

# STS as a Critical Pedagogy Workshop

## Summer 2021

Many educators in Science and Technology Studies (STS) are distributed across a wide range of institutions, disciplines, and home departments, and rarely find opportunities to engage other STS scholars interested in pedagogy. STS pedagogies may be used to help STS students further their education or career path, to help STEM students critically reflect on their assumptions about technological progress, and to help social science and humanities students critically interrogate information, media, and knowledge production. Regardless of the specific learning site and objective, important pragmatic questions remain about how to conduct STS pedagogy as a practice informed not only by STS theories and methods, but also by critical pedagogies from other traditions. This project will benefit society by developing and codifying effective STS pedagogical strategies and researching STS pedagogical interventions as sites of knowledge production and theoretical inquiry. It will also help to create a new mode of STS engagement and intervention through education and pedagogical research on STS teaching and learning in K-12, in college/university contexts, and in museum education and other public engagement arenas. In addition to scholarly articles, this project will result in a repository of publicly accessible STS teaching materials for a range of K-12 and higher education audiences.

This project supports a two-day workshop on STS as critical pedagogy to bring together scholars and educators from a variety of educational contexts and disciplines that employ STS in their teaching. Project participants include individuals who teach and engage in STS work at teaching-oriented colleges and universities, K-12 contexts, and other institutions of educational engagement, such as science museums. Our goal is to create a new subfield within STS - 'STS as Critical Pedagogy' - that seriously considers STS pedagogies as learning interventions and areas of legitimate scholarly inquiry. This subfield will foreground pedagogy within STS and create a space in which pedagogical work can be rigorously theorized and assessed by a community of STS scholars. The two-day workshop will be held at James Madison University in Harrisonburg, VA in the summer of 2020. The timing of the workshop is oriented towards being as inclusive and accessible as possible to bring together a diverse group of individuals from a variety of institutional and teaching contexts. The workshop will be held over the summer months to accommodate individuals from teaching-oriented institutions, who might have significant course loads and teaching responsibilities, and otherwise might not be able to attend a meeting during the school year.



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The STS as a Critical Pedagogy Workshop is supported by the National Science Foundation, [Award# 1921545](#)

June 16 10:00 AM - 2:00 PM EST [Time zone converter](#)

[Zoom Link](#)

## 10-11 Welcoming Remarks

Shannon N. Conley, Emily York

## 11:10-12:15 STS Teaching and Thinking with Disabilities

Crystal Lee, Cora Olson, Ashley Shew

Undergraduate Fellow: Courtney Forberg

In this panel, we discuss STS pedagogy from the perspective of critical scholarship about disability and access, using our own experiences (which range from engineering team embedding to medical school teaching to basic STS prof-ing) and scholarship at the intersection of STS and Disability Studies. We ask you to think with us about disability accessibility and consider the value of disability-forward teaching and scholarship. We ask attendees to reflect on their experiences in the classroom and how to expand opportunities to students (and fellow teachers) who often get excluded in how we traditionally think about education. We consider together the value of STS in re-imagining teaching as critically informed by disability studies -- as we use our classrooms to ask students to re-imagine other parts of our world pertaining to technological infrastructure and scientific understanding.

## 12:45-2 We are Screwing Up and Sticking With It

Monamie Bhadra Haines, Elizabeth Reddy, sam smiley, Lindsay Smith

Undergraduate Fellow: Danica Tran

The idea and practice of failing as a form of necessary training for eventual success is prominent in technopreneur spaces. In this panel we situate front and center our screw-ups and struggles in the classroom while divesting ourselves of the belief that we will succeed in decolonizing anything. Instead, we underscore screwing up as our default pedagogical practice, and how we endeavor to keep sticking with it. As educators, scholars, and students of the interdiscipline of STS with experience in different global contexts and commitments to feminist and decolonial work, we have largely organized our teaching and scholarship around decentering powerful binaries, such as nonhuman/human, men/women, English/Spanish, center/periphery, democracy/autocracy, reason/emotion, sciences/indigenous knowledges. But the interventions we devise are forever incomplete and far from successful. We are all invariably



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caught in institutional and political contexts that structure what we can accomplish and how within and beyond the classroom, even as the classroom simultaneously provides surprising affordances for experimentation. And we make mistakes, too. In this panel, we invite you to reflect with us about how you have included (or could include) more feminist, decolonial pedagogy, perhaps through classroom experiments and interventions, while keeping in mind that we are all flawed, imperfect feminists and anti-racists, might understand decoloniality differently, and say careless crap once in a while. We'll go first.

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June 23 10:00 AM - 2:00 PM EST [Time Zone Converter](#)

[Zoom Link](#)\*

10-11:45 Making the Case for Ourselves: Boundary Objects in Critical STS Pedagogies

We will start in ZOOM and then move to spatial.chat...

\*Please note that this panel will use spatial.chat: <https://spatial.chat/s/STSCriticalPedagogy2>

Marisa Brandt, Sean Ferguson, Anna Geltzer, Kathleen Sheppard, Kari Zacharias

The theme of this panel is boundary objects in STS pedagogy. What are the artifacts that limit us in our teaching of STS to our students?

12:15-2 Making the Invisible Visible

Eleanor Armstrong, Shelby Dietz, Sharlissa Moore, Ellan Spero, Aubrey Wigner

Undergraduate Fellow: Max Etko

Our panel takes a workshop-based approach to thinking about how to make different disciplinary backgrounds and knowledges brought to STS classes a feature of the class rather than a bug that needs to be ironed out. We look at example practical interventions that can support practice going forward.

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July 7 10:00 AM - 2:00 PM EST [Time Zone Converter](#)

[Zoom Link](#)

## 10-11:30 STS Laboratories, Clinics, Data

Anita Chan, Rachel Douglas-Jones, Ranjit Singh, Malte Ziewitz

Undergraduate Fellow: Nolan Harrington

In this panel, we stage a conversation about STS pedagogy based on experiences of creating new spaces for doing STS in and outwith institutions: Labs and Clinics. We think these critical formations through five big themes, discussed across all presenters in turn. Our hope is the conversational format allows for shared experiences to emerge. We first discuss space: what difference does it make to make physical space for STS – permanently or temporarily –within institutions, and what kind of difference does it make to educators and students? Second, what are the institutional affordances of doing STS pedagogy where you are? This may be a disciplinary question, but it is also one that foregrounds situated techniques of intervention in communities of practice within and beyond the university. Third, politics, or the stakes, consequences and ambitions of the Lab / Clinics in their pedagogical aims. Fourth, returning to materiality, are there objects you make, work with or need? How do these artifacts shape and inform the pedagogical possibilities? Fifth, we take student engagement as a long term lesson in the kinds of pedagogies needed where we are. We will reflect on what Labs and Clinics have taught us about how we bring STS sensitivities to our STS pedagogies.

## 12-2 Interrogating STS Pedagogies

Martin Perez Comisso, Eric Kennedy, James Malazita, Raquel Velho, Matt Wisnioski

Undergraduate Fellow: Alexa Houck

During our session on Interrogating Critical STS Pedagogies tomorrow, we will share - and ask you to share - artifacts that you use while teaching STS, but that also help you reflect on what critical pedagogy means to you. These might be assignments, evaluations, examples, vignettes, activities, simulations, or anything you want. We're excited to see both artifacts from core STS classes and from non-STS classes where you're trying to bring STS sensibilities. Spend no more than 15 minutes total on this. For now, there is no need to explain or contextualize. We'll discuss them in group conversation, but we'll also invite you to share them (e.g., handouts, summaries, instructions, etc) as part of a "Critical Pedagogy Cookbook" that we'll construct together towards the end of our conversation



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July 14 10:00 AM - 2:00 PM EST [Time Zone Converter](#) o

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10-11:45 Cooking with STS: Lived Experiences as Ingredients

Matthew Harsh, Nicole Mogul, David Tomblin, Damien P. Williams, Hong-An Wu  
Undergraduate Fellow: Andrew Webb

What's cookin' in your STS pedagogies? Let's share recipes and make an STS cookbook together! In this panel, we invite you to reflect and imagine what alternative ways of relating, being, and figuring may emerge in our STS pedagogies when approached playfully through the metaphor of cooking. For critical pedagogues teaching to transgress, bell hooks (1994) reminded us that "we have to challenge and change the way everyone thinks about pedagogical process" (p. 144). Pedagogical processes, when trafficked through the dominant language of schooling, lesson objectives and plans, degree and curriculum requirements, assessment and evaluation rubrics etc., often prefigures a kind of banking model of learning that Paulo Freire (1970) critiqued and the neoliberal educational institutions commodified. In order to be mindful about naturalized conventions and invisible assumptions ingrained into pedagogical lingo, our panel subverts this common language with the layered significance of cooking to approach STS teaching, learning, and pedagogical processes. With debt to Ruth Cowan, *Kitchen Table: Women of Color Press*, and other scholarship enabled and practiced through gendered, classed, and racialized reproductive labor, our panel begins with us sharing our own pedagogical recipes and moves into a facilitated recipe making session for you to play with ingredients that you have laying around in your workspaces, fields, labs, neighborhoods and towns as kitchens to make a pedagogically nutritious and satisfying dish!

12:15-1:15 Discussion led by Ali Kenner

1:15-2:00 Next Steps and Concluding Remarks with Shannon and Emily



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