scolaires de la province, en plus de faire ressortir les grands aspects institutionnels qui viennent jouer sur l'intégration de ces enseignements, en insistant au passage sur leur rôle dans la conception d'un curriculum pour l'Ontario.*

Keywords: environmental education, Bondar Report, Ontario, curriculum, K–12 schools

Mots-clés : éducation environnementale, rapport Bondar, Ontario, curriculum, maternelle à 12e année

Introduction

The late 1960s was a time of generally increased salience of environmental issues. This came as part of a social movement whose advocates had begun to demonstrate concern about human impacts on the environment. Accordingly, expectations that schools should incorporate greater emphasis on environment into their curricula began to appear in a variety of countries (Gough, 2013; Palmer, 1998). The first elements of the institutionalization of environmental education (EE) arose with the development and implementation of new curricula and initiatives, such as the 20-day IUCN/UNESCO International Working Meeting on Environmental Education in the School Curriculum, held in 1970 at

the Foresta Institute, Carson City, Nevada (IUCN, 1970). Over time, the conceptualization, pedagogical development, and implementation of EE has evolved in response to changing priorities and political challenges (Hudson, 2001; Sauvé, 2005).

In 1973, the Ontario Ministry of Education (OME) introduced environmental science courses into the province's elementary and secondary schools. In the two decades that followed, and with increased outdoor education opportunities for students, the environment held a significant position in school curricula. However, as neoliberalism began to dominate educational approaches to curricula in the second half of the 1990s (Basu, 2004; Sattler, 2012; Winfield & Jenish, 1999), funding and infrastructure for outdoor education programs were cut (Borland, 2014, 2015; Kopar, 2013). Public concern over the "patchwork approach" to environmental education (EE) (Environmental Education Ontario, 2003; Puk & Behm, 2003) followed the removal in 1998 of the two Environmental Science courses which had been offered as electives in Ontario secondary schools (in Grades 10 and 12) (Cundiff, 1989; Puk & Behm, 2003; Puk & Makin, 2006). By 2000, EE was not a priority in provincial education policies and, despite the decision by the OME to "infuse" environmental content broadly into other subjects (Puk & Makin, 2006), canvasses of teachers indicated that little environmental focus found its way into the classroom (Puk & Behm, 2003).

The key response to the situation came in 2007, when the OME's Curriculum Council formed a Working Group on Environmental Education, chaired by Roberta Bondar. One of its objectives was "to analyze needs and research successful approaches to teaching and learning about the environment in elementary and secondary schools" (OME, 2007a, p. 3). The working group's report, *Shaping Our Schools, Shaping Our Future*, also known as the "Bondar Report," provided a new vision for policy and curricula (OME, 2007a). The most far-reaching of the Bondar Report's recommendations was to "increase the cross-curricular focus of environmental education by embedding environmental expectations and topics across all subjects, disciplines, and grades" (p. 14). This aligned with the earlier directive found in the 1987 report titled *Our Common Future*: "Environmental education should be included in and should run throughout the other disciplines of the formal education curriculum at all levels—to foster a sense of responsibility for the state of the environment and to teach students how to monitor, protect, and improve it" (WCED, 1987, p. 113). Among the other recommendations of the Bondar Report were calls for increased curricular attention to inquiry-based learning, action projects, and real-world engagement.

The Bondar Report also recommended the operational definition for EE, which guided subsequent initiatives: "education about the environment, for the environment, and in the environment that promotes an understanding of, rich and active experience in, and an appreciation for the dynamic interactions of:

- The Earth's physical and biological systems
- The dependency of our social and economic systems on these natural systems
- The scientific and human dimensions of environmental issues
- The positive and negative consequences, both intended and unintended, of the interactions between human-created and natural systems" (OME, 2007a, p. 6).

In response to the Bondar Report, the OME released a statement on standards for EE (OME, 2008) and a policy framework, *Acting Today, Shaping Tomorrow: A Policy Framework for Environmental Education in Ontario Schools* (OME, 2009). These provided goals, strategies, and actions for the mandated implementation of EE in all Ontario schools. They included changes in or to teaching and learning, student engagement and community connections, and environmental leadership. They also called for the adoption of an integrated approach to EE, embedding environmental expectations throughout the curriculum. Subsequently, EE resource documents and guides to aid in the policy's implementation have been prepared and updated (OME, 2007b, 2017a, 2017b). The development of Ontario's EE policy parallels policies emerging elsewhere in Canada (British Columbia Ministry of Education, 2007; Cirkony, 2015).

Faced with continuing impediments to the incorporation and implementation of EE in Ontario's schools, a number of research studies have been undertaken focusing on the enduring challenges of such endeavours (Beckford, 2008; Chowdhury, 2015; Inwood & Jagger, 2014; Karrow & Fazio, 2015; Mnyusiwalla & Bardecki, 2017; Pedretti & Nazir, 2014; Steele, 2011; Tan & Pedretti, 2010). Overall, despite the focus in recent policy initiatives concerning environmental education, EE is not yet perceived as flourishing in Ontario schools.

That there are significant constraints to effective implementation of EE has been recognized for some time in a variety of jurisdictions (Anderson & Jacobson, 2018; Evans, Whitehouse, & Gooch, 2012; Ham & Sewing, 1988; Taylor et al., 2019). For example, Ham and Sewing (1988) identified four classes of barriers: conceptual (i.e., a lack of consensus and misconceptions about the nature of EE); educational (i.e., a lack of commitment to EE and/or a sense of a lack of capacity and competence in addressing the subject); logistical (i.e., the lack of instructional materials and other resources, funding, and preparation time); and attitudinal (i.e., attitudes about the environment and EE). These sorts of challenges remain for each of the institutional contributors in Ontario as well as for the many individual educators and others in the province who are committed to promoting environmental literacy and knowledge and improving students' learning experiences.

This paper is a reflection on the development and state of EE in Ontario schools. It identifies the key institutional elements which contribute to and influence the course of EE implementation and focuses on their role in the delivery of environmental curricula in the province. Existing barriers to the successful implementation of EE are examined and responses to the challenges are offered. We identify a number of institutional contributors to implementing EE in Ontario's schools (Figure 1). Our observations and reflections on each are discussed below.

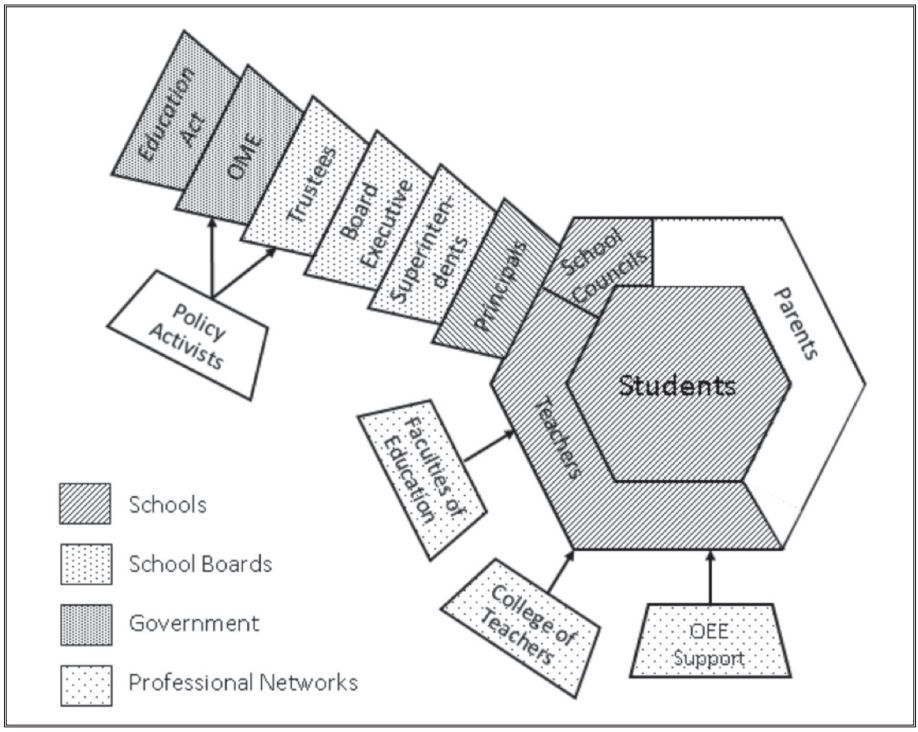

Figure 1. Implementing Environmental Education in Ontario's Schools: The Institutional Framework; OME: Ontario Ministry of Education, OEE: outdoor and experiential education

The Ministry of Education

The Ontario Ministry of Education administers provincial law and policy concerning education in the province. Specifically, under the provisions of the

Education Act, the Ministry is responsible for the following: setting and administering policies and guidelines related to the provision of education; overseeing the funding model for school boards; and developing curriculum. As noted above, it is through its influence on curriculum that the Ministry has had the greatest impact on the state of EE in the province.

A close reading of the curriculum expectations in OME's curriculum documents for individual courses demonstrates that themes related to EE may be entirely absent (Litner, 2016) or are widely dispersed. At the secondary level, content is concentrated in a small number of courses (particularly Science, Geography, and Green Industries). Moreover, only a small proportion of the content relating to expectations for EE and which appears in the curriculum documents (at least at the secondary level) is prescribed (Mnyusiwalla & Bardecki, 2017). While the documents outline possible avenues which may be used by teachers (e.g., examples which may be used in class, and questions which can be posed), much of the material is optional. In addition, it has been noted that existing barriers to the inclusion of EE content in the classroom must be overcome. These include teachers' lack of confidence about the subject and a dearth of resources for implementing EE within an overcrowded curriculum (Chowdhury, 2015; Karrow and Fazio, 2010; Tan & Pedretti, 2010).

Teachers and principals have expressed concern regarding the level of awareness among teachers about the curriculum documents. Few educators have a deep understanding of their content (Chowdhury, 2015; Mnyusiwalla et al., 2016). It is apparent that the shared vision of EE developed by the Ministry of Education has not been adequately transmitted to those who work most closely with students.

Another issue relates to the call by the provincial government for the introduction of "measures accountability." They have placed great weight on numeracy and literacy, with the results reported in the context of measuring the international performance of education systems (OECD, 2017). The public interprets these scores as measures of the performance of schools, educators, and students. Because EE subject material and requirements were not included among the scored elements, many education experts concede that EE subject material and requirements were made a low priority in the curriculum (Mnyusiwalla et al., 2016).

In the absence of baseline information of students' environmental knowledge and literacy, environmental educators in the province have called for environmental literacy assessment for both elementary and secondary schools (Igbokwe, 2012). Standardized testing came to Ontario after one of the largest public consultations in Canadian history (Green, 1998) and the release of *For the Love of Learning* in 1995 by the Royal Commission on Learning, formed in 1993 to "ensure that Ontario's youth are well-prepared for the challenges of the twenty-first century" (Royal Commission on Learning, 1995; Volante, 2007). With the increasing recognition that environmental issues represent one of the

most acute crises of the coming century, one might argue for recognition of EE as central to the development of "well-prepared" youth. In an overcrowded curriculum, this is unlikely.

Policy Activists

Policy activists are those who mobilize not only to effect transformative change in the policy environment by addressing specific problems but also to get those issues and their preferred solutions onto public and policy agendas (Klugman, 2011). A variety of policy activists focused on education and environmental issues provide considerable weight in the province's discussion about EE. Although they are often underpublicized and reliant heavily on membership fees and volunteer efforts, a number of organizations play a significant role in championing EE at the provincial and Board levels. These include:

- Environmental Education Ontario (EEON) (http://www.eeon.org/);
- The Canadian Network for Environmental Education and Communication (http://eecom.org/);
- The Council of Outdoor Educators of Ontario (COEO) (https://www.coeo.org/);
- The Ontario Association for Geographic and Environmental Education (https://oagee.org/en/); and
- The Ontario Society for Environmental Education (http://home.osee.ca/).

Moreover, the Ontario Teachers' Federation and the teachers' unions, i.e., Ontario Secondary School Teachers' Federation (OSSTF), Elementary Teachers' Federation of Ontario (ETFO), Association des enseignantes et des enseignants franco-ontariens (AEFO), and Ontario English Catholic Teachers' Association (OECTA), have each played a role in influencing policy generally and in promoting EE knowledge and literacy.

School Boards and Trustees

The 72 school boards in the province are responsible for: the supervision and operation of publicly-funded schools; the provision and management of teaching programs in response to the needs of their schools' communities; and the hiring and performance appraisal of teachers. The school boards are composed of Trustees—elected officials who form the decision-making body of each board. They and the boards' administrative executive provide system-wide oversight of and direction to schools. Academic superintendents normally oversee a cluster of schools, monitoring them and coordinating with school principals.

The Bondar Report called on school boards to develop "a board-wide framework for environmental education reflecting the board's culture and

that of its community and partners" (OME, 2007a, p. 12). Yet, supporters of environmental education in the province have identified problems with the decreasing priority school boards have given to EE, claiming that a shift in priorities to get "back to the basics," along with budget cuts, has reduced or eliminated outdoor education.

Many boards have made considerable progress on incorporating environmentally sustainable practices in the management and operations of their properties and buildings. However, many of the most cited board-level initiatives, such as EcoSchools, EarthCARE™, and Energy W.I.S.E. (Gillespie, 2006), as well as ongoing initiatives such as integrated Environmental Studies Programs (Breunig, Murtella, & Russell, 2015; Sharpe & Breunig, 2009), predate the Bondar Report. Some boards have mandated school participation; however, the early adoption and success of these initiatives are generally predicated on the ease of quantifying and monitoring goals' attainment and performance and the presence of someone on staff who is passionate about the environment and willing to volunteer time to make it successful.

The OME mandates that school boards' improvement plans are renewed and revised annually. Concern has been expressed by many education experts over the lack of board-level EE planning in these initiatives; the lack of accountability in the process has been seen as an issue (Mnyusiwalla et al., 2016). The result of such a dearth of liability can be a disconnect between provincial policy on EE and its implementation (though course offerings and programming, curriculum development, school-level initiatives, and community partnerships). The *Acting Today, Shaping Tomorrow* policy document (OME, 2009) provides for the use of short-term, mid-term, and long-term status indicators, facilitative indicators, and effect indicators for measuring progress and assigning accountability in EE. However, the responsibility and support for ensuring that EE policy goals are met are not assigned consistently.

OME statistics (OSIS, 2013) on course availability and enrollment beyond the compulsory courses provide some insight into the effectiveness of EE progression and integration into the curriculum. The Bondar Report recommended that students be offered opportunities to pursue EE in the senior grades (11 and 12) in order to provide continuity with material introduced in earlier grades and to reinforce the importance of EE (OME, 2007a). The reality is that the courses which offer the greatest potential for EE (e.g., Environment and Resource Management, Green Industries) are often offered at a surprisingly low proportion of schools in the province (Mnyusiwalla & Bardecki, 2017). In addition, there is a high degree of variability among schools. Innovative programs—such as the Specialist High Skills Major – Environment program (Breunig, 2013; OME, 2016), which allows secondary school students to focus their learning on a specific field of interest while earning certifications and being involved in cooperative education placements—are unevenly available.

Schools

In school systems, which are generally organized in a hierarchical and siloed fashion, educators often have difficulties establishing a distinct identity for subjects such as EE. Additionally, such subjects often fail to achieve a status comparable to more established areas of study. Stevenson (2007a) has outlined the existence of four sets of contesting lenses through which EE can be seen as diverging from traditional education:

- The social and cultural purpose of schooling: Although EE presses for an insurgent approach which pursues reform, schools tend to reinforce the status quo.
- Curriculum and pedagogical practices: Although EE stresses cooperative and collaborative strategies with an emphasis on creative and critical thinking, schools focus on individual achievement in their content-based approaches.
- School organization: The paradigms and questions which are at the core of EE demand an appreciation of ambiguity. Such an idea is at odds with schools' focus on efficiency and proficiency.
- Curriculum and pedagogical ideologies: Environmental literacy more readily accommodates other knowledges than do traditional curricula promoted by schools, which tend to be biased toward providing technical-rational or high-status knowledge.

Environmental education is fundamentally interdisciplinary in its foundational approach and knowledge base. It requires systems thinking and field study. Indeed, it has been suggested that EE demands "whole school approaches" (Tilbury & Wortman, 2006) and the nurturing of strong communities of practice within schools and beyond (Roth & Lee, 2004; Stevenson, 2007b). The lack of collaboration between departments required for successful EE, particularly at the secondary school level, has been seen as an issue by many education experts (Mnyusiwalla et al., 2016).

Principals acknowledge the importance of recognizing volunteer efforts to maintain enthusiasm and reinforce the positive benefits coming from these activities (Mnyusiwalla et al., 2016). Indeed, much of the success of EE programming, in class and elsewhere, takes place at schools and is a direct result of voluntary activity on the part of teachers, students, and administrators. The success of programs such as Ontario EcoSchools certification program and Forest Ontario's Ontario Envirothon (https://www.forestsontario.ca/education/programs/ontario-envirothon/) is directly related to these actions.

Social, economic, and geographic disparity among schools means that some school communities are more readily mobilized and better able to advocate for EE objectives. In these better-mobilized school communities, environmental issues can be more salient for parents. Likewise, students can better navigate their own environmental interests in these school communities. Other schools

may be targeted for special attention; for example, teachers involved in the Model Schools for Inner Cities program with the Toronto District School Board (TDSB) focused their efforts on high-priority schools, aiming to make the environment literacy a priority and empower students to shape their communities (Mnyusiwalla et al., 2016).

Theoretically at least, it is easier to integrate EE into the primary curriculum since a single teacher may be responsible for the bulk of the curriculum. With leadership, elementary schools—where individuals are responsible for a range of disciplines—may be at an advantage for realizing environmental objectives (Mnyusiwalla et al., 2016); the compartmentalized nature of disciplines in secondary schools may not be as conducive to collaborative efforts.

Principals and Teachers

There are wonderful examples of innovation and leadership in EE from schools across the province. Teachers have developed a myriad of approaches to communicating EE in and out of the classroom (Russell, Bell, & Fawcett, 2000; Steele, Hives, & Scott, 2016). However, there are substantial challenges to incorporating EE within schools (Spence, Wright, & Castleden, 2013); these are similar to those noted elsewhere, for example in Australia (Pearson, Honeywood, & O'Toole, 2005), the United States (Ham & Sewing, 1988), and England and Wales (Summers, Childs, & Corney, 2005).

Perhaps the key among all the perceived barriers to implementing EE is the overcrowded curriculum, resulting in educators' inability to adequately meet all course requirements. The EE curricula largely lack prescription; as mentioned above, there are opportunities to incorporate EE but it is not required (Mnyusiwalla & Bardecki, 2017). With an already overcrowded curriculum and the time constraints placed upon teachers (Tan & Pedretti, 2010), opportunities to incorporate EE are being omitted in favour of other priorities, such as literacy and numeracy. The result may be, at best, a "shallow integration" of EE into the classroom (Pardy, 2010).

The translation of expectations from principals to their teaching body and efforts to develop greater coherence across and among subject areas and grade levels are not always priorities (Mnyusiwalla et al., 2016). There is also a dearth of EE leadership: between teacher and principal, in the relationship between the board and academic superintendents, as well as between superintendents and principals.

The level of expertise and comfort among the broad swath of teachers confronted with integrating EE into their course curricula is also an issue. The need for more professional development opportunities for educators on environmental aspects of curriculum and more research that focuses on teachers of EE has been acknowledged by education experts (Mnyusiwalla et al., 2016; Pedretti & Nazir, 2014). In the absence of recognition of EE as a teachable subject, few teachers self-identify as "environmental educators" (and even fewer would be

recognized as such). Outside those involved in the Specialist High Skills Major – Environment program (OME, 2016), students, regardless of the degree of their participation in senior environmental electives and their career aspirations, do not identify with environment as a subject area. Even at the minority of secondary schools which do offer the Environmental Science courses (SVN3E and SVN3M), for the individual educator there is generally no community of teachers with whom to collaborate (Mnyusiwalla & Bardecki, 2017).

Time for teachers to develop practical resources is extremely limited. Such a quest is in competition with numerous other demands. However, resources to support EE in classroom and outdoor education are widespread and accessible. Not only does the OME provide curriculum support (OME 2007b), but professionally developed lesson plans and other materials can be readily found in a wide variety of sources, including:

- Ontario EcoSchools (https://www.ontarioecoschools.org/);
- Learning for a Sustainable Future (http://www.lsf-lst.ca/);
- The Ontario Institute for Studies in Education (http://www.oise.utoronto.ca/research/index.html);
- The Environmental Literacy Council (https://enviroliteracy.org/teachers-index/);
- The Royal Canadian Geographical Society (http://www.rcgs.org/programs/education/lesson-plans.asp);
- Green Teacher (https://greenteacher.com/);
- Local conservation authorities, e.g., Ausable-Bayfield CA (http://www.abca.on.ca/page.php?page = lesson-plans);
- The Ontario Society for Environmental Education (http://home.osee.ca/);
- Ducks Unlimited (http://www.ducks.ca/resources/educators/);
- Evergreen (https://www.evergreen.ca/tools-publications/teachers-corner/); and
- WWF-Canada (http://schools.wwf.ca/).

Faculties of Education

Many challenges have been identified in increasing educators' capacity and confidence to teach EE (Beckford, 2008; Puk & Stibbards, 2010). Pre-service education has been identified as an important aspect in developing EE in schools (Inwood & Jagger, 2014; Pedretti & Nazir, 2014). Through their mandate to grant undergraduate (and graduate) degrees, the faculties of education across the province are the principal means by which teachers receive professional education and training. Programs are overseen by the Ministry of Training, Colleges and Universities (MTCU) and are certified under the guidelines and requirements of the Ontario College of Teachers (OCT).

Discussions at a roundtable hosted by the Ontario Institute for Studies in Education (OISE) in 2013 sought to build on the vision of the Provincial Policy Statement (OME, 2009). The OISE meeting specifically pursued a strategy for

responding to the perceived need for changes with respect to EE in pre-service teacher's education programs (Inwood & Jagger, 2014). Key to the discussions was concern over the degree of unpreparedness felt by many teachers to implement EE in their classrooms, and the opportunities provided by (then) new initiatives to restructure pre-service teacher education in the province.

The National Roundtable on Enhancing Environmental and Sustainability Education at Canadian Faculties of Education, hosted at Trent University in June 2016 (Karrow & DiGiuseppe, 2020), and the Canadian Network for Environmental Education and Communication's Standing Committee on Environmental & Sustainability Education in Teacher Education in Canada (http://eseinfacultiesofed.ca/) both speak to the need for a refocusing of EE in pre-service education. The faculties of education have a significant role to play in helping teachers understand the OME's integrated curriculum model and how to respond through their course preparation and teaching. In the absence of a clear mandate to address EE goals and responsibilities, faculties of education have experienced challenges integrating EE into their curricula for pre-service teachers. Thus, it is often interest by individual faculty members which drives incorporation of EE into the pre-service teaching curriculum (Council of Ministers of Education Canada, 2012). Although there are important conversations underway and significant innovations in faculties of education (DiGiuseppe et al., 2016; Falkenberg & Babiuk, 2014; Sims & Falkenberg, 2013), as yet little consistency exists among the various faculties in their approach to EE. Currently, only York, Western, and Lakehead Universities offer Environmental Science as a teachable subject in their pre-service education programs.

Ontario College of Teachers

The Ontario College of Teachers (OCT) is the professional accreditation body for the province's teachers. As noted above, faculties of education must certify their students as per the guidelines and requirements of the OCT. Potentially, OCT's authority over curricular goals could provide an opportunity to advance EE awareness and capacity among pre-service teachers and ensure a more consistent response from the faculties of education.

Currently, the OCT does offer the means by which individual teachers can increase their capacity in EE. This is accomplished through accredited Additional Qualification (AQ) courses in EE for in-service members of the Ontario College of Teachers (in Environmental Science/Environmental Studies, Green Industries, and Specialist and Honour Specialist designations for teachers seeking to focus on leadership and curriculum development).

Outdoor and Experiential Education Support

Of particular concern is support for outdoor and experiential education (OEE) (Foster & Linney, 2007). The Bondar Report states that: "Outdoor education

is … seen as a distinct and critical component of environmental education, concerned with providing experiential learning in the environment to foster a connection to local places, develop a greater understanding of ecosystems, and provide a unique context for learning" (OME, 2007a, p. 6).

This concern is reflected in the provincial *Standards for Environmental Education in the Curriculum* (OME, 2008), in which OEE is a major focus of attention. Despite the notional support found in this document, the number of expectations involving field study which appear in the current provincial secondary curricula is remarkably limited (Mnyusiwalla & Bardecki, 2017).

Some faculties of education offer courses and practicum placements in OEE (e.g., Lakehead University's Outdoor Ecological and Experiential Education and Queen's University's Outdoor & Experiential Education) to introduce teacher candidates to education approaches suitable to a variety of school and community-based settings. In addition, the OCT has introduced Additional Qualification in OEE. In practice, OEE can require professional development time to develop locally-relevant or personalized resources that are region-specific. In addition to the conventional resources available online, numerous formal programs and support resources are available at developed education centres and other locations. Examples include:

- School boards, e.g., Toronto District School Board (http://www.tdsb.on.ca/HighSchool/Yourschoolday/Outdooreducation.aspx); **Ottawa**-Carleton District **School Board (http://www.ocdsb.ca/cms/one.aspx);**
- Sudbury Catholic District School Board (http://outdoored.scdsb.edu.on.ca/)
- Conservation authorities, e.g., Toronto and Region Conservation Authority: (https://trca.ca/learning/teacher-resources/);
- Ontario Science Centre (https://www.ontariosciencecentre.ca/school/curriculum/chart/);
- Conservation centres e.g., *rare* Charitable Research Reserve (http://raresites.org/); and
- Non-governmental organizations, e.g., the River Institute (https://riverinstitute.ca/river-institute/education/education-programs/).

Most such organizations providing out-of-school locations offer unique programming, non-traditional learning for students, and professional development opportunities for teachers. They face obstacles, however, including: overcoming safety and comfort concerns; increasing teacher, student, and parent comfort levels with the outdoors; fostering teacher engagement; encouraging and inspiring students; shifting the focus of outdoor education from encouraging recreation to promoting environmental literacy; addressing the complexities of field trip logistics and paperwork; guaranteeing accessibility (particularly in the case of urban schools); and ensuring adequate sources of funding (Mnyusiwalla et al., 2016).

Moving Forward

The Bondar report and OME policy have given direction and substance to the advancement of EE in Ontario's schools. Since the release of the report, the various institutions involved in education in the province have responded by increasing the opportunities for EE in schools. While it is important to recognize and celebrate the progress which has been achieved, there remains a need for the OME to facilitate the shared vision of EE—as articulated in the Bondar Report and in subsequent provincial policy statements—to all involved and to address issues of capacity and resource requirements to advance EE. Key policy activists outside the formal education system, as well the Ontario Teachers' Federation and the teachers' unions, are positioned to play a significant role in championing EE at the provincial and Board levels.

The Bondar Report called on school boards to develop "a board-wide framework for environmental education reflecting the board's culture and that of its community and partners" (OME, 2007a, p. 12). Yet, a decreasing priority given to EE by school boards, a shift in priorities to get "back to the basics," and budget cuts that have reduced or eliminated outdoor education have been seen as impediments to establishing EE at the school level. Even as boards valorize environmentally sustainable practices in management and operations of properties, concern has been expressed over the lack of board-level accountability for EE in schools. Particularly notable are the constraints resulting in failure to fully embrace the Bondar Report's recommendation to reinforce the importance of EE and to ensure students have the opportunity to pursue EE throughout secondary grades. The continuing development and broadening of collaboration among the diversity of institutions and individuals involved must be improved upon. Board and school improvement plans provide opportunities for EE initiatives to be prioritized

There is an as-yet-underdeveloped case for integrating EE with other streams of concern in schools. EE aligns closely with many aspects of OME priority for education in the province. The curriculum review process provides opportunities for the integration of elements of EE with other priority areas of emphasis in the curricula, such as:

- Global citizenship (Schweisfurth, 2006);
- Social-ecological resilience (Krasny, Lundholm, & Plummer, 2010);
- Social change (Tan, 2012);
- Well-being (Guhn, Gadermann, & Zumbo,, 2010; Hayward et al., 2007);
- Reconnecting with nature (Foster & Linney, 2007);
- Physical activity (Dyment & Bell, 2007; Fjørtoft 2001);
- Indigenous knowledge (Lowan, 2009; Simpson, 2002); and
- Science, technology, engineering and mathematics (STEM) (Steele, 2014).

There is a strong basis for the connections between these areas and EE. Policy activists, education leaders, and faculties of education have opportunities to encourage the Ministry, boards, and schools to further interlace EE into the curriculum structure of schools in the province. Indeed, as Orr (1992, p. 90) declares, "all education is environmental education."

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