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Introduction

Learning Within Socio-Political Landscapes: (Re)imagining Children's Geographies

Kathryn Lanouette and Katie Headrick Taylor

Over a century ago, Lucy Sprague Mitchell, one of Bank Street College's founders, put into practice a vision of teaching and learning enmeshed in the physical, social, and political city spaces of young peoples' daily lives. Central to her work was reimagining geography, grounding the discipline in the *here and now* of children's neighborhoods, connecting with community members and city spaces as a means to explore complex relationships within the wider world. Mitchell considered working across different modes of engagement as an integral practice for children to learn about their worlds and their roles within it: physical movement, like walking and subway riding, and the construction of maps with varying scales, materials, and symbols (Mitchell, 1991). Mitchell also envisioned movement and mapping as essential for teachers' learning, leading multi-day **Long Trips** along the eastern seaboard to make visible educators' connections to contemporary social, political, and environmental realities, and connecting city and rural locales. Temporally, these practices and tools acted as playful intermediaries between visible and invisible interrelationships constituting children's and adult's lives and livelihoods.

In this special issue, we bring together educators and researchers to (re)imagine what it means to teach and learn within the immediacy of the here and now, an orientation crucial to confronting contemporary threats to children's lives, democracy, and the planet. We seek to extend and broaden Mitchell's original conceptualizations—centering the past and future alongside the immediacies of the now, elevating Black, Indigenous, and other People of Color (BIPOC) perspectives in children's geographies and exploring potentialities of mapping in analog as well as emerging digital forms. We also aim to carry forward her commitments to listening to children with curiosity and care, rooted in a belief that young people know a lot about the world already and that they are fully capable of delving deep into complex processes and problems. As such, this collection situates young peoples' here and now within socio-political landscapes, the wider nested systems and structures that constitute and reconstitute land, place, and children's geographies.

We draw on the term *landscapes* to forge the agency of land together with the human construction of place. Lands exist on their own terms, changing with and without human intervention: coastlines shrink, canyons grow deeper, and mountainsides erode. Places, on the other hand, come to being through human-centered relationships with one another and our material surroundings. We borrow Doreen Massey's words to consider places as “a simultaneity of stories-so-far” (2005, p. 9). Our stories bring to bear the emotional, social, political, economic, and racialized forces on the lands where we live, learn, and play. Landscapes also help us to move away from anthropocentrism, a common orientation undergirding place-based education, in which humans dominate the planet. In *Ecology is a Sistah's Issue Too: The Politics of Emergent Afrocentric Ecowomanism*, Shamara Shantu Riley (2003) writes, “the social construction of race, gender, class, and nonhuman nature in mainstream Western thought are interconnected by an ideology of domination.” Starting from a point of care and collective agency (Nickson, 2021) rather than control guides a different praxis “to challenge inequities arising along

racial, gendered, and species boundaries” that shape and are shaped by the local and global places we inhabit and sustain. Landscapes help us to see the land, water, and climate as constantly exercising their agency, willing humans and more-than-human counterparts to acclimate, migrate, or perish.

(RE)IMAGINING CHILDREN'S GEOGRAPHIES

Beyond adult-centric notions of political will

While young people’s daily lives and their geographies remain a focus of the work of teachers and scholars in the decades since Bank Street’s founding, we have seen major shifts in educators’ orientations to the work. First, adults are increasingly recognizing the collective power and political ingenuity of young people (Shea & Jurow, 2020; Tivaringe & Kirshner, 2021); the COVID-19 pandemic was a distinctive time of youth organizing (e.g., Barton et al., 2021). Perhaps it is young people’s well-being that has been most impacted during a time in which a global pandemic, racialized gun violence, and growing climate injustices have radically shifted our relationships with landscapes. Youth-led organizations like **Youth Over Guns, Uplift**, and **Grey to Green** exemplify ways to face these existential realities with care, clarity, and imagination. Uplift, for instance, focuses on the environmental destruction wrought by colonialism and capitalism in the US Southwest to build alliances with people and groups adversely impacted by energy extraction and pollution.

Our times of ecological, social, and political precarity require forms of teaching and learning that nurture young people to find joy and sustenance through building compassionate relationships with and within their local landscapes (Jurow & Shea, 2015; Taylor, Silvis, & Bell, 2018; Lanouette, 2022). Yet we also recognize young people’s increasing rage at the slow and impotent response of policymakers to address the multiple injustices stemming from racial capital (e.g., race as foundational to the creation of capitalist spatial relations; Inwood, Brand, & Quinn, 2021) of which gun violence and climate change are both symptoms of these injustices.

Beyond human exceptionalism

We also see shifts beyond the centrality of human geography as a guiding discipline in place-based learning. Broadly speaking, human geography is:

the study of interrelationships between people, place, and environment, and how these vary spatially and temporally across and between locations... human geography concentrates on the spatial organization and process shaping the lives and activities of people, and their interactions with places and nature. (**Dartmouth Library Research Guides**)

While relationships and spatiality persist as important qualities of learning, some place-based learning—especially that informed by Indigenous epistemologies—focuses on the agency of lands and waters over and beyond human existence (e.g., Marin & Bang, 2018). Such an orientation invites educators to question how human exceptionalism may be an underlying assumption of curricular designs. In practice, this could look like an outdoor curriculum in which the plants, animals, weather, and natural pathways encountered during the day guide the students’ learning activities. It could also mean supporting young people to pay attention to the ways in which animals, plants, lands, and water *repair* disturbed or broken relationships outside of human intervention (Tsing, 2013). Storying the land, “a process whereby the land is invested with the moral and spiritual perspectives specific to Native American communities” (Yi, 2016, p. 1), may also be a method used for making sense of these place-based experiences, alongside note-taking, photography, and mapping. “Generalizing” or “scaling” a

curriculum, therefore, are not underlying values as much as being in relation with and responsive to the particularities of the surrounding worlds in which our daily lives are enmeshed.

Beyond White and ableist hegemony

Since Mitchell's early work, more educators are considering shifts beyond human geography to encompass frameworks that elevate geographies of race, sex/gender, and (dis)ability. Black geographies (McKittrick, 2006), for instance, "seek to highlight black agency in the production of space and black geographic experiences in the articulation of Black geographic visions of society" (Allen, Lawhon, & Pierce, 2019, p. 1002). In centering Black lives and agency *despite* White hegemony, Black geographies guide teacher-scholars to co-construct an "analytics of race," not about human suffering, but about human life. Put into practice, Black geographies support facilitators of young people's geographic explorations to elevate and center Black lived experiences, Black knowledges, and Black excellence, elevating the contributions Black people have made and make to the production and theorizations of space and place (Lipsitz, 2007). Doing this work necessarily opens up other geographic sources as valuable forms of knowledge production and spatial expression, including parades, protests, films, and music festivals. Situating inquiry into these kinds of large-scale, collectively produced spatial expressions highlights plurality—everyone experiences and makes meaning of places in their own way.

Perhaps there is no better landscape to see this plurality than the COVID-19 pandemic, during which the intersections of race, gender, and (dis)ability illuminated inequities in all facets of life, including physical mobility and immobility. While some people dramatically limited their mobility by never leaving home, others' daily rounds hardly changed at all, or even intensified. Essential workers, disproportionately Black and Brown people, clocked more trips and hours away from home than usual. Meanwhile those with arrested mobility had a much lower risk of infection, with much better health outcomes and rates of survival for themselves and their families.

Shifting maps and mobility

How would Mitchell have helped her students explore inequities across people's physical mobilities? Perhaps she would have asked young people to draw pathways between school, work, and home over canvas maps of the city, or build a "typical day" with wooden blocks, or take walking trips through the city to talk with essential workers. Today, innovations in geospatial and other mapping technologies, like augmented and virtual reality, open up new modalities for understanding, making it possible to differently **visualize places and enact forms of mobility**, connections, and insights (Marin et al., 2020). Young people can "fly around" their communities in **Google Earth**, they can chase after Pokémon moving through their neighborhoods via a mobile app (Silvis, 2022), and they can approach a building on foot, hold up their phones, and **overlay an image** of a more youth-friendly asset on top. There are also new digital media for map-making, enabling youth to overlay photographs, sketches, and text with local, regional, and global data sets, in turn making possible new avenues for disciplinary learning (Lanouette, 2019; Rubel et al., 2016), civic participation, and advocacy (Van Wart, Lanouette, & Parikh, 2020; Radinsky et al., 2014; Mitchell & Elwood, 2012). Various spatial technologies now also record and make visible the pathways youth travel (Taylor, 2017), along with the embodied exertions of such movements (e.g., oxygen inhaled, steps taken), allowing easy visualizations of this data to answer questions about one's own body (Taylor, 2020). With these changes in how spatial data can be generated and visualized, youth's daily map-making and map reading have become integral to forming social relationships, inquiring into family and neighborhood histories, and engaging in civic community issues.

LOCATING OURSELVES AND OUR CHILDREN IN DIVERGENT SOCIO-POLITICAL LANDSCAPES

As we write, our current socio-political landscapes are informed by our identities as White, cis-gendered, mother-scholars, raising children and doing our work—in collaboration with community organizations, schools, teachers, young people and their families—in two different locations in the United States. For Kathryn, her day-to-day life and work with young people takes place in Richmond, Virginia, a mid-sized city in the mid-Atlantic. For Katie, her daily interactions with young people are in Seattle, Washington, in a progressive corner of the Pacific Northwest. As we talked together over the last year, it was clear that variations in our socio-political landscapes matter for not only *what* young people learn, but for *how* they learn in schools, homes, and other out-of-school time environments. Our place-based perspectives may be situated on opposite coasts, but our Whiteness means we are both beneficiaries of a nation “founded upon a triumvirate of horrors” (Castillo, 2022; p. 100) perpetrated by White settler colonials and slavers. As we grasp this truth, we seek ways to divest from racial capital and hold other White folks accountable to do the same.

Place is socio-political; land is carved up by human-constructed borders and boundaries, often with names and specific rules, norms, and policies. The public school systems in and around Seattle, for example, affirm and promote the **13 Principles of Black Lives Matter**. Individual schools’ Race & Equity Teams contact families to inform them that districts uphold these values. A commitment to these values means that teachers should practice restorative justice “for Black people, and by extension, all people”; affirm students who identify as trans and queer, and honor Black women, Black families, and Black villages. At the same time, many Seattle public schools continue to remain segregated along racial and socioeconomic lines, with unaffordable housing magnifying inequities within and outside school walls. Concurrently, in other parts of the US, school boards, state legislators, and governors are trying to ban—or have successfully banned—teachers from saying “gay,” or acknowledging how White men’s ruthless perpetuation of chattel slavery since the year 1619 enabled our nation’s development. These district-by-district differences in public school policy mean that some schools starkly support educators while others surveil educators as they talk with our children about racism and sexism, shaping how we conduct educational research and interventions. What kinds of questions can we ask? Who will be willing to collaborate and participate? How will the institutions that employ us provide support, or even protections?

Different sociopolitics alter land itself in particular ways, affording or constraining forms of access and mobility for young people. City and county planning policy, for example, reveal the ways in which sociopolitics shape where and how learning opportunities can emerge. Sidewalks, bus routes, bike lanes, and highways—overlaid on longstanding patterns of redlining—facilitate vastly different routes for walking, wheel chairing, biking, and driving. We see this focus on infrastructure in efforts to enhance public transit options for Seattle- and Richmond-area youth by making bus and light rail ridership free of charge. In other parts of the US, voters in places like Nashville, Tennessee, repeatedly struck down efforts to democratize transit, creating mobility deserts for non-driving or car-less residents (e.g., young people and the elderly). These variations in public mobilities contribute to shaping the potential learning opportunities we design with and for youth (Pinkard, 2019), as well as our own travels with our children along streets and across neighborhoods. What kinds of movements are possible for young people, educators, and researchers in particular places? Along what pathways or corridors through city, suburban, and rural byways is mobility possible, and for whom?

Distinctive socio-political landscapes for living, learning, teaching, and researching shape relations with land. This past year, Katie's first grader son, for instance, spent many school days preparing for a trip to the tidepools of the Puget Sound to see, touch, and smell camouflaged sculpin, crimson-colored blood stars, and mossy chiton. In bringing his multi-modal tidepool explorations home, Katie's son taught her—a child of a land-locked section of the Appalachians—about an ecosystem she could not have imagined as a first grader. In contrast, Kathryn's first-grader stayed within the schoolground's grass and asphalt schoolyard, far removed from nearby local waterways flowing into Chesapeake Bay. These variations make possible or foreclose particular types of interactions young people can have with land and waters and more-than-human life, shaping young peoples' connections and considerations to questions such as: Who lives and thrives here? Who are our neighbors? What interspecies and intergenerational relationships are we entangled with?

In this special issue, we are excited to learn with and from contributing authors, in the pursuit of learning and teaching that centers: 1) young people's here and now as a basis for making sense of and participating in complex socio-ecological, political, racialized systems; 2) the integral role of mapping and movement in teaching praxis; and 3) the concerns and ideas young people have for acting on injustices in their local geographies. We view these orientations as having the potential to nurture pedagogies of care and curiosity emergent within these emplaced learning endeavors.

CONTRIBUTIONS TO THE SPECIAL ISSUE

The authors in this special issue extend, critique, and reimagine what it means to center young people's worlds and ways of knowing to make sense of the here and now. As educators and researchers, they share the pedagogical, technological, and emotional complexities of teaching and learning, in turn imagining and enacting more just, ethical, and joyful futures within particular socio-political landscapes. Building from Mitchell's earlier works almost a century ago, contributors to this issue center the historical past and future imaginings along the immediacies of now, elevate the plurality of BIPOC geographies, and explore the potential of analog and digital mapping technologies.

Alejandra Frausto Aceves and Daniel Morales-Doyle reveal how disciplinary pursuits of engineering can be rooted not only in local infrastructure but simultaneously in community and civic participation and protest, in ways that are led by and with young people. As educators, researchers, and community members in a Midwest US city in a neighborhood where many residents have roots in Mexico, Frausto Aceves and Morales-Doyle describe how they supported a sixth grade class to advocate for repairs to the paint crumbling off the neighborhood water viaducts they walked underneath daily on the way to and from school. The paint flakes were full of toxic heavy metals. Drawing on pedagogies that center beauty and disrepair, along with local and Mexican traditions, they recount how students collected evidence about the lead-based toxicity of the peeling paint and shared their findings at community meetings, advocating for lead-paint remediation. The authors also recount the resistance on the part of an elected official who argued that the private ownership of the viaducts and incomplete data reduced her obligation to act on repairing community infrastructure.

Other contributors illuminate the pedagogical possibilities of land-based learning, when intentional space and time allow for children's movement, connections, and curiosities to focus on caring relations with land, waters, and more-than-human life. Drawing from a multi-year research and teaching collaboration in the Pacific Northwest, **Anna Lees and Megan Bang** describe a two-week summer program that intentionally supported "a part of" (rather than "apart from") relationships with complex

ecosystems, detailing how, as educators, they supported 6-to 8-year-old children to navigate Indigenous and western science epistemologies. In the process, Lees and Bang elevate the implicit nature-culture relationships inherent in place-based science learning, and articulate teaching approaches that support understandings of ecological flourishing beyond colonial framings.

Margaret Nell Becker, a fourth and fifth grade teacher in Manhattan, recounts how the two years of the COVID-19 pandemic transformed her and her students' relationship with Randall's Island, a city island in the East River, wedged between East Harlem, the South Bronx, and Astoria, Queens. The ongoing COVID-19 pandemic's disruption of daily life and schooling opened up new opportunities for Becker and her students to venture over to the island. These trips afforded new relationships with the saltwater tidal estuaries' plants, animals, and waters just a few minutes' walk from the school building. Specific locales unique to this particular socio-geographic confluence made possible new ways of learning, being, and caring—with the tides and trees, as well as with one another in the class community. Emerging from new pathways through the city, these changing pedagogies also shaped Becker and her daughter's walks and wanderings through their own neighborhood elsewhere in the city, revealing changing relations with more-than-human lifeforms across an educator's familial and classroom-based communities.

Centering the experience of Black and Brown youth within racialized understandings of place and space, several authors detail possibilities and challenges inherent in understanding teaching and learning within these settings. **Natalie R. Davis and Roni Barsoum** elevate Black children's understanding of their elementary school in a Southern city, a school designed explicitly to nurture Black children as critically and communally oriented citizens. Focusing on children's drawings about their school, the authors seek to understand how the socio-political intentions central to the school's formation and daily enactments are experienced and interpreted by students. Children's drawings and conversations reveal holistic and harmonious aspects of the school community alongside community discord and power imbalances, highlighting research methods that make room for hearing and seeing a school through a child's eyes.

Emily Reigh, Meg Escudé, Michael Bakal, Edward Rivero, Xinyu Wei, Collette Roberto, Damaris Hernández, Amber Yada, Kris Gutiérrez, and Michelle Hoda Wilkerson recount the possibilities and challenges of using spatial data and data storytelling in 12- to-14-year-olds' studies of environmental racism. Centering on local air quality injustices in Oakland, they articulate how young peoples' understanding of race and space relationships—using data-intensive maps—both fostered and stifled discussion of broader structural mechanisms and institutions shaping environmental injustices. Moving back and forth between the here and now to understanding historical events and future possibilities shaping racialized landscapes, the authors detail the tradeoffs when data, primarily quantitative data maps, are interpreted and storied by young people who do not share the same spatialized racialized histories.

Jennifer Kahn, Daryl Axelrod, Matthew Deroo and Svetlana Radojic describe a multi-month collaboration with 11th grade students and their teacher in a primarily Cuban neighborhood in a Florida city. The authors recount how young people's family histories and experiences with first- or second-generation immigration were woven into their transnational identities and storytelling using data visualized across multiple spatial technologies. The authors detail youths' complex understanding of their immediate city streets and neighborhoods in ways that link local and global networks of relationships.

Many of the contributors also expand our understandings of children’s map-making and movement, exploring both varied modalities and materials to elevate young peoples’ expressions and understandings. **Abigail Kerlin and Ellen McCrum** describe their experiences making maps with elementary and graduate students in New York City, focusing on how map-making can be a generative lens for understanding the plurality of perspectives present within city blocks, school hallways, and nation state borders. The authors show how engaging in the process of collaborative map-making and map reading can make visible how place and space are co-constructed through (dis)ability, mobility, and multiple senses (touch, smell, sight, hearing), even with the simplest of materials (clipboards, pencil, and paper). Through processes of creating, sharing, and juxtaposing maps, the students gain insights into what is seen and what remains unseen in their own worlds.

Several of the authors also center varied mappings of youths’ worlds. For example, Davis and Barsoum focus on Black children’s drawings of their school, using pencil and paper as media for children to express their understandings of “what it is like here” in their school. These sketches in turn become ways for teachers and researchers to understand how the schools’ strivings and strengths are felt and understood by children. Frausto Aceves and Morales-Doyle use Photovoice methodologies, blending photos and text to support youth capturing and sharing their perspectives on community infrastructures. Reigh and colleagues juxtapose several quantitative public datasets on social and environmental indices, using a digital data mapping interface (CODAP) to inquire into spatialized and racialized inequities. Kahn and colleagues bring together multiple sociohistorical spatial data platforms (e.g., Social Explorer, Snapchat, Padlet) to support youth in interpreting and storying their own cultural heritage and transnational identities within large data sets.

LEARNING AND TEACHING TO (RE)IMAGINING SPACE, PLACE, AND LAND RELATIONS

Teaching and learning have always been social and political, happening somewhere amidst a network of historical, contemporary, and future-building relations. Lucy Sprague Mitchell’s efforts with young people and adults demonstrated this orientation to education decades ago. In this special issue, we aim to illuminate what it can mean to engage with this complexity—in the immediate here and now of young peoples’ lives. Authors collectively elevate the agentive and dynamic elements of the local, which become visible only when we take seriously young peoples’ perspectives and wholeness, as well as the dynamic socio-political landscapes within which they live, learn, and play (never mutually exclusive but always happening together). Throughout, authors reveal emergent and enduring forms of praxis that center holistic and pluralistic experiences of young learners, in turn making and remaking space, place, and land relations.

We hope this special issue captures an urgency—the essential role of learning and teaching for facing existential threats to children’s lives, democracy, and the planet. The authors share a commitment to making learning matter beyond capitalist notions of education (e.g., testing, standards, grit), while also being responsive to how those notions have reinscribed racism, misogyny, ableism, and human exceptionalism. As policymakers create new avenues for chipping away at our mountains, voting districts, literacy, social studies curricula, and bodily and community sovereignty, learning within socio-political landscapes has never felt so essential. Therefore, we hope this collection provokes us all to (re)consider our approaches to education as an opportunity to collectively care for the people, places, and nonhuman relations made most systemically vulnerable.

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REFERENCES

- Allen, D., Lawhon, M., & Pierce, J. (2019). Placing race: On the resonance of place with black geographies. *Progress in Human Geography*, 43(6), 1001-1019.
- Calabrese Barton, A., Greenberg, D., Turner, C., Riter, D., Perez, M., Tasker, T., Jones, D., Herrenkohl, L. R., & Davis, E. (2021). Youth critical data practices in the COVID-19 multipandemic. *Aera Open*, 7. doi.org/10.1177/23328584211041631
- Castillo, E. (2022). *How to Read Now*. Viking.
- Inwood, J. F., Livia Brand, A., & Quinn, E. A. (2021). Racial capital, abolition, and a geographic argument for reparations. *Antipode*, 53(4), 1083-1103.
- Jurow, A. S., & Shea, M. (2015). Learning in equity-oriented scale-making projects. *Journal of the Learning Sciences*, 24(2), 286-307.
- Lanouette, K. (2019). *The potential of place: Leveraging children's local knowledge and participatory GIS mapping to conceptualize ecological systems in elementary science instruction*. University of California, Berkeley.
- Lanouette, K. (2022). Emotion, place, and practice: Exploring the interplay in children's engagement in ecologists' sampling practices. *Science Education*, 106, 610-644. doi.org/10.1002/sc.21702
- Lipsitz, G. (2007). The racialization of space and the spatialization of race theorizing the hidden architecture of landscape. *Landscape Journal*, 26(1), 10-23.
- Marin, A., & Bang, M. (2018). "Look it, this is how you know": Family forest walks as a context for knowledge-building about the natural world. *Cognition and Instruction*, 36(2), 89-118.
- Marin, A., Taylor, K. H., Shapiro, B. R., & Hall, R. (2020). Why learning on the move: Intersecting research pathways for mobility, learning and teaching. *Cognition and Instruction*, 38(3), 265-280.
- Massey, D. (2005). *For Space*. Sage.
- McKittrick, K. (2006). *Demonic grounds: Black women and the cartographies of struggle*. University of Minnesota Press.
- Mitchell, L. S. (1991). *Young geographers: How they explore the world and how they map the world* (4th edition). Bank Street College of Education. educate.bankstreet.edu/books/10/
- Mitchell, K., & Elwood, S. (2012). Engaging students through mapping local history, *Journal of Geography*, 111(4), 148-157. doi.org/10.1080/00221341.2011.624189
- Nickson, D. (2021). The democratization of educational care: Spatial imaginaries, demographic change, and Black families continued educational advocacy. *Equity & Excellence in Education*, 54(3), 303-316.
- Pinkard, N. (2019). Freedom of movement: Defining, researching, and designing the components of a healthy learning ecosystem. *Human Development*, 62(1-2), 40-65.

- Radinsky, J., Hospelhorn, E., Melendez, J. W., Riel, J., & Washington, S. (2014). Teaching American migrations with GIS census webmaps: A modified “backwards design” approach in middle-school and college classrooms. *The Journal of Social Studies Research, 38*(3), 143-158.
- Riley, S. S. (2003). Ecology is a sistah’s issue too: The politics of emergent Afrocentric ecowomanism. In R. S. Gottlieb (Ed.), *This Sacred Earth* (pp. 412-427). Routledge.
- Rubel, L. H., Lim, V. Y., Hall-Wieckert, M., & Sullivan, M. (2016). Teaching mathematics for spatial justice: An investigation of the lottery. *Cognition and Instruction, 34*(1), 1-26.
- Shea, M. V., & Jurow, A. S. (2020). Student-led organizing for sustainability in business. *Cognition and Instruction, 38*(4), 538-560.
- Silvis, D. (2022). Cherished world thinking: Developing a maintenance mindset in family caregiving contexts. *Cognition and Instruction, 1*-33.
- Taylor, K. H. (2017). Learning along lines: Locative literacies for reading and writing the city. *Journal of the Learning Sciences, 26*(4), 533-574.
- Taylor, K. H. (2020). Resuscitating (and refusing) Cartesian representations of daily life: When mobile and grid epistemologies of the city meet. *Cognition and Instruction, 38*(3), 407-426.
- Taylor, K. H., Silvis, D., & Bell, A. (2018). Dis-placing place-making: How African-American and immigrant youth realize their rights to the city. *Learning, Media and Technology, 43*(4), 451-468.
- Tivaringe, T., & Kirshner, B. (2021). Learning to claim power in a contentious public sphere: A study of youth movement formation in South Africa. *Journal of the Learning Sciences, 30*(1), 125-150.
- Tsing, A. (2013). More-than-human sociality: A call for critical description. In *Anthropology and Nature* (pp. 37-52). Routledge.
- Van Wart, S., Lanouette, K., & Parikh, T. S. (2020). Scripts and counterscripts in community-based data science: Participatory digital mapping and the pursuit of a third space. *Journal of the Learning Sciences, 29*(1), 127-153. doi.org/10.1080/10508406.2019.1693378
- Yi, I. (2016). Cartographies of the voice: Storying the land as survivance in Native American oral traditions. *Humanities, 5*(3), 62.

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Kathryn Lanouette is assistant professor of learning sciences and science education at William & Mary's School of Education. In collaboration with schools and museums, her research and teaching explore how place-based pedagogies and emerging technologies can be central to young people's learning about science and data science in ways that build towards more joyful and ethical futures. Her scholarship is shaped by her teaching experiences in Washington, DC and New York City. Lanouette has published in *Science Education*, *Educational Researcher*, *The Journal of the Learning Sciences*, and *Mathematical Thinking and Learning*.



Katie Headrick Taylor is associate professor of learning sciences and human development at the University of Washington's College of Education. Research-practice partnerships led by Taylor center racial and gender equity in STEM, data science, and digital literacy. These collaborations have occurred across museums, public libraries, public schools, homes, undergraduate courses, and family-serving organizations in New York, Chicago, Nashville, Seattle, and nonmetropolitan areas of East Tennessee. Her scholarship and teaching focus on community well-being through the digital re-mediation of learning, foregrounding the ingenuity that young people from immigrant and/or communities of color have within and across contexts. Taylor's commitment to care as a design value for digitally-mediated learning interventions has been fundamentally shaped by her roles as mother, daughter, educator, and writer. Funded by, among others, the National Science Foundation, the NAEd/Spencer Foundation, and the Heising-Simons Foundation, Taylor's research and public scholarship can be found in venues such as *The Conversation*, *The Journal of the Learning Sciences*, *Cognition & Instruction*, *Connected Science Learning*, and *Learning, Media, & Technology*.