Editorial: Critical Perspectives on Digital Platforms in ELA Teacher Education

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Amid recurrent cycles of enthusiasm for, and backlash against, new technologies, it can be tempting to believe that ours is a moment uniquely characterized by technological disruption. In books and op-eds, we regularly hear that we are living in a fourth industrial revolution (Schwab, 2016), a new capital-A "Age" of Big Data (Peters, 2012), algorithms (Douthat, 2022), and artificial intelligence (Kissinger et al., 2022) — and that these epochal shifts are nurturing new generations of young people who are, at once, "networked" (Coleman, 2023), "distracted" (Mancall-Bitel, 2019), "empowered" (MIT RAISE, n.d.), and "anxious" (Haidt, 2024). We are, likewise, told that education has a responsibility to adapt to such transformations. After all, we do not want students or teachers left unprepared for the forms of life and work that, we are assured, are just over the horizon (Khan, 2024).

The urgency with which such proclamations are made leaves little room to reflect on their premises. Were we to do so, one question we might ask is, What if the changes today's technologies introduce are better understood not as temporal or generational ruptures, but as a continuation of existing historical processes? From this vantage point, the task of education is not to reflexively react to new technologies — either by accommodating or avoiding them — but to contextualize and explain their place in the braided history of technology, teaching, and learning.

This perspective should be especially welcome in literacy studies, a field founded on such sociohistorical analyses (Graff, 1979; Street, 1984) and whose research agenda has long been marked by the evolving relationships among technologies (e.g., the written word, the printing press, and the personal computer), literacy practices, and the pedagogies that intermediate the two.

Today, digital platforms are emerging as another technology that is reconstituting the teaching and practice of literacy. They modulate students' access to and engagement with texts (including legacy media forms, like books and newspapers), shaping what and how they read. They enable new forms of composition and assessment, transforming how students develop as writers. And they generate vast stores of data about student learning, influencing how teachers come to know, evaluate, and respond to the individual and collective needs in classrooms. In many ways, then, digital platforms are doing for literacy education what previous technologies, from moveable type to the printed book, have done for centuries: molding the nature of literacy and learning to comport with their own properties and logics.

This editorial introduces a special issue series in *Contemporary Issues in Technology and Teacher Education (English Language Arts Education)* on "Critical Perspectives on Digital Platforms in ELA Teacher Education," the contents of which take up the question of how literacies and digital platforms are shaping one another and the implications of their interplay for high- quality, equity-oriented ELA teacher education. Over the coming volume year (Winter 2024 – Winter 2025), we will publish a range of theoretically and methodologically diverse studies that, together, extend the field's longstanding critical orientation toward technology, literacy, and pedagogy to include the digital platforms that increasingly underwrite how literacy teaching and learning unfold in ELA classrooms and teacher education programs.

Situating Digital Platforms and ELA Education: A Sociotechnical View

While most people associate "platforms" with the products of Big Tech companies like Amazon, Facebook/Meta, or Google/Alphabet, the term applies to any digital app, service, or infrastructure that facilitates social, technical, and political-economic exchanges (Gillespie, 2010; Nichols & Garcia, 2022; van Dijck, 2013). Platforms, in other words, are a *category* of digital technologies that coordinates and controls networked relations of multiple actors — people, companies, algorithms, protocols, and so forth — and enlists them in the creation, sharing, and commodification of content and data. The most visible dimension of these relations are the interfaces where users' views, clicks, and swipes respond to, and set in motion, a range of less-visible sociotechnical processes that simultaneously implicate both the local (e.g., the immediate context of a platform's use) and the the global (e.g., the natural resources required to sustain its underlying data processes) and innumerable scales between.

Importantly, as the recent National Council of Teachers of English (NCTE) policy brief, *Digital Platforms and the ELA Classroom* (LeBlanc et al., 2023), suggested, the steady proliferation of platforms in administration, instruction, and learning — what some have termed "the platformization of education" (Kerssens & van Dijck, 2021; Pangrazio et al., 2022; Perrotta, 2021) — enjoins ELA classrooms with these vastly distributed processes in ways that define and delimit the shape of literacy teaching and learning within them.

For this reason, a thread running through the articles that comprise this special issue series of *CITE (English)* is an interest in approaching platforms not as pedagogical "tools" with instrumental uses and functions but as "sociotechnical systems." This latter view, as theorized in the transdisciplinary literature of science and technology studies (STS), recognizes that technologies always condition, and are conditioned by, wider social relations — often in ways that reflect and refract the structures and logics of each (e.g., Bijker et al., 1987; Haraway, 1988; Latour, 1990; Star, 1999).

Understanding the interplay of digital platforms and the social practices of literacy education, then, demands attention not only to the observable uses of such technologies in classrooms, but also to the ways these uses are coconstituted by the interests and imperatives embedded in the design of such platforms.

The individual articles within the series approach this interplay from different vantage points — a testament to the ways a sociotechnical orientation can multiply the sites and entry points for studying literacy education's mediation by digital technologies. They also collectively contribute to a growing research base in the field of literacy studies that seeks to interrogate the material conditions through which digital literacies are constituted, animated, and contested (Bhatt & de Roock, 2013; Burnett & Merchant, 2020; Gourlay & Oliver, 2016; Robinson et al., 2024).

It bears repeating, at this point, that the mediation of literacy education and practice by changing technologies is not new. And one of the gifts that a sociotechnical view offers to researchers and practitioners is a mode of analysis that is as much interested in mapping historical continuities as it is in explaining new divergences. Indeed, from a sociotechnical perspective, the latter depends on the former. Accordingly, in what follows, we cut an oblique path to set up larger themes of the articles in this special issue series — one that detours through a different sociotechnical artifact that predates platforms by centuries: the printed book. We do so to establish the sociotechnical dynamics that have long structured literacy education so that we can reckon with what is at stake as they are reconfigured by platform technologies. Such an approach allows us to make visible those facets of literacy education's existing sociotechnical relations we might fight to preserve and those we might choose to leave behind, as our shifting technological landscapes mediates pedagogical practice anew.

The Coconstruction of the Printed Book and the Literacy Teacher

The printed book can easily be defined by its social features. Books contain content that we consume, and we might do so for different reasons: for pleasure, to learn, because we want to, because we are told to. We can purchase books — from a locally-owned bookstore, from a retail chain, from Amazon. We can give books as gifts and inscribe them, display them on shelves, and pass them along to our children. But crucially, the printed book is not *only* a social artifact; it has technical and political-economic features as well.

A book is bound, for instance — unlike, say, a scroll. It consists of pages upon which words (and images and charts and so on) can be imprinted; and, through the process of mechanical reproduction, those pages can be expediently duplicated to allow for their contents to be circulated to, and read by, different readers in different places. Books are also products of labor — of authors, yes, but also of copy editors and acquiring editors, publishers and publicists, contract managers and literary agents, designers and typographers — and they are commodities that hold different values, simultaneously, for those who own them as physical or intellectual property.

To approach the printed book as a sociotechnical artifact is to recognize that these technical and political-economic features are enmeshed with, not ancillary to, a book's social meaning. Remove the mediations of publishing houses from the production of the latest bestseller, and it would fundamentally alter not just the ways people learn about or access the book, but the intricacies of its content as well. Adrian Johns (1998) illustrated this in his magisterial history of the book as a technical object: the early days of print were rife with piracy, making books notoriously untrustworthy. It was only through the long-suffering collective labor of authors and typographers, presses and censors, that the process of publishing could be standardized enough to shore up authority for books to be treated as reliable sources of information.

Importantly, for our purposes, it was out of this hazy information environment that our Western notions of schooling emerged, as well as literacy education as an institutional endeavor approximate to the form we know today. Johns (1998) showed that early reading "tutors" were recognized as navigating a dangerous task. During the 17th century, as mass-produced books began circulating widely in the West, reading was understood to bear physiological effects. Reading morally suitable texts could imprint civility upon the mind of readers; whereas, improper texts could have lasting mental, physical, and spiritual consequences. The work of the tutor, then, was not just instrumental instruction but moral training — curating books so as to imprint only the most positive traits on their pupils.

The role of the literacy teacher and the technology of the book were, thus, coconstructed. Just as reading tutors brought to bear on books a set of interpretive techniques for adjudicating which texts were permitted to circulate among their students, the book remade literacy instruction according to its own logics — privileging, in this era, forms of reading that scrutinized texts for credibility and moral suitability.

This mutually constitutive relation laid the foundation for what Graff (1979) has called "the moral economy of literacy," where the teaching and practice of literacy are understood to be reflections of and strategies for cultivating the moral subjectivity of readers — a view that persists, albeit in less overt forms, even into the present (cf., Smith & Nichols, 2023).

Graff's analysis of literacy's moral economy helps illustrate the extent to which the kind of sociotechnical analysis we have been describing is not a novel addition to the repertoire of literacy research; rather, it has been a subtle yet significant undercurrent in the field, even in its earliest formulations. Street's landmark study, *Literacy in Theory and Practice*

(1984) explicitly glossed Graff's work as making visible the ways that the "moral, socializing function of literacy teaching" cannot be understood apart from attention to the technical features of books; that is, the ways cultural attitudes and dispositions have been structured materially through "book bindings, illustrations, covers, etc." and even to the physical locations where books were encountered (p. 109).

Indeed, we can even understand Street's own, influential theorization of "the autonomous model of literacy" as naming a flawed approach to literacy research and pedagogy that unmoors the concept's social functions from its underlying technical and political-economic relations. In contrast to this, Street offered "the ideological model of literacy" as an alternative orientation that recognizes the imbrication of literacy, technology, and pedagogy. By calling attention to literacy as a socially situated practice tethered to underlying technical and political-economic relations, Street's ideological model set the stage for contemporary sociotechnical analyses of how digital platforms are reconfiguring literacy today.

The Coconstruction of Digital Platforms and the Literacy Teacher

Having laid the above groundwork for the longer history of sociotechnical analysis in the field of literacy education, let's return to our original point of departure: digital platforms and their implications for ELA teaching and teacher education. As noted, digital platforms are apps, services, and infrastructures that facilitate exchanges (Gillespie, 2010) — whether economic exchanges as in e-commerce, technical exchanges as in intraplatform interoperations, or social exchanges as in communication. However, much like the printed book, digital platforms are most readily defined by their social features. It is easy to see, for example, how platforms connect us to others, allow us to share our ideas and experiences, and enable us to create communities, just as a book's literal meaning can be more legible to readers than its symbolic or historical meanings. And like books, we might access platforms through different devices, like smartphones, tablets, or computers; and we, or our schools, might purchase subscriptions or agree to exchange our data for access to content or services through platforms.

In *Postprint: Books and Becoming Computational* (2021), Hayles described the growing prevalence of *networked books* — that is, books accessed through digital reading platforms (e.g., Kindle) — which are enmeshed in "cognitive assemblages, [or] networks of human and technical systems through which information, interpretations, and meanings circulate" (p. 130). Today's ELA classrooms are similarly enrolled within cognitive assemblages, where students' minds and bodies interact with complex networks of human and nonhuman actors, including teachers and classmates but also algorithms and interfaces.

Because these interactions shape what students read and write, they also shape how students learn and how teachers teach (Perrotta et al., 2021). When students read a text on Newsela, for example, they are not just accessing content in a new format but are interfacing with a computational system that can adapt text to their reading level, track their progress, and

generate data about their performance. Building from Hayles (2021), the data generated by platforms like Newsela might be understood to produce a kind of pedagogical-cognitive assemblage for ELA teachers, who must navigate and interpret an array of analytics and metrics to inform their instructional decisions, even as *their* use is also tracked and measured by those same platforms.

In response to these dynamics, NCTE's research brief called for professional development that supports teachers in developing critical insights into the digital platforms they use, whether willingly or by mandate.

"Making these conversations visible," the authors noted, "is one way to resist the default positioning of platforms and open space for collective action" (LeBlanc et al., 2023, p. 9). We would extend this message to ELA teacher educators, who are well-positioned to prepare teacher candidates to engage critically with the ways digital platforms shape literacy practices and pedagogy. Such preparation would require more than simply building teachers' technical proficiency with platforms. It also, and perhaps more importantly, would mean developing their ability to examine the values, ideologies, and biases that animate the design of platforms and their capacity to influence teaching and learning.

ELA teacher educators might, for example, help teacher candidates interrogate how a platform like Newsela structures and mediates reading education, how it commodifies literacy education through premium content and features, and how in doing so it shifts power away from teachers and students toward algorithms and engineers. Such critical explorations can be extended to other platforms as well, from Google Docs and Turnitin to Flip and MagicSchool AI.

Important, too, is that teacher educators help novice teachers positively recognize the platforms and platform features that may hold promise for enhancing student learning in ways that align with shared pedagogical values, including, for example, platforms that connect students with authentic audiences and purposes for their work (e.g., Stornaiuolo & Jung, 2017). In other words, the aim should not be to fully reject or embrace platforms, but instead to nurture critical orientations toward them in ways that help teacher candidates make good decisions about whether, when, how, and why to invite platforms — and other educational technologies — into their future classrooms.

Conclusion

Over the next year of this special issue series of *CITE (English)*, articles will explore a range of issues at the intersection of digital platforms, literacy education, and teacher preparation. For example, in the first issue, Robinson and Hadley (2024) examine how the logics of competition, speed, and personalization that structure Accelerated Reader surfaced in preservice ELA teachers' reflections on using the platform as schoolchildren. Their findings highlight the need for teacher educators to help novice educators become critically sensitized to platform logics and their capacity to influence students' literacy practices and identities in durable ways. Also featured in the first issue is a study of how preservice

teachers navigate the TikTok platform when creating content for the #BookTok community, where Jerasa and Mitchell (2024) highlight the complex ways preservice teachers' out-of-school digital literacy practices can inform their literacy pedagogy while remaining attuned to the challenges such platforms pose (e.g., algorithmic bias).

Scholars featured in future issues will examine how platforms shape the way content is taught and assessed in ELA classrooms and teacher education programs and how teacher educators are engaging issues of power and social justice concerning platform technologies. They will also discuss how teacher candidates can develop more critical perspectives on the platforms that populate ELA classrooms, as well as how teacher educators can help novice teachers respond to the new challenges brought by AI. Finally, across the articles, authors will consider strategies and practices for reconciling, resisting, or subverting the tensions that platforms bring to ELA classrooms and teacher education.

In bringing together these critical perspectives, this special issue series positions *CITE (English)* as a home for scholarship that interrogates the powerful sociotechnical systems that govern literacy teaching and learning today. Though the incursion of technology — with its attendant ideologies, consequences, hype, and criticism — is by no means a new phenomenon in education, we suggest that ongoing interrogation of novel technological formations like the digital platform should be considered a key pillar of teacher education research and practice. By unfurling the complex interrelationships between technology, literacy, and education, such work can equip educators to navigate the promises and pitfalls of technology integration and to make informed decisions that align with their pedagogical values and goals.

Ultimately, we hope this special issue series contributes to a broader reckoning with the role of technology in education — one that goes beyond uncritical adoption or reactionary rejection, and instead empowers educators to shape the future of literacy teaching and learning in the platform era.

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