

Contesting Scientific Literacies: New Tools for a New World
Proposals ~~due April 30~~ due May 15

Edited by Meg M. Marquardt and Lourdes Cardozo Gaibisso , Mississippi State University

Send questions and proposals to: contestingciliteracy@gmail.com

Call for Chapters

Scientific literacies have been widely treated as a marker and prerequisite of civic preparedness, national belonging, economic prosperity, and even military preparedness (Fahenstock, 2019; West-Puckett, 2022), and, importantly, as a neutral and objective marker of *who* is allowed to engage in and with science (Avraamidou & Schwartz, 2021). Historically, this notion of scientific literacies have been constrained by normative assessments such as standardized tests in schools and curricular metrics that reflect and reproduce dominant ideologies. These practices privilege Western, academic, monolingual, and hierarchical scientific culture, while overlooking and disregarding the diverse linguistic and rhetorical repertoires and practices students and communities draw upon to demonstrate their scientific literacies (Booher & Jung, 2017; Harman, et al., 2020). In this context, it is crucial to engage in epistemological mediations that broaden our ability to understand and interpret our world. This requires us to promote internal diversity within science, and a reassessment of knowledge and practices from social groups that have been historically oppressed and marginalized (Alvarez, 2017).

Contesting Scientific Literacies: New Tools for a New World aims to challenge how these frameworks limit and reify how individuals and communities explore and acquire scientific literacies. Following the call made by “A Linguistic Justice Statement for the Field of Professional, Technical, and Scientific Communication” (Black, et al.), this collection reconceptualizes scientific literacies as socially distributed, rhetorically mediated, and collectively enacted across a wide array of educational and public spaces.

We seek contributions that interrogate formal educational settings (such as preK-12 institutions shaped by normative accountability regimes, as well as higher education settings that privilege disciplinary expertise) and public spaces where scientific literacies are negotiated through everyday practice and civic and/or community-engaged action. The collection asks how individuals and communities develop and teach scientific literacies within institutions and outside of them through lived experience, linguistic autonomy, cultural knowledge, and collective action.

In addition, a central contribution of this book is its intentional bridging of Writing Studies and Applied Linguistics, two fields that often address scientific communication in parallel, with overlapping commitments to understanding how different actors make meaning across contexts, the power around and within language ideologies, and literacies as a socially-mediated practice. By engaging these fields into conversation, this collection seeks to illuminate how writing studies and applied linguistics, in tandem, can advance a new theory of scientific literacies that accounts for multilingual, embodied, and pluriversal approaches to science communication that resist traditional gatekeeping mechanisms.

Contribution Types & Scholarly Commitments

As editors, we are committed to building the collection in a way that embodies the collection's very critique: scientific literacies should not be determined solely by those with established institutional authority. In line with this, we seek contributions from across (academic) ranks, geographies, and institutions, including graduate students, non-tenure-track faculty, community-based practitioners, and extension agents.

All contributions should consider how their work contests, redefines, or expands scientific literacies, ideally demonstrating how theory and practice inform one another. We invite two forms of submissions: theoretical/empirical chapters and interchapters. These chapter types are meant to compliment and amplify the way researchers and practitioners understand and teach scientific literacy.

Theoretical or Empirical Chapters

We envision these longer chapters to be grounded in theoretical and/or empirical research on scientific literacies. However, we invite broad interpretation of scholarly form and voice. Final submissions will:

- Be 7,500–8,000 words
- Be grounded in theoretical and/or empirical research, broadly constructed.
- May include historical analyses, rhetorical case studies, language ideology critique, assessment research, technical communication research, etc.

Interchapters (Theory–Practice Bridges)

These shorter chapters will appear between theoretical chapters to demonstrate and explain what theory might look like in practice. The interchapters answer the question:

What do these theories look like in actual classrooms or public spaces? Final submissions will:

- Be 2,000–2,500 words
- Translate scholarship into pedagogical or public-facing applications
- Offer replicable practices (e.g., curriculum designs, multimodal heuristics, community partnerships, policy-oriented interventions)

All contributors should explicitly articulate how their work contests, revises, or expands the construct of scientific literacy

Areas of Focus

We welcome proposals that address topics such as:

- Multilingualism, translanguaging, and linguistic justice in science education
- Culturally and Linguistically Sustaining Science Praxis
- Multimodal disciplinary literacies in science
- Queer, embodied, Indigenous, and other nondominant epistemologies
- Rhetorical dimensions of scientific testing, assessment instruments, and accountability regimes
- Public science communication, civic participation, and knowledge co-production
- Disability rhetorics, accessibility infrastructures, and Universal Design in science
- The affective, imaginative, and material dimensions of scientific inquiry
- Informal learning ecologies (community advocacy, maker culture, museum literacies)
- Histories of exclusion and resistance in scientific participation
- Ethics, risk, and power in science communication
- Scientific literacy as a contested space of disciplinary identity formation
- The role of science textbook in shaping scientific literacies

Proposal Guidelines

Proposals of 400–500 words should:

- Identify the central problem/ intervention in area(s) of focus listed above
- Outline major arguments and, for theoretical/experimental chapters, engage with disciplinary conversation
- Describe theoretical frameworks and/or methodological approach
- State which type of chapter (theoretical/experimental chapter or interchapter)

- Include a short bio (75–100 words per author; not counted towards the proposal word limit)

Please send submissions to contestingciliteracy@gmail.com.

Timeline (subject to press negotiation)

- Chapter proposals are due: April 30, 2026
- Notification of accepted proposals: May 15, 2026
- Complete chapters are due: August 15, 2026
- Reviews returned to authors: October 15, 2026
- Revised chapters are due: January 15, 2027
- Anticipated submission to the publisher: Spring 2027

We are pursuing publication with the ATTW Series in Technical and Professional Communication (Routledge), with significant interest expressed by the series editors.

References

Alvarez, M. A. (2017). *Epistemologías del Sur. Críticas al paradigma científico dominante y alternativas poscoloniales de producción y validez de conocimientos. En busca de la justicia cognitiva global*. XII Jornadas de Sociología. Facultad de Ciencias Sociales, Universidad de Buenos Aires, Buenos Aires.

Avraamidou, L., & Schwartz, R. (2021). Who aspires to be a scientist/who is allowed in science? Science identity as a lens to exploring the political dimension of the nature of science. *Cultural Studies of Science Education*, 16(2), 337-344.

Black, S., Cardinal, A., Garcia Santana, O., Gonzales, L., Lawrence, H., Lee, S., Martinez, D., Rivera, N.K., Shelton, C.D., & Walwema, J. (2025). A Linguistic Justice Statement for the Field of Professional, Technical, and Scientific Communication." In N.N. Jones, L. Gonzales, A. M. Haas, and M.F. Williams (Eds.), *The Routledge handbook of social justice in technical and professional communication* (pp. 342-353). Routledge.

Booher, A. K., & Jung, J. (Eds.). (2017). *Feminist rhetorical science studies*. Southern Illinois University Press.

Fahnestock, J. (2022). Rhetorical citizenship and the science of science communication. In *Rhetoricians on Argumentation* (pp. 85–101). Springer Nature Switzerland.
https://doi.org/10.1007/978-3-031-18802-2_7

Harman, R., Buxton, C., Cardozo-Gaibisso, L., Jiang, L., & Bui, K. (2020). Culturally sustaining systemic functional linguistics praxis in science classrooms. *Language and Education*, 35(2), 106-122.

West-Puckett, S. (2022). Crash Encounters: Negotiating Science Literacy and Its Sponsorship in a Cross-Disciplinary, Cross-Generational MOOC. *Community Literacy Journal*, 16(2), 33.