

CONCLUSION

From Mimeographs to New Learning Ecologies

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When I was in grade school, my mother completed her undergraduate degree in elementary education and became a teacher. After school, we (her children) would often accompany her as she would prepare her classroom, grade papers, and my favorite, make copies on the mimeograph machine. I was just tall enough to turn the crank of the mimeograph drum and watch as the machine would suck in the paper from the tray and press it against the stencil attached to the round drum. Around it would spin, pressing the paper against the stencil and ink, and then spit out a wet, blue-inked paper on the other side. The movement of the drum, the suck and swoosh sound, and the fresh ink smell is pungent in my memory to this day.

I have spent years of my life in schools—in my own education, as a teacher, teaching specialist and consultant, and finally as an educational researcher and teacher educator. Yet, if you ask me to close my eyes and picture “school,” it is this “suck and swoosh” of a mimeograph I am immediately taken back to.

Why am I starting the conclusion of a book on Critical Digital Literacies in 2021 talking about the suck and swoosh of a mimeograph machine from the 1980s? It is quite simple. I kept hearing this machine as I read. Despite the vibrant kaleidoscopic possibilities (Ávila, this volume) explored in this volume for expanding the means and modes of meaning-making for transformative, liberating, and humanizing praxis in our lives across political, economic, and social planes, as soon as schooling was mentioned, I could hear the “suck and swoosh.” Suddenly, I am back at school, back at decontextualized standards, limited and limiting assessments, and policies informed by lobbyists for commercial interests, and along with these come the pull of deficit frameworks, perpetuated inequities, and normed discourses of the White, hetero, binary gendered, monolingual (often preferred English speaking), and ablest kind.

In my own chapter in this volume written with Matthew Hall, we bemoan the lack of widespread multimodal and multimedia composition in schools. We write about the same project that Glynda Hull and I (Smith & Hull, 2012) explored in the 2012 volume *Critical Digital Literacies as Social Praxis: Intersections and Challenges* from Ávila and Pandya. In this project, Hall and I engaged youth in digital storytelling with global peers like Glynda Hull, who had been doing this for years previously (e.g., Hull & Katz, 2006). In this one chapter, we

are traveling through at least 15 years of Critical Digital Literacies encouragement, illustration, examples, and charge to shift the focus in schooling from print-centric regimes of knowledge replication. And yet, suck and swoosh, the crank turns, and out comes another ink-soaked page the same as the last 15 years.

If we want to travel back 25 years ago, in 1996 the New London Group, widely known for the terms “multimodality” and “multiliteracies,” pointed to radical changes in social, economic, and political life. Advances in technologies increased ease in the movement and exchange of goods, ideas, languages, and discourses, and were resulting in the blurring of boundaries and producing the “continual intersection” (p. 71) of difference. In describing the then-present as being characterized by “productive diversity, civic pluralism, and multilayered lifeworlds” (p. 71) they pointed to diversification and multiplicities as a newly-articulated norm, necessitating novel ethical and communicative realities in meaning-making, and thus the pedagogical imperatives for literacy education. This, they argued, was compounded by growing disparities in equitable access to learning opportunities in a globalizing society.

The New London Group further argued that adherence to staid ideologies of language as singular, monomodal, and stable in schools produced authoritarian pedagogical approaches of transfer that not only resulted in poor outcomes—but were neither responsive to the wide repertoires of meaning-making practices diverse populations brought to school nor to the diversifying means and forms of communication amid burgeoning technological advancements. And yet, in the decades since, governmental policies and approaches internationally have continued to invest—financially and epistemologically—in educational technology and testing regimes that, though packaged in the trendy words of the day like “personalized,” “connected,” and “emerging,” continue to center administrative control and surveillance of curricular and pedagogical decisions at the classroom level (Watters, 2021). The crank turns. The paper sucks in. The drum goes swoosh.

Several of the authors of this volume address this issue, naming the most difficult aspect to enact: *criticality* itself. Bacalja (this volume), for instance, provides the example of a carefully-crafted gaming unit that takes up Luke’s (2000) redefinition of critical literacy as “(1) teaching and learning how texts work, (2) understanding and re-mediating what texts attempt to do in the world and to people, and (3) moving students towards active ‘position-takings’ with texts to critique and reconstruct the social fields in which they live and work” (p. 451). As much as the educators at the school were dedicated to innovative teaching, Bacalja details how they failed to see the purpose of resistant reading positions when the schooling system values and rewards the success of the first two aspects of critical literacies, and not the last. Had they done so, the

results would have been, as many scholars in this volume discuss, potentially controversial, unsettling, and disruptive. Indeed, a young person whose critical consciousness is alert and ready to both “critique and reconstruct the social fields in which they live and work” (Luke, 2000, p. 451) is someone that schooling as an institution is ill-designed to host. The mimeograph is a machine built to reproduce a stencil on paper. The school is a machine built to reproduce an outcome on a test.

Perhaps it is not another appeal for criticality or Critical Digital Literacies that we need. Maybe, instead, we need a new machine—not one made to reproduce, but one that can host multiplicities and responsive mutability. It may be here that my machine metaphor breaks down, and where a more complex learning ecology must be imagined. So, leaving my mimeograph in the 80s, let’s move with this book’s scholars through several suggestions of ways forward.

Drawing from Cardozo-Gaibisso et al.’s (2017) Curriculum in Motion (CiM) model, Pangrazio and Cardozo-Gaibisso (this volume) point us to the curriculum as a starting point. The Curriculum in Motion (CiM) model is a dynamic and collaborative framework for student learning that makes room for critical data literacies exploration. Taking it up would mean, among other things, negotiation of learning goals between teachers and students and centering youths’ interests and concerns. Just those two aspects are a radical refiguring of authority and control—the teachers’ and the curriculum’s. Assignments within such a curriculum, likewise, hold promise to shift power.

Johnson and Galdeano suggest a slow-paced, “answerable” (Patel, 2015) teacher-student relationship built across assignments wherein educators critique and reconstruct the gendered norms that their assignments suggest and impose. Their chapter does not only suggest a change in Critical Digital Literacies assignments but in the pace of engagement and length of learning relationship. Both of these are really only possible if we think outside of current timespans of schooling practices of semesters, courses, and periods toward new potential learning relations across expansive learning ecologies.

Ahn and Peña (this volume) argue that by positioning students as makers and not just as consumers of texts, they will not only be able to recognize genres of fake media but be set to be players on the social, political, and economic stages of life. Young people are eager for relevant education that they play a role in shaping and in which they are able to pursue critical inquiry (Gierhart et al., 2019). Luke et al. (2018) argue that this is an ethical imperative for education: “It is no longer sufficient to construct curriculum in preparation for later life. It is no longer sufficient for children to learn about decisions adults make for the planet they will inherit ... It is their world already” (p. 260).

Castrillón-Ángel and Mora (this volume) demonstrate how podcasting as a Critical Digital Literacies practice can work to reach Luke's (2000) final proposition for critical literacy—that youth are positioned to “critique and reconstruct the social fields in which they live and work” (p. 451). In their example of Castrillón-Ángel's podcast project, students engaged in gathering information from multiple positions, critiqued injustices and defended their communities, and created a new community around their podcasts wherein they were able to mobilize their rights. This vision of digital engagement is a far cry from the view of digital literacy as high-demand competencies for skilled workers in the global economy as is often depicted in mainstream, neoliberal frameworks for 21st century literacy (see Mirra & Garcia, 2021). In this sense, Critical Digital Literacies are not just working against the machine and mechanisms of schooling for a place but against a popular operationalization of “digital literacy” that already fits as a nice attachment to the schooling machine.

Critiquing and restructuring teacher learning is another focus of several chapters. Similar to the Curriculum in Motion (CiM) model, I have worked with a curriculum*-in-the-making (Roth, 2013) approach for educator's Critical Digital Literacies learning in which we co-produced a “living curriculum” and learning infrastructure (West-Puckett, et al., 2018) where teachers could construct their own learning pathways and networked content with and for each other (Smith, et al., 2016). Piotrowski and Plaizier (this volume) make the argument, as we had in suggesting this type of living curriculum, that in order for teachers to enact critical, liberatory pedagogies, they must experience these pedagogies for themselves. They importantly emphasize critical reflection as a central tenet for teachers to experience in their preservice education.

Jensen (this volume) highlights the need for preservice teachers to practice vulnerabilities in sharing expertise with young people regarding digital technologies. She also stresses the need for critical reflection, which I read as a practice in critical humility in regard to their own developing criticality. Educational justice has long been peripheral in the preparation of teachers, and when schools and practices within schools so often reproduce inequities, it stands to reason that new, critical, transformative approaches to teacher education are needed (Souto-Manning & Winn, 2019).

The range and depth of knowledge necessary for Critical Digital Literacies teaching is at once vast and changing, as well as deeply personal. Pötzsch (this volume) points to the global infrastructure of the digital economy that rests on low cost and child labor, poor working conditions, and land and resource extraction, among many other negative and multi-scalar impacts and influences. Grappling with the ethical and moral imperatives of device or app engagement will be, I hope, a commonplace practice in the future.

Rice (this volume) directs our attention to sociocultural and anti-racist (Inoue, 2015) assessment approaches that, like curriculum, would be localized, involve the learner and center their values, and share authority among teacher, students, and audiences. Such assessment practices are not only much more coherent with the ideologies of Critical Digital Literacies than rubrics and high stakes tests, but if they were taken to scale in schooling, they would have the potential to destabilize the commercial assessment complex that heaves great power in educational policy and directives.

Pangrazio and Cardoza-Gaibisso (this volume) also suggest that family must not only be invited to engage in Critical Digital Literacies learning, but the role of family and community must be rethought and reconstructed in schooling. Especially since there is no false classroom wall that can be drawn around criticality, digital engagement, or literacies, it seems the timing is right to finally answer the long-standing calls to center and sustain family and community knowledge and practice (Gonzalez et al., 2006; Ladson-Billings, 2014; Paris & Alim, 2017). For instance, through counter-storytelling, Lewis Ellison and Solomon (2019) have shown the multiple agentive, creative ways African American children use and learn with digital technologies with their families, including extended ones. These families' stories run counter to prevailing narratives about the digital divide that focuses on lack of access to technologies and deficits. Instead, their lived experiences show them to be "knowledgeable agents of the digital" (Lewis Ellison, 2018, p. 88). These findings resonated with my own research with colleagues where we revisited studies we had conducted in a classroom and our own ethnographies with young people of color to consider the multiple sponsors of digital literacies in young people's lives, many of whom were cousins, mothers, and brothers (Smith et al., 2020). Placing family and community at the center of a learning ecology, rather than as an add-on, would prove to be a fundamental shift to the logics of schooling where now families, particularly families from marginalized populations, are seen as extraneous or even oppositional to the project of schooling.

Taking up Critical Digital Literacies is not simply a pedagogical approach, and it is especially not an end-of-term project. It is a commitment, if you will, to engage in Critical Digital Literacies ourselves, to "critique and reconstruct the social fields in which [you] live and work" (Luke, 2000, p. 451). It is a commitment to flattening power hierarchies, centering and honoring youth and family values and interests, negotiating learning goals and curriculum, navigating uncertainty, humanizing self and others, recognizing and addressing inequities and injustices through our design of, and engagement in, Critical Digital Literacies ourselves (Duncan-Andrade & Morrell, 2007; Mirra & Garcia, 2020). Though the machine and mechanisms of schooling are not likely to be rebuilt

anytime soon, and in another 10 years we will likely still hear the “suck and swoosh” of the metaphorical mimeograph cranking along, we can take heart that each of these Critical Digital Literacies projects and efforts is doing the work of critical engagement; each enactment, each spin of the kaleidoscope, draws new perspectives and shapes new potential. I have the hope that as we work to center the *critical* in Critical Digital Literacies in our own school-based teaching and scholarship, and encourage others to do the same, we will be able to keep the potential of a new vibrant learning ecology in view.

References

- Ávila, J., & Pandya, J. Z. (2012). *Critical digital literacies as social praxis: Intersections and challenges*. Peter Lang.
- Cardozo Gaibisso, L., Allexsaht-Snider, M., & Buxton, C. (2017). Curriculum in motion for English language learners in science: Teachers supporting newcomer unaccompanied youth. In L. de Oliveira & K. Campbell Wilcox (Eds.), *Teaching science to English language learners: Preparing pre-service and in-service teachers* (pp. 7–29). Springer.
- Duncan-Andrade, J., & Morrell, E. (2007). Critical pedagogy and popular culture in an urban secondary English classroom. In P. McLaren & J. L. Kincheloe (Eds.), *Critical pedagogy: Where are we now?* (pp. 183–199). Peter Lang.
- Gierhart, A., Bonner, S., Smith, A., & Seglem, R. (2019). Fostering cosmopolitan dispositions through collaborative classroom activities: Ethical digital engagement of K-12 learners. In K. Turner (Ed.), *The ethics of digital literacy: Developing knowledge and skills across grade level* (pp. 89–100). Rowman & Littlefield.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2006). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Routledge.
- Hull, G., & Katz, M. (2006). Crafting an agentive self: Case studies of digital storytelling. *Research in the Teaching of English*, 41(1), 43–81.
- Inoue, A. B. (2015). *Antiracist writing assessment ecologies: Teaching and assessing writing for a socially just future*. Parlor Press.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. *Harvard Educational Review*, 84(1), 74–135.
- Lewis Ellison, T., & Solomon, M. (2019). Counter-storytelling vs. deficit thinking methods around African American children and families, digital literacies, race, and the digital divide. *Research in the Teaching of English*, 53(3), 223–244.
- Lewis Ellison, T. (2018). Integrating and humanizing knowledgeable agents of the digital and Black feminist thought in digital literacy research. In K. A. Mills, A. Stornaiuolo, A. Smith, & J. Z. Pandya (Eds.), *Handbook of writing, literacies, and education in digital cultures* (pp. 88–98). Routledge.

- Luke, A. (2000). Critical literacy in Australia: A matter of context and standpoint. *Journal of Adolescent & Adult Literacy*, 43(5), 448–461.
- Luke, A., Sefton-Green, J., Graham, P. W., Kellner, D., & Ladwig, J. G. (2018). Digital ethics, political economy, and the curriculum: This changes everything. In K. A. Mills, A. Stornaiuolo, A. Smith, & J. Z. Pandya (Eds.), *Handbook of writing, literacies and education in digital culture* (pp. 251–262). Routledge.
- Mirra, N., & Garcia, A. (2020). In search of the meaning and purpose of 21st century literacy learning: A critical review of research and practice. *Reading Research Quarterly*, 1–34.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–93.
- Paris, D., & Alim, H. S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
- Patel, L. (2016). *Decolonizing educational research: From ownership to answerability*. Routledge.
- Roth, W. M. (2013). To event: Toward a post-constructivist of theorizing and researching the living curriculum as event*-in-the-making. *Curriculum Inquiry*, 43, 388–417.
- Selwyn, N. (2016). Minding our language: Why education and technology is full of bullshit ... and what might be done about it. *Learning, Media and Technology*, 41(3), 437–443.
- Smith, A., & Hull, G. (2012). Critical literacies and social media: Fostering ethical engagement with global youth. In J. Ávila & J. Zacher Pandya (Eds.), *Critical digital literacies as social praxis: Intersections and challenges* (pp. 63–84). Peter Lang.
- Smith, A., West, A., & McCarthey, S. (2020). Literacies across sponsorscales: Mobilizing notions of literacy sponsorship. *Literacy*, 54(2), 22–30.
- Smith, A., West-Puckett, S., Cantrill, C., & Zamora, M. (2016). Remix as professional learning: Educators' iterative literacy practice in CLMOOC. *Education Sciences*, 6(12), 1–19. doi:10.3390/educsci6010012
- Souto-Manning, M., & Winn, T. L. (2019). Toward shared commitments for teacher education: Transformative justice as an ethical imperative. *Theory into Practice*, 58(4), 308–317.
- Watters, A. (2021). *Teaching machines: The history of personalized learning*. MIT Press.
- West-Puckett, S., Smith, A., Cantrill, C., & Zamora, M. (2018). The fallacies of open: Participatory design, infrastructuring, and the pursuit of radical possibility. *Contemporary Issues in Technology & Teacher Education*, 18(2), 203–232.