



Linguistics and Education

Family literacies during the COVID-19 lockdown: Semiotic assemblages and meaning making at home



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ABSTRACT

When home became the primary place for children's learning during the COVID-19 lockdown, a dominant rhetoric emerged about a literacy-skills crisis, especially involving learners from low-income and culturally and linguistically diverse families. By documenting the literacies practiced and the literacy-learning opportunities created in and among households during the lockdown in the spring and summer of 2020, this study turns this deficit-oriented rhetoric on its head. Conducted by parents with their children (aged 2–15), this collective biography found that during the lockdown households were forced into spaces that were physically constrained yet replete with a wide range of semiotic resources. Parents and children used these resources, which included multiple modes, media, and languages, to produce expansive literacies and literacy-learning opportunities. The present study offers suggestions about how to recognize and build on learners' linguistic, cultural, and semiotic repertoires in the creation of literacy curricula.

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1. Introduction

Coterminous with the extended global school closures of the COVID-19 lockdown that began in early 2020 was the prolif-

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eration of a narrative about an impending literacy crisis and the possible economic impacts of learning loss (e.g., OECD, 2020; O'Sullivan, 2020). As home became the primary place for learning for school children, deficit discourses many decades old about families' inability to support literacy learning (e.g., Hannon, 2003) were revitalized. Such discourses privilege formal, school-sanctioned literacy (e.g., Johnston, 2009; Paratore & Harrison, 1995; Tett, 2000) and negate the funds of knowledge (e.g., Johnston, 2009; Taylor, 1993; Tett, 2000) and identities of households, minoritizing, in particular, low socioeconomic status (SES) and culturally and linguistically diverse families (e.g., Hannon, 2003; Purcell-Gates, 1993; Stooke, 2005; Taylor, 1983, 1993). Despite glimmers of studies describing creative lockdown literacies that produced surprising literacy learning opportunities (e.g., Bhamani et al., 2020; Kuby & Rowsell, 2021), the existent literature suggests the pandemic has renewed home/school literacy divides and amplified educational inequities in old ways during new times. So, what literacies and literacy-learning opportunities were actually being generated in families during the pandemic? What did the everyday/everynight experiences of literacies in the earlier phase of the pandemic look, sound, and feel like from the vantage point of those who lived them? What might be learned from a close-up view of a diversity of families during this phase, and how might this learning flesh out the existing literature?

To respond to the call that multifaceted investigations are needed to address educational inequities created by the pandemic (Drane et al., 2020), the coauthors of this paper conducted a collective biography study. We are a group of parents in Ontario, Canada, who all were loosely affiliated with each other prior to the pandemic because of our shared connection to the education field. When we decided to conduct this study, our group was made up of education professors, education students, and/or people working in some vein of education (e.g., teachers). Our households spoke a variety of languages, were differently comprised (e.g., some of multiple generations), and had diverse access to socioeconomic resources. We served as co-researchers to document and share our experiences of "in-the-moment" unfoldings of literacies (Kuby & Vaughn, 2015, p. 435) in our households during the spring and summer of 2020. We explored two questions: What were the literacies of our households during the pandemic lockdown? How did these literacies happen, what and who were involved, and with what opportunities for literacy learning? Adopting a posthuman orientation towards literacy, we documented how literacies emerged through ongoing "relational encounters" potentially involving a diversity of languages, modes, media, bodies, matter, time, and spaces (Wargo, 2018, p. 504) and what literacy-learning opportunities they were creating for children. Through parents as co-researchers' collective storytelling, we intended to make explicit the "power-producing binaries" of school/family literacies, human/nonhuman, L1/L2, and mind/body (Zhang, 2022) and how their interconnectedness affected literacy learning at home during the lockdown.

2. Literature review

The literature on family literacy is central to our exploration of the literacies of households during the earlier stage of the pandemic. Our literature review on asset-oriented views of family literacies highlights homes as valuable places for literacy learning; however, the emerging literature on literacy learning at home during the pandemic shows renewed home/school literacy divides and amplified educational inequities, such as the challenges that minoritized communities encountered during school closures (e.g., communities of lower SES and ethnic minorities).

2.1. Asset-oriented perspectives of family literacies

Various applications and definitions of family literacy have arisen since the 1980s when Taylor (1983) coined the term *family literacy*. Taylor used the term to highlight how families encouraged and participated in their children's reading and writing experiences, with homes understood to be valuable places for literacy learning to happen (e.g., Gregory, 1996; Tett, 2000). Family literacy also refers to various family literacy programs designed to enhance adults' literacy as well as children's literacy within the home (Purcell-Gates, 1993). Parents are perceived by some family literacy programs, however, as lacking appropriate knowledge or strategies to offer formal literacy support, and family literacies that differ from formal school-like literacy activities are "uncritically viewed as deficits" (Hannon, 2003, p. 105). Scholars challenge the view that parents are inexpert and should be trained by experts to help their children get ready to read (Stooke, 2005).

Scholars have critiqued deficit views of literacy, particularly as they are applied to minoritized families such as those of lower socioeconomic status and ethnic minorities for whom English is a second language (e.g., Hannon, 2003; Purcell-Gates, 1993; Taylor, 1983, 1993). Such families engage in a wide range of everyday literacy activities which may be unlike what their children experience at school (e.g., Barton, 2007)—activities that are often disregarded or seen as insignificant simply because they are incongruent with formal, school-like notions of literacy (e.g., Johnston, 2009; Paratore & Harrison, 1995; Tett, 2000). To disrupt the notion that literacy practices must be homogeneous, various studies have foregrounded the wealth of funds of knowledge (Moll et al., 1992), namely, the cultural, linguistic, and semiotic resources that different households bring to literacy activities and uses (e.g., Johnston, 2009; Taylor, 1993; Tett, 2000). The varying conceptualizations of family literacies guided our review of current literature on family literacies during the pandemic.

2.2. Family literacies during the pandemic

Emergent literature on literacy practices at home during the pandemic shows conflicting pictures of literacy support versus literacy loss. These studies reflect different conceptualizations of literacy (Barton, 2007). Some literature adopts expansive views of multiple forms of literacies, whereas other studies place a heavy emphasis on print-based literacy. We think that such a narrow view of literacy tends to silence and marginalize the rich literacy activities that happen in diverse families. Such a monistic and narrow view of literacy portrays family literacy as problematic (e.g., Whitehouse & Colvin, 2001).

Most studies on literacy learning at home during the pandemic focus on reading and writing activities. For example, Read et al. (2021) conducted a study in the US of 85 parents with children between two and five years old to ascertain the impact of COVID-19 on families' literacy practices at home, but this study only focused on shared reading and screen-mediated reading engagement at home. The findings show that the nature of shared reading changed because of increased frequency of screen-mediated reading. In a Spanish study, 337 families with children aged 2 to 8 reported in a home literacy activities questionnaire that during the COVID-19 confinement they prioritized writing activities (López-Escribano et al., 2021). Although mentioning multimodal literacies, the study related home literacy activities to print-based texts. Dialogic-recreative literacy activities, for example, involved interactive dialogue about a text and creative play using letters. López-Escribano et al.'s study defined digital literacy as listening to or watching electronic books, writing with digital devices, or playing digital games that involve reading. In another American study, 162 parents responded to an online survey

about the type and frequency of children's home literacy activities (children aged between 2 and 9) (Sonnenschein et al., 2021). The study documented four most frequently reported home literacy activities for older children: reading storybooks, using reading and writing workbooks, reading with children, and reading information books. The most frequently reported literacy activities for younger children were reading storybooks, playing sound games, playing games to learn letters, and reading information books. This study's conceptualization of literacy focused on skill development, such as vocabulary learning, print awareness, phonological awareness, awareness of the alphabetic principle, and world knowledge (Sonnenschein et al., 2021).

Regarding the narrative about the literacy crisis (e.g., OECE, 2020), emergent literature presents both positive and negative outcomes of school closures worldwide. An OECD (2020) report on the long-term impacts of school closures foregrounds primary to upper secondary students' disengagement and learning loss during the COVID-19 lockdown. In Schaefer et al.'s (2021) study, youths of 13-17 years old tried to theorize their pre-pandemic face-to-face creative activities and the impacts of moving these multimodal activities online during the shelter-in-place mandate in New York between March and June 2020. The youths explored their frustrations with time and space in virtual learning when their dance classes, band rehearsals, and math and writing experiences were transferred to the screen. They found that the orchestration of voices, bodies, thinking, creating, and doing in their previous face-to-face classes lost dimension in the Zoom spaces. For example, with students experiencing internet lags and lost cues from their peers' instruments, youth Charlotte found that group instrumental practices became a cacophony. For Molly's dance-at-home experience, the limited space, slippery floor, absence of mirrors, and disconnected bodies moving with the music via Zoom all became temporal-spatial constraints.

Studies also report that the pandemic has further complicated systemic inequities around the world, but that minoritized parents' resilient efforts to support learning at home might refute the aforementioned narrative of possible learning loss during the pandemic. In the best circumstances, in some households children had more bonding time and more individual attention from parents, more time to play and relax, and more time to read and chat (e.g., Crew, 2020; Zainuddin et al., 2020). However, literature about the impact of the global health crisis on family literacy also finds that working-class parents are less likely than their middle-class counterparts to receive online support and access digital devices and the internet (e.g., Crew, 2020; Zainuddin et al., 2020) and that both primary and high school students in minoritized communities encountered major challenges during school closures, such as limited accessibility to technologies and distance learning (e.g., Agaton & Cueto, 2021; Burke & Dempsey, 2020). The Education Partnership Center's (2020) report documented that Nigerian parents from Lagos who, with higher accessibility to technology than families living in northern Nigeria, encouraged their children to read books alongside their parents and on their own, participate in online lessons, and listen to educational programs on the radio. However, even northern Nigerian parents of middle and low socioeconomic status believed that the pandemic would not have severe impacts on their children because they also took steps to support their early-grade children's literacy development (Akinrinmade et al., 2021).

Only a few studies reported learners' and parents' positive literacy engagement at home. Their findings helped problematize the deficit perspectives that are associated with diverse families' abilities to support children's literacy learning at home during the pandemic lockdown. Twenty low-income, Latinx parents of pre-schoolers participated in Soltero-González and Gillanders's (2021) phone interviews. Parents expressed challenges with the

demands of remote education during the pandemic, such as children's disengagement with repeated literacy practices in online lessons. However, the authors found that, in contrast with the prevailing deficit views of Latinx families, languages, and literacies, these parents also created a wide range of practices to respond to their children's interests and support their learning and well-being (e.g., play-based learning to support literacy skills and outdoor activities to exercise and explore in nature). Akinrinmade et al. (2021) conducted in-depth qualitative interviews with 15 parents of middle- and low-socioeconomic status in Kano State, Nigeria. Parents reported that they supported their children and felt confident about their literacy development. Without specific definition of literacy development, Akinrinmade et al.'s findings mainly focused on reading skills. The UK's annual literacy survey also found that children's enjoyment of reading was greater than before the lockdown (Clark & Picton, 2020). Children aged 8-19 reported that the lockdown gave them opportunities to discover or rediscover their identities as readers because of increased reading time, increased accessibility to various formats of books (e.g., audio books, print and digital books), quiet space, and being away from busy school and social schedules during the lockdown. Kuby and Rowsell (2021) also identify literacy moments within different affective encounters during the COVID pandemic and how changed atmospheres (e.g., virtual learning, social distancing), landscapes, timescapes, and expectations offered pedagogical potentials for meaning-making. For example, Kuby and Rowsell describe that one child's free time at home allowed her to enjoy audiobooks as much as she wanted and her creation with all kinds of materials during the lockdown. Northern Nigerian parents also reported positive outcomes, such as more time to play and better parent-child relationships; however, they had concerns about their children's examination results if schools did not provide adequate exam preparation (Akinrinmade et al., 2021). Literacy "in the new normal" (Zainuddin et al., 2020) captures the "paradoxical paradigm shift from the 'previous normal' prescriptive curricula to the 'new normal' parent-led home literacy" (p. 646) which, according to Akinrinmade et al. (2021), has the potential to increase literacy engagement at home. However, parental concerns reported by Akinrinmade et al. (2021) about high-stakes examinations show that the narrow focus of the old normal still affectively impacts literacy learning at home.

Some literature concerning literacies at home during the pandemic reveals a reductionist conceptualization of family literacy that is focused on book learning and Western standards for literacy success (Rowsell & Pahl, 2020). To problematize this reductionist view, we worked as parent co-researchers to explore how reducing literacy to discrete reading and writing skills would privilege "classed and raced versions of what literacy is" (Rowsell & Pahl, 2020, p. 12). We also identified practices and relations that sustain such educational inequity. Other studies show that children, adolescent co-researchers, and parents turned critical moments during troubled times into opportunities for creative literacy learning and meaning making (e.g., Kuby & Rowsell, 2021; Schaefer et al., 2021). Parent stories, rather than correlational studies, have been pivotal resources for researchers to access diverse families' literacy activities (Edwards et al., 1999; Rowsell, 2006). Documenting parent stories during the pandemic is essential because rich, multiple, and fluid literacies can be easily overlooked and made invisible given ethnographic researchers' constrained access to individual households.

3. Theoretical orientation

A posthuman conceptualization of literacy oriented this study. At base, the study understood literacy as meaning making that can include any combination of reading, writing, speaking, lis-

tening, viewing, and representing across myriad text forms (e.g., Heydon, McTavish, & Bainbridge, 2021). This meaning making is not an individuated process, product, or repertoire (Pennycook, 2018) or linguistic choices made by humans in their heads (Pennycook, 2017a). Rather, we conceptualize literacy as a sociomaterial effect of *semiotic assemblages* (Pennycook, 2017b), namely, human and more-than-human entities (e.g., people, time, space, and semiotic resources) dynamically form relationships to produce the doing of literacies. Such a relational ontology is connected to Deleuze and Guattari's (1987) theory of assemblage, which holds that human and non-human entities are not randomly assembled but come into relationships to affect world-making practices.

Given the relational quality of literacies, the study also noted their situatedness. The *semiotic domain* (Gee, 2003) related to literacies, for instance, affects their value and even recognition as a literacy. Boldt and Leander (2020) address these points in their submission of *territorialized and deterritorialized* versions of reading. They contend that the territorialized version of reading at school narrows what counts as reading and evaluates readers with quantitative measures. This version of reading does not consider the different timescales and spaces that readers encounter or the various relations within which they are entangled. "Appropriate" reading at school is territorialized in ways that are "raced, classed, and gendered" (p. 526). For example, imagine a "struggling" reader who lives in a building in an impoverished area with an exhausted, short-tempered mother who works night shifts at a low-wage job. The reader might find themselves "more constrained, more judged and punished" (p. 526) if their reading happens in ways unexpected by the school system that "narrows what counts as reading and as a reader into knowable, quantifiable terms" (p. 525). In contrast, deterritorializations might happen when the reading of a white, middle-class reader not diagnosed as struggling takes place in new directions. We attended to what literacies take place and how they are contingent on what happens moment to moment (Burnett & Merchant, 2020). In the study, we heeded these lessons by attending to the moments of literacies and their related *space-timemattering* which, according to Barad (2019), could suggest how "an infinite set of im/possibilities" (p. 12) materially (re)configured our life-worlds and the past/future/presents we experienced during the pandemic.

Our study was also oriented through posthuman ethics that were "fluid and open" to surprise (Hargraves, 2019, p. 191) and rejected a priori assumptions of findings, including those related to who and what would be involved in the household literacies. Posthuman scholarship, for instance, highlights human-nonhuman entanglements and pedagogical advocacy that goes beyond the "realm of the humans" (Takaki, 2019, p. 608). Snaza (2019) argues that all living things sign and that human meaning making emerges with the semiotic life of all life forms. His concept of *literacy situation* frames literacy as an affective contact zone in which more-than-human agency (e.g., of books, paper, ink, glue, light, chairs, desks, and computers) animates literacy events. Literacy further becomes a question of ethics and politics because of its roles in "distributing and regulating movement" (Snaza, 2019, p. 147) and the ways in which it can co/create spaces for the human and more-than-human to intra-act (or not). Literacies are also implicated in "conceptualizing race, gender, sexuality, ability, nationality, class, species" (p. 148) and conceptualizing relations with more-than-human entities and agencies. Meaning-making is also a process of sustaining human and more-than-human relationships (e.g., Engman & Hermes, 2021; Henne-Ochoa et al., 2020). Due to the flattened ontology of posthumanism, reciprocity is implied among living things and matter. As Kuby et al. (2019) note, posthuman ethics is entangled with places, cultures, multispecies, and matter. Posthuman *ethical meaning making* responds to ethical

relationship-building among humans, matter, languages, and cultures (Zhang, 2022).

A posthuman orientation of literacy enabled our exploration of the forms, productions, and consequences of literacies at home during the pandemic.

4. Research design

4.1. Methodology

Collective biography is a research methodology that involves a group of researchers sharing their experiences of a specific topic through storytelling, listening, and writing (Davies & Gannon, 2006). In line with Auerbach's (1995) wealth-oriented perception of family literacy, our collective biography involved parents as co-researchers. We problematize the scientific correlational studies of family literacy during the pandemic that narrowly define family literacy activities as reading and writing. Instead, our interest in the sociomaterial turn in education aligns with Gonick and Gannon's (2013) vision of collective biography, which examines how humans and their learning and becoming are "discursively, affectively, materially constituted in particular moments" (p. 8).

We are aware of the strengths of ethnographic observation of literacy events in research on family literacy (e.g., Purcell-Gates, 1993). However, we problematize the conceptualization of *literacy events* as observable episodes of patterned, human-centered "activities where literacy has a role" (Barton & Hamilton, 2000, p. 8). Burnett and Merchant (2020) argue that meaning making is porous, lively, multiple, and fluid, but that the notion of literacy events reifies the spatial and temporal boundaries of meaning making. Burnett and Merchant's conceptualization of *literacies-as-events* builds on the idea that literacy arises out of an event and an event is produced as people and things mingle, affect, and are affected by one another. In this paper we use *literacies-as-events* to emphasize the plural nature of literacies and the ways in which time is a continuum, with each event connected to another that precedes and proceeds it. Further, in the study we suggested that parent co-researchers capture moment-by-moment learning and how it was entangled with traditional materials, digital materials, hardware, software, curriculum, available media designs, time, space, and humans (e.g., parents, grandparents, and siblings) (Dezuanni, 2015). In the early stage of the pandemic, the parent co-researchers documented literacies-as-events at home in spring and summer 2020 through images, videos, and written vignettes of specific moments of literacies (ranging, for example, from conversations to uninterrupted snapshots of children's and even parents' learning, explorations, and discoveries in woods and around a pond). Then, from September to December 21, 2020, we conducted an eight-week collective biography study with the following components: (1) sharing documentation (i.e., to facilitate circulation of all forms of data to all co-researchers, we set up a secure online site to share the videos, images, and written stories); and (2) collective story sharing via Zoom (i.e., we shared stories about home schooling and provided suggestions to one another regarding specific affective-related moments in our eight weekly Zoom meetings, around two hours per week). We also offered comments and questions that emerged from each participant's story sharing.

The images and video-recordings that the parent co-researchers documented as the *literacies-as-events* offer "sensory or visceral or affective or material" (Gonick & Gannon, 2013, p. 9) details of the moments so that all the co-researchers could better visualize one another's embodied experiences. Our way of noticing literacies focused on "dynamic and contingent materialization" (Barad, 2007, p. 224) of these spaces, timescales, and bodies, for example, how children's and parents' embodied encounters with space, humans, modes, media, and languages in a specific moment opened (or

Table 1
Participant profiles.

Parent co-researcher	Child (pseudonym chosen by child)	Child's age	Languages spoken at home
Hisham (PhD candidate)	Ahmed	12	English, Arabic (Libyan dialect)
	Ali	9	
	Amina	5	
Lisa (PhD student)	Mark	11	English
	Lewis	9	
	Thompson	7	
Jeff (educator)	Danny	15	Mandarin, English
	Sunny	9	
Zheng (professor)	Rainbow Dash	4	English, Mandarin (Shanghai and Hunan dialects)
Susan (educator)	Lion	6	English, Arabic (Palestinian dialect), standard Arabic, Aramaic, Hebrew, Polish
Le (educator)	Dimitri	11	English, Mandarin (Wenzhou and Shanghai dialects)
Ayman (educator)	Sami	10	English, Arabic (Lebanese dialect), French
	Zain	7	
	Sara	2	

not) lively, fluid, and multiple possibilities for meaning making. We also attended to and shared paralinguistic elements in the stories, such as bodily (e.g., gestures, mimes, and postures), affective (e.g., stress, anxiety, and fear), and sensory (e.g., seeing, hearing, touching, smelling, speaking) elements (e.g., [Guerretaz et al., 2021](#); [Pennycook, 2018](#); [Takaki, 2019](#)). Such posthuman ways of noticing foreground the unbounded material-discursive relationships through which communities of inquiry, subjectivity, knowledge, and meaning emerge. Such relational thinking also concerns power and equity because scholars inheriting this ontology try to identify which relations sustain educational inequity, what excludes or maintains such relations, and how we could (de)stabilize them ([Burnett & Merchant, 2020](#)).

4.2. Participants as co-researchers

At the beginning of the pandemic, a group of parents formed an informal group to talk about learning at home during the lockdown. After receiving a grant for the formal conduct of the research and an ethics approval from the university, the principal investigator (PI) sent potential participants a letter of information by email (see [Table 1](#) for participant profiles; all pseudonyms for blind review purposes). Those interested in becoming parent co-researchers and coauthors of future publications sent their signed consent forms to the PI. Parents also asked their children to assent orally to sharing their documented literacy learnings.

These parent co-researchers came from diverse backgrounds; some were self-identified native English speakers who had grown up in Canada; others were Mandarin-speaking or Arabic-speaking immigrants or international students in Canada. These parents represented a wide range of socioeconomic statuses, though all acknowledged their privilege in being involved in education and higher education. All coauthors held professional and/or academic credentials and had professional experience in education.

4.3. Thinking with “texts”

The study employed a diffractive methodology ([Barad, 2007, 2014](#))—a means to make explicit human and nonhuman entanglements through reading, thinking, and writing with theories and multiple data sources. We thought with various research texts ([Jackson & Mazzei, 2013](#)): (1) conceptualization of literacies as affect of spacetime-mattering; (2) videos of moment-by-moment meaning making; (3) parents’ written narratives about the embodied experiences in the videos; (4) video recordings of Zoom meetings where parent co-researchers shared stories and critical reflections; and (5) transcriptions of Zoom meetings. We ensured that parent co-researchers did not record in the videos any confiden-

tial information about their children’s schools, classes, teachers, or classmates.

We immersed ourselves in the “infinite” ([Leander & Boldt, 2012](#), p. 41) circumstances that emerged in literacies-as-events happening at home. Rather than adopting a preset process for data analysis, we acknowledged the agency of data and allowed the data to lead us to what to focus on for the ensuing collective story sharing. The diffractive methodology of reading, thinking, and writing with data and theories is similar to waves intersecting with one another and constantly making new patterns and configurations ([Heydon, McTavish, & Bainbridge, 2021](#)). As [Jackson and Mazzei \(2013\)](#) contend, both data and concepts are “productive forces in their potential for difference” (p. 269). Our data analysis and findings were not “coded moments of frequency” ([Wargo, 2017](#), p. 398) or meanings reduced into simplified aggregates. Instead, posthuman notions such as spacetime-mattering and intra-action enabled us to think differently about how literacy at home was discursively and materially formed in particular moments during the pandemic isolation. For instance, in the Zoom meetings the co-researchers collectively explored about how to attend to humans, languages, materials, time, and space as “imbricated” entities ([Lather & St. Pierre, 2013](#), p. 630). While documenting literacies-as-events, they took pictures, videos, and wrote up stories that could shed light on how humans, matter (e.g., modes and media), time, and space were entangled to affect meaning making. Besides, while rereading the transcriptions of our Zoom meetings for publication purposes, these shared stories took us to journals, videos, and photos about learning and helped us to see how different time, space, and matters came into relationship to affect literacy practices at home.

5. Findings

Findings show that constellations of time, space, and semiotic and other resources in households generated rich potential for meaning making despite the physical confinement of COVID-19 lockdown. The literacies-as-events were produced through novel entanglements that, relatively freed from the expectations of school-directed literacy, created literacies wherein children could explore the substance of their own environments and interests. The literacies produced were complex, sophisticated, and imbued with expansive multimodal literacy-learning opportunities.

5.1. Meaning making across modes and media

Data suggest how the assemblages involved in households in the earlier stage of the pandemic had “energizing impacts” on the literacies being produced that moved learners to “continue making, doing, and learning” ([Ehret, 2018](#), p. 57). Literacies traversed semiotic modes in particular moments in specific spaces at home. These

literacies departed from the semiotic domain of school to become something different, most notably complex, multimodal engagements predicated in pleasures and curiosities. These literacies-as-events happened during full school closure for most children with a few having virtual assignments from their teachers. The following literacies-as-events relayed by Susan in her May 28th journal entry illustrates these movements:

I realized that Lion's reading level has decreased since the pandemic although he is thriving in other areas such as taking physical risks and overcoming his shyness around his cousin or in videos that I take of him. He seems very confident and creative in his creations through LEGO, storytelling, and game making. He made up several games (e.g., Marble Race and Spy Zones for his independent play) and magic tricks during the weeks at home. As I am writing this, Lion is dutifully working on his comic book out of his own volition. We stay up all night doing reading, writing, magic, being silly, and LEGOs.

Moving from a narrow, school-oriented conceptualization of reading, Lion's interests could assemble with his favourite movie (Star Wars) and his experience of purchasing juice boxes to compose 22 episodes of LEGO Juice Box Wars. Susan recounted:

Lion used LEGOs to conceive of his own characters for a YouTube series. His idea was to create "juice box" characters out of LEGO. The colors of the LEGO pieces represented certain flavors such as blueberry, strawberry and even eggnog. He consulted his Star Wars LEGO encyclopedia (print textbook) to develop ideas for his characters' powers and put them on one of two teams: the light side and the dark side. He built a spaceship out of LEGO where he decided the Juice Boxes live on and do battle in. He further ventured to make a YouTube series that chronicled the Juice Box Wars (in keeping with his Star Wars inspiration). He would practice the story line before recording his videos. After practicing, he set up his iPad to be an independent camera and recorded himself acting out the story lines. He did not need any adult help with this. The idea for Juice Boxes probably came from the experience of choosing juice boxes for lunch at the grocery store. Lion used multimedia and multimodality to come up with an original YouTube series.

These meaning-making events involved expansive semiotic resources of LEGOs, print text (encyclopedia), and digital devices (iPad for YouTube) that went beyond the limits of leveled print-based reading texts.

The literacies from Jeff's household similarly moved across modalities as Jeff's children pursued their interests and used their experiences. These literacies seamlessly crossed languages, unlike the literacy of school which was English only. Jeff's journal entry below documents a literacies-as-event involving Sunny roller skating on the patio in their home during the lockdown and turning this experience into a digital story:

Sunny is playing roller skating at the patio. She complains to daddy about the protective gears because they are not very comfortable. Daddy told her that those gears can protect her because she is still not very good at roller skating. Soon Sunny finds that the patio is a little bit sloped, and it makes her feel quite different when she moves in different directions. Right after Sunny says "我发现这个其实是个斜坡" ("I find it is actually a slope"), she loses her balance and falls. Then she sits up and tells me immediately that she is OK thanks to the protective gears ("我没事儿, 还好有这个"). We listened to a podcast program several days ago in which a professor from UCLA introduced her research on the connection between tone language and music. So, Sunny and I worked together for two days and made a short music video (based on this scenario).

Jeff and Sunny cut the short video clip into several pieces and repeated the two sentences that Sunny said "我发现这个其实是个斜坡" ("I find it is actually a slope") and "我没事儿, 还好有这个" ("I am OK thanks to the protective gears") to tell a story of Sunny's encounter with the slope and the protective gear. Jeff recounted that while making the video he and Sunny realized that the tone of Sunny's speech sounded like singing. Therefore, using Windows Movie Maker, they layered music onto Sunny's melodic utterances and manipulated the tempo of Sunny's speech. Such multimodal, multimedia, and multilingual literacies-as-events reflect "bodily, sonic and visual" constituents of "communication" (Smythe et al., 2017, pp. 42–43) as well as affect. As Jeff recounted, "I hope Sunny can learn through all the fun, for example, learning skills in video editing and the necessity of appropriate protective gears and trying to make herself happy even in some hard times."

Literacies in the study data were also energized by dynamic intra-actions with animals and everyday household objects, as illustrated in the following documentation from Lisa's household. These intra-actions were characterized by feeling–emotion and physical—and not just the intellect. The children in the household continued their journal writing during the lockdown. Lisa's documentation concerning writing in the earlier weeks of the pandemic shows her attention shifting from literacy as meaning making in the head to the body and senses.

My youngest son Thompson is 7. Anytime I tell him to write his journal, most of the time he just gets upset and doesn't want to do it. . . . He usually writes things like "I ate a muffin for breakfast." Then one day, I didn't ask him but he wanted to do it. He wrote about how he wanted to know what birds were thinking and I thought it was interesting because now it's on his terms so now he wants to write. . . . He wrote: "Today I am wondering what birds think, that is why I want to be a bird. I think that birds tweet and when they tweet they think of English words. I also think that they are dinosaurs." He reads quite well, so he's probably been reading about the fact that birds evolved from dinosaurs. . . . We have birdhouses in the backyard that the kids fill routinely, and he had been watching the birds.

Birds, the birdhouses, the physically constrained spaces at home and in the backyard during the lockdown all intertwined to energize Thompson's journal writing, which mirrors his multisensory engagements with the birds, the birdhouses, and the spaces: the sights and sounds of birds and both human and bird movements (boys feeding birds and birds coming and going). Lisa recounted that when she started to see that Thompson was happy to write for his own purposes, she stopped worrying about his writing.

Data also show that the literacies shuttled between online and offline spaces and expanded children's opportunities to engage with diverse semiotic resources. For example, Ayman's journals in spring and summer show Zain moving seamlessly across media at home. Zain expressed his appreciation of the freedom to choose what to read and to decide his own reading pace. Zain said that he also enjoyed the opportunities to diversify his digital literacy learning tools, such as reading on BookFlix, learning about spelling with the app Lexia, and journal writing on an iPad.

Le's journal likewise records literacies in her household energized by new assemblages where her child, Dimitri, was introduced to new interests and could pursue them. Dimitri and his friends became interested in Prime Minister Justin Trudeau's 2020 urge to "buy Canadian" (Tunney, 2020), an interest that featured prominently in their online and offline communications that enabled their Lobster Project. To meet the seafood demands of households in local Canadian Chinese communities, a group of youth organized this non-commercial fundraising activity. Money raised was to be used to help people, such as children with Down syndrome. The youth used WeChat to connect the supply (fish indus-

try in Prince Edward Island) and demand (Chinese communities in Mississauga and Oakville). They asked people to place pre-orders through Group Solitaire, a free WeChat community marketing tool. A few parents picked up the seafood from the Pearson Airport and dispatched it to four distribution centers. Dimitri joined the project as a volunteer and received online and face-to-face training in how to ensure safety, handle and weigh live lobsters, greet customers, and respond to their questions. He worked with other volunteers in one of the distribution centers (a garage of a household in his neighborhood) where he was in charge of stapling a thank-you card to each paper bag. Dimitri and his peers used Chinese and/or English when addressing different customers. The youth sent out a survey in Chinese to all the buyers for customer feedback. Dimitri and other volunteers also had a Zoom meeting to reflect on the experience and discuss future plans.

Parents also documented how human and more-than-human bodies intertwined to shape multimodal meaning making, as illustrated in the next example. Zheng and her child, Rainbow Dash, started dancing during the lockdown in an attempt to help Rainbow Dash burn off energy before bedtime. Below is Zheng's journal from May 2020:

Rainbow Dash loved the mirror that we moved from the house entrance to the living room for dancing. She often puts on her Elsa costume and accessories, sometimes talking to herself in the mirror. On May 18 Rainbow Dash seemed tired, sitting on the sofa after a short while and leaving me to dance alone. Suddenly, Google Home started playing "Blah Blah Blah Cha Cha Cha." Once the upbeat music was on, Rainbow Dash arose right away and resumed dancing. The two videos I took show that she got really excited, kept swirling and laughing, invited me to a partner dance, and initiated new steps for it. On May 26, to make a fort for Rainbow Dash, I dug out a piece of pink polyester pongee that my husband and I used 15 years ago to decorate our wedding room. After dinner, we pulled it off the fort and started dancing with it. Rainbow Dash loved it, making herself a cocoon wrap, stomping on it, sliding on it, and laughing all the time. This scenario reminds me that she often searches for things to dance with: a Chinese fan, her Elsa dress and accessories (her all-time favorites), and my silk scarves which she would put on as cloaks, run fast, and laugh to see the cloaks flying in the air.

Dancing and singing were also among Lion and Susan's favorite "Undies Academy" events. They held karaoke concerts for their stuffed animals. Susan loved singing classic rock and Lion became a fan of her concerts, singing along during the chorus. Lyrics on the screen prompted Lion's interest to read. They also played guitars and keyboard while singing. The duo made funny voices and faces to render the concerts into "realistic" rock shows. When Cousin LuLu came over, they danced a lot. Lion's favorite dance was "Right Here Right Now" by Fatboy Slim. The music video shows the evolution of humans from a unicellular organism to *Homo sapiens*, and Lion liked to imitate the progression of animals through dance.

Parents' documentation of literacies-as-events in the earlier stage of the pandemic not only shows lively meaning-making activities that dispersed across modes, media, and senses, but those meaning-making activities also foreground how the constrained physical spaces at home enabled multiple forms of semiosis to assemble to create expansive meaning-making opportunities for children.

5.2. Intra-acting with technologies and traversing real/virtual spaces

Parents' documentation of meaning making at home in the early stage of the pandemic reflects that fluid spacetime mattering at home during the lockdown allowed infinite possibilities for di-

verse semiotic resources to assemble to affect children's meaning making with technologies.

Parents, though physically constrained during the lockdown, found that technologies at home connected to their children's interests and to current events during the pandemic and expanded semiotic opportunities. For instance, during the lockdown, Ayman's children, Sami and Zain, increased their technology use and started watching Spy Kids on Netflix. Zain wanted to buy gadgets that are used by spies and tech explorers. The toys Zain ordered on Amazon included night vision goggles and a voice disguiser. Zain enjoyed playing with them with his older brother as they went on a made-up Spy Kids mission, secretly communicating on a special frequency on their walkie-talkies. The physically constrained spaces during the lockdown also enabled Lisa's children to reconnect with their digital devices, for example, engaging in imaginative dialogue in tents in their backyard using walkie-talkies and stuffed animals. Their play was based on space shuttles and the space station because at the time astronauts were traveling to the space station. In Le's June reflections, she noted that digital devices had become an extended "body" for Dimitri. Though he still wrote on paper and whiteboard, or drew on physical objects such as a globe, during the lockdown, he increased his use of laptop, iPad, phone, and the keyboard or input system to type texts to express thoughts, create slides, and communicate as he saw fit. In mid-May 2020, Dimitri used Adobe Spark to create a video about his experiences during the lockdown. He had stopped using Adobe Spark for several years but resumed its use in lockdown conditions. At the end of May, he explored PowToon and watched tutorial videos to create a slideshow about the coronavirus. Toward the end of the Lobster Project described above, Dimitri created his own report about lobsters and oysters for the youths' after-project Zoom meeting. He used Google Slides and searched for, selected, and embedded images of live and cooked lobsters and oysters to accompany written texts. He adjusted and played with the images and reorganized images and text for a better display. The different digital tools of Adobe Spark, PowToon, and Google Slides expanded his semiotic options and enabled his creation of different multimodal and multimedia texts to communicate about his thoughts and experiences of the current events during the pandemic.

Digital engagements (re)configured the literacies of households during the lockdown. Hisham's child Ali's gaming, which reconfigured his reading material and practice, is a case in point. During the lockdown, Ali was unable to borrow library books or materials from school. Engaging with new reading materials in new ways thus became a must, with positive consequences. In his May 18th journal entry, Hisham described it thusly:

Ali was playing a game called Piggy. I was observing him. He was reading out loud what was on his tablet so he can continue the game. I encouraged his reading and praised his correct pronunciation of words, fluency, and intonation. . . . At the beginning of the school year, he was below average and needed to read more to improve. Now he is almost at the right level.

Within the Piggy game, Ali communicated with a virtual pig that gave him instructions to play the game and build a map. Being in the moment with Ali and the game, which would not have happened had Ali been at school, Hisham was able to notice and support Ali's reading with the game. This event and the assemblages that made it up expanded the ways and spaces to engage Ali in reading.

Digital engagements likewise created unintended opportunities and consequences in Jeff's household. Jeff recounted the online occasions for Sunny to socialize with her friends during the 2020 lockdown. Of these efforts Jeff said:

Every Wednesday I teach Scratch to Sunny and 6–7 other grades 2 and 4 kids via Zoom. Last week, it was another kid's birthday. They could not have a birthday party as usual during the lockdown. So Sunny thought about creating an online celebration animation for the girl. She combined the cake and the bear together and made an animation of "Happy Birthday." . . . After a week, the kids told me that they wanted a kids' meeting. So I left them alone so that they could chat with each other, share their ideas, and talk about everyday life.

Jeff also recorded an interview with Sunny about how she surprised him when she taught her friends how to use the color effects function in Scratch. He was happy to see that the Wednesday Scratch events engaged the children in collaborative making, co-teaching, and socializing with friends.

The digital engagements in literacies-as-events in Jeff's household allowed additional forms of social action. Jeff is the cofounder of an NGO that supports immigrant children's STEM education. During the pandemic, Jeff and both his children (Danny and Sunny) helped him with online events to support the community, such as a Friday online program concerning Python and Wednesday Zoom meetings about coding and digital storytelling with Scratch. Connecting to these events, Jeff said in the journal, "I believe that we can contribute to equitable learning opportunities outside of schools, especially in such a difficult pandemic situation." His team received positive feedback from both the children and parents in the community. He recounted that all the virtual learning experiences made him believe that "by standing together, life is much easier, for all of us."

Data show that during the pandemic with all the formal learning spaces closed (e.g., indoor playgrounds, extracurricular classes, museums, and libraries), the outdoors and digital spaces became entangled in literacies-as-events. Free of the constraints of school, Ayman's family, for instance, spent more time outside during the pandemic and expressed happiness about this. Ayman recounted that the outdoor activities had always been entangled in their home literacies-as-events, however, the degree of the entanglement was intensified during pandemic. He said, they became more intentional in scheduling their weekly outdoor education and highlighting encounters with animals for educational purposes. For instance, Ayman recorded that he and his family went for hikes and encountered geese, frogs, birds, rabbits, fish, and snakes. One day on their way home, Ayman's children, Sami and Zain, decided to adopt birds for the upcoming summer vacation. Their parents encouraged them to take responsibility for the adoption by devising a bird plan that included costs for food needed per month, ways to take care of the birds, and scheduling. The children used their digital devices to research, read, and learn about the characteristics of budgies, how to take care of them, the materials they would need, and the issues they would need to consider before making the commitment.

In sum, children's knowing and doing in the interconnected real and virtual worlds participated in (re)configuring the sociomaterial lifeworlds during the lockdown.

5.3. Intra-acting with languages, cultures, and traditions

Parents' documentation describes events in which literacies were produced through dynamic relationships between family members and their linguistic resources, cultural repertoires, histories, memories, and traditions.

Now out of the way of school-based linguistic expectations, the entanglements of the households produced fresh language-learning opportunities for the children. Lion, for instance, when in school, was required to use the didactic program Rosetta Stone: language-learning events that Susan said he did not enjoy. Dur-

ing lockdown, Lion instead viewed movies with his mother. Susan and Lion watched movies in Arabic and French, and Lion read the English subtitles. Susan recorded Lion liking to follow along and read the words as they came up on the screen. Rainbow Dash had new opportunities related to her mother tongue of Mandarin and her family's Chinese cultural practices. Her grandparents came to Canada from China for a visit in late 2020 and had to stay in Canada because of the pandemic. During the lockdown, they engaged Rainbow Dash by teaching her Chinese calligraphy, the Chinese tea ceremony, Chinese chess, and Chinese baking. The language of the literacies-as-events in Hisham's household also altered during the lockdown. Ordinarily, Arabic was spoken at home. After lockdown, Hisham's eldest children, who had communicated with each other in Arabic, realized that they could understand each other in English. Their mother spoke little English, so the children would code-switch depending on with whom they were communicating. Hisham's youngest child, Amina, was sometimes frustrated because her parents could not understand her mixed use of English and Arabic. They would say to her, "Say it the way you say it. And we may bring translators right here. The two brothers translate for us." One day in May, Amina showed her parents two of her drawings. Amina explained to Hisham what she meant by both drawings. Hisham recalled that she used simple sentences with lots of descriptive adjectives, action verbs, and colors in both English and Arabic. Hisham said he used to worry about her when she was in school because she chose not to communicate and socialize, but at home she moved between Arabic and English and was bubbly all the time.

In the parent co-researchers' meetings, parents reported that various linguistic and spatial repertoires assembled to help maintain their children's heritage languages. In fall 2020, Zheng was pleased to share with the group that Rainbow Dash's Mandarin was growing fast during the pandemic, and having intra-acted with her Chinese-speaking grandparents and parents, Mandarin learning apps, and Mandarin audiobooks at home, she started to recognize and write Chinese characters. Jeff reported that he and his wife bought a lot of Chinese books in China and shipped them to Canada. Their children, Danny and Sunny, had daily homework related to Chinese language learning during the lockdown, such as listening to audio stories, writing, and reading. Ayman said his family had added Arabic language and Islamic studies to the home-schooling curriculum and tried to use Arabic as much as they could at home.

I can see this mostly in my daughter, who was two years and a half. She is picking up a lot of Arabic words because I intend to speak with her only Arabic. Sometimes, to my surprise, she replies in English because she heard her brothers speak in English.

Ayman's family lives in an area in southern Ontario where there are many families from different regions of the Middle East. While reminding the children to maintain social distancing, the parents sent their children to play in the neighborhood playground. For most of the time, the children would try to speak English, but they were also exposed to Arabic when playing at the playground. The scenarios that the parent co-researchers shared highlight the idea that languages are not internalized, individual competences: heritage language learning was extended and embedded across places, materials, people, and the linguistic resources that people brought into the intermingling (e.g., [Pennycook, 2017b](#)). Such intermingling in home learning spaces during the lockdown was agentic to enable children's exploration with their heritage languages.

Parents shared thoughts about how maintaining heritage languages is intertwined with children's fluid subjectivities. Both Ayman and his partner, Hanaa, are academics. Despite their tight schedules, they engaged their children in learning with the Quran, and the morals and rituals associated with it. They sought to main-

tain their children's identity as Canadian Muslims with an Arabic origin. Ayman and his wife were aware of the significance of learning more languages and having a good understanding of their social, cultural, and religious duties. Ayman wrote, "In that way, they can better contribute to the overall Canadian inclusive society and be an effective part of its fabric." Ling communicated that Dimitri had a period of openly expressing confusion about what it meant to be Canadian and what it meant to be Chinese. Ling told Dimitri, "Your identities and languages do not have to be in a binary framework. You can be plural. You can be both. And you don't have to pigeonhole yourself." Ling found that having grandparents from China staying with them during the pandemic offered Dimitri more opportunities to engage with Mandarin and the Wenzhou dialect. When he talked to his grandparents, who only speak Mandarin and Wenzhou dialect, he adjusted his code to communicate with them. Ling noted him using elements of the Wenzhou dialect, especially around the dinner table. Dimitri also seemed to enjoy hearing his grandparents tell stories about Ling's childhood. Ling understood that these engagements, as well as the Lobster Project, created opportunities for the promotion of transcultural identities.

6. Conclusion, discussion, and implications

This collective biography study focused on the rich, lively, and fluid family literacy activities that took place in diverse households during the COVID-19 pandemic. The key finding shows that during the lockdown diverse households were forced into spaces that were physically constrained yet replete with a wide range of semiotic resources. These semiotic resources included multiple modes, media, and languages and intertwined with time, space, parents, children, and their intentionality and emotions to produce expansive literacy-learning opportunities.

In contrast to the deficit model of family literacy (e.g., Gregory, 1996), parent co-researchers' documentation illustrates the semiotic and other resources that coalesced during the lockdown in relation to the literacies-as-events in their diverse households. The findings defy the transmission model of family literacy (i.e., skills being transmitted from parents to children; Auerbach, 1989) and suggest how a sociomaterial ontology helped parent co-researchers adopt a new way of noticing the agency of human and more-than-human entities in enacting literacies. The parent co-researchers' material-informed observations and documentation foreground the dynamic assemblages of semiotic resources when human and more-than-human entities "enroll[ed] and mobilize[d] each other" (Dezuanni, 2015, p. 433) from moment to moment during the lockdown. We acknowledge the distributed agencies that enable meaning making (Burnett & Merchant, 2020), such as our entanglement with multiple modes and media in everyday life. Parent co-researchers recorded how humans and more-than-humans mingled to make meaning at home during the lockdown. Toohey (2019) contends that pedagogies and research that focus attention to "vocal musculature or fingers and hands, lungs, air, eyes, faces, bodies, memories stored in identifiable parts of brains, and semiotic resources of many kinds" create more spaces for literacy practices (p. 945). Focusing on relational knowing in the materiality of our lifeworlds during the pandemic allowed us to see how multisensory meaning making happened through "touch, taste, sight, sound, smell, memory, and story" (Engman & Hermes, 2021, p. 96).

Methodologically, we collectively explored the "material reconfigurings of spacetime-mattering" (Barad, 2019, p. 10) that affected meaning making during the pandemic, and we probed the possibilities for post-pandemic literacy education and research. Findings from parents' documentation of learning during the lockdown demonstrate "unboundedness" and "play-like ways" of meaning making, knowing, and becoming (Kuby &

Vaughn, 2015, p. 459). Our study identified the expansive possibilities of creative meaning making in the early stage of the pandemic, which belies the narrow focus on reading and writing of many studies on family literacy during the pandemic (e.g., López-Escribano et al., 2021; Sonnenschein et al., 2021). Those findings are consistent with Kuby and Vaughn's (2015) finding that teachers in public schools are under pressure to teach narrow-scaled sequential literacy skills and to prepare students for standardized literacy assessments at various levels. In contrast, our findings of literacies-as-events during the lockdown show that children's knowing/becoming/doing literacies were enacted through the "agentic relations" (Spector & Kidd, 2019, p. 61) among time, space, and a wide range of semiotic resources at home (e.g., media, material, and languages). The study aimed at identifying and nurturing "different modes of relationality beyond human centric or child-centred relationality" (Nxumalo et al., 2018, p. 436).

Our findings relate how humans, more-than-humans, matter, time, and space were continuously forging relations to shape knowing/doing/becoming and to (re)configure the diverse families' sociomaterial lifeworlds. These findings offer important insights into building and sustaining relationality between body and mind, nature and technologies, real and virtual worlds, and human and more-than-human (e.g., Engman & Hermes, 2021) in household literacies. Because of the research team's rich experience in education and familiarity with school literacy, parents as co-researchers intentionally captured the emerging learning opportunities during the lockdown to engage children in relationship building with languages, modes, and media in specific moments and spaces. Takaki (2019) raises important questions about the affordance of posthuman applied linguistics, asking questions such as, "To what extent does a posthumanist applied linguistics favor the less prestigious social classes, their cultural capitals and histories together with the less dominant materiality in entangled ways?" (p. 595). We argue that post-pandemic literacy pedagogy and curriculum can foreground relational and ethical responsiveness to the world. Such an orientation could expand pedagogical spaces in which learners, parents, and educators can explore how "an on-going relation and responsiveness to humans and non-humans" (Kayumova et al., 2019, p. 216) could enable collective problem solving for living well together. As Kuby et al. (2019) contend, posthuman ethics is entangled with places, cultures, multispecies, and materials. Posthuman ethics are responsive to the "fluid and open" (Hargraves, 2019, p. 191) intra-actions between human and more-than-human (e.g., semiotics and signs in nature and diverse human histories). Deleuze and Guattari's (1987) "assemblage" conceptually enabled the researchers to see that assemblages are purposeful and they are always about "arrangements of desire" (Buchanan, 2021, p. 79). Instead of looking for random accumulation of individual actors, parent co-researchers in our study started to see the importance of intentionally creating time and "physical and curricular space" for learners to "live out their literacy desiring" (Kuby & Vaughn, 2015, p. 458) and to connect with their linguistic, social, cultural, and semiotic repertoires. Schools and teachers should also connect with literacy learners' embodied life experiences within households, communities, and nature, embrace children's bodily emotions and desires, engage ethics in meaning making, and buttress pedagogies of "infinite variations" (Springgay, 2015 p. 83).

Concerning the limitations of the present study, we see human and semiotic resources as "completely imbricated" entities; however, what happened in the literacies-as-events still exceeded our perception (Lather & St. Pierre, 2013, p. 630). Given the predominant roles that critical reflection or reflexivity has played in educational research and practices, we also felt challenged to put reflexivity and diffraction in conversation with each other in our collective biography. We upheld the focus of reflexivity on social trans-

formation (Bozalek & Zembylas, 2017). Haraway (1992) notes that reflection intends to produce the same, while diffraction maps interference and places where “the effects of difference appear” (p. 300). However, we believe in the role of critical reflection in problematizing power relations in knowledge production. The diffractive methodology helped the parent co-researchers see that we are part of the apparatus that produces knowledge (Barad, 2007) and there are no storyteller-researchers who rationally observe what happens and reflectively tell stories; there are only storyteller-researchers who are “multiply dispersed and diffracted throughout space/time(mattering)” (Barad, 2014, pp. 181–182). Materials and languages accessible at diverse households of our research team were intertwined with meaning making at home during the lockdown. The privileges of the research team also affected our strong intentionality to disrupt the power-producing binaries of school/family literacies, human/nonhuman, L1/L2, and mind/body and how their interconnectedness affected our family literacy practices during the pandemic. Our familiarity with school literacy and our professional knowledge about harnessing modes, media, and languages in creative meaning making and the team’s socio-economic, cultural, and linguistic diversity were all assembled and contributed to knowledge production and literacy pedagogies. We acknowledge that diverse families are experiencing raced, classed, and gendered versions of school literacy; therefore, we call for future studies that attend to the silenced nuances of the diversity (e.g., intersectionality of race, class, and sexuality etc.) and how they mingle to affect meaning making.

A broader semiotic analysis of family literacy during the pandemic could help educators and researchers identify the significance of time, place, and mattering in multimodal, multisensory, and multilingual meaning making (e.g., Pennycook, 2017b). The knowledge gained from the present study can offer alternative ways to both disrupt the dominance of school literacy and envision inclusive school education and curricula that respond to educational inequities, which become more prominent during public health threats.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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