

Standards, Pedagogies, and Celebrating the STS Infrastructure Award to *ESTS*

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Abstract

Volume 10 comes in two parts, issue 1 and 2 published together. The double issue includes two Thematic Collections, “Standards and their Containers” and “Pedagogical Intersections.” It also includes two Original Research Articles and an Engagements piece. With these issues, *ESTS* also celebrates winning the Infrastructure Award 2024 awarded by the Society for Social Studies of Science (4S).

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Introduction

Welcome to volume 10 of *Engaging Science, Technology, and Society*. Though it comes late in the year, this double issue is full of new STS scholarship, including two Thematic Collections, two Original Research Articles, and a piece in the Engagements category. These issues also celebrate the journal's editorial team being awarded the 2024 STS Infrastructure Award at the joint meeting of the Society for Social Studies of Science (4S) and the European Association for the Study of Science and Technology (EASST) in Amsterdam in July.

The two Original Research Articles in these issues cover the greenwashing of bioenergy in the United States ([Powell et al. 2024](#)), and the disappearance of human workers in data work in India ([Chaudhuri and Chandhiramowuli 2024](#)).

“Renewable Ruse” ([Powell et al. 2024](#)) is a collaboratively researched and written piece that details an energy transition that is not really a transition in North Carolina. While touted as a positive move towards sustainability, the development of bioenergy sources (wood fuel and methane drawn from agricultural and forestry industries) leaves intact existing forms of extractivism, intensifying rather than ameliorating environmental injustice. The essay is notable for a number of reasons, including its collaborative, polyvocal approach to research and writing, which enacts social and material connections and differences that the ruse of “renewability” they examine elides.

“Tracing the Displacement of Data Work in AI” ([Chaudhuri and Chandhiramowuli 2024](#)) examines a different kind of elision, bringing into relief how the opportunities of data workers in the Global South get enclosed. Sited in Bangalore, once the icon of IT outsourcing, the web startup at the center of this article run a price matching tool. While an indispensable tool for bargain hunters, these seemingly intelligent systems rely on teams of human data workers to be “in the loop” to be of any value. The article shows that while work in the platform economy is often seen to be a precarious world of endless gigs, more secure workers in India are deskilled, devalued, and made invisible as logics of labor organization and the transnational IT economy intersect.

The entry in the Engagements genre originates with the Author–Meets–Critic session held at 4S's 2022 meeting in Cholula, Mexico. Sophie Chao and Gregg Hetherington ([2024](#)) discuss monocropping, monocultures, and the agribiopolitics of industrial food systems with Hetherington's Rachel Carson Award winning book, *The Government of Beans* ([2020](#)).

Among the many characteristics of a piece of strong academic writing, one may be how well it embodies a scholarly connoisseurship. Understood as a skill of discernment cultivated through deep engagement with the details of a subject, connoisseurship is essential to all scholarship, and it is certainly on display in the

issues' Original Research Articles, grounded in detailed qualitative work in-situ. But other manifestations appear in historical work, especially of the type on display in the Thematic Collection, "Standards and Their Containers." Edited by Aro Velmet and Claas Kirchhelle (2024), the articles in the collection cover an impressive historical and geographic span in painstaking detail to draw attention to the colonial and post-colonial vicissitudes of human-microbe relations (Kollmer 2024; Kirchhelle and Kirchhelle 2024; Pouget 2024; Tousignant 2024; Vanderslott 2024; Velmet 2024). The pieces in the collection track pathogens as they are brought into socio-technical infrastructures that impose various forms of standardization, but which are continually transformed by microbial unruliness. From hygiene in Europe and its colonies to the asymmetrical biopolitics of global health, the collection conceptually contributes to how we think about microbes, disease, and the technoscientific practices deployed to epistemologically and clinically capture them. What's more, the collection's connoisseurship lies in the grasp of a swathe of primary sources with eyes tuned to draw out the sense they embody.

Pedagogy as STS

Another quality of good scholarship becomes apparent when, as journal editors, we don the hat of "teacher." Many of us are teachers introducing students to new ideas, and impart to them an appreciation for the crafts of reading, writing, and analysis. As we read through new submissions, part of our attention is always on the question, "How might I use this research in my teaching?" (York and Okune 2024; York et al. 2024).

There are so many factors at play that there is no one way to approach this question. Class size, subject area, and student level are all considerations, as are new teaching styles, classroom techniques, as well as the easy availability of texts to students. Long gone are the days when a teacher could compel an entire class to purchase a photocopied class reader.

But of course, as we often hear "students don't read anymore." This refrain has echoed across the years, but it tends to diminish the fact that students are different now, more diverse in background and perspective, and far more nimble, savvy and economical with their time than we might be able to perceive from the lectern. And as Monamie Haines shows, teachers need to be attentive and respond thoughtfully to the predicaments generated by intensifying transnational circuits of higher education, which may bring students and teachers into the same physical classrooms while occluding the historical and socio-cultural distances that structure them (Haines 2024).

It is not lost on us that the social, technological, and political economic shifts washing over academic publishing are not so different from those that are changing the landscapes of higher education. The corporate enclosure of the intellectual commons is as much an existential risk for scholarly publications as it is for universities, as is the bizarre notion spreading in some parts of the world that university teaching need no longer be "research-driven." But, perhaps by recognizing this shared plight we might begin to see guides for navigating it. We might start by bracketing off the impulse to see research as prior to teaching. Instead of asking first "How might I use this research in my teaching?," we could ask instead "How is teaching a form of research?"

This is the kind of problem examined by the articles in the “Pedagogical Intersections” Thematic Collection. The collection was coordinated by Emily York and Angela Okune ([2024](#)), two of the editors in this journal’s editorial collective driving its aim of *strengthening STS pedagogies* ([ESTS 2024](#)). Taking up Ruha Benjamin’s call to employ education to “hack the current system” as much as to equip people to “play the game of life” ([Benjamin 2016](#)), the collection is an experiment and provocation in collaboratively rethinking the practices and loci of knowledge production, critical analysis, and activism to foster new formations of STS.

The collection is also a multi-modal invitation to pedagogy as a way of doing STS. From reconnecting to histories of multi-modal, student-led practices of doing critical pedagogy before the age of the digital, for example through student “zines” ([Chan 2024](#)), to theater as a feminist practice that can involve students and teachers together in pondering over what it is that they learn as they engage in theoretical readings ([Aushana et al. 2024](#)).

The modality can also be the physical space of a “Lab,” that does not only welcome teaching and research in a same space, but also different disciplines, and that can thus contribute to ‘enliven’ the ways research, teaching, and interdisciplinarity may come together through pedagogical efforts—as exemplified by Douglas-Jones et al.’s ETHOS lab, a critical feminist lab at the IT University of Copenhagen ([2024](#)). EthnoData is a Lab of a different kind—a multimodal and multimedia digital platform designed to critically engage different publics with data production and circulation about violent deaths in Ecuador. It relies on the digital as a pedagogical space to learn about the political effects of numbers, and how experimenting with numbers can bring about new understandings about violent deaths and meaningful political interventions ([Suarez et al. 2024](#)).

The multi-modal invitation to pedagogy as STS can also be seen in the many data artifacts associated with the contributions, and made available on the platform STS Infrastructures. The collection builds on the online workshop “STS as a Critical Pedagogy” that took place during the summer of 2021, and all contributors were invited from the start to work closely with each other and *with* the STS Infrastructures platform. Rather than the manifestation of an ad hoc decision, the data made available in these issues is part of a continued, dialogical process. As such, it can be seen as both resources and contributions to what will hopefully become a broader archive of practice, theory, and reflection about what STS as a critical pedagogy might look like in different spaces, places, and times.

With contributions like these awaiting your engagement, this volume reaffirms this journal’s commitment to extending and opening up fruitful new directions in science and technology studies.

With these issues, ESTS also celebrates winning the Infrastructure Award 2024 awarded by 4S. In their award statement, the 2024 STS Infrastructure Award Committee: Zheng “Vincent” Li (Chair), Michael Barany, Hsin-Hsing “Dikoh” Chen, Luisa Fernanda Grijalva-Maza, and Anne Pollock, noted our editorial team’s

“often-subtle infrastructural work” in promoting “new visibilities and priorities for STS scholarship.” Below, we reproduce our award acceptance statement:

The editorial team of Engaging Science, Technology, and Society (ESTS), the diamond open access journal of the Society for Social Studies of Science (4S), is delighted to accept the STS Infrastructure Award 2024. We thank the prize committee for their work and the 4S community at large for their continuing support to the journal. We are honored to follow in the foot-steps of individuals, institutions, and sister journals who have infrastructured the field in profound ways.

Informed by STS scholarship, our editorial team has worked with a keen awareness that infrastructures of scholarly publication crucially underwrite how research can circulate, as well as the kinds of scholarly communities that we hope to build. We have purposefully sought to publish content at the interface of different global reference points for STS, developing ESTS’s infrastructure in ways that encourage greater participation in the journal community across boundaries of language, genealogy, and geography. This has entailed ongoing experimentation with genre and form, development of data repositories and pedagogical materials, collaboration with other journals, and participation in efforts to deepen the ecology of open access publication more broadly.

We hope that the award serves to further entrench this commitment to inclusion and openness in the field and as a reminder that the more-than-human infrastructures to realize these values are not given but need to be built, maintained, and cared for collectively ([4S 2024](#)).

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Data Availability

Data published in these issues can be accessed in STS Infrastructures at: <https://n2t.net/ark:/81416/p4ns3t>.

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