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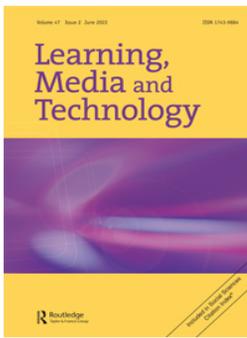
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Alone-together: intergenerational mapping of digital and analogue spaces of self

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ABSTRACT

The project featured in this article experiments with mapping methods as part of a research-creation approach to exploring spaces, times, and movements within materialisations of self. Bringing together adults and children across two cities during lockdown, the project problematises a stance on 'learning loss' during the pandemic and instead focuses on the potential of the experiential blurriness of analogue and digital spaces. Rather than seeking to control and structure online learning – thereby denying and limiting its possibilities, explorations, and senses of self – three researchers set out on a speculative approach that acknowledges the dynamic complexity of physical and virtual ways of knowing and being. The article discusses the affordances and challenges that the methodology offers and concludes with the broader implications of this research for reimagined post-pandemic pedagogies. In the end, we advocate for mapping as a way of generously creating spaces and activating meaning-making in diverse learning contexts.

Introduction

This article shares how we were drawn to the concept of research-creation (Manning 2015; Truman et al. 2020) as a way of engaging with the dynamic complexities of online and offline learning during Covid. We explore a project that moves across digital/analogue, online/offline, human/more-than-human spaces and times through experimentations with mapping methods. With this, we offer the special issue a research-creation lens on digital (and non-digital) materialisations of self through sharing an intergenerational research study that explores the potential of mapping as a way of activating relational multimodal spaces.

Traditional approaches to research put us at risk of marginalising everyday experiences that move in and out of online/offline spaces by applying pre-conceived structures that compel us to collect *certain* data and organise it in *certain* ways (St. Pierre and Jackson 2014). Lockdown brought into sharp focus the need to attune ourselves to the dynamic complexity of learning lives as a way of reimagining possibilities for learning as a dynamic process of becoming (Atkinson 2018). We looked to mapping methods as a way of permitting more nuanced understandings of the ontological blurring between digital and analogue spaces and were guided by research-creation in order to activate unanticipated questions through non-linear explorations (Jackson and Mazzei 2018).

This article charts a project that brings together the three of us, a class of nine- and ten-year-olds in Delft, and two undergraduate students, Scarlett and Will, in Bristol to explore mapping as a

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research event (Truman 2021). We deliberately use the term *event* as opposed to *data collection* to signal the active, relational and improvisational nature of the research. Taking inspiration from mental mapping (Gieseking 2013; Lynch 1960; Powell 2016) as well as mapping within arts practices (Harmon and Clemans 2009), maps invited us to engage with the people, places, and things of lockdown; the sounds around us; and the rhythms of our everyday experiences as learners and educators in a pandemic.

As a contribution to post-qualitative research, as well as inquiry-based and arts-informed pedagogy, we advocate for mapping as an affirmative way to make space for alternate ways of producing and sharing knowledge and learning. Our exploration intensifies understandings of how learning practices can engage with the not-yet-known rather than becoming structured into already-established knowledge (Atkinson 2018). This matters: first, because we have a collective responsibility to permit learners to explore and imagine difference (Facer 2016); and, second, because it is through such practices that we have the possibility of collectively sustaining life (Ingold 2019).

We begin by describing how the project came about. We then introduce research-creation and mapping methods before sharing how the research event unfolded. Next, we surface three concepts that further our thinking and activate new questions: *researchers-artists-educators in process*; *mobility*; and, *possibility*. We conclude by advocating for mapping as a way of creating space for, and activating, meaning-making in diverse learning contexts and share how the project surfaces new ideas that help us reimagine learning for post-pandemic times.

At the threshold of pedagogy-art-research (in a pandemic)

To begin with, we knew each other previously: Jennifer and Mark co-researched a study on sensory-led multimodal composing (Rowsell and Shillitoe 2019); and, Harriet and Mark co-designed a conference seminar in lockdown, with participatory responses to place, storying through objects and silent mapping (Hand and Shillitoe 2020).

We had been in lockdown, on and off, for nearly a year. Mark had already been experimenting with new ways of activating learning in Delft. Learning in Mark's classroom is inquiry-based and follows open-ended lines of questioning (Shillitoe 2021). Lockdown disrupted the rhythms of home and school which led to new encounters across online and offline spaces, such as online brunch, sewing or making homemade face packs. Taking inspiration from Fluxus art events (Higgins 2002), these performances shifted learning outside of conceived boundaries of education into a 'between-ness or liminal state that create new zones of participation, interaction, and understanding' (Miles and Springgay 2020, 1011). Mark shared the following with us as a reflection of his pandemic teaching space:

> I seized our lockdown home learning as an opportunity, a possibility. Making it a moment, capturing the moment … I devised a series of engagements which interrogated the inside and outside of our lockdown learning spaces. Encounters of thinking, making, doing that mapped our rhythms and routines. Finding moments to share, to perform, to discover more about ourselves and each other. Morning yoga, a series of art experiments, making brunch together in silence, microphones open, alone together.

In Bristol, Jennifer and Harriet had also been negotiating the shift to online life. For Jennifer, in the day-to-day activities of her teaching practice and research work engaging in literacy, social change and maker approaches (McLean and Rowsell 2021). And, for Harriet, as postgraduate researcher exploring the utility of mapping as a pedagogical tool (Hand forthcoming). Motivated by our shared interest in arts-based approaches that explore affect, experimental methods and speculative methodologies, the three of us decided to conduct a research study guided by the concept of research-creation based on our joint readings of a Springgay and Truman article (2017).

The project took shape during a simultaneous walk whilst connected via video call, where lost drivers, frozen screens and freezing hands deepened our shared response to the complex, multi-sensory and multimodal experiences of learning in the pandemic. The conversational events of our walk
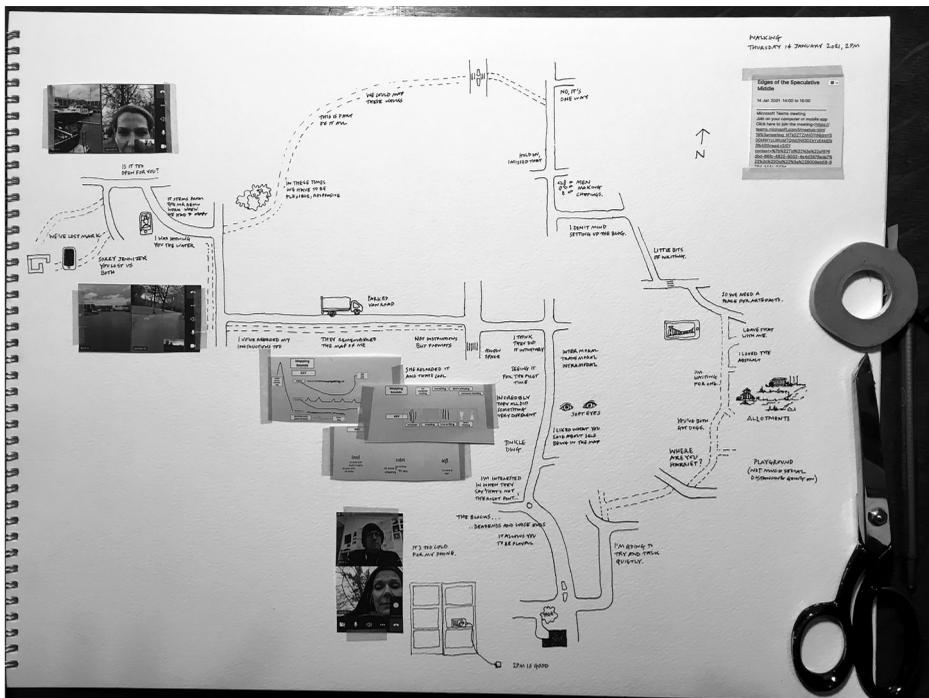
Figure 1. The map of our walk and the collective dialogue.

made their way onto a map (Figure 1) where place, embodied feelings, memories, hopes and objects were brought into relation and continued to activate new ideas as the map was shared over email.

We were drawn to the in-between spaces often neglected in traditional pedagogical and methodological approaches that create binaries such as child/adult, matter/discourse, human/non-human (Barad 2007, 2003). Problematising the conceived and perceived boundaries of analogue and digital spaces between: learner self and private self; present and future; or, classroom and bedroom became increasingly important to us as a dimension of multiplicity, not as 'a combination of the many and the one, but rather an organisation belonging to the many as such, which has no need whatsoever of unity in order to form a system' (Deleuze 1994, 182). We therefore wanted to expand the ways that we activate knowledge (Manning 2020) to make 'space in digital education for the impact that comes from engaging with the world and its messiness more creatively and critically, more imaginatively and inventively' (Ross 2017, 227).

Experimenting with research-creation

The relational, emergent properties of life have long been a subject of interest for those who challenge the taken-for-granted ways we approach research based on an assumption of the world as static (Lather and St. Pierre 2013), or who seek alternative ways of thinking and doing, for example, non-representational methodologies (Thrift 2008; Vannini 2015), speculative research (Wilkie, Savransky, and Rosengarten 2017) or transdisciplinary research (Gibbs, Neuhauser, and Fam 2018).

What is important to us about research-creation (Manning 2015; Truman et al. 2020) is an orientation that is 'grounded in … ontological, epistemological, ethical, and political attunements to creating a different world' (Springgay 2020, 226), and that decentres the human. Research-creation shares with more-than-representational theories (Thrift 2008) an interest and concern for complexity, relationality, and emergence. As a process-oriented way of conceiving and enacting research, it

is described by Springgay (2020, 226, parentheses in original) as 'a way of doing theory/thinking that is bodily, experimental, and considers research (knowledge making) as a (speculative) event emerging from a practice, rather than preformed or predetermined.' Research-creation provokes new 'modes of thinking-making-doing' (Springgay and Truman 2017, 4) without any privileging of one above the other. In practice, such an orientation guides researchers towards: collaboration; transdisciplinary thinking; and being responsive to what happens (Springgay and Truman 2017; Truman et al. 2020). Research methods are employed to activate thought and speculate rather than to reach conclusions based on already-established structures or pre-conceived outcomes.

The possibility of mapping

Mapping offers a way of engaging in our everyday that is open to possibility. According to Kitchin and Dodge (2007, 343) 'maps are of-the-moment, beckoned into being through practices; they are always mapping,' signalling a significant shift away from the notion of maps as passive representations. This argument rests on a process-orientated approach, suggesting that mapping is emergent through sets of relations that continue to do their work, even after the tools are put down (Corner 1999).

Mapping is increasingly used to develop understandings of place (Gieseking 2013; Powell 2010, 2016) and is recognised for the affordances it has in strengthening connection with the world around us, as explored in *Learning, Media, and Technology* previously by Literat (2013). Within the arts, however, mapping is also used more experimentally (Harmon and Clemans 2009) and can become completely disentangled from place, offering a way to explore relations between all manner of entities (Panneels 2018). Of interest to this project, was its potential for engaging with the indefiniteness and open-endedness of human and non-human intra-action (Barad 2003).

Deleuze and Guatarri make use of the rhizome to evoke how mapping produces itself through continuous and dynamic 'variation, expansion, conquest, capture, offshoots' (1988, 22). It is precisely these properties that distinguish the map from the tracing which is doing nothing more than attaching itself to already-established hierarchies and organising structures. What this helps to do is show how mapping can activate the not-yet-thought and shift us away from well-practiced ways of learning and knowing that cling to recognition of what makes sense to us (Deleuze 1994), intensifying the utility of mapping as a method that gets us closer to the properties of learning that are often hidden or rarely explored (Lemieux et al. 2020).

The research-pedagogy event

Participants

Mark's class was a group of 20 nine- and ten-year-old international learners in Delft. The research event was intentionally planned as part of a now, hybrid transdisciplinary programme of inquiry, with consent from parents for the learning experiences to be part of the research project. In Bristol, Jennifer took up the opportunity to invite two undergraduates as part of a research placement. We shared our motivations for the research with Will and Scarlett, exploring what it might mean to do research experimentally. Our project demanded dynamic ethics (Vannini 2015) imbued with care, integrity and responsibility to each other and the places and objects we engaged with (Ingold 2019).

Experimental spaces

The project was conceived as a series of mapping encounters over 12 weeks in different online-offline experimental spaces. The practicalities of school and university timetabling led us to schedule a series of weekly sessions in each location, but we resisted specifying what the sessions would be or what we would try to do. Mark and the children connected through an online app

called Seesaw[1] to explore mapping using drawing tools, text, emoji, video recording, audio recording or photographic image, as well as collaged assemblages of any number of these modes. In Bristol, Jennifer, Harriet, Will and Scarlett met through scheduled video calls and mapped using pens and paper delivered to our homes by Harriet on her bicycle. Then, the three of us met weekly online in an infinite whiteboard space of Lucidspark[2] where artefacts that emerged were brought together in new ways activated by our dialogue. In this space *what if?* questions acted as catalysts for further mapping encounters. We plotted our research activities across different locations, alone and together, on a project map as we moved through the weeks (Figure 2).

Instructions

Familiar with Yoko Ono's instructions (2015), we took up the notion of instruction as a way of enacting mapping techniques experimentally (Miles and Springgay 2020). Instructions are short texts that provoke action without being prescriptive which results in often improvised and unexpected responses. In the spirit of the Fluxus art movement (Higgins 2002), they can be playful and ambiguous. We began with basic instructions for mapping (Figure 3) and, as the project developed, we used pages from theoretical texts, emails, or transcripts of our conversations as starting points and blacked out words leaving remnants of the original text that formed a kind of poem for action (Figure 4). Our interest in this technique of *redaction* aligns with the work of artist Tom Phillips (2016) who sees the method as a means of discovery of something not yet imagined

Figure 2. Project map.

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Mapping performance
LISTEN to the Soundscape. Just listen.

Mark an X on your paper – this is where the journey starts and ends.

Draw the map of the soundscape journey.
<<It is a circular journey! Therefore it ends at the start.>>
Use the black pens (thick and thin)
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Figure 3. Mapping instruction.

(Caws 2001). The resulting texts became provocations for mappings as well as ways of activating new lines of thought.

Mapping methods

> The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. (Deleuze and Guattari 1988, 12)

Guided by research-creation we set out to map speculatively (Springgay and Truman 2017). To do this, techniques were explored in-the-moment in response to the increasing ambiguity of our instructions. In Bristol, we extended the practice of mental mapping of place (Lynch 1960; Gieseking 2013) by engaging with, and expressing through mapping, real and virtual spaces of our lockdown and pre-pandemic everyday lives. We used paper and black and red pens to draw offline whilst connected online through the video call because we were interested in how non-digital tools permit certain gestures and mark-making not easily expressed with a trackpad or mouse (Figure 5).

The mode of mapping permitted expression of cultural, material, and emotional experiences that traversed online and offline spaces. The resulting maps (Figure 6) intensify a sociomaterial perspective (Barad 2007) on meaning-making that shifts conceptions of the digital as a discrete entity to become more attuned to 'the complex ways in which digital objects and digital communications are woven into everyday social contexts' (Burnett and Merchant 2020, 12). We each recorded an audio response to the mapping after the online call. In these recordings, we immersed ourselves in our maps from where multiple stories unfolded that wove our online and offline social, learning and material spaces together, creating richness that is difficult to create in another mode (Vujakovic 2018).

We drew upon Harriet's practice of layering within cartographic design where data that describe places are constructed into separate layers to create multiple narratives. Our maps were physically

Listen to sounds
Listen to bodies
Grasp the rhythms, the habitual
Get outside, but not completely,
Exteriority enables a rhythm to have been grasped
Let go, abandon to its duration
In learning one only understands the meanings which produce rhythms
Grasp this fleeting object, situate oneself inside and outside admirably

Figure 4. Redacting *Rhythmanalysis* (Lefebvre 2004) and resulting instruction.

Figure 5. Children mapping in Delft.

placed one over another in Photoshop[3] to create a 'second surface' (Corner 1999, 235) which animated new relational structures. Here, we wanted to explore the notion of play and chance as provocations that mobilise thinking (Higgins 2002). In the example in Figure 7, new relations were

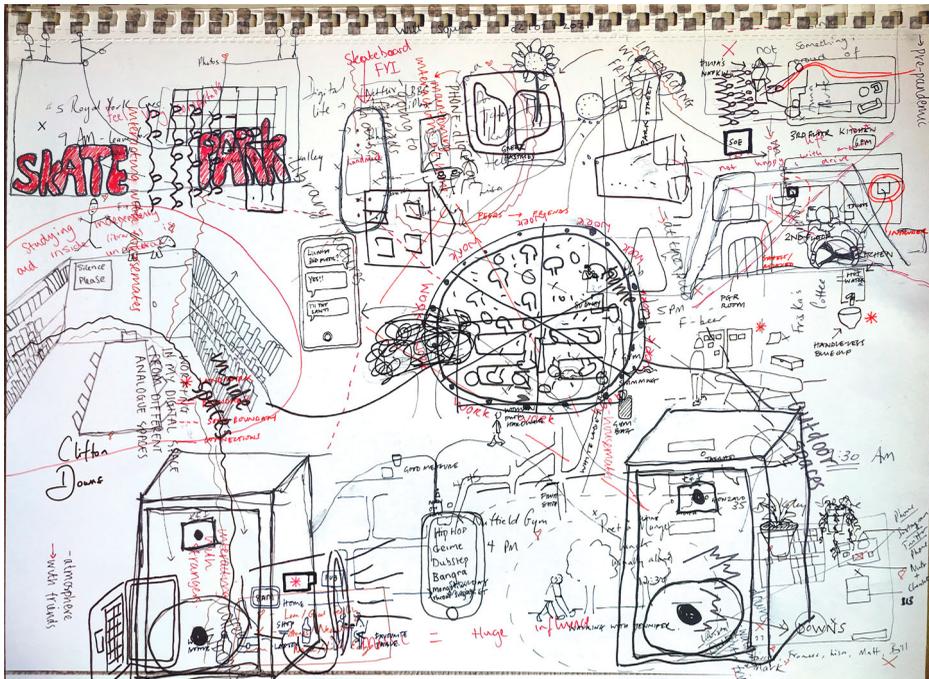**Figure 6.** Will's map of everyday life in lockdown.

Figure 7. Layered maps of pre-lockdown and lockdown activate multiple narratives that blur online/offline spaces.

beckoned into being, such as the skate park and the library or Instagram and shelves of books. These relations amplified the frustration Will expressed about passive scrolling on his mobile phone during lockdown and how he understood his learning style as the kind of active learning that happens at the skatepark, a physical space that had become blurred with the online spaces of skate videos. The mapping materialised Will's dynamic sense of self as it was emerging through intra-actions of online, offline, social, material and linguistic entities.

In another mapping activity, Mark took inspiration from soundscapes and performance scores: a kind of notation that is experimentally constructed in response to sound using invented mark-making (Folkerts 2021). An original audio recording of sounds from a walk near Mark's home resulted in a discomfort with the quiet of lockdown and led to a more experimental sound edit where he layered on top different sounds from his archive. Listening to the same recording, Jennifer and Harriet with Will and Scarlett mapped offscreen but together using their paper and pens (Figure 8); in Delft, the children mapped in the Seesaw App layering coloured emojis and other symbols over the marks they had made to show how the sound made them feel (Figure 9). Here, sound was no longer tethered to its original place and the map became 'a device that "trans-acts" between (visual) language, enactment, the body, and space' (Folkerts 2021, para 6) and across time. The maps became vibrant matter (Bennett 2010) that mobilised sights, sounds, thoughts, feelings, and even smells. As Will commented: *It didn't feel like I was walking and hearing these sounds it was more like I was travelling through time.*

Taking the notion of inside and outside in another activity, the children were given an instruction to sit for 10 minutes and listen to the sounds around them, taking notice of the direction they were coming from (Figure 10). Here, children's spaces were constituted by the whirring of the computer intermingled with birdsong; Mr Mark talking online with the sound of children playing outside the window. The way the children interpreted *outside* as not only what was happening *outside of the home*, but also what might happen *outside of lockdown*, led us to consider how in the sounds

Figure 8. Soundscape in Bristol.

of the present were found future desires (Braidotti 2019). In this context, the Inside/Outside maps brought forward new questions about mapping as a practice for sensing possible futures (Hall 2004) and a tool through which children's sense of themselves is therefore being shaped.

Mark also devised a map that would engage the children with objects of their lockdown learning spaces. The children were invited to map a favourite part of their room (Figure 11). The instruction

Figure 9. Soundscape in Delft.

Figure 10. Inside/Outside map.

for the map was to ask three questions to their favourite things. The maps gave children a way to inhabit and navigate the space and helped us see how mapping activated new questions and 'embodied memories' (Gieseking 2013, 720): *Bed, why are you broken? Books, where have you all been before we got you all? Tedy bear, did I nock you off?*

We aimed for these engagements to bring attention to the ways in which children are becoming with the world around them (Deleuze and Guattari 1988) as a way of animating their new learning spaces and attuning selves to who they are and to things they care about. Haraway (2004; 2016) and Barad (2007; 2013) remind us to be attentive to how objects come to matter and the ways that we all live beside each other. The comfort of children's things (Miller 2008) during lockdown reinforced a strong posthuman and new materialist underpinning to the research (Rowsell et al. forthcoming). These entanglements between adults, children, and their objects became a recurrent motif that activated questions about how learning in lockdown had become a more situated learning (Kitchens 2009) that takes account of how place plays a part in identity, something often denied within the boundaries of the classroom. In accord with post-qualitative frameworks such as posthumanism, this accounting for the non-human as well as the human in mapping brings attention to the method as 'a material movement of becoming *other* that, in addition to the production of new signs, mutually constitutes emergent understandings of self as materially embodied through encounters with both human and non-human objects' (Powell 2016, 4, italic in original).
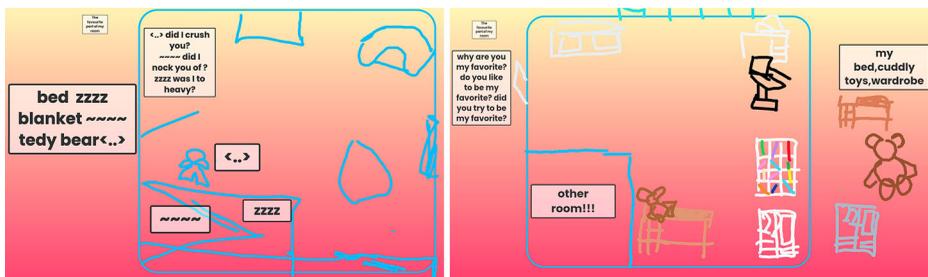

Figure 11. Children's maps of the favourite part of the room.

Attuning to data

From the beginning of the project, artefacts that included maps, extracts of conversation, theoretical texts, references to artists, memories or objects from our homes, were brought into relation on the single, infinite surface of a Lucidspark whiteboard (Figure 12). Here, cut and paste, remix and reuse allowed us to bring theory and practice into relation intuitively and instinctively in response to the dialogue of our video calls and 'what if?' questions that acted as catalysts for further action (Manning and Massumi 2014). This became a kind of mapping that permitted matter to take on a life of its own, as assemblages mobilised new ideas and practices (Jackson and Mazzei 2018) that themselves became part of a continuous process of change (MacLure 2013). The whiteboard felt very much like a *middle* of 'aggregates of intensities' (Deleuze and Guattari 1988, 15) from where new ways of thinking and doing were unfolding. How we engaged with the data resonated with the idea of *soft eyes*,[4] a way of staying with the complexity of what was unfolding and allowing what radiates to move us and mobilise new ideas (MacLure 2013).

As a materialisation of what was emerging, we made layered compositions using whatever tools we had to hand: text was layered in Photoshop over image; maps projected over other maps on classroom walls; texts photocopied onto acetate and overlaid with images; video and archive imagery overlaid onto maps using HotGlue[5] (Figure 13). This was an experimental art school pedagogy that took account of haptic and embodied ways of learning and non-linear practices (Miles and Springgay 2020) that folded digital and non-digital methods and objects together.

Furthering thought and practice

Researchers-artists-educators in process

It would be impossible to separate out the ways in which we were implicated in the research event, however we are moved to articulate our own positioning and the tensions we feel (Stephenson, Daniel, and Storey 2022), as a way of activating thought and feelings of how we found our way through the event. Table 1 foregrounds similarities and differences in our methods, thinking, training and ruling passions (Barton and Hamilton 1998) to help situate our collaborations within a research-creation orientation.

The research-creation perspective fuels the potential of these differences rather than setting boundaries to particular ways of being and interacting. However, to stay with the movement and complexity of the project we needed to question our attachments to practices (Lather and St. Pierre 2013). One way we did this was to give ourselves and each other permission to take risks, to do things differently: a kind of daring each other fuelled with care and a commitment to collectively navigate whatever surprises, tensions or discoveries unfolded.
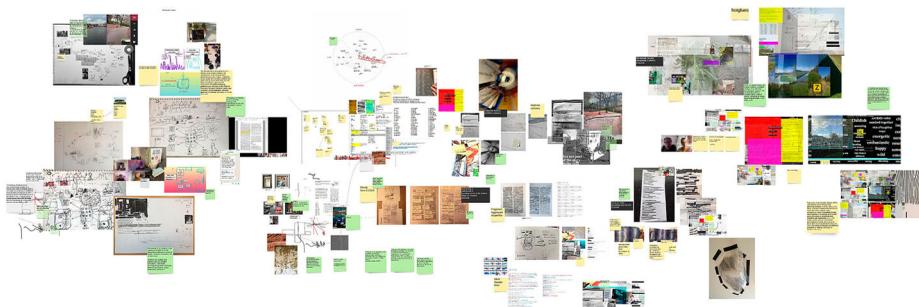

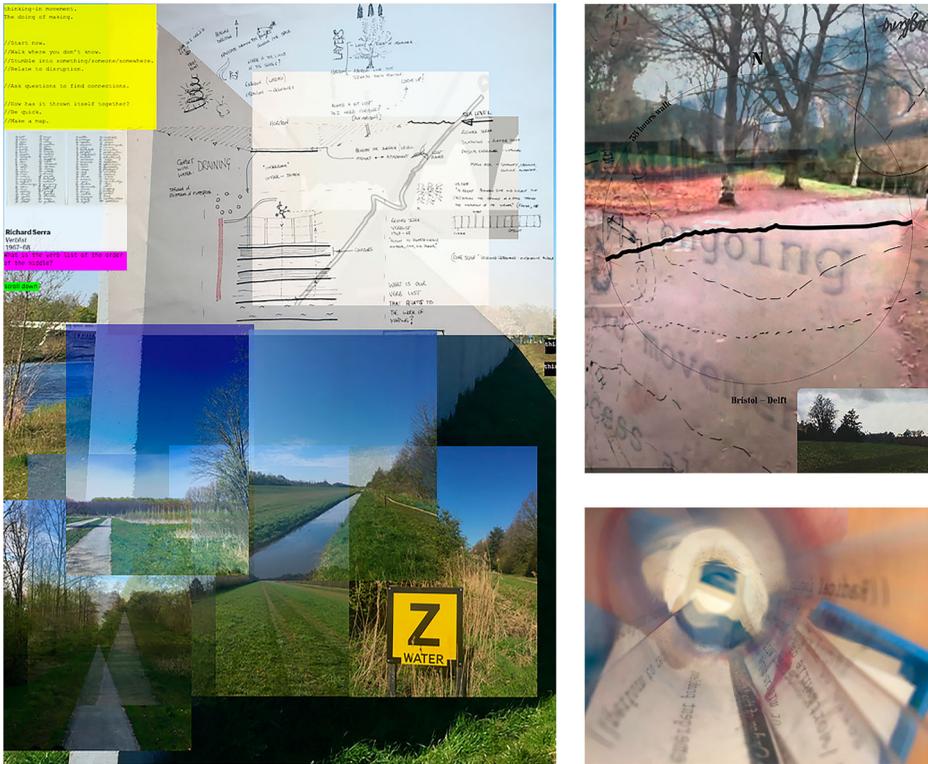**Figure 12.** Artefact mapping in Lucidspark.

Figure 13. Experimental layering of artefacts (from left clockwise: HotGlue mapping; Photoshop layering; 360° digital manipulation of pages of redacted text).

Table 1. Researcher-artist-educator positioning.

Team	Educator-artist-researcher positioning	How we research	(In)tensions (Springgay and Truman 2017)	What we value
Mark **art educator/** **researcher**	arts-based inquiry methods in-class experiential learning engagements	to disrupt, to mix, to intersect, to sense, to listen-with, to provoke	co-creation awareness of being on the threshold of something	openness to young learners' mis/re interpretations of learning experiences and listening for the 'suddenly possible' (Atkinson 2018) of the unknown
Jennifer **ethnographer,** **multimodal** **researcher**	arts-based, multimodal methods first and then digital ways into meaning making second.	to get inside of multimodal pathways (Kress 1997) into literacy; to observe and document; to sit alongside; and, to see differently	disrupt and push against deficit framings of children, young people, and adults; imagine otherwise across communities with objects and people	the often unremarked, tacit, dynamic, creative ways that people make meaning in the world
Harriet **design thinker/** **educator/post-** **graduate** **researcher**	process-orientated methods, people-centred approaches arts- and design-based practices	to activate, to permit, to immerse, to question, to disrupt	young people's capacity to co-shape possibilities, imagine difference	responsibility, reciprocity, companionship

The approach drew us to an in-between-ness of theoretical wanderings and practical encounters which made it a threshold (Jackson and Mazzei 2018), a place of thinking, and daring to think, something new. As Manning (2015) describes, research-creation is a 'messy proposition' (63), suggesting it is more about feeling your way than following any procedure; sometimes we were taking control, other times letting go. We were at times overwhelmed by the sheer diversity of artefacts at play, often times we were disorientated by what was unfolding, but it was through sticking with that discomfort that new possibilities unfolded (Hein 2017). This was made possible not through accord or coherence, but through the multiplicity of our collective histories, ways of thinking and doing and remaining attuned to how different (in)tensions (Springgay and Truman 2017) were emerging and how our values guided thought and action. The notion of improvisation helps us explore this idea of being *in-process*, as it draws our attention to the inevitable harmony *and* discord that results from such a methodological stance. The objects and places and time of our research fuelled the playful engagement and dynamic properties of the project. Keeping these entities in play sparked unexpected lines of flight (Deleuze and Guattari 1988) and new understandings, which have continued to be productive in our practices beyond the timescale of the project itself.

Mobility

We were drawn to research-creation as an alternate way of inhabiting new and dynamic learning spaces without imposing previously conceived structures. We did not fuss about the common distinctions made between digital or non-digital spaces and instead moved across them, sometimes awkwardly and sometimes nimbly allowing a layering of what unfolded to draw our attention to what was happening. Gunther Kress (1997) wrote about how children tacitly move across modes that are physical, digital, and sensed and that they have little problem or concern about their pathways into multimodal meaning-making. When digital spaces enter institutional environments and mindset or when adults adopt 'digital pedagogies,' pre-conceived boundaries are more pronounced and bifurcated.

Research-creation encouraged us to move in quite an opposite way to traditional linear approaches to research. What might be considered data collection, analysis and dissemination became interwoven practices defined by pace and changes in direction: the picking up of speed during dialogue; the slow, mindfulness of redacting a page of text; or the faulty photocopier that chewed up an acetate sheet sparking playful experimentation that led us on to explore new techniques.

These rhizomatic breaks and turns intensifies mapping as a means of permitting mobility (Lynch 1960). The indefiniteness of mapping makes it a practice that is open to the kind of experimentation that sparks possibility and potential (Corner 1999) through mobilising thought as dynamic paths (Ingold 2016). What this helps us to see is how mapping, enacted through the lens of research-creation, opens up 'a rich and textured sense of how learners mobilize their meaning-making and sense-mattering' (Lemieux et al. 2020, 36), but also engages dynamically with the complex web of relations, across time and beyond and behind screens (Burnett and Merchant 2020). The constant in-processness engenders a sensibility to the ever-present potential for becoming other than what we can imagine when we give ourselves permission to move away from the learned practices and conceived rhythms of learning spaces.

Possibility

Research-creation encouraged us to keep everything in play: all kinds of human and non-human and more-than-human bodies (Barad 2007) that might be real, virtual, observed or felt in the past, present or future to 'engender new and meaningful relationships amongst otherwise disparate parts' (Corner 1999, 229). The orientation served to intensify the notion of *possibility* and mapping

as a way to engage with, transform and continue to emerge with the complexities of online and offline lives and how they were shaping our sense of self. We can apply this idea to Will's audio recording in response to his maps of pre-lockdown and lockdown. The transcripts were redacted in response to an unanticipated urge that seemed to reach out from the texts themselves (MacLure 2013) to be mapped in a kind of conversational exchange between two different but interrelated spaces of self (Figure 14). The resulting entanglement blurs the boundaries between online and offline people, places and things and brings into focus an intra-action of different entities that produce a sense of future self.

'Pure experience is on the cusp of the virtual and the actual: in the experiential register of the not-quite-yet' (Manning 2015, 55). The *not-quite-yet* suggests a plurality of time in space in mapping, Hall (2004, 16) comments: 'it is hard to look at a map without sensing, in our bones, private hopes and secret fears about change.' Take, for example, the Inside/Outside maps in our project. Mapping these spaces activated new questions about different futures with a care for the intimate social and material relationships that shaped children's sense of themselves. As Barad observes, 'matter does time. Matter materializes and enfolds different temporalities' (2013, 17). Engaging with this quotation, Barad maintains that not only does time seep into and through all moments, i.e., moving back in time and forward in time through objects (Lemke 2000), but also and importantly, imagining new possibilities for time that intersect across humans and more-than-humans. Our project urges us to consider the ways in which mapping practices help us explore such questions as how pedagogies make space for the simultaneity of time (Massey 2005), rather than render static past, present and future. And, how this engagement might help create *different* possible futures (Facer 2016).

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A conversation between pre-lockdown and lockdown self.

——pre-pandemic
——during lockdown

My way of learning is learning by doing.
I'll wean myself off digital. Maybe I'll start now.
Like the skateboard environment, where you watch and try it.
How it's made, how it's created.
Trial and error, trial and error.
Maybe I'll become a bit more productive.

Looking after plants.
It's a good start to the day, a routine.
A little bit of purpose.
Humbling, grounding.
I enjoy this, it characterises me.
Looking over the city.
Immersed in greenery.
Feel like I'm not in the city.

I'm not proud of driving.
Fuel consumption. Time in traffic jams.
Not something I enjoy.
M32, M5, M4, M32…
Scrolling, scrolling, scrolling….
I'm not connected to it.
What do I do nowadays?
Am I enjoying what I'm doing?
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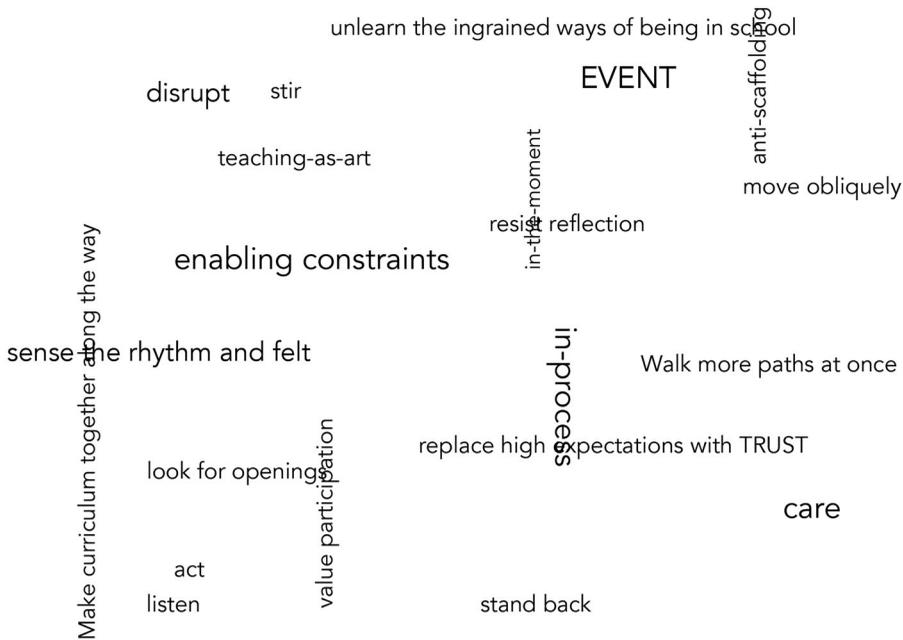**Figure 14.** Poem constructed through redaction of texts.

Figure 15. Concrete poem mapping our collective sense of possibility.

Conclusion

We set out to engage with the concept of 'online-offline alone-together' to activate new ideas about research and pedagogic theory and practice as an affirmative move to explore possibility from within the dynamic and complex learning spaces that have emerged during the pandemic. We advocate for mapping as a method that makes space for this complexity but also one that disrupts pre-conceived structures that exist within educational institutions and argue for its utility in bringing all manner of things into relation in ways that mobilises and transforms our sense of self.

As we return to *normal*, schools and institutions are conceiving of the structures and protocols that must be in place to make up for the perceived loss of learning based on pre-determined expectations. This project is important because we don't want to lose what possibilities were mobilised through this unprecedented time. Our collective engagements emphasise the inherent capacity of learners to explore, imagine and engage with possibility. To allow this capacity to flourish, methods must account for the dynamic complexity of the social, material and sensed relations that constitute our everyday spaces rather than continue to reinforce, and be limited by, pre-conceived boundaries. We emerge from the latest lockdown seeing things differently and looking for new forms of engagement in our classrooms and our practice. As a closure for this article but an opening for our practice, we end with a mapping from our shared discussions that propels us forward (Figure 15).

Notes

1. Seesaw (https://web.seesaw.me/) is a collaborative real-time digital learning application.
2. Lucidspark (https://lucidspark.com) is a collaborative virtual whiteboard that has an infinite surface where word, image and drawn elements can manipulated.
3. Photoshop (https://www.adobe.com/products/photoshop) is an Adobe software package that is well-suited to image manipulation. Each file can have multiple layers using different filters to change levels of transparency for example. The filter used in this project was Multiply.
4. Soft Eyes is the title of an episode of the US television series The Wire (Simon 2006). Soft eyes suggests a kind of gaze which takes everything in.

5. Hotglue (https://hotglue.me/) is a Content Manipulation System for DIY web-design and Internet samizdat. Samizdat is a form of dissident self-publishing, similar to a Zine.

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Disclosure statement

Ethics

Ethics approval for this study was obtained for all protocols by the Ethics Committee of the Faculty of Social Sciences and Law, University of Bristol, Bristol, England. Reference number: 116064.

Informed written consent was obtained before commencement of the study. In the case of participants under 18 years, consent was obtained from parent or legal guardian.

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