COMMENTARY

Sexual health education outcomes within Canada's elementary health education curricula: A summary and analysis

Daniel B. Robinson¹, Vikki MacLaughlin^{1,2}, and Jason Poole^{1,3}

Faculty of Education, St. Francis Xavier University, Antigonish, NS
 Chignecto-Central Regional Centre for Education, Truro, NS
 Thames Valley District School Board, London, ON

There continues to be much concern about Canadian students' access to sexual health education within their schools' health education programs. This concern continues in a largely unique national context—one in which health education curricula vary across all territories and provinces. At the same time, the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2018) has recently published its updated *International Technical Guidance on Sexuality Education*. These UNESCO guidelines provide key concepts, topics, and technical guidance about sexual health-related topics that are advisable for students in all grades, including for those students in Kindergarten/Primary (K/P) through Grade 6. In this article, we provide a summary and critical analysis of sexual health education outcomes within all of Canada's elementary health education curricula. This summary and analysis should be of particular relevance to those who share an interest in health education and/or sexual health education, particularly within Canadian and/or other Western schooling contexts.

KEY WORDS: Curriculum, health education, outcomes, primary/elementary school, public education, sexual health education

Education within Canada falls entirely under regional jurisdiction whereby individual territories/provinces make all curriculum decisions (Levin & Young, 2002). Although the Federal Government, its various departments, and the non-governmental organizations it partly funds may offer recommendations about what should be included in school curricula, ultimately all curriculum-related decisions lie in the hands of territorial/provincial ministries of education (Hickson, Robinson, Berg, & Hall, 2012; Kilborn, Lorusso, & Francis, 2016). It is also noteworthy that due to smaller populations and related logistical difficulties, the northern territories of Yukon, Northwest Territories, and Nunavut have adopted many curricula from neighbouring provinces (Hickson et al., 2012; Kilborn et al., 2016). Further, educational mandates and initiatives introduced by these territories/provinces are systematically introduced and implemented within a large number of publicly funded school jurisdictions across the nation. These publicly funded schools can be further delineated to include English- and French-language secular and Catholic schools, as well as federally-funded First Nations education systems. (As is the case within many other Western nations, Canada has additional school possibilities including, for example, charter and private schools. Publicly funded charter schools must

adopt territorial/provincial curricula, while private schools may or may not.)

Given this landscape, there is a complete absence of a common curriculum within Canada (Lu & McLean, 2011). That is, one cannot identify the curriculum outcomes related to knowledge, skills, and attitudes—that all students within Canada are meant to acquire. As is likely the case within some other subject areas, health education has risked suffering the consequences of such fragmentation. We believe this is especially true when one considers the curriculum differentiation that exists related to sexual health education across the country. In light of these observations, we have found a need to complete and offer a clear and critical account of sexual health education outcomes (SHEOs) within Canada's elementary health education curricula. While we recognize that sexual health education ideally occurs in all grade levels (or at least in the first 10 years of schooling when health education is generally a compulsory course), our focus here is limited to elementary education. Such a focus is not meant to be suggestive of any greater relative importance. Rather, we have chosen a focused scope that addresses the grade levels and curricula with which we are most engaged and interested.

Correspondence concerning this article should be addressed to Daniel B. Robinson, St. Francis Xavier University, Department of Teacher Education, 211 Xavier Hall, Antigonish, NS B2G 2W5, Canada. E-mail: drobinso@stfx.ca

				Gr	ade									
			Γ	Git	aue		T							
		1	2	3	4	5	6							
вс	PHE	HE Integrated Curriculum												
AB	HE	≈ 75 minutes/week (10% of instructional time)												
SK	HE	≈ 80 minutes/we	≈ 80 minutes/week											
MB	PE/HE	≈ 40 minutes/week (25% of 11% of HE and PE instructional time)												
ON	HPE	≈ 30 minutes/week (30% of PHE instructional time [100 minutes/week])												
QC	PEH	≈ 120 minutes/w	≈ 120 minutes/week (for PHE)											
NB-A	HE		≈ 130 minutes/week (10% of instructional time) ≈ 45 minutes/week (2.75–3% of instructional time)											
NB-F	HE	≈ 100 minutes/w	eek (6% of instru	ctional time)										
NS	HE	Integrated Curri	culum											
PE	HE	≈ 60 minutes/we	ek (4% of instruc	tional time)	≈ 70 minutes/we	ek (5% of instruc	tional time)							
NL	HE	Integrated Curri	culum		≈ 90 minutes/we	ek (6% of instruc	tional time)							
YT	HE	Integrated Curri	culum (follows the	e BC curriculum)										
NT	HE	≈ 90 minutes/we	ek (6% of instruc	tional time)										
NU	HE	≈ 90 minutes/we	eek (6% of instruc	tional time)										

Note. Kindergarten/Primary is not included within this table as there are too many variable and/or undefined guidelines related to health education instructional time for this 'grade' level. 'PHE' is used herein for physical and health education; 'HE' for health education; 'PE' for physical education; 'PEHE' for physical education and health education; 'HPE' for health and physical education; 'PEH' for physical education and health. In British Columbia, Nova Scotia, Newfoundland and Labrador (K–3), and Yukon, health education is no longer offered as a stand-alone course; it is now meant to be taught in an integrated curriculum manner. NB-A is for New Brunswick's Anglophone (English) sector. NB-F is for New Brunswick's Francophone (French) sector.

ELEMENTARY HEALTH EDUCATION IN CANADA: A BRIEF OVERVIEW

Elementary health education curricula vary considerably across Canada. These curricula do not only vary in content but also in a number of other aspects, including how health education stands alongside physical education. Within five territories/provinces (British Columbia, Manitoba, Ontario, Québec, Yukon), health education is combined with physical education. Within all other territories/provinces, these are entirely different subjects. Additionally, stand-alone elementary health education curricula have a number of different monikers, including Health and Life Skills (all grades in Alberta; see Alberta Learning, 2002), You and Your World (Grades K-2 in New Brunswick; see New Brunswick Department of Education, 2005), Personal Wellness (Grades 3-5 in New Brunswick; see New Brunswick Department of Education, 2016), and Health Education (all grades in Saskatchewan and Nova Scotia; see Saskatchewan Ministry of Education, 2010 and Nova Scotia Department of Education, 2015).

Instructional time allotments for health education also vary across territories/provinces (see Table 1). For example, Ontario requires 30 minutes/week of health education instruction for all elementary grades while Saskatchewan requires 80 minutes/week of health education for all elementary grades. Consider, too, the lack of clarity

that exists for teachers within territories/provinces with integrated instruction models. With these relatively new models, teachers are now required to teach what used to be stand-alone subjects (e.g., Health, Science, Social Studies, etc.) within expanded upon Language Arts and Mathematics instructional time. Within Nova Scotia, for example, teachers are expected to teach Integrated Learning for 200–240 minutes/week. This time is meant for explicit subject instruction in *Health, Information Communication Technology, Science, Social Studies, [and] Visual Arts* (Nova Scotia Department of Education, 2016, para. 3). The same situation exists within British Columbia, Newfoundland and Labrador, and Yukon. Clearly, in these territories/provinces, there are an almost infinite number of ways to allocate instructional time.

Many of these territorial/provincial health education curricula were drafted in different years without any specific stated requirements or suggested dates for renewal. Years of publication range from 1994 (Newfoundland and Labrador) to the most recently-released curricula in British Columbia and Nova Scotia, which were both circulated in 2016. While being newer, alone, does not necessarily make a curriculum document a superior one, we would suggest that a 20- to 25-year-old health education curriculum ought to be renewed. That is, it is difficult for some territories/provinces, particularly Northwest Territories/Nunavut (1996) and Newfoundland and Labrador (1994), to claim

that their health education curricula are up-to-date. It is also worth noting that although Québec's health education curriculum is almost a decade old (i.e., from 2009), the province piloted a new sexuality education program in 2017–2018.

SEXUAL HEALTH EDUCATION: RELEVANT AND RELATED LITERATURE

There is no shortage of literature related to sexual health education in the West, particularly as it might inform a consideration of sexual health education-related outcomes. Accordingly, following is an overview of some of this literature as it relates to the following four broad topics: (1) a defence of comprehensive sexual education (CSE); (2) the politics of sexual health education; (3) teacher training, preparedness, and resources; and (4) sexual health education in Canada for those on the margins.

A Defence of CSE

Sexual health education remains a highly debated topic, not only within Canada's education sector but also within the broader political landscape (Ninomiya, 2010; Rayside, 2014). Within this milieu, Lu and McLean (2011) have argued that there has been a lack of academic analysis focused upon specific health education curricula, within which sexual health education generally resides. Though extensive curriculum examinations have been scarce, the affirming commentary on what UNESCO (2015, 2018) has termed CSE is becoming far more familiar to some. CSE, most simply defined, is "education that includes abstinence as the best prevention strategy, but also provides medically accurate information about contraceptives and condoms-in promoting abstinence along with protective behaviors" (Eisenberg, Bernat, Bearinger, & Resnik, 2008, p. 352). Grounded upon sound research literature, UNESCO's position on CSE has suggested the inclusion of culturally relevant and progressive sexual health education can empower young citizens to lead healthier and more tolerant lives (Ninomiya, 2010; Schalet et al., 2014; UNESCO, 2015, 2018). Weaver, Smith, and Kippax (2005) have elucidated some of the common misconceptions about progressive CSE programs versus abstinence-based approaches. Their findings have also been echoed by Schalet et al. (2014), who have shared two key and common findings: the implementation of CSE does not increase sexual activity among youth, and the delivery of abstinence-based sexual education is associated with a higher number of teen pregnancies as well as increased cases of sexually transmitted infections (STIs).

The Politics of Sexual Health Education

The politicization of sexual health education within curricula has been prevalent for decades and sexual health education continues to be contested at multiple levels of governance today (Helmer, Senior, Davison, & Vodic, 2015; Schalet et al., 2014; Weaver et al., 2005). From a Canadian perspective, Rayside (2014) has provided a comprehensive commentary, stating how education ministries are not immune to political involvement when it comes to this subject. The implementation of CSE has become a part of many political agendas and platforms within territorial/provincial governments (Rayside, 2014). This is especially evident in Ontario, for example, where then-Progressive Conservative leader Doug Ford recently made it clear that he would repeal the province's contested CSE curriculum if elected (Lucs, 2018). Upon being elected Premier, he swiftly made good on this promise—though to immediate rebuke from Ontario and Canadian health education leaders and scholars. For example, both the Elementary Teachers' Federation of Ontario and the Canadian Civil Liberties Association mounted legal challenges to Doug Ford's repealing of the CSE curriculum. These legal challenges occurred while the Ford government was inviting parents/guardians to report teachers who introduced repealed curriculum content via, what critics had dubbed, a "snitch line" (Jones, 2019). (In both of these cases, the rulings were ultimately in favour of the government.)

Territorial/provincial and federal governments aiming to create a more tolerant and inclusive society have necessarily introduced various educational reforms. However, the pace and success of these reforms seemingly continue to be limited by a minority group of vocally opposed, and often socially conservative, dissenters (Rayside, 2014; Warner, 2010). These minority dissenters have found success in their protest efforts despite being outnumbered in all instances. Indeed, multiple research studies in Canada have shown that parents/guardians overwhelmingly are in support of CSE in schools. For example, McKay, Pietrusiak, and Holowaty (1998) have found that 95% of parents/guardians strongly agree or agree that CSE should be taught in schools and Weaver, Byers, Sears, Cohen, and Randall (2002) have found 94% of parents/guardians strongly agree or agree that CSE should be taught in schools.

Teacher Training, Preparedness, and Resources

The increased amount of study placed upon sexual health education's inclusion within curricula has invoked further concerns not yet attended to with sufficient scholarly examination (Garcia, 2015; Rayside, 2014). Perhaps the most prevalent issue is the lack of formal training teachers have in delivering these programs to children and youth in Canada (Balter, Van Rhijn, & Davies, 2016; Helmer et al., 2015; Klein & Breck, 2010; Meaney, Rye, Wood, & Solovieva, 2009). While effective and continuous professional development on this subject is inconsistent, there is an expressed need by teachers, parents/guardians, and health-care professionals for varying degrees

of CSE within schools (Balter et al., 2016; Klein & Breck, 2010; Meltem, Utas, Tanir, & Yildiz, 2015; Ninomiya, 2010). Research by Balter et al. (2016) and Garcia (2015) has suggested that with a lack of professional development on this subject, teachers will only convey sexual health-related topics they are most comfortable addressing. Klein and Breck (2010) have extended a commentary on this discomfort, discussing how pre-service teachers often engage in an apprenticeship of observation, taking on qualities of their supervising teachers. The influence of pre-service teachers' teacher mentors and university advisors can negatively affect the delivery of CSE curriculum as neophyte teachers may want to be seen as agreeable with the status quo (Klein & Breck, 2010).

Sexual Health Education in Canada for Those on the Margins

Many territorial/provincial education ministries have recently increased their communication with schools and non-governmental organizations to better prepare teachers for the sexual diversity of student populations (Rayside, 2014). This largely-reactive measure is a point of positivity but one that still illustrates the fact that school systems may require further reform towards inclusivity. While there has been increased commentary on the interplay between intersectional marginalized groups (e.g., racialized, cultural, ethnic, and socio-economic minorities) and sexual health education, more study is needed on the delivery of this subject to sexually diverse populations in schools (Weaver et al., 2005). Rayside (2014) and Schalet et al. (2014) have suggested that educating youth on sexual diversity continues to be broached through a simplifying theme—the reduction of sexual violence, bullying, and discrimination against sexually diverse populations. While these are certainly essential educational outcomes to discuss, CSE implementation and delivery may not be doing justice to those populations. There is a growing body of literature (e.g., see Helmer et al., 2015; Rayside, 2014) that notes how even with the implementation of an increasingly progressive sexual health education curriculum, Canadian schools continue to perpetuate heteronormative gender and sexual norms. Such perpetuation occurs through the reproduction of gender norms in school sport, the presumption of heterosexism when discussing relationships, and the normalization of certain sexual acts within sexual health education. This suggests that program and policy messaging at the national and territorial/provincial level are not being effectively actualized within territories'/provinces' school communities. Canadian schooling, including health education, is not immune to the homonegativity, homophobia, and heterosexism that continue to permeate many Canadian institutions (Maticka-Tyndale, 2008).

SEXUAL HEALTH EDUCATION: WHAT SHOULD BE IN THE CURRICULUM?

While many Canadian (as well as other international) organizations might provide useful information or

suggestions related to sexual health education content within elementary schools, three of the more commonly recognized sources of such information for those within Canada include the following: the Public Health Agency of Canada's (PHAC) Canadian Guidelines for Sexual Health Education (PHAC, 2008), the Sex Information Education Council of Canada's (SIECCAN, 2015) Sexual Health Education in the Schools: Questions and Answers, and UNESCO's (2018) International Technical Guidance on Sexuality Education.

UNESCO's (2018) International Technical Guidance on Sexuality Education is a thoroughly researched framework to which all sexual health education-based programs can be assessed. In a similar fashion to both documents published by PHAC (2008) and SIECCAN (2015), this document includes both specific content recommendations and theoretical framework proposals so that teachers might be enabled to provide quality, age-relevant sexual health education. Regarding these frameworks, school and community-based sexual health education programs are provided with key considerations based on whether said programs ought to stand alone or be integrated within already-established curricula. Curriculum recommendations come in the form of eight general key concepts, which include contemporary "progressive" topics (e.g., sexual violence, bodily integrity, and gender identification) as well as more familiar and normalized ones (e.g., human anatomy and STI prevention). These more general concepts provided in the publication are then further categorized into sub-topics and then into more specific outcomes to support the development and maintenance of a globally recognized sexual health education program. In recognizing the importance of CSE but also the subsequent political tension that sometimes accompanies it, the concluding sections of this document provide implementation strategies for multiple international regions. This implementation for the CSE process is layered with numerous strategies for teachers, school champions, school-wide councils, and community-wide committees.

While all three of the frameworks mentioned here are informative and useful to health teachers, the UNESCO (2018) offering is regarded, by us, as the most relevant and progressive resource for those interested in the development of a CSE program. Moreover, no other similar publications (by this organization or any other) are as extensive and up-to-date. (We note that a new edition of the Canadian Guidelines for Sexual Health was very recently released in June of 2019.) In addition to being comprehensive in content, it is also comprehensive in its intended audience; sexual health outcomes are offered for students in all grade levels, Kindergarten/Primary (K/P)-12. UNESCO's technical guidance is structured to provide both general and specific SHEOs within the scope of multiple age categories. The comprehensive nature of this document is matched by the breadth of its international scope. As a nongovernmental agency whose sole purpose is to provide the most globally acceptable and effective information, UNESCO's publication was chosen as the primary source for this Canadian curriculum analysis (see Table 2).

Table 2. UNESCO's Overview of Key Concepts and Topics

Key concept 1: Relationships	Key concept 2: Values, Righ	ts, Culture and Sexuality	Key concept 3: Understanding Gender						
Topics: Families Friendship, Love and Romantic Relationships	<u> </u>	•							
Tolerance, Inclusion, and Respect Long-term Commitments and Parenting			and Bias Gender-based Violence						
Key concept 4: Violence and Staying Safe	Key concept 5: Skills for Hea	alth and Well-being	Key concept 6: The Human Body and Development						
Topics: Violence Consent, Violence and Bodily Integrity Safe use of Information and Communication Technologies (ICTs)	Topics: Norms and Peer Influence Decision Making Communication, Refusal a Media Literacy and Sexua Finding Help and Support	and Negotiation Skills	Topics: Sexual and Reproductive Anatomy and Physiology Reproduction Puberty Body Image						
Key concept 7: Sexuality and Se	exual Behaviour Key	Key concept 8: Sexual and Reproductive Health							
Topics: Sex, Sexuality, and Sexual Lif Sexual Behaviour and Sexual	e Cycle Pro Response HI'	Topics: Pregnancy and Pregnancy Prevention HIV and AIDS Stigma, Care, Treatment and Support Understanding, Recognizing and Reducing the Risk of STIs, ir ing HIV							

Note. Excerpted from International technical guidance on sexuality education, © UNESCO, 2018, http://www.unaids.org/sites/default/files/media_asset/ITGSE_en.pdf (p. 36).

CURRICULUM ANALYSIS PROCEDURES

Once this UNESCO (2018) framework was chosen, the process of collecting and categorizing elementary health education curriculum learning outcomes began. The intent with this analysis was to identify to what extent territories'/ provinces' health education curricula addressed/aligned with UNESCO's suggested SHEOs. The primary step within this analysis procedure required an initial identification of all sexual health-related outcomes from every elementary health education curriculum document in Canada. To perform this task, all elementary health education specific curriculum outcomes (SCOs; and/or indicators as appropriate) were recorded on a shared Microsoft Excel document. They were then thoroughly examined by two independent researchers. As this process progressed, one-by-one, a number of SCOs/ indicators were then categorized as draft SHEOs (i.e., they initially appeared to be related to sexual health); these were organized into a second shared Microsoft Excel document. Once complete, a more extensive process of reviewing these draft SHEOs was done by the two researchers. In an effort to establish trustworthiness (Guba & Lincoln, 1989; Lincoln &

Guba, 1985), these two researchers then worked alongside a third researcher and the three then compared and combined the categorized outcomes. They also discussed any disagreements related to their initial and subsequent categorizations and finalized, through consensus, this list of SHEOs.

In a similar fashion to the categorization of all elementary health education curriculum learning outcomes as SHEOs, each SHEO was then reviewed and compared to all of UNES-CO's (2018) eight key concepts. If an outcome held similar or exact learning expectations as one of UNESCO's key concepts, it was flagged for further examination. Once flagged, the learning outcome was further analyzed to identify the exact topic(s) it addressed. These relationships were recorded on the second Microsoft Excel document and later compiled to provide totals for each territory/province. With the analysis of nearly 700 SHEOs, and a subsequent in-depth comparison with UNESCO's eight key concepts and 27 topics, it was then possible to present and consider the findings. This process mirrored the above-mentioned process whereby two individual researchers independently categorized outcomes before coming together with a third researcher to finalize categorized outcomes through consensus.

RESULTS

There is not a common curriculum structure, with respect to outcomes, in use by Canada's territories/provinces. For example, some territories/provinces have general curriculum outcomes (GCOs) and subset SCOs (e.g., British Columbia and Ontario) whereas others have GCOs, SCOs, and subset indicators (e.g., Saskatchewan and Nova Scotia). Figure 1 illustrates these two possible structures of outcomes/indicators.

We found substantial differences across territories'/ provinces' curriculum documents, particularly with respect to the extraordinarily high variation in the number of SCOs/indicators within each (see Table 3). Nova Scotia, for example, has the fewest SCOs for Grades P-6 with only 98 whereas Saskatchewan, with the same format (i.e., exclusively health education with SCOs, including indicators), has 517. In all, there are 3,970 elementary health education SCOs/indicators in Canada. Though there are 3,970 SCOs/indicators, it is also important to note that the SCOs/indicators for British Columbia and Yukon are shared, as they also are for Northwest Territories and Nunavut (i.e., there are "only" 3,202 SCOs/indicators when duplicate territories/provinces are taken into consideration).

Of the 3,202 SCOs/indicators, 689 are specific to sexual health education. While almost one quarter of Canada's health education outcomes may be related to sexual health, there are some regional outliers at both ends. That is, sexual health education is given considerably more or less of a relative focus within some territories/provinces. For example, within Saskatchewan and Nova Scotia, 36% and 46% (respectively) of the health education SCOs focus upon sexual health education-related content. This is well above the national average for outcomes related to sexual health. Conversely, provinces such as Manitoba and Québec are on the lower end of the scale. Sexual health education outcomes in Manitoba make up only 11% of their entire elementary health education curriculum. We note, however, that this 11%

amounts to 57 SHEOs in Manitoba. Though 57 may seem like many, Manitoba has 518 SCOs, or 461 other SCOs that must be addressed within health education. Québec had left SHEOs out of their curriculum entirely—until the *Learning Content in Sexual Education* document was piloted. This new document became mandatory for the province in September 2018; however, it still only makes up 12% of the province's health education outcomes (Gouvernement du Québec, 2018).

Streams/themes throughout the health education documents differ greatly with only two territories/provinces having some that are specific to sexual health (e.g., Human Development and Sexual Health in Ontario; Human Sexuality and Physical Growth and Development in Newfoundland and Labrador [Grades 4–6 only]). It is also the case that some territories/provinces (e.g., British Columbia and Alberta) use the same streams/themes throughout their K/P-6 curricula whereas other provinces (e.g., New Brunswick and Prince Edward Island) do not—and, instead, have varying streams/ themes for different grade levels. There also appears to be, generally, five common streams/themes across Canada. These include: wellness, relationships, growth and development, lifestyles, and mental health. Although not all of these themes are seen in all territories'/provinces' curricula, they are found within many of them.

With respect to the sexual health-related outcomes found across Canada, particularly as they relate to the UNESCO (2018) key concepts and topics, there again seems to be tremendous variability across the territories/provinces. Table 4 provides a summary of the exact number of SCOs/indicators within each territory/province that align with those outlined in UNESCO's (2018) International Technical Guidance on Sexuality Education.

So as to offer a more complete summary of the adequacy of Canada's elementary health education curricula (i.e., as they align with UNESCO's eight key concepts), the following is a key concept-by-key concept account of them.

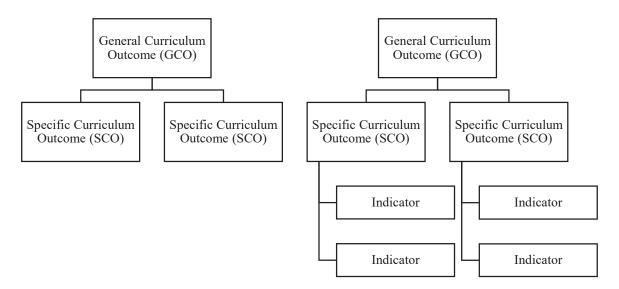


Figure 1. Territories'/Provinces' Two Different Models of Outcomes/Indicators (GCOs with SCOs, GCOs with SCOs and Indicators)

Table 3. Territorial/Provincial (T/P) Health Education GCOs, SCOs, Indicators (INDs), SHEOs, and Streams/Themes (K/P-6)

T/P	Year	GCOs (284)	SCOs (2,695)	INDs (507)	SHEOs (689)	Streams/Themes
BC YT	2016	33	203	0	48	Physical Literacy; Healthy and Active Living; Social and Community Health; Mental Well-being
AB	2002	3	188	0	42	Wellness Choices; Relationship Choices; Life Learning Choices
SK	2010 (K-5), 2009 (6)	3	55	462	185	None
МВ	2002 (5–6), 2001 (K–4)	5	518	0	57	Movement; Fitness Management; Safety; Personal and Social Management; Healthy Lifestyle Practices
ON	2015	7	174	0	47	Health Eating; Personal Safety; Substance Abuse, Addictions and Related Behaviour; Human Development and Sexual Health
QC	2009	3	214 (36 in pilot)	0	0 (29 in pilot)	Lifestyle Habits; Effects of Sedentary Lifestyle; Anatomy and Physiology of Human Body
ΝB	2016 (3–5), 2005 (K–2,	4	110	0	26	K: Students as Individuals; Healthy Lifestyles; Our Senses; Place and Community
	6)					1: Groups; Our Environment; Healthy Lifestyles; Community
						2: Growth and Development; Technology and Community; Work; Healthy Lifestyles; Change and the Physical Environment
						3–5: Wellness; Mental Fitness; Relationships; Careel Development
						6: Caring for Yourself, Your Family and Your Community; Personal Wellness; Use, Misuse and Abuse of Materials (emphasizing Media Literacy); Physical Growth and Development
NS	2016 (P-3),	3	53	P-3: 45	45	P–3: None
	2015 (4–6)			4–6: 0		4–6: Healthy Self; Healthy Relationships; Healthy Community
PE	2013 (K), 2009 (4–6),	5	176	0	41	K: Physical Development; Health and Well-being; Personal Development
	2006 (1–3)					1–6: Wellness Choices; Personal Health; Safety and Responsibility; Relationship Choices; Understanding and Expressing Feelings; Interactions; Group Roles and Processes; Life Learning Choices; Learning Strategies; Life Goals and Career Development; Volunteerism
NL	2015 (3), 2011 (2), 2010 (K-1),	3	403	0	66	K–3: Body Development and Awareness; Healthy Mind and Feelings; Family, Friends and Community; The Environment
	1994 (4–6)					4–6: Active Living; Consumer Health; Dental Health; Drug Education; Environmental Education; Human Sexuality; Injury Prevention and Safety; Mental Health; Nutrition; Physical Growth and Development; Relationships; Self Care
NT NU	2017 (K), 1996 (1–6)	215	565	0	103	Mental and Emotional Wellbeing; Growth and Development; Family Life; Nutrition; Dental; Safety and First Aid; Alcohol and Other Drugs

Note. GCOs = general curriculum outcomes; SCOs = specific curriculum outcomes; SHEOs = sexual health education outcomes.

Table 4. Sexual Health Education Key Concepts (KCs) and Topics included in Territories'/Provinces' Curricula (by number of SCOs/Indicators)

		KC	1		ı	KC 2	2	I	KC 3	3	ŀ	C 4	ļ	KC 5				KC	6		KC	7	KC 8					
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	7.1	7.2	8.1	8.2	8.3	
BC YT	4	9	4	1	1	0	3	3	4	2	4	6	1	1	8	3	2	13	3	0	6	2	0	0	0	0	1	81
AB	8	10	7	0	0	0	2	0	2	2	0	0	3	2	2	5	2	3	6	3	3	4	4	1	0	1	1	71
SK	18	36	25	1	6	1	12	8	13	12	17	2	12	15	15	8	19	13	10	3	20	7	6	4	0	11	24	318
MB	6	11	9	1	1	0	3	6	2	4	4	6	6	3	9	4	3	10	8	2	4	0	1	1	1	1	4	110
ON	2	14	8	0	1	1	2	3	2	0	7	1	6	3	7	9	2	3	3	3	4	1	2	3	1	1	1	90
QC	1	9	5	0	0	0	0	1	4	0	0	0	1	0	0	0	1	0	4	4	4	1	7	0	4	0	0	46
NB	5	5	4	0	0	0	0	0	0	1	2	0	1	1	0	2	2	1	1	1	7	1	1	0	1	0	0	36
NS	4	11	4	0	0	0	0	3	1	0	0	0	6	1	6	3	4	4	2	1	4	4	2	0	1	1	4	66
PE	8	9	4	0	0	0	1	0	0	1	1	0	0	3	2	6	1	3	2	1	2	5	3	0	1	0	0	53
NL	8	14	11	1	0	1	0	0	0	0	2	1	0	4	2	5	4	5	6	5	5	1	0	7	4	3	4	93
NT NU	12	13	5	1	0	2	0	0	0	0	2	0	0	8	4	8	6	11	23	20	7	0	4	4	14	2	7	153
CA	76	141	86	5	9	5	23	24	28	22	39	16	36	41	55	53	46	66	68	43	66	26	30	20	27	20	46	1117

Note. Numerical values quantify the number of times a topic is addressed by K/P–6 SCOs/indicators. One SCO/indicator may address more than one KC or topic and one KC or topic may be addressed by more than one SCO/indicator.

Key Concept 1: Relationships

All territorial/provincial elementary health education curricula consistently address this key concept and three of its four topics. More specifically, though topics 1.1, 1.2, and 1.3 are addressed within all territories/provinces, topic 1.4 (Long-term Commitments and Parenting) is largely unaddressed. Indeed, only five curricula include outcomes related to this topic (and all five of those include a *single* outcome in the Grades K/P-6). A closer examination of this specific topic reveals that it is meant to focus on the idea of marriage, separation, and divorce in relation to a society's idea of differing family structures. UNESCO's (2018) technical guidance also includes the concept of child, as well as early and forced marriages. Given the contemporary Canadian landscape (i.e., its longstanding history of welcoming immigrants and refugees, as well as its leadership with respect to marriage equality), the absence of attention to this topic by many territories/provinces is a curious one.

Key Concept 2: Values, Rights, Culture and Sexuality

Territories/provinces' elementary health education curricula are generally consistent in their absence of outcomes related to key concept 2. Indeed, this key concept is inadequately represented across all territorial/provincial curricula. For example, less than half of the 13 jurisdictions across Canada include outcomes related to topic 2.3 (Culture, Society and Sexuality). Upon closer analysis, three curricula are completely void of any outcomes that are related to this topic while four other curricula include three or fewer related outcomes. Topics 2.1 (Values and Sexuality) and 2.2 (Human Rights and Sexuality) are largely absent

from all elementary health education programs across Canada. The technical guidance progresses beyond the relationship-based topics of key concept 1 here to focus on the values and human rights of those within differing relationships. This progression is not shared by many of the territorial/provincial curricula and few efforts are seemingly being made to address cultural influences on how sexuality is understood within the country.

Key Concept 3: Understanding Gender

Territorial/provincial elementary health education curricula are relatively divided on this key concept. Three of the curriculum documents have no outcomes related to topics 3.1, 3.2, and 3.3 while nearly half of the curriculum documents include five or more similar outcomes. Potential consequences of this absence might be recognized when one considers that topics 3.2 (Gender Equality, Stereotypes and Bias) and 3.3 (Gender-Based Violence) include ideas related to the unfair treatment of individuals based on their gender. UNESCO (2018) views the unfair treatment based on gender as a violation of basic human rights. The fact that this topic is in the UNESCO technical guidelines demonstrates that the document's progressive and current nature is inconsistent with many curricula in Canada. While territorial/provincial educational jurisdictions within Canada hold consistent mandates against bullying, there is a clear gap in how gender-based bullying/discrimination is approached.

Key Concept 4: Violence and Staying Safe

There is a clear divide in how territorial/provincial elementary health education curricula approach this specific key concept and its three associated topics. Every educational jurisdiction in Canada includes at least one of these topics in its curriculum, but there is a differentiation in how this key concept is addressed. Topic 4.3 (Safe Uses of Information Communication Technologies) is addressed the most, with nine territories/provinces including it in their documents. It is important to note that UNESCO's (2018) interpretation of this topic does not overtly include CSE-based ideas until the middle school grades. It might also be argued that safe use of information communication technology may be addressed in other subject areas within elementary territorial/provincial curricula, explaining its absence from health education. Topic 4.1 (Violence) is also addressed by 10 of the 13 jurisdictions but many of these curricula's outcomes were included here due to their focus on more conventional topics (e.g., bullying) rather than upon more explicitly CSE-related topics (e.g., sexual assault). Less than half of all territorial/provincial curricula include outcomes related to topic 4.2 (Consent, Privacy and Bodily Integrity), following a nation-wide pattern where body rights are seemingly not addressed.

Key Concept 5: Skills for Health and Well-being

The traditional topics included with this key concept are consistently built into the curricula of nearly all territorial/ provincial education systems across Canada. Indeed, in all territories/provinces other than Québec, almost all key concept topics are addressed at least once (the lone exclusion is topic 5.2 [Decision Making], which is not addressed in New Brunswick). Aside from the outlier Québec, all Canadian curricula seem to address topics 5.1-5.5 equally. We note, too, that Saskatchewan has the greatest number of SCOs/indicators related to this key concept (70). The ideas presented within such topics, which are more conventional in nature, include Decision-Making, Communication, Negotiation/Refusal Skills, Media Literacy, and Seeking Help and Support. It is important to note that topic 5.1 (Peer Influence on Sexual Behaviour) is addressed in relation to peer pressure during the elementary years and is not fully associated with explicit sexual behaviour. This theme is similar across most of key concept 3's topics, which are supported by nearly all Canadian curricula.

Key Concept 6: The Human Body and Development

Again, the conventional CSE topics of this key concept are addressed consistently within all curricula. The ideas presented within topics 6.1–6.3 include Sexual and Reproductive Anatomy and Physiology, Reproduction, and Puberty. It is curious, however, that topic 6.4 (Body Image) is not incorporated into the curricula of three of Canada's 13 territories/provinces. This is an increasingly important concept within the modern digital age. It is noteworthy that these same territories/provinces do address topic 5.4 (Media Literacy and Sexuality). Certainly, it is possible that outcomes related to topic 5.4 might also attend to body image-related content. A closer examination of the results reveals that five curriculum documents address topic

6.2 (Reproduction) fewer than two times in their curricula. This may suggest that there is still some hesitation amongst educational jurisdictions with respect to how reproduction is discussed with elementary-aged students.

Key Concept 7: Sexuality and Sexual Behaviour

There is some consistency within territories'/provinces' elementary health curricula in how this specific key concept and its two associated topics are approached. In a similar fashion to key concept 4 (Violence and Staying Safe), every educational jurisdiction in Canada includes at least one of the two topics in their curricula. How these topics are addressed, and the breadth to which they are addressed, is much different. Topic 7.1 (Sex, Sexuality and the Sexual Life Cycle) is addressed by 10 curricula. It is important to understand that a clear majority of these outcomes were included because they addressed ideas related to feelings. Few, if any, covered UNESCO's (2018) more complex topics of explicit sexuality and sexual attraction. Similarly, topic 7.2 (Sexual Behaviour and Sexual Response) was addressed within seven curricula but often through the inclusion of ideas associated with touching, but not sexual stimulation and masturbation.

Key Concept 8: Sexual and Reproductive Health

UNESCO's (2018) final key concept includes more recognizable topics often addressed in conventional CSE programs. The presence of these topics within Canadian elementary curricula is relatively consistent. All territorial/provincial curricula address at least one of this key concept's three main topics. All but four documents include learning outcomes related to topic 4.1 (Pregnancy and Pregnancy Prevention). The similarity between topics 4.2 (HIV and Aids Stigma, Care, Treatment and Support) and 4.3 (Understanding, Recognizing and Reducing the risk of STIs, including HIV) is matched by their consistent presence within Canadian elementary health education curricula. With the exception of two territories/provinces, outcomes related to this topic are included in all locations across Canada. To be clear, some jurisdictions address these topics far more than do others. For example, learning outcomes related to these topics were identified 35 times in one of the curriculum documents, compared to the lone one found in another territory/ province.

DISCUSSION

The formal categorization of all SHEOs from across Canada has led to the discovery of some observations worthy of further and focused discussion. With all territorial/provincial jurisdictions controlling and organizing their own education systems, differing levels of (in)adequacy regarding UNESCO's (2018) key concepts can be seen. It is clear that some jurisdictions ascribe different attention to different topics in their sexual health education programs.

Following is a more focused discussion of what we recognize as three of the more important issues to address. These include the following: (1) territories'/provinces' differing degrees of (in)adequacy; (2) clear attention to common/familiar "staple" topics; and (3) (near) absence of attention to important topics.

Territories'/Provinces' Differing Degrees of (In)adequacy

It would be a straightforward and logical assumption to believe any nation with a regionally-governed education system would contain inconsistencies regarding the subject-specific content within its varying curricula. Indeed, results from some other Canadian curriculum analysis studies, in other disciplines, have also found this to be the case (see Kilborn et al., 2016; Mundy & Manion, 2008). Upon completion of our analysis, similar conclusions can be made with respect to the nation's elementary health education curricula and, more specifically, SHEOs within them.

Evidence of (in)adequacy varied from territory/province to territory/province. It is important to remember that there are 27 topic recommendations provided by UNESCO (2018). Our analysis indicated that while nearly all curriculum documents held varying degrees of SHEO inadequacies, they also all clearly addressed some UNESCO key concepts. That is, they all did something well. The intent of our analysis was never to place territories/provinces upon a hierarchy of CSE progressiveness (though, herein, we recognize that we do nonetheless offer something approaching a ranked continuum). Rather, our intention was to uncover the overall strengths and shortcomings of Canada's elementary sexual health education programs.

The results garnered through this research allowed us to analyze which specific territorial/provincial curriculum areas satisfy UNESCO's (2018) recommendations but it also enabled a deeper understanding of the degree to which those outcomes were present between K/P and Grade 6 health education programs. Ontario, at the time in genuine limbo regarding which elementary physical and health education curriculum was to be implemented the following year, satisfied nearly all key concept recommendations. We still also note that 18 of those identified outcomes were present three times or fewer between the seven grade levels. This is similar within the Alberta, New Brunswick, and Prince Edward Island health education curricula where, again, many recommendations were achieved with some being done so three times or fewer. While these provinces might be commended for the variety of sexual health education outcomes in their respective curricula, it is perhaps still worrisome to think that some of the outcomes are covered only briefly throughout a student's elementary health education.

In contrast, the Northwest Territories and Nunavut, while having almost no outcomes related to UNESCO (2018) key concepts 2, 3, and 4, still have over 100 SHEOs across all others. Saskatchewan follows suit in the amount of SHEOs, holding within their K–6 curriculum the highest amount at 185. Lest one might be tempted to celebrate this large number

of outcomes, it is important to step back and reflect upon the expectations placed upon elementary teachers in Canada. That is, having so many (sexual) health education outcomes could be regarded as a burden rather than as an opportunity for a progressive sexual health education program. With as little as 19.5 hours of health education instructional time in one year, teaching hundreds of outcomes (including almost 200 SHEOs) presents a daunting or impossible task.

Québec is a concerning case. Its pilot curriculum, while providing a fair number of outcomes for key concept 6 (The Human Body and Development), otherwise only addressed 13 of the 27 UNESCO (2018) recommended topics—the least of any territory/province. Furthermore, five of the 13 topics that are addressed are only done so one time. British Columbia and Yukon share the same elementary health curriculum, which seems to be a relatively balanced document (see Table 4). Still, apart from one identified outcome, this is also the only document without SHEOs that address UNESCO key concepts 7 and 8. It is fair to say that while the scripts regarding curriculum effectiveness may differ across Canada, the stories remain largely the same. Though all students across Canada ought to have access to a health education program containing progressive and internationally recommended sexual health education topics, too many curricula seemingly fail to deliver.

Articulating the overall effectiveness of curriculum documents as they relate to UNESCO's (2018) age-specific recommendations is a challenging affair. It is important to recognize multiple factors when establishing any sort of ranking. Such factors might include the number of key concepts included/excluded from the document, the overall number of recommendations satisfied, and/or the number of times these key concepts are satisfied throughout the elementary grades. When considering these three factors, some curriculum documents are better and more comprehensive than are others.

From our analysis, it is our opinion that Ontario and Manitoba have the most balanced documents in the country. That is, their curricula address the greatest number of UNESCO (2018) topics within its eight key concept areas. Their curricula align, best, with UNESCO's recommendations. This is followed closely by Saskatchewan, which adequately addresses all but one UNESCO key concept (yet includes nearly 200 outcomes overall). Still, and again, we believe this scope is too extensive. New Brunswick currently offers one of the least comprehensive sexual health education curricula in the country, with over 11 topic recommendations being absent. Still, this is not the worst. With over 14 missing topic recommendations, the elementary health education curriculum of Québec is the least comprehensive in the country. Of the 13 topics this province does satisfy, five are only addressed one time in the elementary grades.

Clear Attention to Common/Familiar Staple Topics

A sexual health education program will always include what we have viewed herein as familiar or traditional topics. Given the results of our SHEO analysis, both UNESCO (2018) and Canada's territorial/provincial educational jurisdictions hold a common belief that a place exists for such conventional material. The primary focus of our curriculum analysis is aimed solely towards the elementary grades and, therefore, familiar and introductory topics of interest include the diversity of relationships (key concept 1) and the obtainment of health and well-being (key concept 5). The examination of related literature on the topic of CSE verifies how importance is still being placed on topics surrounding human growth and development. Still, sexual maturation is occurring sooner in Canadian youth and the education systems relaying associated education on these topics need to keep pace (Helmer et al., 2015). Learning outcomes related to puberty, sexual anatomy, and body image are also regarded as traditional in nature and these topics fit well within UNESCO's key concept 6.

Apart from topic 1.4 (Long Term Relationships), the curriculum landscape of Canada's elementary educational jurisdictions is largely consistent from coast to coast to coast with respect to the teaching of relationships. This key concept, and its associated topics, were identified no fewer than 15 times per territory/province across all curricula from K/P to Grade 6. Of the relevant outcomes that address this more traditional key concept, topic 1.2 (Friendship, Love and Romantic Relationships) is addressed more frequently than is any other. This confirmation of valuing healthy relationships is closely matched to how Canadian elementary health education curricula also address the health of a student's body and mind. UNESCO's (2018) key concept 5 (Skills for Health and Well-Being) includes a group of CSE-related topics which are also regarded as traditional. Apart from Québec, all curriculum documents across Canada address topics 5.3 (Communication, Refusal and Negotiation Skills) and 5.5 (Finding Help and Support) with at least one curriculum outcome. Topic 5.2 (Decision-Making) is also highly valued and covered at least twice in all territories/ provinces, apart from New Brunswick and Québec. It is assuring to see that nearly all elementary students in Canada are being provided with this foundation upon which more progressive topics may be delivered.

Accompanying these foundational topics of study are the equally expected concepts regarding human growth and sexual development within a progressive CSE program. UNESCO's (2018) topics 6.1 (Sexual and Reproductive Anatomy and Physiology) and 6.3 (Puberty) are well represented across Canadian curricula. Topic 6.2 (Reproduction) meets a similar standard, being present in every elementary health education curriculum apart from British Columbia and Yukon. These results may indicate how a national belief nearly exists regarding the conveyance of pregnancy-related topics within a CSE program. A closer examination of exact learning outcomes and approved educational resources would explain whether such knowledge is to be delivered by way of abstinence-only or abstinence-plus programs.

(Near) Absence of Attention to Important Topics

Of all the prominent themes gathered from the results of our elementary health education curriculum analysis, the complete absence of some key concepts within Canada's curricula is most concerning. While it can be accepted that territorial/provincial educational jurisdictions would not have across-the-board identical learning regarding sexual health education, the less than adequate attention placed upon more than one entire topic deserves question. Again, the results of our curriculum analysis proved to be invaluable as it not only indicated complete absences of attention but it also indicated near absences of attention to UNESCO (2018) key concepts and topics.

For the purposes of this discussion, near absence includes any territorial/provincial curriculum documents which address a UNESCO (2018) outcome recommendation three times or fewer within a seven-year elementary learning period. Just as there are conventional or assumed topics within a traditional CSE program, there are also inclusions deemed as progressive which may evolve into points of contention for some. For instance, while every territorial/provincial elementary health education curriculum seems to address topics 1.1-1.3, the absence of a focus upon topic 1.4 (Long-Term Commitments and Parenting) is very-much the norm across Canada. Few curriculum documents place attention upon the diversity of marriage/parenting and how those concepts are understood and influenced by different cultures and gender norms. Canada continues to pride itself on its multicultural and inclusive identity yet elementary health education curriculum documents seem to be nearly void of learning outcomes aimed at furthering thoughts beyond normative and culturally prescribed ideas of marital structures and parenting.

A similar circumstance is observable with key concepts 4 (Violence and Staying Safe) and 8 (Sexual and Reproductive Health). Here, a general and nearly nation-wide program inadequacy exists. For example, there are 12 instances of key concept 4's topics not being addressed and 10 instances of key concept 8's topics not being addressed in Canadian curriculum documents. Let us focus here upon the inadequacy of key concept 4 being addressed within Canada's territories/ provinces. With sexual maturation occurring earlier in Canadian youth (Helmer et al., 2015), today's teens will spend more years as sexually mature singles than did their same-aged peers from previous generations (Maticka-Tyndale, 2008). Though Canadian data suggest that there have not been recent changes in some areas related to adolescent sexual activity (e.g., age of first sexual intercourse; Rotermann, 2012), some emerging research has found that early pubertal maturation is correlated with early sexual intercourse and teenage pregnancy (De Genna, Larkby, & Cornelius, 2012; Downing & Bellis, 2009). Clearly, then, educating children and youth on the impact of their sexual activity-based choices will become increasingly important for those in these grade levels. Only three of Canada's educational jurisdictions seem to be supportive of this idea, leaving a considerable absence across this country's elementary sexual health education curricula. While the complete absence of a topic within one of UNESCO's (2018) key concept recommendations might be somewhat forgivable, the near complete absence of an entire key concept within a country's elementary

health education curricula perhaps demonstrates a troubling pattern within the culture itself.

Of the eight UNESCO (2018) key concepts, key concept 2 (Values, Rights, Culture and Sexuality) is the most underrepresented. Nine of 11 curriculum documents analyzed (and 11 of 13 territories/provinces) are without at least one SCO that addresses one topic from this key concept. Only two territories/ provinces address all three topics (and, in each of those territories/ provinces, only one SCO/indicator addresses some topics). These three inadequately addressed topics include Values and Sexuality, Human Rights and Sexuality, and Culture, Society and Sexuality. These data suggest that Canadian elementary students are not being exposed to foundational ideas surrounding how basic value systems and human rights regarding their bodies and sexuality are influenced by the society in which they exist. Without the teaching of these concepts, students may not be exposed to introductory ideas of equality, respect, acceptance, and tolerance-ideas which act as the foundational ideals for an effective sexual health education program to be based upon.

CONCLUDING COMMENTS

We believe this work builds upon Lu and McLean's (2011) earlier work, particularly with our focus upon SHEOs within Canada. Perhaps due to the polarization this topic can invite (Schalet et al., 2014), such an extensive content-specific analysis had yet to be completed. While Canada may lack a national or unified voice regarding specific learning outcomes in this area (Rayside, 2014), establishing a coherent, progressive, and universal standard for regional comparisons is a worthwhile enterprise. Through this focus and procedure, we have been able to extract thematic adequacies and inadequacies within all of Canada's elementary sexual health education curricula. Further to this, we also recognize that common nation-wide variances in curricula may be detrimental to the changing biology of and media messaging for elementary-aged Canadians (Brown, Halpern, & L'Engle, 2005; Schalet et al., 2014). Indeed, as sexual maturation continues to occur earlier and as media messages grow in number and influence (Weaver et al., 2005; Wright, 2011), Canada's CSE-related learning platforms must adapt in order to meet the needs of all students.

Results gathered through our analysis suggest that Canada's elementary health (and physical education) curriculum documents contain somewhat similar learning outcomes with respect to the more traditional and conventional scope of sexual health. That is, while elementary students are engaged in differing amounts of health education, the more staple topics within the study of sexual health are being satisfied within curricular documents (e.g., relationships, well-being, puberty, and sexual anatomy). We suggest that such consistencies can act as a foundation for what Canadian education jurisdictions can do to better the overall health of our young citizens. After all, is sexual health not health?

As is suggested in the literature (e.g., see Balter et al., 2016; Byers, 2008; Ninomiya, 2010), parents/guardians, teachers, and

health-care representatives all value the inclusion of CSE within curriculum. While our analysis focused on content-rich themes, it would be important to examine the depth to which this subject is conveyed to elementary-aged students. Furthermore, teachers at the forefront of elementary CSE are clearly frustrated and lacking confidence when it comes to teaching such sensitive and important topics (Cohen, Byers, Sears, & Weaver, 2004; Cohen, Byers, & Sears, 2012; Menmuir & Kakavoulis, 1999). While teachers may be in support of sexual health education topics within health education curriculum (Balter et al., 2016), they, nonetheless, lack adequate training. We suggest that further investigation needs to take place in order to determine the means through which teachers can be more adequately trained and prepared to implement curriculum—particularly when curriculum is meant to evolve and improve to better satisfy a more sexually diverse population.

A Cautionary Note and an Unfortunate Occurrence

It is not lost on us that our focus upon health education curricula has been a focus upon what curriculum scholars would label the explicit or stated curriculum (Flinders, Noddings, & Thornton, 1986). This explicit curriculum is not what is necessarily/actually taught to (or learned by) students. As we have mentioned, some teachers do not feel comfortable teaching certain content and some do not have the time to attend to all outcomes (Balter et al., 2016; Cohen et al., 2012). Apart from what might be learned from a hidden or null curriculum (Flinders et al., 1986), we recognize that just because these outcomes are meant to be taught does not mean that they actually are. There exists some research which has focused more closely upon the lived health education and/or sexual health-related curriculum what actually happens in Canadian classrooms. This limited research has highlighted the influence of other in-the-class barriers—such as teacher comfort and skills (Humphreys, 2017) and victimization discourses (Connell, 2005)—and the resultant classroom consequences. So, we acknowledge that while we may be able to draw conclusions about what teachers across the nation are meant to teach, we cannot make claims about what they actually teach. This is our cautionary note.

Lastly, at the time that we undertook our curriculum analysis, Ontario had what we would label as one of the country's best sexual health education curricula, as well as one of the country's best overall physical and health education programs. Indeed, Ontario is the only province that can boast having a K/P–6 health education stream/theme that explicitly addresses human sexuality (Human Development and Sexual Health). Premier Doug Ford's repeal of this curriculum was a "wake-up call" to many who may have become complacent or comfortable. The unfortunate politicization of this issue has resulted in that province's students no longer being taught a very-much UNESCO-aligned sexual health education program. This is our unfortunate occurrence. That province, and all others, still have work to do.

ORCID ID

Daniel B. Robinson Dhttps://orcid.org/0000-0002-4608-361X

REFERENCES

- Alberta Learning. (2002). *Health and life skills kindergarten to grade* 9. Edmonton, Canada: Alberta Learning. Retrieved from https://education.alberta.ca/media/160196/health.pdf
- Balter, A. S., Van Rhijn, T. M., & Davies, A. W. J. (2016). The development of sexuality in childhood in early learning settings: An exploration of early childhood educators' perceptions. *Canadian Journal of Human Sexuality*, 25(1), 30–40. https://doi.org/10.3138/cjhs.251-a3.
- Brown, J. D., Halpern, C. T., & L'Engle, K. L. (2005). Mass media as a sexual super peer for early maturing girls. *Journal of Adolescent Health*, 36(5), 420–427. https://doi.org/10.1016/j.jadohealth.2004.06.003. Medline:15837346
- Byers, E. (2008). Parents' reports of sexual communication with children in kindergarten to grade 8. *Journal of Marriage and Family*, 70(1), 86–96. https://doi.org/10.1111/j.1741-3737.2007.00463.x.
- Cohen, J. N., Byers, E. S., & Sears, H. A. (2012). Factors affecting Canadian teachers' willingness to teach sexual health education. *Sex Education: Sexuality, Society and Learning*, 12(3), 299–316. https://doi.org/10.1080/14681811.2011.615606.
- Cohen, J. N., Byers, E. S., Sears, H. A., & Weaver, A. D. (2004). Sexual health education: Attitudes, knowledge, and comfort of teachers in New Brunswick schools. *Canadian Journal of Human Sexuality*, *13*(1), 1–15. http://dx.doi.org/10.3138/cjhs.251-A3.
- Connell, E. (2005). Desire as interruption: Young women and sexuality education in Ontario, Canada. *Sex Education*, 5(3), 253–268. https://doi.org/10.1080/14681810500171433.
- De Genna, N. M., Larkby, C., & Cornelius, M. D. (2012). Pubertal timing and early sexual intercourse in the offspring of teenage mothers. *Journal of Youth Adolescence*, 40(10), 1315–1328. https://doi.org/10.1007/s10964-010-9609-3. Medline:21279428
- Downing, J., & Bellis, M. A. (2009). Early pubertal onset and its relationship with sexual risk taking, substance use and anti-social behaviour: A preliminary cross-sectional study. *BMC Public Health*, 9(446), 1–11. https://doi.org/10.1186/1471-2458-9-446. Medline:19958543
- Eisenberg, M. E., Bernat, D. H., Bearinger, L. H., & Resnik, M. D. (2008). Support for comprehensive sexuality education: Perspectives from parents of school-age youth. *Journal of Adolescent Health*, 42(4), 352–359. https://doi.org/10.1016/j.jadohealth.2007.09.019. Medline:18346660
- Flinders, D. J., Noddings, N., & Thornton, S. J. (1986). The null curriculum: Its theoretical basis and practical implications. *Curriculum Inquiry*, *16*(1), 33–42. https://doi.org/10.1080/03626784.1986.11 075989.
- Garcia, C. K. (2015). Sexual health education in Québec schools: A critique and call for change. *Canadian Journal of Human Sexuality*, 24(3), 197–204. https://doi.org/10.3138/cjhs.243-c01.
- Gouvernement du Québec. (2018). Sexual education. Québec City, Canada: Author. Retrieved from http://www.education.gouv.qc.ca/en/parents-and-guardians/sexuality-education/.
- Guba, E. G., & Lincoln, Y. (1989). Fourth generation evaluation. Newbury Park, CA: Sage.

- Helmer, J., Senior, K., Davison, B., & Vodic, A. (2015). Improving sexual health for young people: Making sexuality education a priority. *Sex Education*, *15*(2), 158–171. https://doi.org/10.1080/14681811.2014.989201.
- Hickson, C., Robinson, D. B., Berg, S., & Hall, N. (2012). Active in the north: School and community physical activity programming in Canada. *International Journal of Physical Education*, 4(2), 16–30.
- Humphreys, T. (2017). The state of Canadian sexuality education. *The Journal of Sexual Medicine*, 14(5), e231. https://doi.org/10.1016/j.jsxm.2017.04.116.
- Jones, A. (2019, January 9). Teachers challenge Ontario over sex-ed curriculum, 'snitch line'. Retrieved from https://www.ctvnews.ca/ canada/teachers-challenge-ontario-over-sex-ed-curriculum-snitchline-1.4246529.
- Kilborn, M., Lorusso, J., & Francis, N. (2016). An analysis of Canadian physical education curricula. *European Physical Education Review*, 22(1), 23–46. https://doi.org/10.1177/1356336x15586909.
- Klein, N. A., & Breck, S. E. (2010). "I wish I had known the truth sooner": Middle school teacher candidates' sexuality education experiences. *Research in Middle Level Education*, 33(6), 1–10. https://doi.org/10.1080/19404476.2010.11462069.
- Levin, B., & Young, J. (2002). Understanding Canadian schools: An introduction to educational administration (3rd ed.). Toronto, Canada: Harcourt Brace.
- Lincoln, Y., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage.
- Lu, C., & McLean, C. (2011). School health curricula: A critical analysis. *PHENex Journal*, 3(2), 1–20.
- Lucs, I. (2018, February 12). Ontario PC leadership hopeful Doug Ford vows to review province's sex-ed curriculum. Retrieved from http:// www.cbc.ca/news/canada/toronto/doug-ford-sex-ed-curriculumchanges-1.4532400.
- Maticka-Tyndale, E. (2008). Sexuality and sexual health of Canadian adolescents: Yesterday, today and tomorrow. *Canadian Journal of Human Sexuality*, 17(3), 85–95.
- McKay, A., Pietrusiak, M., & Holowaty, P. (1998). Parents' opinions and attitudes toward sexuality education in the schools. *Canadian Journal of Human Sexuality*, 7(2), 139–145.
- Meaney, G. J., Rye, B. J., Wood, E., & Solovieva, E. (2009). Satisfaction with school-based sexual health education in a sample of university students recently graduated from Ontario high schools. *Canadian Journal of Human Sexuality*, 18(3), 107–125.
- Meltem, K., Utas, A. L., Tanir, I. M., & Yildiz, H. (2015). The sexual development and education of preschool children: Knowledge and opinions from doctors and nurses. *Sexuality and Disability*, 33(2), 207–221. https://doi.org/10.1007/s11195-015-9393-9. Medline:26346662
- Menmuir, J., & Kakavoulis, A. (1999). Sexual development and education in early years: A study of attitudes of pre-school staff in Greece and Scotland. *Early Child Development and Care*, 149(1), 27–45. https://doi.org/10.1080/0300443991490103
- Mundy, K., & Manion, C. (2008). Global education in Canadian elementary schools: An exploratory study. *Canadian Journal of Education*, *31*(4), 941–974. https://doi.org/10.2307/20466735.

- New Brunswick Department of Education. (2005). You and your world curriculum: Kindergarten—grade 2. Fredericton, Canada: Author. Retrieved from http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/curric/Health-PhysicalEducation/Youan-dYourWorldK-2.pdf.
- New Brunswick Department of Education. (2016). *Personal wellness: Grades 3–5*. Fredericton, Canada: Author. Retrieved from http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/curric/Health-PhysicalEducation/PersonalWellness3-5.pdf.
- Ninomiya, M. (2010). Sexual health education in Newfoundland and Labrador schools: Junior high school teachers' experiences, coverage of topics, comfort levels and views about professional practice. *Canadian Journal of Human Sexuality*, 19(1/2), 15–26.
- Nova Scotia Department of Education. (2015). *Learning outcomes framework: Grades primary-6*. Halifax, Canada: Author. Retrieved from https://www.ednet.ns.ca/files/curriculum/P-6LOFs-Oct1-2015. pdf.
- Nova Scotia Department of Education. (2016). *Plan for instruction: Revised time-to-learn strategy grades 4–6*. Halifax, Canada: Author. Retrieved from http://www.ssrsb.ca/wp-content/uploads/2012/08/Time-To-Learn-NEW-4-6.pdf.
- Public Health Agency of Canada. (2008). Canadian Guidelines for Sexual Health Education. Ottawa, ON: Public Health Agency of Canada.
- Rayside, D. (2014). The inadequate recognition of sexual diversity by Canadian schools: LGBT advocacy and its impact. *Journal of Canadian Studies*, 48(1), 190–225. https://doi.org/10.3138/jcs.48.1.190.
- Rotermann, M. (2012). Sexual behaviour and condom use of 15- to 24-year-olds in 2003 and 2009/2010. *Health Reports*, 23(1), 41–45. Medline:22590804
- Saskatchewan Ministry of Education. (2010). *Health education*. Regina, Canada: Author.

- Schalet, A. T., Santelli, J. S., Russell, S. T., Halpern, C. T., Miller, S. A., Pickering, S. S., ... Hoenig, J. M. (2014). Invited commentary: Broadening the evidence for adolescent sexual and reproductive health and education in the United States. *Journal of Youth and Adolescence*, 43(10), 1595–1610. https://doi.org/10.1007/s10964-014-0178-8. Medline:25200033
- Sex Information and Education Council of Canada (SIECCAN). (2015). Sexual health education in the schools: Questions and answers, Ontario Edition. Toronto, Canada: Author.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015). Emerging evidence, lessons and practice in comprehensive sexual education: A global review. Paris, France: Author.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2018). *International technical guidance on sexuality education*. Paris, France: Author.
- Warner, T. (2010). Losing control: Canada's social conservatives in the age of rights. Toronto, Canada: Between the Lines.
- Weaver, A. D., Byers, E. S., Sears, H. A., Cohen, J. N., & Randall, H. E. S. (2002). Sexual health education at school and at home: Attitudes and experiences of New Brunswick parents. *Canadian Journal of Human Sexuality*, 11(1), 19–31.
- Weaver, H., Smith, G., & Kippax, S. (2005). School-based sex education policies and indicators of sexual health among young people: A comparison of the Netherlands, France, Australia and the United States. Sex Education, 5(2), 171–188. https://doi.org/10.1080/14681810500038889.
- Wright, P. J. (2011). Mass media effects on youth sexual behavior assessing the claim for causality. *Annals of the International Communication Association*, 35(1), 343–385. https://doi.org/10.1080/2 3808985.2011.11679121.

Copyright of Canadian Journal of Human Sexuality is the property of University of Toronto Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.