# Reading Research Quarterly Special Issue: Literacy in the Age of Al



Prompt: a young child, reading a book in an elementary school classroom, with the help of artificial intelligence (Images created by MidJourney, an artificial intelligence art generator)

The images above were created using Midjourney, an artificial intelligence (AI) program that generates digital art based on natural language descriptions. When a user enters a prompt—in this case, "a young child, reading a book in an elementary school classroom, with the help of artificial intelligence"—Midjourney algorithmically processes the prompt's language and then renders it as set of four images, which will be different each time one enters the same prompt. Such computational processes, along with the startlingly creative images they produced in response to the prompt above, illustrate a provocative blurring of boundaries between the human reader and the reading machine: a machine in a child's book, a machine as a child's eyes, a machinic child reading. Taken together, these images gesture toward an important question facing the field of literacies studies: What does literacy mean in the age of AI?

This special issue of *Reading Research Quarterly* (*RRQ*) aims to set a broad agenda for literacies studies in the age of Al. Al, or technologies designed to mimic human capacities, is inseparable from the technical, social, political, economic, and ecological forces that make it possible. So too is literacy. Indeed, the practice of literacy—whether it be reading algorithmically recommended books on an Amazon Kindle or composing algorithmically generated synthetic text using ChatGPT—is increasingly threaded to sociotechnical factors that are and will continue to shape the boundaries of literacy living and learning in the age of Al. Such factors include the opaque computational techniques that constitute Al (e.g., machine learning, ML), their influence on social relations in a world that grows both more connected and more divided, their potential to exacerbate such divisions in the service of political aims absent policy interventions, their entanglements with technology corporations operating at global scale, and their voracious thirst for fossil fuel energy. These forces, as Beller (2021) explained, are "operationally disappeared into our machines. Nonetheless they continue to do their work" (p. 65). They work on us all, and they do

# Reading Research Quarterly Special Issue: Literacy in the Age of Al

it as we read, write, speak, listen, and create alongside an array of computational agencies designed and deployed by humans—most of them male, white, and in the Global North—with specific values and objectives (e.g., longtermism).

Recently, literacies studies researchers have begun to investigate how digital infrastructures (e.g., user interfaces, algorithms, business models, etc.) are reshaping the way literacy is practiced and learned in and out of schools. These scholars have explored how the computational techniques structuring artificial intelligence are deployed in literacy education. For example, both Dixon-Román, et al. (2020) and Nichols, et al. (2021) examined how ML-powered automated writing assessment platforms (e.g., Turnitin) algorithmically shape a racialized, gendered, and abled construction of so-called good writing that can suppress the voices of students who write with nonstandard English. Such insights are reinforced by research in fields like computer science on the kinds of language models responsible for automated writing assessment platforms, not to mention synthetic text generators such as ChatGPT, which can perpetuate forms of social violence (e.g., racism) given the pervasiveness of such violence in their training data (Bender, et al., 2021). While this strand of emerging research has offered critical insights into the imbrication of literacy and AI—specifically by calling attention to the sociocultural, ideological, and material forces that animate it—it is crucial that literacies studies come to terms with the accelerating incursion of AI (e.g., generative AI) on human communication and expression in support of socially just futures.

The special issue will therefore bring together an interdisciplinary and geographically diverse cohort of researchers with varied epistemological, theoretical, and methodological commitments to critically explore questions such as the following:

- What role does machine learning play in the construction of reading and writing in schools (e.g., digital reading platforms)?
- How does the growing convergence of literacy and Al speak to important (dis)continuities with the historical trajectory of literacies studies, theory, and practice?
- How might scholars understand the recent turn toward generative AI in relation to literacies studies, specifically concerning theoretical commitments to posthumanism, (im)materialism, affect, and emotion?
- What kinds of pedagogical perspectives are needed to help scholars, practitioners, and scholar-practitioners make sense of generative AI and ML with respect to issues of multimodality, disinformation, biometrics, and more?
- How can literacies studies reckon with the potential impacts of AI technologies on literacy learning/learners given its opaque, complex, and often proprietary nature?
- What kinds of pedagogical, theoretical, or policy interventions can address emerging forms of algorithmic governance—that is, the capacity for algorithms to performatively structure human activity—at the intersection of literacy and Al?
- What should literacies studies scholars understand about the relation of AI to issues such as racial justice, climate change, surveillance capitalism, and labor practices, particularly in the Global South?
- Finally, when considering the above provocations, how can the field of literacies studies reckon with the potential for AI to reshape literacy living and learning without succumbing to deterministic, totalizing logics that undermine individual and collective agency toward either utopian or dystopian futures?

# Reading Research Quarterly Special Issue: Literacy in the Age of Al

We invite the submission of **500- to 750-word abstracts by June 12, 2023**, to **tatiana.becerra@mcgill.ca**, with "RRQ special issue abstract" in the subject line. Authors of approved abstracts will be invited to submit full manuscripts for peer review and adjudication by both the editors of RRQ and the guest editors of this special issue. Invitations for full manuscripts will be sent by June 26, 2023, with full manuscripts due by October 1, 2023. Full manuscripts can target one of two available strands: 1) shorter, conceptual manuscripts that respond to the call with a future-facing orientation (4,000–5,000 words), or 2) longer, empirically driven manuscripts that present original research related to the call (10,000 words).

**Timeline:** Due to the urgency of this work, we anticipate a typical schedule of moving from abstract acceptance, to manuscript development, through review and revision and, ultimately, to publication. Acceptance of an abstract does not guarantee publication; all manuscripts will go through the peer review process. Authors who are asked to submit manuscripts will be expected to work quickly through this process.

- June 12, 2023: Abstracts due
- June 26, 2023: Abstract authors informed of whether they can proceed to submission of a paper
- October 1, 2023: Final date for manuscript submissions
- **December 15, 2023:** The first peer review phase should be completed and decision letters sent to authors
- March 15, 2024: Final date for revised manuscript submissions
- May 15, 2024: The second peer review phase should be completed and decision letters sent to authors
- **July 1, 2024:** Final date for final manuscript submissions

#### **REFERENCES**

Beller, J. (2021). The world computer: Derivative conditions of racial capitalism. Duke University Press.

Bender, E.M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021, March). On the dangers of stochastic parrots:

Can language models be too big? ... In Proceedings of the 2021 ACM conference on fairness, accountability, and transparency (pp. 610–623). https://doi.org/10.1145/3442188.3445922

Dixon-Román, E., Nichols, T.P., & Nyame-Mensah, A. (2020). The racializing forces of/in AI educational technologies. Learning, Media and Technology, 45(3), 236–250. https://doi.org/10.1080/17439884.2020.1667825

Nichols, T.P., LeBlanc, R.J., & Slomp, D. (2021). Writing machines: Formative assessment in the age of big data. Journal of Adolescent & Adult Literacy, 64(6), 712–719. https://doi.org/10.1002/jaal.116

### **Guest Editors for the Special Issue**

**Brad Robinson**, Texas State University, and **Ty Hollett**, Pennsylvania State University, will serve as guest editors, adjudicating all papers for this special issue of *Reading Research Quarterly*.