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Multiliteracies and Multiple Literacies within Ontario (Canada) Health and Physical Education

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Abstract

The primary research question asked: What is multiliteracy and how is this accomplished in elementary schools in Ontario, given the new directives within the 2019 Health and Physical Education curricular document? The qualitative research uncovered an understanding of multiliteracies that was examined via summative latent content analysis of the current Ontario provincial government positions arising from the recent release of 2019, Ontario Health and Physical Education curricular document. The 320-page document prompted ancillary queries which asked: What are the multiple literacies and how should these be achieved in Health and Physical Education? What level of multiple literacy should Ontario Physical Educators and students reach for at the elementary level? What are the existing literacy guidelines and orientations impacting Ontario teachers? Multiple literacy is viewed as a priority and necessary for healthy growth and development of teachers, students and the wider community. The ideas, concepts and themes relating to literacy surface in the curriculum analysis, revealing a tacit and broad base of knowledge which constitutes the theoretical underpinning of required literacies. Several are expected and taught, including health, physical, media, financial, and critical literacies.

Introduction

The current global connectedness has transformed educational landscapes, impacting the vision of literacy for all learners in Ontario. Today, in Canada, the Ontario Ministry of Education (2019) believes all students need be “equipped with the literacy skills necessary to be critical and creative thinkers, effective meaning makers and communicators, collaborative co-learners, and innovative problem solvers. These are the skills that will enable them to achieve personal, career, and societal goals” (p.78). This vision is further enhanced by the idea that,

literacy instruction takes different forms of emphasis in different subjects, but in all subjects, literacy needs to be explicitly taught. Literacy, mathematical literacy, and inquiry and research skills are critical to students’ success in all subjects of the curriculum and in all areas of their lives. (Ontario Ministry of Education, 2019, p.78)

As a student moves from early grades in elementary levels of health and physical education there is “a solid foundation of language, communication, and thinking skills that enable students to develop the skills, knowledge, and attitudes they need to make healthy decisions with competence and confidence is at the heart of both health and physical literacy” (Ontario Ministry of Education, 2019, p.78). This literacy development, or in some cases lack of literacy development, is associated with both negative and positive health outcomes (Nutbeam 2015), and inequities (Ryan & Munn, 2014). Low levels of literacy can cause a student to be “less responsive to school health activities, less likely to manage chronic diseases successfully, and are less likely to use disease prevention services” (Persson, 2016, p.39). This wellness-literacy relationship surfaces as “low health literacy exists within developed and wealthy nations and is a large contributor to health inequity” (Churchill, 2019, p.20).

Literacy has broadened its base, and deepened its stance, and in 2020 includes “researching, discussing, listening, viewing media, communicating with words and with the body, connecting illustrations and text, role playing to create meaning through stories, and – especially important for kinesthetic learners – communicating through physical activity” (Ontario Ministry of Education, 2019, p.78). With the infusion of technology, many modes of literacy are possible which has instigated the term multiliteracy, emerging in the late 1990’s, about the time the world wide web emerged, and personal computing moved into people’s lives.

Multiliteracy in 2020 incorporates communication, comprehension, critical analysis, and skills to understand digital technologies, video (visual images), television (digital images), and new media (screens) to function daily (Cope & Kalantzis, 2009; Ryan & Sinay, 2017). The term multiliteracies surfaced in response to the increasing cultural and linguistic diversity of our connected globalized societies (The New London Group, 1996). Multiliteracies is at present a term that includes multiple meaning making modes such as, internet, radio, and television along with cultural and linguistic diversity, and a variety of resources (Cope & Kalantzis, 2000; Jewitt, 2008). Multiliteracy is situated in authentic practice, pedagogy that is meaningful, developed within overt instruction, transformative and causes multiple perspectives to surface within varied contexts (Cazden et al., 1996). This is quite different from literacy which has traditionally been understood as a set of progressive skills in reading and writing of print-based text (Serafini & Gee, 2017), however literacy can include auditory, visual, spatial, linguistic, and gestural combinations (Kress, 2003). Multiliteracy includes students who are co-creators of multiliteracy pedagogical activities and locate meaning in local contexts that are also arenas of inquiry.

Today children are born within a digital landscape, indeed, a “technological epoch, there may be no choice, it is simply a way of being” (McTavish, 2014, p. 320). Researchers claim, “. . . 20 billion devices will be connected by 2020. Cheaper, faster devices and nearly limitless data storage are accelerating the pace of change in every aspect of life, including schooling” (Scoggin et al., 2018, p. 57). Consequently, every aspect of literacy must include the fact that literacy exercises today are, or can be, technologically infused (Gillen & Hall, 2013; Ryan & Neely, 2017). The multiliteracies pedagogy includes direct teaching (overt/explicit teaching), situated practice (constructivism/prior knowledge and experiences), critical framing (critical thinking/analysis), and transformed practice (practical application of knowledge) (The New London Group, 1996; Walsh, 2013; Ryan & Sinay, 2017). Hepple et al. (2014) suggest multiliteracies are a set of creative literacy practices, student-centered, involving active teaching and learning. When multiliteracies are offered to students it provides alternative ways for all students to express their understanding thereby engaging even Health and Physical Education students. This engagement within multiliteracies is linked to the fact that they are creative, fecund, authentic, practical, and often transformative (Ryan & Sinay, 2017).

Ontario Health and Physical Education Curriculum

The Ontario curriculum is designed to help “all students reach their full potential through a program of learning that is coherent, relevant, and age-appropriate. It recognizes that, today and in the future, students need to be critically literate in order to synthesize information, make informed decisions, communicate effectively, and thrive in an ever-changing global community” (Ontario Ministry of Education, 2019, p.3). The expectations “that make up this curriculum also provide the opportunity for students to develop social-emotional learning skills and well-being” (Ontario Ministry of Education, 2019, p.7). Students are presented with opportunities to learn by doing, and there is an expectation that physical education will unfold daily in schools (Kilborn et al., 2016).

In 2019, recommended time allocations for physical education instruction is left to the discretion of individual schools, meaning there are not stringent government guidelines except that Health and Physical Education must occur within 110 hours of instruction per year. The 2019 health and physical education elementary document includes “new expectations on mental health literacy; new expectations on social-emotional learning skills, to be taught in connection with all parts of the curriculum; and enhanced connections to mental health within existing curriculum expectations” (Ontario Ministry of Education, 2019, p.6). The main elements in the curriculum include movement skills/activity, personal & social responsibility, active living/fitness and healthy living/choices as detailed in Figure 1 which emphasizes well-being.

The aim of the curriculum is grounded in the vision that the knowledge and skills acquired in the program will benefit students throughout their lives, and help them to thrive in an ever-changing world by enabling them to acquire physical and health literacy; and to develop the comprehension, capacity and commitment needed to lead healthy, active lives and to promote healthy, active living. Above all, “students of all social and cultural backgrounds, abilities, sexes, gender identities, gender expressions, and sexual orientations – feel included and recognized in all activities and discussions” (Ontario Health & Physical Education, 2019, p.63). The 2019 curriculum is linked to other curriculum via its priorities and emphasis on social-emotional learning, physical and mental health, and inclusion together with academic success for all students in a manner that enables a “healthy learning environment that supports well-being” (Ontario Ministry of Education, 2019, p.10).

Method

As an active educator of teachers in training it is important to understand the new curriculum before teaching hence this review was undertaken by this author. The research herein was a qualitative reductive process that included summative analysis which “undertakes a search for the essential elements of a text, it continues to consider the importance of the text as a whole and its impact” (Rapport, 2010, p.270). In fact, this summative content analysis (Zhang & Wildemuth, 2009) is a “replicable technique for compressing many words of text into fewer content categories (headings)” (Stemler, 2001, p.1). Berelson (1971) suggests content analysis can identify intentions, focus or communication trends of an individual, group or institution; in this case the Ontario Ministry of Education. Content analysis can provide valuable historical/cultural insight over time through the analysis (Busch et al., 1994-2012), and provides insight into complex models of human thought and language use (de Sola Pool, 1959).

The examination of literacy was the unit of analysis leading to associated terms involving “keywords or content, followed by the interpretation of the underlying context” (Hsieh & Shannon, 2005, p.1277); in this case multiliteracies and five other literacy areas. The reduction and sense-making resulted in core consistencies and meanings (Humble, 2009, Kindermann, 2020), which were used to broaden the scale and scope of the analysis. Text was revisited to reassess and reconstitute interpretations (Schreier, 2012), to advance insights, producing a guiding schematic (Kindermann, 2020). Overall, this content analysis is “a research method for the subjective interpretation of the content of text data” (Hsieh & Shannon, 2005, p.1280), which permitted descriptions and summaries that revealed perspectives (Schreier, 2012), while substantiating assumptions (Berelson, 1971; Kindermann, 2020).

While a series of steps is viewed by some as wrongheaded (Bowen, 2009), I outline my journey as follows: After initial reading of the Provincial curriculum document a list of terms emerged from notes taken during the initial reading. At this point I was able to decide on what (level of analysis) words would be used as categories. The literacy categories emerged and included Physical, Health, Critical, Media, and Financial Literacy which became rigid dividers of text analyzed. This focus became a means to sift through text via frequency counting using the review function of the Microsoft Word review function.

I then decided to highlight/count and code for frequency of a word, for instance the word Literacy appeared 65 times in the 320-page curriculum document and Financial Literacy appeared only 10 times. I was able to rank order the words according to frequency realized in text searches. It was then possible to determine if the word existed at a significant level of usage (ten times or more) and determine the frequency or number of times the word appeared in the document. Often the word needed to be distinguished among variations such a critical, critically and critic. Therefore, it was important to recheck searches and frequency counts. I was consistent, following this practice for each word which became both headings and search terms (frames of reference/unit of analysis). Moreover, in content analysis, obeying by the traditional mode/rules is equivalent to validity (Bowen, 2009). To analyze data, I reviewed the ranked frequencies to realize both inferences and overviews. I took time to re-examine, revisit and reassess the content analysis scheme leading to both interpretation and summation.

Teachers

Ontario Health and Physical Education teachers are the “key educators for a student’s literacy and numeracy development” (p.65), and this development happens best in a “safe, supportive, and welcoming environment that nurtures their self-confidence while they are receiving focused literacy instruction” (Ontario Ministry of Education, 2019, p.70). A student will be able to function best in a community where they feel supported, invited and trusted (Vamos et al., 2020). A teacher knowing this will reach out within the local school community to engage parents and other stakeholders to become involved with students in school and community activities that promote multiliteracy. One means to achieve community engagement is to “encourage parents to continue to use their own language at home in rich and varied ways as a foundation for language and literacy development in English” (Ontario Ministry of Education, 2019, p.69), or French in Ontario schools.

Teachers should understand that English Literacy Development (ELD) “programs are primarily for newcomers whose first language is a language other than English or is a variety of English significantly different from that used for instruction in Ontario schools, and who arrive with significant gaps in their education” (Ontario Ministry of Education, 2019, p.70). Language differences can be associated with various determinants of health which have been shown to “affect a person’s overall state of well-being. Some of these are income and social status, education and literacy, gender, culture, physical environments, social supports and coping skills, and

access to health services” (Ontario Ministry of Education, 2019, p.4). Well-being is an anticipation in the Ontario Health and Physical Education (2019) programs and many students, come from countries where access to education is limited or where there are limited opportunities to develop language and literacy skills in any language. Some First Nations, Métis, or Inuit students from remote communities in Ontario may also have had limited opportunities for formal schooling, and they also may benefit from ELD instruction. (p.70)

Multiliteracies create new social configurations and student interactions, which invite dissimilar students to work with one-another, connected by certain literacies; for example, working on a digital task using technology may enhance student engagement, initiation, and joy of learning. Educators in 2020, that utilize differential modes of expression inspire communication (Kilinc et al., 2016), and the educator enables communication via drama (skits, plays), digital modes (tablets/screens), short commercials, movies, posters, public announcements); these “opportunities children are given to succeed are important because of the strong correlations between health, social position and work” (Persson, 2016, p.23).

Using a multiliteracy approach while teaching has been shown to connect students with content, peers and teachers resulting in an engaged pedagogy. Creating numerous opportunities via multiliteracies helps students to “discern and identify credible, reliable and valid resources that can affect their well-being. Knowing how to differentiate misleading and false information from reliable claims will allow students to make better decisions for both their classwork and themselves” (Ohara-Borowski, 2018, p. 69). In 2020, there are opportunities to learn about mental health, enhanced through the inclusion of new expectations on mental health literacy (Ontario Ministry of Education, 2019). Helping all students develop “mental health and well-being, physical and health literacy, and the comprehension, capacity, and commitment they will need to lead healthy, active lives and promote healthy, active living” (Ontario Ministry of Education, 2019, p.6), is imperative and expected as shown in Figure 1.



Figure 1. Healthy Active Living (Ontario Ministry of Education, 2019)

As Figure 1 suggests, it is expected that teachers will help students develop “mental health and well-being, physical and health literacy, and the comprehension, capacity, and commitment they will need to lead healthy, active lives and promote healthy, active living” (Ontario Physical Health Education Association, 2019, p.6). Schools that are able to unite may more easily provide all students with “the physical literacy and health literacy they need to lead healthy, active lives (p.6). All students regardless of background or ethnicity need to know how to “differentiate misleading and false information from reliable claims . . . to make better decisions for both their classwork and themselves” (Ohara-Borowski, 2018, p. 69). Knowing how to decode and interpret information can only help students achieve well-being while potentially impacting multiple literacies (Ryan & Munn, 2014).

Physical Literacy (PL)

The World Health Organization Global Action Plan on Physical Activity includes PL (World Health Organization, 2018), as a goal for all countries who need to,

develop a national communication strategy for physical activity as part of, or aligned with, a national action plan on physical activity to raise awareness and knowledge of the health benefits of physical activity, promote behavior change and increase health and physical literacy. (p.63)

The core elements of PL include motivation and confidence which link to enthusiasm and enjoyment while engaging in physical activity (Jurbala, 2015). Individuals who are physically literate move with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person (Ontario Ministry of Education, 2019, p.7). Physical communication skills are fundamental to the development of physical literacy (Ontario Ministry of Education, 2019, p.79), aiding participation and understanding as noted in Figure 2.

Within Ontario elementary schools” educators understand that “physically literate individuals consistently develop the motivation and ability to understand, communicate, apply, and analyze different forms of movement” (Physical and Health Education Canada, 2019, p. 7). By supporting the Health and Physical Education program educators can improve confidence and competence of students and this impacts well-being and causally academic achievement. More precisely, Darracott et al. (2019) revealed a “correlation between the number of steps per minute...and literacy” (p. 53), obviously the more physically literate person would have more steps. PL contributes to all aspects of life (Whitehead et al., 2018), and understanding these “connections provides the foundation for health and physical literacy, overall mental health and well-being, and lifelong healthy, active living” (Ontario Physical and Health Education, 2019, p.10). PL impacts the whole as social skills (Whitehead et al., 2018), and cognitive functioning improves (Mandigo et al., 2019); and “learning through physical activity helps to enhance students” physical literacy” (Physical and Health Education Canada, 2019, p.29), as communicated in Figure 2. Physical literacy seems less possible unless “children feel safe and trusted in their environment, and that includes the people that they are working with” (Castelli et al., 2015, p. 159).

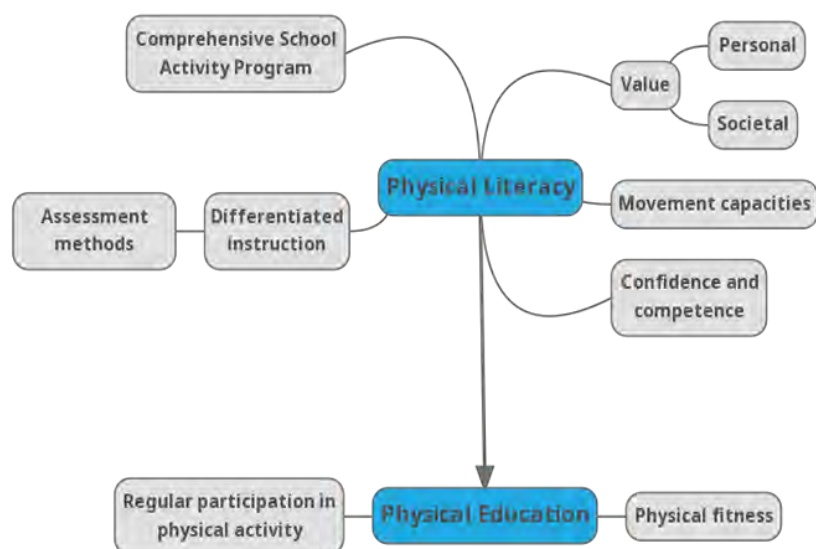


Figure 2. PL Centerpiece of Health and Physical Education

The development of fundamental movement skills in “association with the application of movement concepts and principles provides the basic foundation for physical literacy” (Physical and Health Education Canada, 2019, p.31), as detailed in Figure 2. Students learn how to transfer “strategies, tactics, and skills from one game or activity to another in the same category. In so doing, they acquire game literacy and extend their competence to a much wider range of activities” (Physical & Health Education Canada, 2019, p.36)

Health Literacy (HL)

HL involves and requires skills to acquire, comprehend and use information to make good decisions for health and well-being as illustrated in Figure 3. The Canadian Public Health Association’s Expert Panel on Health Literacy (2008) defines HL as the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course (Rootman & Gordon-El-Bihbety, 2008). Benes and Alperin (2019) claim “limited health literacy is negatively associated with multiple health outcomes” (p.30). Therefore, improving all students’ abilities to access, comprehend, evaluate, and communicate information promotes, maintains and improves health in a variety of settings which is necessarily

important (Fleary et al., 2018). HL can be nurtured in the community, away from school, for instance, “families that select healthy foods and prepare healthy meals together help young people develop food literacy skills and reinforce healthy eating habits (Ontario Physical & Health Education, 2019, p.14). The HL cycle can be routinized at home and serve as a tool to support family members to achieve well-being; at school the same is possible if guided by informed people as imaged in Figure 3.

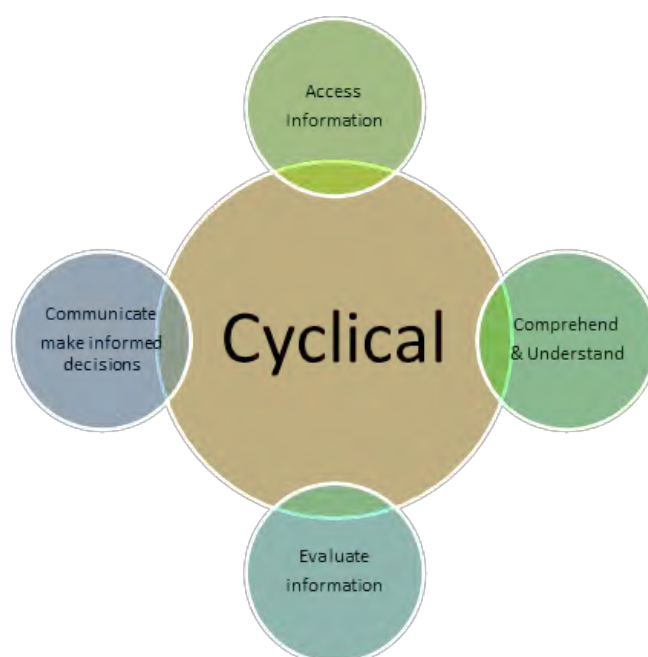


Figure 3. Health Literacy Cycle (adapted from the Canadian Public Health Association, 2014, p.7)

Within the Ontario Physical & Health Education (2019) curricular resource, health content is contained within the Healthy Living Strand under the topic of Healthy Living Learning. The health content in this strand is “divided into five content areas: healthy eating; personal safety and injury prevention; substance use, addictions, and related behaviours; human development and sexual health; and mental health literacy” (Ontario Physical & Health Education, 2019, p.41). Teachers are guided by the curricular document to understand that students will develop “health literacy as they acquire the knowledge and skills they need to develop, maintain, and enjoy healthy living as well as to solve problems, make decisions, and set goals that are directly related to their personal health and mental health and well-being” (Ontario Physical & Health Education, 2019, p.39).

With the “integration of social-emotional learning skills and mental health concepts throughout the curriculum, and through the mental health literacy expectations in the Healthy Living strand” (Ontario Physical & Health Education, 2019, p.41), a specific “progression of learning across the grades is designed to develop students’ mental health literacy. This learning is integral to the “development of social-emotional skills and the understanding of connections between physical and mental health” (Ontario Physical & Health Education, 2019, p.44).

Critical Literacy (CL)

CL is an opportunity for students to find their voice in the classroom (Luke, 2012; Saunders, 2012), and discover their position as a reader as all texts attempt to situate the readers (Bourke, 2008). Students need to realize that they can look at all texts from multiple perspectives which can enhance understanding and comprehension. CL is a habit of practice enabling perspective “beyond and beneath texts, investigating issues of power, whose interests are being served by texts, and whose interests are not being served, and why” (Jones, 2006, p. 67). In health and physical education “lessons can be used as a vehicle for instruction in critical literacy. Students can interpret product information on food labels and critique media messages related to sex and gender stereotypes, body image, or alcohol use” (Ontario Physical & Health Education, 2019, p.64). CL is about questioning what is perceived and looking for alternative views, messages and meanings. CL “gives us potent ways of reading, seeing, and acting in the world” (Janks, 2014, p. 349).

CL is the term used to refer to a particular aspect of critical thinking. CL “involves looking beyond the literal meaning of a text to determine what is present and what is missing, in order to analyse and evaluate the text’s complete meaning and the author’s intent” (Ontario Physical & Health Education, 2019, p.81). By questioning media messages, it is possible to reveal hidden meaning, different perspectives and writer intentions, new understanding is possible however, the location and context of the teacher can change the messages (Han et al., 2015), as educators guide the inquiry. CL is linked to “fairness, equity, and social justice therefore decoding for meaning is essential. Critically literate students adopt a “critical stance, asking what view of the world the text advances and whether they find this view acceptable, who benefits from the text, and how the reader is influenced” (Ontario Physical & Health Education, 2019, p.81). The skilled educator will provoke thought by asking challenging questions and increasing the tension in the classroom to engage all learners as they decipher and look for media message positioning as laid out in Figure 4.

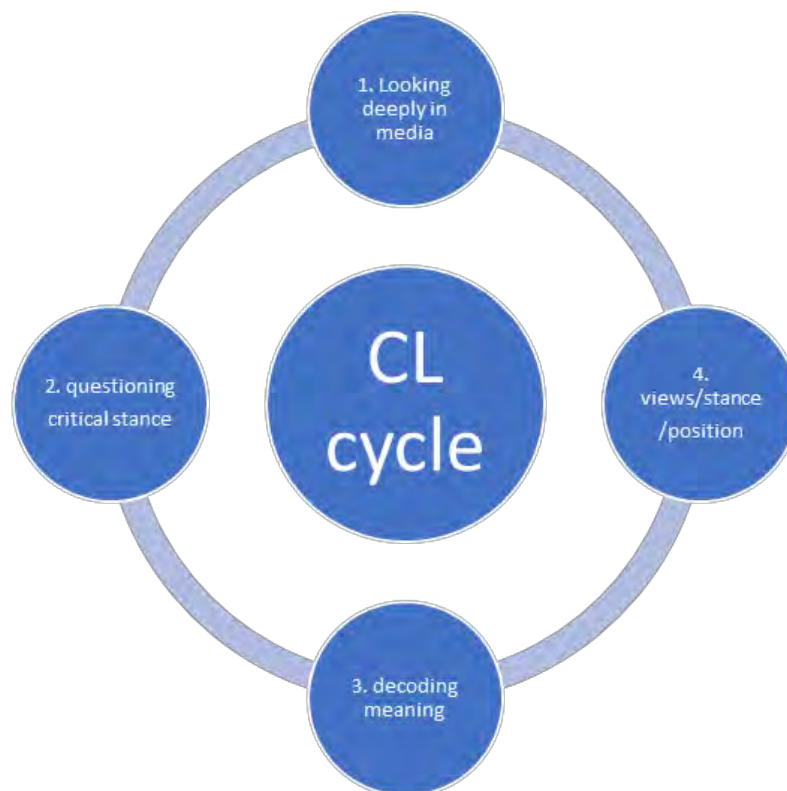


Figure 4. Critical Literacy (CL) Cycle

Critically literate students,

understand that meaning is not found in texts in isolation. People make sense of a text, or determine what a text means, in a variety of ways. Students therefore need to take into account: points of view (e.g., those of people from various cultures); context (e.g., the beliefs and practices of the time and place in which a text was created and those in which it is being read or viewed); the background of the person who is interacting with the text (e.g., upbringing, friends, communities, education, experiences); intertextuality (e.g., information that a reader or viewer brings to a text from other texts experienced previously); gaps in the text (e.g., information that is left out and that the reader or viewer must fill in); and silences in the text (e.g., the absence of the voices of certain people or groups). (Ontario Physical & Health Education, 2019, p.81)

All students who are critically literate are able to “actively analyze media messages and determine possible motives and underlying messages” (p.81) In addition the literacy skill of metacognition supports each students’ ability to think critically through reflection on their own thought processes (Lesley, 2001). Acquiring and “using metacognitive skills has emerged as a powerful approach for promoting a focus on thinking skills in literacy and across all disciplines, and for empowering students with the skills needed to monitor their own learning” (p.81). CL is a means of “problematizing texts to expose privilege and oppression; it reveals how texts benefit some people and harm others” (Bourke, 2008, p.304). Students decoding these texts will need to “develop broader skills in problem solving, inquiry, decision making, critical thinking, and critical literacy related to financial issues” (Ontario Physical & Health Education, 2019, p.77).

Financial Literacy (FL)

Globally, FL has become a significant component in society and recently, “more countries have started introducing financial education into schools, often as part of a national strategy for financial education across the whole population with a view to advancing financial literacy among young generations” (OECD, 2014, p.28). FL is presently a meaningful life skill that has lately been recognized as something that need be standardized and taught as a characteristic of literacy in elementary and secondary schools (Bosshardt & Walstad, 2014). A financially literate person is “an individual who has developed sufficient levels of (a) financial knowledge and (b) skill in using financial representations, tools, and models in order to function. . . in society” (Alhammouri et al., 2015, slide 7). FL is an “essential component of the education of Ontario students – one that can help ensure that Ontarians will continue to prosper in the future” (Ontario Physical & Health Education, 2019, p.44). The government of Ontario believes health and physical education is “linked to financial literacy education in a number of ways” (Ontario Physical & Health Education, 2019, p.77).

FL has gradually emerged in the Ontario curriculum; over a decade ago the Ontario Ministry of Education released a curricular guide entitled: *A Sound Investment: Financial Literacy Education in Ontario Schools* (2010) that suggested, “Ontario students will have the skills and knowledge to take responsibility for managing their personal financial well-being with confidence, competence, and a compassionate awareness of the world around them” (Ontario Physical & Health Education, 2019, p.77). More recently a new resource document for grades four through eight entitled: *Financial Literacy Scope and Sequence of Expectations, 2016* - “has been prepared to assist teachers in bringing financial literacy into the classroom” (Ontario Physical & Health Education, 2019, p.77). Educators need be reminded that FL requires,

knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society. (OECD, 2012, p. 144)

FL education can provide the “preparation Ontario students need to make informed decisions and choices in a complex and fast-changing financial world” (Ontario Physical & Health Education, 2019, p.77). The 2019 curricular guide for health and physical education in Ontario elementary schools identifies the curriculum expectations and related examples and prompts, in various subjects from “Grade 4 to Grade 8, that provide opportunities through which students can acquire skills and knowledge related to financial literacy. The document can also be used to make curriculum connections to school-wide initiatives that support financial literacy” (p.78). Educators observing these expectations in planning and instruction in health and physical education are aware that the purpose of financial education programs is to “prepare students for financial decisions they will face as adults” (Collins & Odders-White, 2015, p. 112). FL decisions such as comparison shopping, budgeting, decision making (save, spend, give), running a business, wants vs needs, and terminology can easily be introduced into debates, discussions and projects that are problem based.

For the educator planning to address FL they need only visit the Ontario physical and health education association (OPHEA) website, which is a not-for-profit organization that champions healthy, active living in schools. OPHEA has developed a curricular resource entitled: *Wallet Wellness* which is a “free financial literacy resource designed to provide children and youth with a strong understanding of financial basics in order to successfully navigate today’s complex financial world at, teachingtools.ophea.net/activities/wallet-wellness (Ontario Physical and Health Education Association, 2019, p.1). Admittedly there are many resources available online however OPHEA materials have been vetted and approved for use in Ontario schools, therefore this resource is preferred as media for use in Ontario Health and Physical education programs.

Media Literacy (ML)

ML is an important Health and physical education student capacity as media develops and the internet has continued to grow in depth and breadth via innovative social media software such as snapchat and Instagram. Media education “expands literacy to include reading and writing through the use of new and emerging communication tools” (Thoman & Jolls, 2004, p.3), “and multimedia forms of expression and communication” (Hobbs, 2004, p.47). “Within the domain of media education, the accepted definition of media literacy is the ability to access, analyze, evaluate, and produce media in a variety of forms” (Johnson, 2001, p.17). Fostering “students’ literacy skills is an important part of the teacher’s role in health and physical education. In addition to developing reading, writing, and media literacy skills” (Ontario Physical and Health Education Association, 2019, p.79). Health and Physical educators in 2020 need be reminded that,

print texts are merely one form in a spectrum of multimedia texts literacy skills involve speaking, and listening; and understanding expands to include symbol systems in audio, visual, and interactive media. Likewise, in conjunction with critically reading both print and non-print texts, being able to communicate in a variety of modes and mediums-by creating blogs, podcasts, and videos, for example, is an essential component of 21st century literacies. (Moore & Redmond, 2014, p.11)

Health and Physical Education students must be able to “determine what biases might be contained in texts, media, and resource material and why that might be, how the content of these materials might be determined and by whom, and whose perspectives might have been left out and why” (Ontario Physical & Health Education, 2019, p.81). “Developing these skills will help students to acquire other learning in health and physical education and to communicate their understanding of what they have learned (Ontario Physical & Health Education, 2019, p.79).

UNESCO (2019) suggests media literacy is “considered as one of the main components of the “21st century literacy” and refers to the so-called “soft skills”, the importance of which has been increased recently” (p.1) (see Figure 5). Traditional literacy of print is not abandoned instead it is digitized and infused with visual images as “media literacy education expands the concept of „text” to include not just written texts but any message form-verbal, aural, or visual- that is used to create and then pass ideas back and forth between human beings” (Thoman & Jolls, 2004, p.2). Health and Physical Education Students will still need to decode, process and discuss what is experienced since “oral communication skills are also a key part of the development of health and physical literacy and are essential for thinking and learning” (Ontario Physical & Health Education, 2019, p.79). ML requires students to,

learn to ask important questions about all media texts-questions about authorship, purpose, point of view, and key omissions that are all part of the media creation process. By better understanding the media that surrounds them and making media of their own, students simultaneously develop important critical thinking skills that are essential to communication in the 21st century. (Moore & Bonilla, 2015, p.11)



Figure 5. UNESCO (2019) Media Literacy Image

Conclusion

From the onset of the investigation multiliteracy was defined and how multiliteracy was accomplished in elementary schools in Ontario, was given attention while closely reading the new directives within the 2019 Ontario Health and Physical Education curricular document. This qualitative research effort uncovered an understanding of multiliteracies via summative latent content analysis of the current Ontario provincial government positions arising from the recent release of 2019, Ontario Health and Physical Education curricular document. This uncovering addressed the research queries which asked: What are the multiple literacies and how should these be achieved in Health and Physical Education? What level of multiple literacy should Ontario Physical Educators and students reach for at the elementary level? What are the existing literacy guidelines and orientations impacting Ontario teachers?

As it happens, multiliteracy can be achieved in Health and Physical Education by embracing multiple literacies such as CL, ML, PL, FL, and HL while incorporating some traditional notion of literacy in planning and instruction phases. This set of creative literacy practices need be student-centered, active, and involve both teaching and learning that can be observed and evaluated via a pedagogical lens. The level of multiliteracy should reflect the need of the individual students as each student is engaged in a constructivist manner while

working with others on problems and projects to enhance all literacies (Ryan, 2019). It is expected that Ontario Physical Educators and students will become aware of the current existing literacy guidelines and orientations via multiple literacies that are utilized to achieve curricular expectations on a daily, weekly and monthly basis. Literacy remains a priority, and necessary for healthy growth and development of teachers, students and the wider community. In sum, this study revealed many required literacies are expected and taught, including health, physical media, financial, and critical literacy to create a classroom that encourages multiple literacies and multimodal pedagogical pathways. Similarly, Van Sluys (2005) determined many years ago that we should include texts that: a) reflect linguistic and cultural diversity; b) represent a variety of genres, purposes, and authorial perspectives; and c) move beyond words and encourage many ways of knowing” (Lee, 2011, p.261), and in doing so we can better prepare Health and Physical Education students for the 21st century.

References

- Alhammouri, A., Foley, G. D., & Ashurst, J. M. (2015, October). Financial modeling for high school students [PowerPoint slides]. The Ohio Council of Teachers of Mathematics, Cincinnati, OH. <http://www.ohioctm.org>
- Benes, S., & Alperin, H. (2019). Health education in the 21st century: A skills-based approach. *JOPERD: The Journal of Physical Education, Recreation & Dance*, 90(7), 29–37.
- Berelson, B. (1971). *Content analysis in communication research*. New York, NY: Hafner.
- Bosshardt, W., & Walstad, W. (2014). National standards for financial literacy. *The Journal of Economic Education*, 45, 63–70. doi:10.1080/00220485.2014.859963
- Bourke, R. T. (2008). First graders and fairy tales: One teacher's action research of critical literacy. *The Reading Teacher*, 62(4), 304-312.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. doi:10.3316/QRJ0902027
- Busch, C., De Maret, P.S., Flynn, T., Kellum, R., Le, S., Meyers, B., Saunders, M., White, R., & Palmquist M. (1994 - 2012). *Content analysis*. Writing@CSU. Denver, CO: Colorado State University. <https://writing.colostate.edu/guides/guide.cfm?guideid=61>
- Canadian Public Health Association (2008). A vision for a health literate Canada: Report of the expert panel on health literacy. https://www.cpha.ca/sites/default/files/uploads/resources/healthlit/report_e.pdf
- Castelli, D. M., Barcelona, J. M., & Bryant, L. (2015). Contextualizing physical literacy in the school environment: The challenges. *Journal of Sport and Health Science*, 4(2), 156-163. <https://doi.org/10.1016/j.jshs.2015.04.003>
- Cazden, C., Cope, B., Fairclough, N., Gee, J., et al. (1996). A pedagogy of multiliteracies: Designing Social Futures. *Harvard Educational Review*, 66(1), 60-92.
- Churchill, E., (2019). *Changing the narrative of social determinants of health: messaging for Ontarians*. Unpublished Master’s thesis. Wilfrid Laurier University, Kitchener, ON. <https://scholars.wlu.ca/etd/2207>
- Collins, J. M., & Odders-White, E. (2015). A framework for developing and testing financial capability education programs targeted to elementary schools. *The Journal of Economic Education*, 46, 105–120. doi:10.1080/00220485.2014.976325
- Cope, B., & Kalantzis, M. (2009). “Multiliteracies”: New literacies, new learning. *Pedagogies: An international journal*, 4(3), 164-195.
- Cope, B., & Kalantzis, M. (Eds.). (2000). *Multiliteracies: Literacy learning and the design of social futures*. Psychology Press.
- Darracott, C. R., Darracott, S. H., & Harris, P. P. (2019). Associations of physical activity, sedentary behavior, and enjoyment of physical activity with children’s literacy. *Reading Improvement*, 56(2), 51-58.
- de Sola Pool, I. (1959). *Trends in content analysis*. Urbana, Ill: University of Illinois Press.
- Fleary, S. A., Joseph, P., & Pappagionapolous, J. (2018). Adolescent health literacy: A systematic review. *Journal of Adolescence*, 62, 116-127.
- Gillen, J. & Hall, N. (2013). The emergence of early childhood literacy. In J. Larson & J. Marsh (Eds.), *The Sage handbook of early childhood literacy* (2nd ed., pp. 3-17). London, England: Sage
- Han, K. T., Madhuri, M., & Scull, W. R. (2015). Two sides of the same coin: preservice teachers’ dispositions towards critical pedagogy and social justice concerns in rural and urban teacher education contexts. *The Urban Review*, 47(4), 626-656.
- Hepple, E., Sockhill, M., Tan, A., & Alford, J. (2014). Multiliteracies pedagogy. *Journal of Adolescent & Adult Literacy*, 58(3), 219–229.
- Hobbs, R. (2004, September). A review of school-based initiatives in media literacy education. *American Behavioral Scientist*, 48, 1, pp. 42–59. <http://journals.sagepub.com/doi/abs/10.1177/0002764204267250>.

- Hsieh, H.-S., & Shannon, S.E. (2005). 'Three approaches to qualitative content analysis' qualitative health research, 15(9), 1277-1288.
<http://www33.homepage.villanova.edu/edward.fierros/pdf/Hsieh%20Shannon.pdf>
https://teachingtools.ophea.net/sites/default/files/pdf/ophea_walletwellnessactbooklet_02ap19.pdf
- Humble, A. M. (2009). Technique triangulation for validation in directed content analysis. *International Journal of Qualitative Methods*, 8(3), 34-51.
<http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/1480/5586>
- Janks, H. (2014). Critical literacy's ongoing importance for education. *Journal of Adolescent and Adult Literacy*, 57(5), 349-356. doi: 10.1002/jaal.260
- Jewitt, C. (2008). Multimodality and literacy in school classrooms. *Review of Research in Education*, 32, 241-267.
- Johnson, L. L. (2001). Chapter one: Media literacy education. *Counterpoints*, 106, pp. 1-18. JSTOR, www.jstor.org/stable/42976225.
- Jones, S. (2006). *Girls, social class, and literacy: What teachers can do to make a difference*. Portsmouth, NH: Heinemann
- Jurbala, P. (2015). What is physical literacy, really? *Quest*, 67, 367-383.
- Kilborn, M., Lorusso, J., & Francis, N. (2016). An analysis of Canadian physical education curricula. *European Physical Education Review*, 22(1), 23-46.
- Kilinc, S., Kelley, M., Millinger, J., Adams, K. (2016). Early years educators at play: A research-based early childhood professional development program. *Childhood Education*, 92, 50-57.
- Kindermann, K. (2020). Summative content analysis as a core method to reconstruct subjective theories using structure-formation-techniques. *Forum: Qualitative Social Research*, 21(1). doi: <http://dx.doi.org/10.17169/fqs-21.1.3324>
- Kress, G. R. (2003). *Literacy in the new media age*. London, England: Routledge.
- Lee, C. (2011). What do we mean by literacy? Implications for literacy education. *The Journal of Educational Thought*, 45(3), pp. 255-266. www.jstor.org/stable/23767207.
- Lesley, M. (2001). Exploring the links between critical literacy and developmental reading. *Journal of Adolescent & Adult Literacy*, 45(3), 180-189.
- Luke, A. (2012). Critical literacy: Foundational notes. *Theory into Practice*, 51(1), 4-11.
- Mandigo, J., Lodewyk, K., & Tredway, J. (2019). Examining the impact of a teaching games for understanding approach on the development of physical literacy using the passport for life assessment tool. *Journal of Teaching in Physical Education*, 38(2), 136-145. <https://doi.org/10.1123/jtpe.2018-0028>
- McTavish, M. (2014). "I'll do it my own way!" A young child's appropriation and recontextualization of school literacy practices in and out-of-school spaces. *Journal of Early Childhood Literacy*, 14(3), 319-344.
- Moore, D. C., & Redmond, T. (2014, May). Media at the core: How media literacy strategies strengthen teaching with common core. *Voices from the Middle*, 21(4), Name, pp. 10-15. www.ncte.org/library/NCTEFiles/Resources/Journals/VM/0214_may2014/VM0214Media.pdf.
- Moore, D., & Bonilla, E. (2015, August). Media literacy and the common core state standards. National Association for Media Literacy Education. <https://namle.net/publications/mle-common-core-standards/>
- Nutbeam, D. (2015). Defining, measuring and improving health literacy. *Health Evaluation and Promotion*, 42, 450-55. 10.7143/jhep.42.450.
- OECD. (2012). *High-level principles on national strategies for financial education*, OECD, Paris, www.oecd.org/daf/fin/financialeducation/OECD_INFE_High_Level_Principles_National_Strategies_Financial_Education_APEC.pdf.
- OECD. (2014). *PISA 2012 Results: Students and Money (Volume VI): Financial Literacy Skills for the 21st Century*. PISA, OECD Publishing.
- Ohara-Borowski, K. (2018). ACCESS to Health Literacy. *JOPERD: The Journal of Physical Education, Recreation & Dance*, 89(6), 66-69.
- Ontario Ministry of Education (2010). *A Sound Investment: Financial Literacy Education in Ontario Schools*. Ontario Ministry of Education.
- Ontario Ministry of Education. (2019). *The Ontario Curriculum Grades 1-8: Health and Physical Education*. <http://www.edu.gov.on.ca/eng/curriculum/elementary/2019-health-physical-education-grades-1to8.pdf>
- Ontario Physical and Health Education Association. (2019). *Wallet Wellness – Activity Booklet*.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage.
- Persson, L.S. (2016). *Health promotion in schools: Results of a Swedish public health project*. Unpublished Doctoral Dissertation, Karlstad University, Karlstad, Sweden.
[file:///J:/HealthPromotioninSchoolsResultsofaSwedishPublicHealthProject.pdf](http://www.karlstad.se/HealthPromotioninSchoolsResultsofaSwedishPublicHealthProject.pdf)
- Physical and Health Education Canada. (2019). *Physical literacy*. <https://phecanada.ca/activate/physical-literacy>
- Rapport, F. (2010). Summative analysis: A qualitative method for social science and health research. *International Journal of Qualitative Methods*, 270-290. <https://doi.org/10.1177/160940691000900303>

- Rootman, I., & Gordon-El-Bihbety, D. (2008). A vision for a health literate Canada: Report of the expert panel on health literacy. Ottawa, ON: Canadian Public Health Association. http://www.cpha.ca/uploads/portals/h-l/report_e.pdf
- Ryan, T. G. (2019). Black student achievement, engagement and inclusion in physical education. *International Journal of Physical Education*, 56(2), 20-29.
- Ryan, T.G., & Munn, S. (2014). An examination of mental health promotion within international schools and current reform practices that can benefit third culture kids. *International Journal of Educational Reform*, 23(2), 1-12.
- Ryan, T.G., & Neely, C. (2017). Professional development: Educating digital natives in the twenty-first century. *The Journal of Technologies in Society*, 12(3) 11-34.
- Ryan, T.G., & Sinay, E. (2017). Edification of education: An illumination of best practices, effectiveness and improvement. *Journal of Educational Thought*, 51(2), 13-18.
- Saunders, J. M. (2012). Intersecting realities: A novice's attempts to use critical literacy to access her students' figured worlds. *Multicultural Education*, 19(2), 18.
- Schreier, M. (2012). *Qualitative content analysis in practice*. Thousand Oaks, CA: Sage.
- Scoggin, D., & Vander Ark, T. (2018). Should we limit "screen time" in school? *Education Next*, 18(1), 54-63.
- Serafini, F., & Gee, E. (Eds.). (2017). *Remixing multiliteracies: Theory and practice from New London to new times*. Teachers College Press.
- Stemler S. (2001). 'An overview of content analysis'. *Practical Assessment, Research & Evaluation*, 7(17) <http://PAREonline.net/getvn.asp?v=7&n=17>
- The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review* 66(1), 60-92.
- Thoman, E., & Jolls, T. (2004). *Media literacy: A national priority for a changing world*. Center for Media Literacy. https://www.medialit.org/sites/default/files/663_ABSThomanJolls_reproversion.pdf
- UNESCO. (2019). Discussion on media literacy within the framework of the Moscow Global Forum - City for Education. Institute for Information Technologies in Education. <https://iite.unesco.org/events/discussion-on-media-literacy-within-the-framework-of-the-moscow-global-forum-city-for-education/>
- Vamos, S., Okan, O., Sentell, T., & Rootman, I. (2020). Making a Case for "Education for Health Literacy": An International Perspective. *International Journal of Environmental Research and Public Health*, 17(4), 1436. doi:10.3390/ijerph17041436
- Van Sluys, K. (2005). *What if and why? Literacy invitations in multilingual classrooms*. Portsmouth, NH: Heinemann.
- Walsh, M. (2011). *Multimodal literacy: Researching classroom practice*. Newtown, New South Wales: Primary English Teaching Association.
- Whitehead, M. E., Durden-Myers, E. J., & Pot, N. (2018). The value of fostering physical literacy. *Journal of Teaching in Physical Education*, 37(3), 252-261. <https://doi.org/10.1123/jtpe.2018-0139>
- World Health Organization. (2018). *Global action plan on physical activity 2018–2030: more active people for a healthier world*. Geneva: <https://www.who.int/ncds/prevention/physical-activity/gappa>
- Zhang, Y., & Wildemuth, B. M. (2009). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science* (pp.308-319). Westport, CT: Libraries Unlimited Inc.

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