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INVENTING NETWORK COMPOSITION: MOBILIZING RHETORICAL  
INVENTION AND SOCIAL MEDIA FOR DIGITAL PEDAGOGY

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A Dissertation  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy,  
Rhetorics, Communication, and Information Design (RCID)

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by  
Jacob D. Richter  
August 2022

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Accepted by:  
Dr. Jordan Frith, Committee Chair  
Dr. Michelle Smith  
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## ABSTRACT

*Inventing Network Composition: Mobilizing Rhetorical Invention and Social Media for Digital Pedagogy* investigates how students learn through writing and invention in digital social networks. Pursuing a primary research question of *How do student composers invent within networked social media environments?*, the dissertation examines how social media and digital writing tools can help students to learn, connect, and share generatively. The core theoretical contribution that this dissertation offers is a theory of *network composition*, which is a mode of invention that composers engage in social media environments that is intensely social, that is structured by a digital interface, that is interactive and participatory, and that incorporates linguistic, visual, sonic, and other multimodal communication forms. Network composition manifests most notably in *network composition pedagogy*, which organically locates the work of composing, as well as the disciplinary work of rhetoric and composition, within networked social media environments.

This dissertation revisits and updates disciplinary exigencies related to rhetorical invention in digital networks, social media use in the writing classroom, and digital participation as a mode for learning. The dissertation offers an updated approach to invention called *network-emergent rhetorical invention* that approaches invention as a distributed emergence arising from a network of actants that includes humans, hardware, technologies, interfaces, communities, cultures, software, and infrastructures. It also features an IRB-approved qualitative case study that finds social media to support learning ecology formation, distributed expertise, rhetorical invention, digital and social media literacy development, rhetoric and writing skills formation, and digital citizenship activities. The dissertation additionally examines challenges for social media use in the writing classroom, considering how accessibility, digital aggression, digital

discrimination, and data/privacy challenges can and should be navigated. The dissertation closes by speculating about futures for network composition and considering what is at stake for the future of learning, interaction, and participation in digital networks.

## DEDICATION

This dissertation project is dedicated to the students—from Onondaga Community College to SUNY Cortland to Clemson University—who helped to endlessly inspire me and keep me thinking, talking, laughing, and writing.

## ACKNOWLEDGMENTS

A dissertation investigating learning in social networks owes a debt to all the social networks it itself is entangled in. Many people, from Canandaigua to Cortland to Buffalo to Clemson, contributed to the ideas and approaches showcased here. I'm forever grateful to my family at home, especially my mom, who taught me to love stories and to value the things that matter most above all else. I'm grateful also to my dad, who helped me learn the importance of dedication to craft as well as dedication to people. Andrea helped me learn to appreciate the big picture, Tarah helped me remember that family comes first, and Michelle helped me remember the importance of staying true to myself. All of these lessons materialize in this dissertation and in the experiences that made it possible.

A dissertation can be lonely work, but I never felt lonely so long as April was around. April brought joy to my life every day and helped make the stress melt away as we played rummy, explored new places, and made immaculate dinners. April sacrificed as much as I did to help this dissertation unfold and I wrote every word of it looking forward to spending time with her later on that day. On the hard days, that's what kept me going. April and "the boys"—Henry, Lynx, Blueberry, Piper, and Bruce—made each day doing a PhD a happy one. Here's to the next adventure for our little family.

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## CHAPTER ONE

### INTRODUCTION: INVENTING NETWORK COMPOSITION

Most writing is *digital* writing. Consider the writing activities you may have engaged in over the past few days. You may have hastily written a Tweet complaining about your commute to work; you may have captioned a photo to Instagram with a quirky one-liner and a hashtag; you may have commented on a friend's YouTube video; you may even have made an edit to Wikipedia or updated your professional website using a Wordpress or Wix editor. You might have typed into a Notes application on your smartphone, or responded to a rude comment on Reddit, or sent a text message to your romantic partner, or even have helped your Apple Watch write a record of your nighttime sleeping patterns. According to PEW Research Center estimates, 72% of adults aged 18-29 in the United States used social media in 2021, and nearly all social media platforms rely on digital writing in major ways for their operation, use, and social impact (PEW Research Center, "Social Media Use In 2021"). While analog and pen-and-paper writing practices are by no means relegated to the past, digital writing is exponentially more impactful on the lives of many today when compared to nearly any other form of writing.

Digital writing helps us to build our lives, our personal relationships, our communities, even our identities. It even helps us to build our sense of how the world works, helping us to envision our place within it. Everywhere we go, digital writing goes with us. We write actively, passively, tacitly, creatively, infrastructurally, socially, and mundanely. Digital writing, whether it's sending an email, responding to a Facebook comment, speaking to a natural language processing device, or leaving a simple record in computer code, is a process of world building, of relationship mediation, and of social action. In other words, digital writing is more important than ever.

Digital writing includes a broad array of practices, including writing within software programs such as Microsoft Word or typing out a text message to ask a friend if they want to grab dinner. However, some of the more compelling opportunities to study digital writing occurs in internet and social media environments. As Heidi McKee and James Porter (2012) assert, the internet is a *writing* space, and likely is “*the* principal writing space” (245). One cannot go far researching writing on the internet without sustained engagement with networked technologies, environments, and communities. Though the numbers are mostly unchanged from the 2021 survey, a 2019 PEW Research Center poll found that while 72% of adults in the United States used some form of social media, this number rose drastically to 90% in younger age groups such as the 18-29 demographic, showing that these tools are likely to play key roles in personal, social, and civic lives over coming decades (PEW Research Center, “Social Media Fact Sheet”). It is no surprise, then, that scholars in rhetoric, writing, and education would find practices of social media writing valuable, intriguing, and continually compelling in their research and teaching.

Teachers of rhetoric, digital writing, and composition are finding social media tools more significant than ever in their classrooms and in their pedagogies, as scholars such as Stephanie Vie (2020) attest (*Pedagogue*, “Stephanie Vie”). Other scholars such as Liza Potts (2017) call digital writing initiatives involving the tools, genres, and practices of social media “a critical part of the writing and rhetoric classroom” (120). As far back as the 1980’s and 1990’s, digital and internet technologies were fundamentally reshaping how we considered writing, communication, and rhetoric (Sullivan, 1998; Lanham, 1992; Strickland, 1987). And in an important development, Kathleen Blake Yancey (2009) expounded on the evolutions the teaching of writing should be undergoing to respond to the practices enabled by networked technologies in

composition and rhetoric instruction, arguing in her 2009 report “Writing in the 21st Century: A Report from the National Council of Teachers of English” that social media tools in particular offer composition instructors an opportunity to nurture “networked literacy practices” (6).

As the practices, behaviors, tools, and influence of social media become more pervasive, more dynamic, and more central to human life, scholars of rhetoric, digital writing, and composition pedagogy would benefit from continued research and attention to the advantages, possibilities, and capacities for practice enabled by networked social media. Additionally, scholars would benefit from considering the challenges, concerns, and issues arising from practices of social media writing, both inside and outside of the classroom. Composition in networked environments is here to stay, and digital rhetoric, writing, and education scholars have a valuable opportunity to nurture productive and generative practices related to networked environments in their classrooms, their composition programs, and their disciplinary theory.

### **Introduction: Inventing Network Composition**

This dissertation, titled *Inventing Network Composition: Mobilizing Rhetorical Invention and Social Media for Digital Pedagogy*, contributes to scholarship on digital writing, social media, and composition pedagogy. It will offer possibilities opened by what I call *network composition pedagogy* within the discipline of rhetoric and composition. *Network composition pedagogy* organically locates the work of composing, as well as the disciplinary work of rhetoric and composition, within networked social media environments. *Network composition* involves writing and participation that is organic to social media environments. This is in contrast to alternative terminology such as *networked composition* or *networking composition*, which import print-based logics and practices common to traditional understandings of composition into



networked environments. Networked social media environments present novel composing situations for rhetors, and demand approaches to composing that are organic to internet environments, fully embracing and enacting the possibilities, capabilities, opportunities, and challenges that networked social media environments introduce. In so many words, social media environments have potential to nurture communities of social learning, peer engagement, and interactive, participatory writing, and that's just a start (Walls and Vie, 2017; Herro, 2014; Gallagher, 2019; Richter, 2021). This dissertation builds arguments concerning the proliferation of learning ecologies, distributed and collaborative invention, and community-based learning using networked tools in composition. In its IRB-approved qualitative study, the dissertation demonstrates the utility of network composition pedagogies for cultivating learning ecology formation, distributed expertise, rhetorical invention, digital and social media literacies, writing and rhetoric skills, and digital citizenship activities. Painting with a broad brush, this dissertation investigates and identifies invention in social media environments as *network composition*, examining how writers, platform, social environment, interface, community, and infrastructure come together in a network to create emergent inventive acts.

Social media-enabled writing and invention represents a burgeoning subfield of rhetoric and composition scholarship, as is shown by the publication of recent books such as Walls & Vie's *Social Writing Social/Social Media* (2017), Potts' *Social Media in Disaster Response* (2013), Gallagher's *Update Culture and the Afterlife of Digital Writing* (2019), and Arroyo's *Participatory Composition* (2013). Pedagogies embracing and practicing composition in networked environments are rapidly proliferating and innovating, both in networked rhetoric classrooms as well as in other fields, including in disciplines such as digital media for learning (DML) and in communication studies. Scholarship in digital media for learning suggests a

variety of strategies, approaches, and learning outcomes that social media initiatives might bring to classrooms (Tess, 2013; Van Den Beemt, 2019; Herro, 2014; Greenhow and Lewin, 2016). Students compose in a variety of digital and non-digital ways in their everyday lives, and they face a wide range of choices, decisions, and considerations when deciding how best to write, create, compose, and distribute their productions (Moore et al., 2016). Embracing digital writing not as tangential, peripheral, or secondary to the work of rhetoric and composition, but as its central and preeminent environment, habitat, and ecology, begins the process of nurturing vital critical and digital literacies for student learners.

This dissertation argues that *network composition*— a highly hybridized constellation of multiply intertwined and internetworked exigencies that composers navigate, assess, maneuver, interact with, and respond to— is essential for those studying digital writing and rhetoric in the 21st century. Network composition is a mode of invention that composers engage in social media environments that is intensely social, that is structured by a digital interface, that is interactive and participatory, and that incorporates linguistic, visual, sonic, and other multimodal communication forms. A network, which is a series of relationships, associations, and affiliations, can be composed of an array of actants that include writers, material objects, and relationships forged between them (McKee and Porter 2017, 77). Networks encompass states of connectedness brought about by interaction, even as networks exist in perpetual states of flux (Latour, 2005; Castells 2009, 171). I devote particular attention to the shared, overlapping actions that networks inspire, as “a network frame looks at the larger rhetorical social scene: at the collections and interactions of various communicators and communications” (McKee and Porter 2017, 20). Networks are, at their core, a tracing of connections and relationships (Latour 2005, 128).

In relation to network composition, *network composition pedagogy* rethinks the discipline of composition as well as the practice of composition instruction through logics organic to internet networks. Composers within digital networks assess concatenations of exigencies, texts, avenues for response, algorithms, bots, visual and procedural interfaces, and the constant presence of other composers writing and sharing alongside them in a networked environment. Network composition pedagogy, in my framing, draws from disciplines of rhetoric and composition, digital media for learning, and communication to posit strategies for productive pedagogical implementation of social media technologies in college courses. By focusing on specific manifestations of network composition's many forms, including composition in social media environments, composition in networked educational settings, and in networks that composition and rhetorical invention have always been participants in, this dissertation works to codify formal definitions of *network composition* and explores its implications for rhetorical invention in the 21st century.

### **Exigence, Overview, & Research Questions**

*Inventing Network Composition* responds to five primary exigencies in the discipline of rhetoric and composition:

- Kathleen Blake Yancey's (2009) call for pedagogies and models of composing that fully engage affordances of networked technologies and practices of social media.
- Douglas Walls and Stephanie Vie's (2017) call to integrate social media into higher education.
- Stephanie Vie's (2015) call for social media pedagogy development.
- Michael J. Faris' (2017) call for empirical studies on student social media usage.
- Damien Smith Pfister's (2014) call to more deeply consider invention in online environments.

I view these “exigencies” in the field as occurring along five distinct lines that this dissertation situates itself in relation to: Yancey’s (2009) call at the broad, disciplinary level; Walls and Vie’s (2017) call at the “subtopic of social media in composition” level; Vie’s (2015) approach at the pedagogical level; Faris’ (2017) call at the methodological level; and finally Smith Pfister’s (2014) call at the theoretical level.

In addition to exigencies arising in academic scholarship, this dissertation also responds to public exigencies. These important exigencies include those related to increased need for digital literacies, evolving professional communication capacities, and changes to civic participation arising from evolutions in communication media. Perhaps most notably, however, are public exigencies stemming from the COVID-19 pandemic that made networked relationships more prescient for many than they were before and that reaffirmed the need for digitally networked models of learning and education as students at nearly all levels transitioned to online and hybrid learning models. The changes to education and educational modalities that the COVID-19 pandemic both initiated and amplified inspired this dissertation’s development, as the promises and challenges of networked education are constantly evolving considerations for instructors, scholars, and public stakeholders to take up. Networked education is hardly new, but many of its promises and perils have been both amplified and exacerbated by the COVID-19 pandemic. This was a core exigence that inspired this dissertation’s brainstorming and development in the Spring semester of 2020 at Clemson University and represents both a current and future innovation opportunity for invested stakeholders.

At a theoretical and practical level, this dissertation draws on Henry Jenkins’ (2009) notion of *participatory culture* to inform an approach to self-sponsored, active, and engaged rhetorical practice using multimodal tools to formulate a participatory pedagogy using networked

composition technologies. Jenkins (2009) approaches participatory culture as the “production and distribution of cultural goods” on the terms of participants themselves, with an open-ended, negotiated power dynamic that balances control between producers and consumers of those cultural products (137). I argue that a network composition pedagogy in composition courses mobilizes many of these same skills, practices, and capacities. I argue that network composition initiatives in rhetoric and writing studies classrooms are capable of nurturing the proliferation of learning ecologies, rhetorical invention, digital literacy, and distributed expertise among students, in addition to various other compelling outcomes. Along these same lines, I propose network composition pedagogical initiatives to mobilize other important aspects of a rhetorical education, including active learning, participatory composition, collaborative knowledge building, information literacy, multimodal invention, metaliteracy, civic engagement, participatory politics, and even the possibility of connecting academic and self-sponsored literacies. For instance, these outcomes have been suggested in work from Liza Potts (2017), Ryan Shepherd (2015), Day, McLure, and Palmquist (2010), Maranto and Barton (2010), and Walls and Vie (2017), among a number of others.

The qualitative research study this dissertation offers features engagement with network composition initiatives in First Year Composition pedagogies. It explores four particular learning outcomes of interest to the social media-enabled writing classroom.

1. First, connections between network composition pedagogical initiatives and the cultivation of *learning ecologies* are explored.
2. Second, network composition is connected to the nurturing of *rhetorical invention* in student learning communities.
3. Third, this dissertation engages network composition’s capacities for engaging *digital literacy* in networked environments.
4. Fourth, this dissertation engages network composition’s ability to nurture *distributed expertise* among classroom participants.

*Inventing Network Composition* formulates strategies writing teachers can use to maximize network writing tools and initiatives in their First Year Composition classroom. With this in mind, I've conducted a qualitative research study that collects data from students participating in a network composition initiative in their First Year Composition course to explore pedagogical implications surrounding these sorts of initiatives. This study is considered exempt by the Clemson University Institutional Review Board #2021-0344 under categories D1 and D2 (see Appendix A). The qualitative study asks students to respond to a variety of questions surrounding the learning outcomes identified above. As is showcased in this dissertation's chapter on Methods (Ch. III) and its two Findings chapters (Chapters IV and V), this study collects data from interviews with students, from reflective journals written by students, and from digital writing in the network composition pedagogical activity. Using a qualitative case study approach to develop network composition as a grounded theory based on student voices and writing, this dissertation ultimately strives to develop strategies for composition teachers to consider when engaging social media technologies in their classrooms.

To situate the arguments and the study that this dissertation pursues, I have formulated three research questions. This dissertation responds to the following primary research question:

1. How do student composers invent within networked social media environments?

Additionally, this dissertation responds to the following secondary research questions:

2. How can network composition pedagogy initiatives in First Year Composition courses cultivate the formation of learning ecologies, rhetorical invention, digital literacy, and distributed expertise?
3. What can this study tell us about potential 'best practices' for network composition pedagogies?

These research questions orient a qualitative study that offers “best practices” for composition instructors to use to help students cultivate learning ecology formation, distributed expertise, rhetorical invention, digital and social media literacies, writing and rhetoric skills, and digital citizenship.

### **Contributions, Goals, & Arguments**

Responding to exigences provided by Yancey (2009), Walls and Vie (2017), Vie (2015), Faris (2017), and Smith Pfister (2014), *Inventing Network Composition* offers at least five unique contributions to the emerging scholarly conversation developing in digital rhetoric and composition studies, which are expanded upon below.

#### *Contribution One: A Unique Pedagogical Approach*

First, *Inventing Network Composition* offers an approach to pedagogy that situates composition directly and robustly within internet networks. Most existing research in rhetoric and composition pedagogies that engages networked social media does so as one component of a larger course, pedagogy, or approach to learning. *Inventing Network Composition* goes beyond this and situates the whole of the course and the whole of the pedagogy within digital networks. The dissertation goes all in on putting composition into a network, approaching internet networks not as an emerging pedagogical strategy or assignment for tangential use in the composition discipline, but as an integral, fundamental mode for training writers in 21st century environments. The discipline of rhetoric and composition currently lacks a monograph that firmly and directly positions social media and composition pedagogy in relationship to one another, and *Inventing Network Composition* helps fill that gap. The unique pedagogical

approach is principally outlined here in Ch. I, but is expanded upon in all of the dissertation's other chapters.

### *Contribution Two: Rhetorical Invention in Networked Social Media Environments*

Second, *Inventing Network Composition* expands on work detailing rhetorical invention in networked social media environments. This dissertation details what I call *network-emergent invention*, which is an understanding of rhetorical invention in networked digital environments that foregrounds the role of the network in invention, rather than simply importing print or oral modes of invention into networked practices. Invention in networked environments is significantly different than invention in other modes, and is oftentimes characterized by collaboration, community, social interaction, circulation, intertextuality, and digital interfaces (Richter, 2021; Pigg, 2014a; Smith Pfister, 2014; Arroyo, 2013; Carlson, 2019; Tomlinson, 2013). I use the term *network-emergent invention* to signal the shared production of rhetorical creations that emerge from interactions in networked social environments composed of multiple humans responding to one another. Importantly, though, network-emergent invention also considers the roles that platforms, interfaces, algorithms, technological affordances, internet genres, infrastructures, and social interaction play in emergent inventive acts. Network-emergent invention thinks of creation and formation of texts, ideas, forums, comments, videos, retweets, and feeds as being formed in the emergence of a concatenating series of events gathered together within a shared environment. Importantly, a particular inventive act is never entirely controlled by one, single actor, human or nonhuman, but is always a shared interaction, a co-participation and co-constitution that emerges from a network. Network-emergent invention is formally



defined and then explored in Chapter II of this dissertation, and its influence can be felt throughout the rest of this text, where its practice is explored, refined, and expanded upon.

### *Contribution Three: Transdisciplinary Studies of Social Media and Digital Writing*

Third, *Inventing Network Composition* draws prominently on work in disciplines of digital media for learning (DML) and communication, offering a transdisciplinary approach to networking composition that will be of use not only in rhetoric and composition courses, but also across the undergraduate curriculum. By *transdisciplinary*, I refer to a hybrid mode of research, thinking, and working that draws from and synthesizes multiple disciplines to solve problems, contribute knowledge, and generate insight that any single disciplinary framework might fall short of. There are currently no monographs in rhetoric and composition that directly and wholeheartedly connect social media technologies to the teaching of rhetoric and writing. This dissertation looks toward that gap and provides a robust series of strategies composition instructors and other stakeholders can use to fully network their classrooms in effective, ethical, and equitable ways. The dissertation's transdisciplinary nature and focus contribute to the "best practices" for network composition pedagogical initiatives that it offers, which are found in Chapter IV and Chapter V.

### *Contribution Four: Qualitative Case Study Findings*

Fourth, *Inventing Network Composition* features a qualitative case study that collected data concerning social media use in two First Year Composition classrooms during the Fall 2021 semester. In particular, the dissertation offers data, analysis, and discussion based upon interviews with students, analysis of written Slack posts, and analysis of student reflective

journals. This qualitative case study and the data it collects contributes to the larger scholarly discussion that is occurring around social media use in composition classrooms (Walls and Vie, 2017; Day, McClure, and Palmquist, 2010; Vie, 2015; Shepherd, 2018; Vie, 2017). Engaging a qualitative case study method to develop network composition as a “substantive-level theory,” this dissertation then spends its closing three chapters exploring implications for how we understand as well as teach composition in digital environments (Creswell and Poth 2018, 88). The qualitative case study found network composition pedagogies to have potential to cultivate learning ecology formation, distributed expertise, rhetorical invention, digital and social media literacies, writing/rhetoric/composition skills, and digital citizenship. For more on qualitative case studies and grounded theory approaches to inquiry, or on this dissertation’s particular qualitative case study, see Chapter III of this dissertation on Methods. Additionally, study findings and suggested “best practices” can be found in Chapter IV and Chapter V.

#### *Contribution Five: Best Practices for the Teaching of Network Composition*

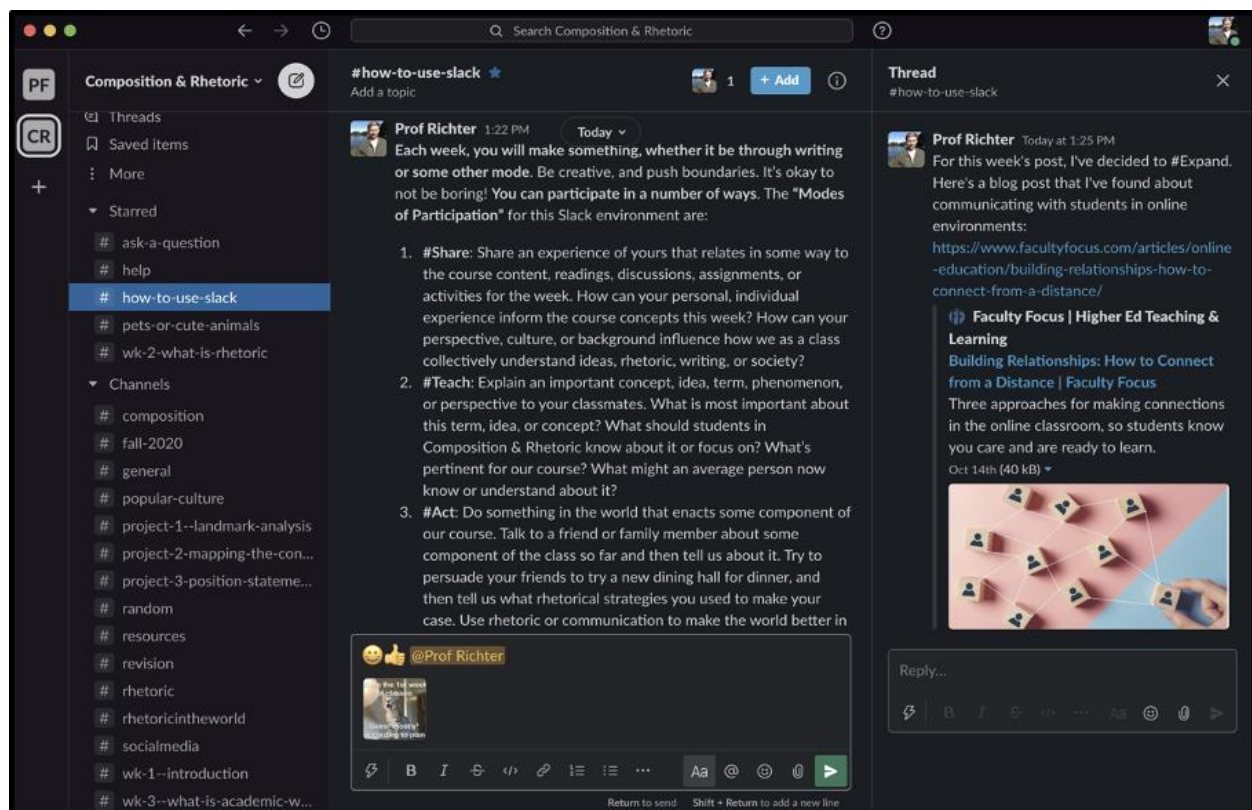
Lastly, *Inventing Network Composition* offers an analysis and set of guiding principles to address challenges entailed in using networked tools in pedagogical environments. Suggestions for “best practices” for the teaching of network composition, and for the use of social media tools in composition courses, are offered in Chapter IV and Chapter V of this dissertation. Additionally, the dissertation’s sixth chapter explores implications of network composition pedagogies, including challenges for instructors to navigate and implications for Writing Program Administrators. This chapter is split into four sections— accessibility, digital aggression, digital racism and misogyny, and data/privacy— that practitioners of network composition should account for to address issues of access, equitability, and justice.

## **Pedagogy & Platform**

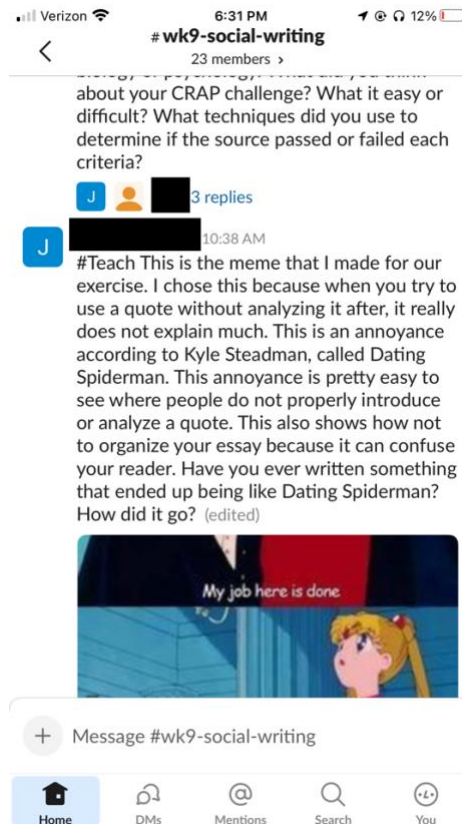
To practice network composition as an initiative in the college classroom, I use the software platform Slack in First Year Composition and technical and professional communication courses. Comprising a substantial grade for the courses, the network composition pedagogical initiative is framed as a major “participation” grade for the course, but also as a learning opportunity to both explore and enact the vital role that digital networks play within contemporary composition and communication. This network composition pedagogy inspired the qualitative case study that this dissertation chronicles and offers one model for how social media tools can be of benefit in college composition classrooms. This pedagogy, which the qualitative case study is built on, asks students to compose in a digital Slack network as part of a First Year Composition course, exercising a multitude of critical digital literacies and modes of social learning along the way.

Slack is a social networking platform that mimics many features of traditional social media interfaces. In many ways, Slack looks, feels, and performs in a manner similar to a Facebook or Twitter feed (see Fig. 1.1). It has important differences, however, which include allowing users to create enclosed, invite-only groups called “workspaces” and “channels” for their communities. Slack allows users to build social networks that have immense utility within educational settings and has proven quite popular with teachers and educators across the educational landscape. For instance, a 2018 article in *Inside Higher Ed* titled “4 Reasons Slack Will Change How You Teach” argues for the platform’s potential to facilitate student connections, to diversify participation and contribution abilities, to facilitate dialogue in online and hybrid classrooms, and finally to allow easier communication between faculty and students

(Kole de Peralto and Robey, 2018). Slack claims that at least 3,000 different educational institutions use the platform in one way or another (Slack, “Distance Learning Thrives in Slack”). Slack is relatively reliable and responsive to educator needs and makes a wholesale, platform-wide effort to create a space that is as accessible to as many bodies as is possible (Slack is screen-reader compatible, for instance). It maintains desktop and mobile applications, which allow it sizable utility in educational settings that stray from conventional in-person instruction (see Fig. 1.2). It is also entirely free, though it does include paid options for larger organizations such as companies or entire academic departments.



**Fig. 1.1:** A screenshot of the Slack interface, showing some of the platform’s affordances for composing posts, sharing resources, and connecting with others in a learning community.



**Fig. 1.2:** A screenshot of the Slack mobile application taken from an iPhone.

Slack allows digital writers to write posts, share links, post comments, tag others, share videos and images, use hashtags, record videos, post drawings, and communicate with other abilities associated with social media platforms. Slack creates enclosed networks, meaning students writing in their course’s Slack network will only encounter other students in that course and their instructor, unless a “guest” is invited in as a participant in discussions. Typically, however, Slack creates insular networks of sharing, linking, composing, and writing that are geared more for engagement within known networks around shared themes, interests, and topics of conversation, rather than attempting outreach into publics beyond the course or classroom.

Slack is a for-profit software technologies platform. It is by no means the only social networking platform available to a network composition pedagogy. Alternatives abound, and a

short sampling might include a number of common platforms. Corporate and for-profit options include Yellowdig, Google Classroom, Discord, Microsoft's Yammer, Ning, Brightspace, and Parlay, while free or open source options include Mastodon, Moodle, Seesaw, and Classroom 2.0. Platform choice is an important consideration when writing online and when designing writing communities, as platforms inspire and inhabit behaviors in important ways (Potts and Harrison, 2013; Sano-Franchini, 2018; Witek and Grettano, 2016). Platforms that have been used in college courses and pedagogies include Facebook (Shepherd, 2015; Amicucci, 2020; Fife, 2010), Twitter (Mina, 2017; Witek and Grettano, 2016; Friess and Lam, 2018), YouTube (Arroyo, 2013; Dubisar et al., 2017), Reddit (Shepherd, 2020), Yammer (Faris, 2017), and Wikis (Cummings and Barton, 2008). I personally have used Slack, Yellowdig, Discord, blogs, and Google Classroom in First Year Composition and technical and professional communication courses to build a learning network among students, and it is important to note that network composition in practice should not be limited to a single platform.

I choose Slack for my own courses and for this dissertation's research study for a few reasons. First, the Slack interface is, in my experience, most attuned to the learning goals of students, educators, and educational communities who are invested in rhetoric and writing studies. It is, in other words, the most useful for sharing writing, for linking, for commenting and responding to others about shared concerns, and for the formation of coordinated learning ecologies. Slack is an ideal platform to study how digital network formation can facilitate learning primarily due to the platform's central function, which is connecting people together in a shared communication environment. Second, Slack is created and designed explicitly for the formation and sustaining of networked communities, meaning the platform and interface are tailored toward helping communities form and subsist that allow students and educators to enact

shared goals together. Slack supports a mobile application that makes keeping up with the community relatively easy, and in doing so engages the important role smartphones play in human activity (Frith, 2015a). Third, Slack as a platform makes sharing, participating, and interacting relatively easy. In doing so, it encourages students to be active and involved makers in the classroom, rather than passive recipients of knowledge from an instructor, helping to build an ecology of learning. In other words, Slack has the potential to help teachers to make their courses active, participatory, and energetic. Lastly, a final advantage to using Slack is that it is free for the purposes of this pedagogy (paid options exist, but a small network for classroom use would not necessitate anything beyond the free option). Slack's inexpensiveness and utility make it a popular application for informal networked communities, and many students are familiar with the platform even before they begin engaging it in educational settings.

I would like to note, however, that Slack as a platform is far less important to this dissertation than the practices, actions, and pedagogies that it is able to enable and facilitate. Additionally, network composition is in no way tethered to Slack, and the data and insights that this dissertation generates should not be limited to any single platform, either. Readers of this text will find its insights into social media writing and pedagogies helpful across multiple platforms, as the foundational pedagogy is built around common social media practices, habits, and sensibilities, rather than around behaviors that are unique or particular to Slack.

The network composition pedagogy that this dissertation explores varies with each course and semester, but features some core goals, values, themes, and learning outcomes that I have developed over my teaching and research career. The core goal of the network composition pedagogical initiative is to create a learning ecology among students and the instructor that involves participation, sharing, communication, conversation, and critical and creative thinking

(see Fig 1.3). As a pedagogy grounded in participation, the formation and nurturing of a learning ecology is a primary goal. Each week, students choose to participate with one of the “Modes of Participation” outlined in Fig. 1.3. These “Modes of Participation” are reminiscent of practices common to social media, and engage a variety of invention strategies, including writing, sharing, tagging, linking, conversing, commenting, responding, and creating multimodally. Students are not constrained to the “Modes of Participation” laid out in Fig. 1.3, but additionally are encouraged to create and design their own participation modes once they are familiar with the general goals of the environment. Students create a longer post each week (200 words, or the equivalent in multimedia formats), and then have to participate in the networked community through commenting, sharing, tagging, and discussion together. The pedagogy is built to nurture and encourage rhetorical invention, learning ecology formation, digital literacy, and distributed expertise. Learning outcomes for the course are engaged, extended, and facilitated by leveraging digital networks to connect students in the course in ways that help all to learn in a more active, engaged way. The full document containing all of the suggested “Modes of Participation” distributed to students can be found in Appendix B.



**Each week, you will make something, whether it be through writing or some other mode.** Be creative, and push boundaries. It's okay to not be boring! **You can participate in a number of ways.** The **"Modes of Participation"** for this Slack environment are:

- (a) **#Share:** Share an experience of yours that relates in some way to the course content, readings, discussions, assignments, or activities for the week. How can your personal, individual experience inform the course concepts this week? How can your perspective, culture, or background influence how we as a class collectively understand ideas, rhetoric, writing, or society?
- (b) **#Teach:** Explain an important concept, idea, term, phenomenon, or perspective to your classmates. What is most important about this term, idea, or concept? What should students in Composition & Rhetoric know about it or focus on? What's pertinent for our course? What might an average person now know or understand about it?
- (c) **#Crowdsource:** Have a question on an assignment? Crowdsource an answer from your peers. Unsure about a course concept or what a term means? Crowdsource an answer from your peers. Curious about what your peers think of some news story, phenomenon, event, or shared experience? You get the idea.
- (d) **#Practice:** Put an idea or concept from our course into practice. Turn something abstract from our readings, our discussions, or our assignments into material, concrete practice.
- (e) **#Expand:** Share a link, video, or site that expands on some aspect of the course we've discussed so far. Provide us an example or illustration of a course topic or term, or give us an application of an idea in another culture, or expand on our knowledge of a concept or idea in a way that we have not explored so far. If you provide a link or video, summarize for us what it argues and shows, and then tell us why it matters for our course in particular.
- (f) **#Respond:** What is a provocative, compelling, or interesting idea have you encountered in this week's readings, activities, assignments, or Slack discussion? Do you agree or disagree with something you've encountered, and why? What have you noticed that is most important, and why? What more could be said about this topic, idea, or issue?
- (g) **#Make:** Create some product, object or artifact that explains, explores, or visualizes some component of the course, and then write about it and share a photo of it in the Slack channel.
- (h) **#Moderate:** Moderators perform valuable work in online communities. Moderators mediate disputes between participants, orient discussion toward shared goals, and ensure a safe, equitable environment for all to share and participate in. Make a post that performs one of these tasks in relation to the networked conversation our classroom community is engaging in.
- (i) **#Connect:** What two or more ideas have you come into contact with, either in this course or in this conversation on Slack, that you can connect to something we haven't discussed yet in this Slack space?

**Fig. 1.3:** Some of the "Modes of Participation" for my version of a network composition pedagogy that students can choose from each week. Importantly, students are not constrained by the listed "Modes of Participation," but can design their own that creatively and critically engage affordances of social media.

My version and approach to a network composition pedagogy sets a foundation for practice that other instructors can use or potentially learn from when engaging social media tools in their courses. Importantly, however, this is just one version or iteration of a network composition pedagogy, and other modes of teaching and learning that engage network composition through social media writing practices can (and have) been developed. The

pedagogy chronicled here is built upon a foundation of scholarship from scholarly conversations emerging around digital rhetoric, rhetoric and composition, digital media for learning (DML), and communication. It is to these intellectual and disciplinary conversations that I now turn.

## **Digital Rhetoric**

The teaching of rhetoric and writing has always been tied to the technological apparatuses facilitating the rhetorical act (Sundvall, 2019). This includes, of course, the ways in which rhetors compose, invent, and circulate their productions. In the United States, the 19th and 20th centuries witnessed the rise and fall of invention within rhetorical teaching and training (Crowley, 1985; Lauer, 2004). Invention as a rhetorical canon has evolved alongside the rise of digital media and internet-connected networks (Eyman, 2015; Smith Pfister, 2014; Pigg, 2014b; Brooke, 2009; Arroyo, 2013). Rhetoric's conceptualization in its early Greek formulations was accompanied by the rise of literacy (Havelock, 1986; Ulmer, 2003). However, a contemporary age in which most writing occurs on computers, smartphones, and internet browsers fundamentally changes how writing, rhetoric, and communication emerge and circulate in the world (Eyman, 2015). Digital rhetoric is a field of study with a decades-long history concerning itself with a variety of questions, concerns, and exigencies that connect rhetorical theory with computers and networked media (Hess and Davisson, 2018; Eyman, 2015).

Following the rise of personal computers in the 1980s and 1990s, instructors of writing began questioning how best to nurture students capable of engaging the digital apparatus in capable, proficient, and empowered ways (Sullivan, 1988; Strickland, 1987; Lanham, 1992). Digital rhetoric features a number of subfields, many of which contain elements of pedagogical application within them. A brief survey of digital rhetoric's disciplinary conversations might

include discussions emerging around participatory culture (Arroyo, 2013; Potts, 2017; Jenkins, 2009), around social media initiatives as classroom tools for learning (Walls and Vie, 2017; Dadurka and Pigg, 2011; Buck, 2012; Anson, 2017; Witek and Grettano, 2016), and around multimodal composition in the rhetoric classroom (Hawisher et al., 1995; Selfe, 2007; Halbritter, 2013; Sheridan, Ridolfo, and Michel, 2012; Dubisar and Palmeri, 2010). Multimodal digital composition has taken on particular resonance in the field of digital rhetoric, and diversifying the genres of production in First Year Composition beyond print writing and traditional literacies alone is now more the rule than the exception (Sullivan, 1988; Hawisher, 1992; Selfe, 1999; Yancey, 2004; Shipka, 2011; Dieterle and Vie, 2015; Palmeri, 2012; Arroyo, 2013; Sullivan, 2015). Other scholars, such as Haynes and Holmevik (2001) and Elizabeth Losh (2017), have explored Massive Online Open Courses (MOOCs) and their potentials for uniting globally networked classrooms across space, time, and geography.

Importantly, a number of scholars working in digital rhetoric have explored writing in digital spaces that exemplify network composition beyond purely pedagogical settings, including John Gallagher (2019), Alexander Reid (2007), Stacey Pigg (2014a), and Heidi McKee and James Porter (2017). Writers write with algorithmic audiences in mind, with profound ethical implications for the circulation and composition of that writing (Gallagher, 2019; Gallagher, 2017; Gallagher, 2020). Still further, writers have connected digitally networked writing, place, and materiality, including Stacey Pigg (2014b), who examines student writing in networked physical locations such as coffee shops and university social learning spaces, and Jordan Frith (2015b), who examines location-based writing in networked mobile smartphone applications. Lastly, a number of scholars such as Margaret Syverson (1999) and Jeff Rice (2012) have explored writing and rhetoric in relation to networks, assemblages, and ecologies.

## **Social Media in Rhetoric & Composition**

Within digital rhetoric, initiatives within rhetoric and composition pedagogies engaging social media technologies to extend and amplify their learning outcomes are still emerging, but are rapidly gaining traction (Daer and Potts, 2014; Mina, 2017; Witek and Grettano, 2016; Faris, 2017; Vie, 2018; Vie, 2015; Vie, 2017; Vie, 2008). Early work in digital rhetoric and composition studies set the foundations upon which other scholars would implement theory and practice related specifically to social media initiatives (Lanham, 1992; Hawisher et al., 1995; Selfe, 1999). The collection *Social Writing/Social Media* (2017), edited by Douglas Walls and Stephanie Vie, represents an important contribution to conversations surrounding social media in rhetorical studies. Connections have been forged between social media and community literacies by Dadurka and Pigg (2011) and the self-sponsored social media writing and participation habits of an undergraduate student were importantly profiled by Amber Buck (2012). Chris Gerben (2009) connected Web 2.0 literacies with collaborative writing, and Samuel L. Head (2016) has connected Facebook composition to the transfer of knowledge, to digital audience awareness, and to Kenneth Burke's theory of identification at work in digital environments.

A number of scholars in rhetoric and composition, digital rhetoric, and technical communication have explored social media use in their pedagogies (Shepherd, 2015; Vie, 2017; Vie, 2018; Faris, 2017; Mina, 2017; Vie, 2015; Gallagher, 2019). The benefits of social media-inclined pedagogies identified by rhetoric and composition scholars are numerous, varied, and plentiful—too plentiful for this brief literature review. Stephanie Vie (2015) identifies a variety of answers to questions concerning why writing instructors should pursue social media in the writing class (34). Vie's (2015) arguments are supplemented by mixed methods survey data,

finding that 90% of writing instructors use social media tools in some way. Vie argues that social media pedagogies are important because of the pervasiveness of social media use among faculty and students, because of their capacities to nurture 21st century “critical-rhetorical literacies,” because of their potential to be of use later on in the careers of students, and finally because of their potential to familiarize students to composing with technology in important ways (36).

William Hart-Davidson (2017) notes that “network writing introduces a quantum shift in how we must think about availability in the moment of composing, both in terms of the available means of persuasion (as Aristotle would have them) and the availability of others to whom we might connect” (X). Ryan Shepherd (2015) studies how college writers connect Facebook use with their composing processes in First Year Composition classrooms, and argues that reflection on Facebook composing processes can help students to conceptualize invention, process, drafting, and analysis of rhetorical situations in composition classes. Chris Anson (2017) asserts that social media initiatives have the potential to nurture *learning ecologies* and *distributed expertise* in composition courses (314). Additionally, Sackey et al. (2015) proffer “facilitation styles” to help design learning experiences and environments online, arguing that “Web 2.0” sensibilities can facilitate both learning and the development of meaningful conversations (115). And finally, Jason Palmeri (2012) writes that students should “have the chance to employ social networking platforms in order to compose and distribute” (159).

A variety of strategies for maximizing the success of digital technology initiatives in pedagogies have been explored, with the positing of case studies, theoretical and classroom experiences, and tangible practices implemented within the disciplinary literature. Pedagogical studies in rhetoric and composition pedagogy that interact in a major way with social media include scholarship by Lilian W. Mina (2017), Donna Witek and Teresa Grettano (2016),

Michael J. Faris (2017), and Alice Daer and Liza Potts (2014). Mina (2017) argues that social media initiatives in classrooms have the potential to help students understand rhetorical choices, to build communities, and to promote student engagement. Mina (2017) argues that social media “can create a paradigm shift in student learning in the writing class,” and that social media in writing courses can further skills related to rhetorical choice-making, analytical thinking, reflective thinking, writing, community building, and student engagement (265). According to Mina, these sorts of classroom initiatives have the potential to supplement a student’s critical literacies, including engaging their worldviews, beliefs, and practices of critique, even challenging them to reflect upon how these develop through writing, rhetoric, and difference. Daer and Potts (2014) identify ten tangible strategies for Writing Program Administrators and curricula engaging social media pedagogies to do so more effectively, more competently, and more generatively (28). Lastly, scholars in technical and professional communication have established a growing scholarly body of research that can be generative and beneficial for conceptions of network composition (Kimme Hea, 2014; Pigg, 2014a; Bowdon, 2014; Kelm, 2011; Ferro and Zachary, 2014; Longo, 2014; Verzosa Hurley and Kimme Hea, 2014).

### **Social Media in Digital Media for Learning (DML) and Communication**

Existing scholarship in rhetoric and composition pedagogies stands to gain quite a lot from increased engagement with research and scholarship in the field of Digital Media and Learning. Social media occupy a complex role mediating social interaction on university campuses (Linville, 2019). Pedagogical initiatives related to social media has been represented within a running series of scholarly conversations held in journals like *Technology, Pedagogy, and Education*, the *Journal of Digital Learning in Teacher Education*, and *Educational*

*Technology & Society*. Faculty face a large array of decisions when deciding whether networked technologies will be of benefit to their course, curriculum, or program (Ajjan and Hartshorne, 2008). Greenhow and Lewin (2016) list potential skills and learning outcomes including collaboration, inquiry, communication, identity work, cognitive and emotional impacts, participation, interaction, information and resource sharing, critical thinking, peer support, intercultural communication and language learning, online identity building, digital literacy development, and finally support for marginalized groups in the academy (7-8). Additionally, social media potentially help to bridge formal and informal learning (Ebner et al., 2010; Lai et al., 2013; Cox, 2013). Social media are important considerations in models of connected learning, which encourage students to pursue “a personal interest or passion” as a mode of learning, especially when that student “is in turn able to link this learning and interest to academic achievement, career success or civic engagement” (Ito et al. 2013, 4).

Other writers invested in Digital Media and Learning identify possible avenues social media initiatives might unlock in classrooms and pedagogies that stretch beyond the thorough list Greenhow and Lewin (2016) identify (Tess, 2013; Goa et al., 2012; Zheng et al., 2018; Van Den Beemt et al., 2019; Herro, 2015; DiVall and Kirwin, 2012; Gilbert et al., 2008). An array of writers argue social media initiatives to nurture skills associated with social constructivism and social constructivist pedagogies, and social constructivism is often a fruitful approach toward learning with digital media (Herro, 2016). Greenhow and Lewin (2016) write that “social constructivism and connectivism are promising initial lenses through which to conceptualize social media and learning with varying attributes of formality and informality” (8). Danielle Fahser-Herro and Constance Steinkuehler (2009) argue that digital literacies can help be nurtured

through Web 2.0 pedagogical instruction, and assert the value this sort of education design might play for literacy and digital literacy instruction in K-12 and higher education classrooms (55).

Other research in digital media and learning has shown social media use in education to help cultivate a sense of online, digital, networked identity, as Greenhow and Robelia (2009) explore, as well as to contribute toward the formation of personalized learning environments (Dabbagh and Kitsantas, 2012). Other writers, such as Vikneswaran and Krish (2016), document the values social networking sites might have teaching writing and languages in intercultural communication settings, in their case through a case study of Chinese students studying in Malaysia. Additionally, further scholars such as Pangrazio (2016), Jones and Hafner (2012), Gillen (2014), and Avilia and Pandya (2013) focus on digital literacies and the benefits of using social media and similar technologies to nurture reading and writing in networked spaces.

The strategies an instructor chooses to employ in their digitally networked course implementation design are complex and multifaceted. An important example of strategies for embedding social media into courses and assignment designs is provided by Danielle Herro (2014). The initiative design Herro describes is oriented around engaging socio-constructivist theories toward achieving learning goals. This particular course and initiative design engaged the production of blogs, podcasts, and wikis as social web practices, mobilizing these production processes into critical thinking skills and outcomes (269). The study that Herro conducted focused on a course implementation focused around “Techno Savvy” thinking, engaging learning outcomes primarily oriented around nurturing skills of creative thinking when engaging practices of collaborative work, digital literacy actions, and formal and informal learning. The initiative design in the course Herro chronicles honed in on strategies of practice, engagement, active learning, and hands-on application within the classroom. Findings of the study suggested that



multimodal production and practices of participatory culture to be marked by social, collaborative, engaging, and creative actions. In the context of 21st century pedagogies and 21st century digital tools, critical thinking is an infinitely valuable skill to mobilize through communities of practice, and Herro's Techno Savvy curriculum model proves a valuable design by which to model network composition initiatives in higher education courses.

### **Looking Ahead: Chapter-By-Chapter Overview**

In its efforts to establish network composition in theory, practice, and pedagogy, this dissertation is divided into seven interlocking chapters.

The first chapter of this dissertation, which you are reading right now, proposes formal definitions for network composition in pedagogical settings. Chapter I introduces this dissertation's general focus on digital writing in social media environments, defines its key terms, introduces its pedagogy and its qualitative research study, and reviews pertinent literature that will be drawn on throughout the remainder of the dissertation.

*Inventing Network Composition's* second chapter on Rhetorical Invention in Digital Networks extends existing research in rhetorical theory relating to the evolution of rhetorical invention, to participatory composition, and to models of distributed invention. Rhetorical invention has long been a foregrounded consideration of historical rhetoricians, with Aristotle, Cicero, and Quintilian all weighing in heavily and influentially on how ideas come into being and are created, and how this is best taught to students or to the general public. Contemporary work in rhetorical theory has detailed more recent developments in rhetorical invention (Lauer, 2004; Crowley, 1985; LeFevre, 1987; Syverson, 1999). Invention changes in networked environments, however. A fully developed theory of rhetorical invention in networked social

media spaces is still largely contested (Smith Pfister, 2014; Eyman, 2015; Arroyo, 2013; Pigg, 2014a; Carlson, 2019; Richter, 2021; Sheridan, Ridolfo, and Michel, 2012). With this in mind, a theory of *network composition* remains incomplete without a theory of *network-emergent invention*. Network-emergent invention understands social media texts to emerge from a network of actants that include, and fundamentally rely upon, varied intra-actions resulting from the material convergence of writers, interfaces, hardware, software, code, infrastructures, social dynamics, genres, and platforms, all of which contribute to an inventive emergence. This dissertation's second chapter attempts to build upon existing models of invention and digital invention, foregrounding internet networks and social media ecologies, interfaces, audiences, infrastructures, practices, and considerations along the way. *Network-emergent invention* refers to the highly hybridized, ongoing, intertextual, distributed, and most importantly *emergent* nature of internet rhetorical ecologies that frequently characterize invention in network composition environments. Importantly, *network-emergent invention* does not locate invention as the sole realm of a single actor or rhetor, but rather as the ongoing, resulting collaboration and co-participation of an array of constellating actants, all of whom contribute to an ongoing inventive process.

In its third chapter on Methods, this dissertation outlines the methodologies, data collection methods, data analysis process, and overall qualitative case study approach of a research study that I have competed as a major part of this dissertation in two First Year Composition courses during the Fall semester of 2021. This IRB-approved research study is embedded within a network composition pedagogical initiative in two First Year Composition course at Clemson University. Using the closed-system social networking platform Slack, the two First Year composition courses engaged in a semester-long initiative to compose, share, and

participate in the constructed online community. Posting roughly once a week in the learning community environment, and then responding to peers and instructors through comments, tags, links, shares, hashtags, and other common affordances of social media, these students engage in a network composition initiative that leverages networked technologies to further learning outcomes related to rhetoric, composition, and writing. This study is built around three forms of data collection: interview data obtained from students, textual analysis of Slack posts and conversations, and analysis of student reflective journals documenting their experiences with the network composition pedagogical initiative. Within these data solicitation methods, four target research topics are identified and probed: the cultivation of learning ecologies, rhetorical invention, digital literacy, and distributed expertise. This chapter represents the dissertation's Methods chapter, and focuses on the methodology and knowledge-generating principles utilized by the qualitative research study, with its findings and implications for rhetoric and composition pedagogies discussed in more depth in the succeeding chapters.

This dissertation's fourth and fifth chapters explore Findings, lessons, "best practices," and opportunities for further research suggested by the qualitative study outlined in Chapter III. Emergent codes, themes, and conceptual categories are presented, with accompanying interpretation and analysis. Positioning the findings of the qualitative case study firmly in rhetoric and composition pedagogy, curricula, and scholarship, these two chapters propose formal learning outcomes network composition initiatives in rhetoric classrooms are capable of furthering and extending. The fourth and fifth chapters examine network composition in light of the knowledge that is generated by the research study, and hones in on some potential "best practices" that the resulting grounded theory generated by the study provides to instructors. Of particular note in these chapters are how network composition initiatives might further the four

particular learning outcomes of interest: developing capacities for rhetorical invention, learning ecology formation, digital literacy development, and distributed expertise among students. Ch. IV examines the potential of network composition pedagogies to cultivate learning ecology formation, distributed expertise, and writing/rhetoric/composition skills, while Ch. V examines their utility for helping students engage with digital and social media literacies, rhetorical invention, and digital citizenship activities.

Following the two “Findings” chapters, this dissertation’s sixth chapter examines Challenges to Network Composition and to network composition pedagogies. Specifically, this chapter focuses on four particular issues of concern related to network composition initiatives within First Year Composition and other courses in higher education. This sixth chapter of the dissertation is split into four sections—*accessibility*, *digital aggression*, *digital discrimination*, and *data/privacy*— that practitioners of network composition should account for to address issues of access, equitability, and justice. Instructors using social media tools in their classrooms as well as Writing Program Administrators will be interested in considering issues of online aggression in networked environments (Reyman and Sparby, 2020; Massanari, 2015; Sparby, 2017; Clinnin and Manthey, 2019; Kelley and Weaver, 2020) and content moderation strategies online (Roberts, 2019; Gillespie, 2018; Frith, 2014; London et al., 2020), both of which may provide helpful illustrations of challenges network composition initiatives might face. Additionally, network composition initiatives face challenges related to privacy (Beck and Hutchinson Campos, 2020) and data collection (Couldry and Mejias, 2019; Reyman, 2013), both of which will need to be navigated by instructors and WPAs using social media in college courses. When interacting with internet media and digital interfaces, we must always remember the human behind the screen, and recall that the gap between virtuality and embodiment is

frequently far murkier than we like to imagine (Frith, 2020). The closing section of this chapter examines and probes a document collaboratively (and anonymously) constructed by students and myself for our classroom network composition initiative that I call a “Statement of Community Goals and Values” document.

This dissertation closes with a short final chapter called “Futures for Network Composition” that examines limitations of the study chronicled here, but that also explores opportunities for future research in social media composition pedagogies. This final chapter speculates about what’s next for network composition and reiterates some of the core conclusions and takeaways outlined in the dissertation.

### **Conclusion: Why Bother with Network Composition?**

Assessing and addressing audiences in a digital age is a highly complex act (Blakeslee 2010). Liza Potts (2017) writes that “social web participation is a significant site of study for digital rhetoric, one that can help expand how we teach social media writing practices to our students” (106). When composing in networked environments, both within and beyond the formal confines of the academy, students enact highly complex rhetorical, inventional, critical, and creative practices. A capable, informed, and empowered network composer assesses highly complex, hybridized, and dynamic rhetorical situations, and responds capably with a variety of tools, skills, and practices at their disposal.

The core goal of this dissertation is to ask, and begin to answer, the question of how writing instructors and program administrators nurture informed composition practices in networked environments. By nurturing and cultivating informed network composition practices in our classrooms, we are able to explore not only how to design situations for empowered

internet communication habits, but to explore the benefits, possibilities, and challenges involved in addressing these important questions as well.

So why bother with network composition, in theory and in practice, in the study of rhetoric and writing? Network composition initiatives represent an opportunity for composition and writing instruction to adapt to the environments, the practices, the habits, and the social situations that characterize many of the important writing situations occurring in contemporary networked life. But in a more proactive and forward-looking sense, network composition pedagogies can help students to think more critically, creatively, and expansively about how they create writing and compositions in social media environments, as well as in academic environments, too.

This seemingly obvious point should not be overlooked: communicating to audiences online requires significantly different aptitudes, mindsets, skillsets, and sensibilities than are needed in other settings. Network composition pedagogical initiatives can help composition instructors to nurture digital literacies, rhetorical invention, distributed expertise, and the formation of learning ecologies among their students. But informally, network composition connects the *techne* of writing, commonly a core value to the rhetoric and composition discipline, to social media environments, where an astounding variety of writing and rhetorical action takes place. Many of our students invent every day on Instagram, Twitter, Snapchat, Reddit, or on other social media platforms. Considering this, composition instructors have a significant opportunity to nurture important rhetorical awarenesses by connecting student writings and invention in social media environments to writing and invention in academic spaces.

How we write online is wholly connected to how we learn there as well, and connecting writing, invention, and learning to social media practices is an important goal for rhetoric scholars to pursue. A rhetorical education for the 21st century benefits from consideration of how writers, students, and publics invent in social media environments, and the capacity to invent online is of paramount importance to students as the literacies needed to participate in public life become more and more digital. It is to this capacity for rhetors in networked social media environments to invent collaboratively, intertextually, digitally, and ecologically that we now turn.

## CHAPTER TWO

### RHETORICAL INVENTION IN DIGITAL NETWORKS

Rhetorical invention is ubiquitous, ongoing, and constant. Rhetorical invention happens in everyday street conversations, in Microsoft Word documents, in cross-continent phone calls, in high school SAT essays. Rhetorical invention occurs when someone types out a tweet or shares a *New York Times* story to their Facebook feed, or when a person initiates a Yelp! search on their smartphone or asks their neighbor a question in a text message. Rhetorical invention is everywhere: people create new texts, initiate new discourses, exchange information through technologies, and generate connections that didn't exist before. Invention is intrinsic to human social connection and in many ways is a prerequisite to the communication, activity, and interaction that we build our lives around. As such, it's no wonder that thinkers interested in rhetoric, communication, and writing would find rhetorical invention such a compelling and invigorating topic. Spanning the Athenian *agora* and the emergence of writing in places such as China, Mesopotamia, Mesoamerica, and Egypt all the way to the 19th-century letter writing desk and then the era of ubiquitous digital communication, the study of invention has continued to trace the origin of ideas, the creation of texts, and the generation of discourses.

Rhetorical invention is traditionally understood as the generation of ideas, discourses, and texts and as the discovery of arguments that respond to a given situation (LeFevre, 1987; Crowley, 1985). Rhetorical invention is something that is not only *practiced* constantly by humans in mundane, everyday, banal, and ordinary situations, but also is theorized by writing scholars and given dedicated, conscious attention. For some, invention may involve a conscious application of discourse-generating practices (for instance, brainstorming, sketching, or pre-writing—see Elbow, 1998). For others, invention may be understood as a more abstract process



that does not require a conscious will or intention to occur, but rather comes about from a convergence of material, technological, discursive, affective, and environmental forces, a “collectivity of interacting elements, energies, and forces, human and nonhuman” (Rickert 2013, 212; see also 36). Still others might inquire into the role of technologies or nonhumans in rhetorical invention: when an iPhone records, visually designs, and sends a user their “Screen Time Summary,” does this communicative situation qualify as rhetorical invention? Most invention can be considered *rhetorical* invention, and rhetorical invention is less concerned with persuasion than it is with the generation of something new. In general, however, rhetorical invention is approached by most theorists as the discovery of arguments, the generation of discourses, and the creation of texts.

In a dissertation investigating a primary research question of *How do student composers invent within networked social media environments?*, rhetorical invention is of primary concern, especially its varied practice in social media spaces. Social media environments are important and meaningful places for invention in a myriad of forms. In social media environments, rhetors invent online petitions (Carlson, 2019), invent activist hashtag networks (Jackson, Bailey, and Welles, 2020), invent identity through online dating profiles (Tomlinson, 2013), and invent persona and voice through Facebook interaction (Amicucci, 2017; Amicucci, 2020). Users of social media create participatory videos on YouTube (Arroyo, 2013), engage in political deliberation on blogs and on reddit (Pfister, 2014; Richter, 2021), coordinate misogynistic brigading attacks on 4chan (Sparby, 2017), and collaboratively structure knowledge on Wikipedia (Kennedy, 2016; Cummings and Barton, 2008). All of these activities require a pragmatic understanding of rhetorical invention in some form or another, even if most users would never call what they do *invention*.

Exploring invention in social media environments is vital for understanding how people participate in these important internet spaces. Rhetorical invention in social media environments is of paramount concern due to its impact on global communication practices, on sociological and political events, and on the formation of identity, expertise, and information flows online, just to name a few of the many ways invention impacts the world every day. People come together with communities, platforms, genres, and interfaces to create the discourses that help to shape our world. An important part of this dissertation's theoretical foundation involves investigating rhetorical invention in social media environments as an integral part of *network composition*: examining how writers, hardware, social environment, interface, code, algorithms, and infrastructure come together in a network to create emergent inventive acts. Invention online matters, and in some cases, rhetorical invention can also be an important mode for learning.

After reviewing some of the ways that rhetorical invention has been theorized throughout history that are particularly relevant to invention in social media, this chapter then considers how invention actually occurs in social media environments. The chapter then offers one way to understand rhetorical invention online, what I call *network-emergent invention*. Network-emergent invention argues that social media invention processes emerge from a network of actants that include, and fundamentally rely upon, interactions resulting from the convergence of humans, hardware, technologies, interfaces, communities, cultures, software, and infrastructures, all of which contribute to an inventive emergence. Network-emergent invention offers one way to consider the hybridized, ongoing, intertextual, distributed, and emergent nature of internet rhetorical ecologies that frequently characterize invention in social media environments. Importantly, network-emergent invention does not locate invention as the sole realm of a single actor or rhetor, but rather as the resulting collaboration and co-participation of an array of

participating actants, all of which contribute to rhetorical invention. An *actant*, as defined by Latour in *Politics of Nature* (2004), is anything that “modifies other actors” (75; see also *Reassembling the Social*, 60). In practice, multiple actants always contribute to rhetorical invention, though it is easy to forget this (and many human-centered approaches do). Network-emergent invention synthesizes some of the insights offered from discussions of social media writing, rhetorical theory, New Materialism, and communication studies to speak to rhetoric and composition as a discipline, including in the teaching of social media writing.

When considering how student composers invent in networked social media environments, it is important to consider first how social media writers invent in everyday, common, even mundane settings. Insights from this chapter, including its description of social media invention practices, its recounting of invention through different cultures and time periods, and its understanding of network-emergent invention, contribute to a broader understanding of network composition and of network composition pedagogies. Considering rhetorical invention in social media environments, including some of its processes, assumptions, features, and limitations, helps to better understand how student writers invent in a Slack social learning environment. One of the core arguments in this dissertation is that acts of invention are also oftentimes acts of learning. In other words, invention is a process through which a composer can learn, practice, connect, and participate in ways that are generative for their educations, for their growth as writers, and for their development as multiliterate and multimodal communicators. Understanding rhetorical invention within digital networks, including through network-emergent invention, helps to define a more holistic theory of network composition, and helps to better articulate its goals, purposes, outcomes, and values.

Invention has changed considerably throughout history, cultures, and technological eras, but attention to how media and technologies influence invention remains important. Just as invention for Plato, Aristotle and the Sophists was shaped for the *agora* gathering space where public speeches would occur, and invention for Roman rhetoricians such as Cicero and Quintilian was influenced by the increasing textuality of that period, invention today is shaped in important ways by internet networks. Invention is not static or changeless, and as Elbert Harrington (1962) writes, “Each generation of rhetoricians must examine anew the concept of rhetorical invention” (373). So, how has rhetorical invention historically been understood, and how does this history relate to invention on social media?

### **Invention Across the Ages**

Rhetoricians have defined, understood, practiced, and utilized invention in a variety of ways across history. In what follows, I’ll lay out major developments in rhetorical theories of invention, with a particular focus on invention theories that speak to invention in social media environments.

#### *Classical Invention in the Greek World: Platonic, Aristotelean, Sophistic*

In her canonical book *Invention in Rhetoric and Composition*, Janice Lauer (2004) divided Greek approaches to invention into three distinct frames: *Platonic*, *Aristotelean*, and *Sophistic*. Rhetorical invention’s first formal theorization in the Greek world is difficult to pin down, but Plato is generally understood to have contributed an early form of understanding invention that, while limited, remains influential to this day.

Plato's understanding of invention involves a process of locating *truth* that is already existent in the world. Invention for Plato involves discovering and locating small bits of truth that normally evade us but can come into our awareness through one means alone: philosophy, or more specifically, dialectic. In so many words, Platonic invention envisioned a solitary creator unconnected to others inventing alone through pure genius, inspiration, and natural talent. Platonic invention, broadly considered, remains the dominant mode through which most people in the general public view rhetorical invention (See Lefevre 1987, 11). In this understanding, as Karen Burke Lefevre (1987) points out, "invention is seen as a private, asocial act of recollection aimed at uncovering the ultimate truth; invention, in this case, does not require others" (11). For Plato and for others building on his general theory, there is innate knowledge in the world and in humans, and invention is a process of self-examination, introspection, and individualism where transcendent knowledge is located, and then must be found.

Many of the limitations of Platonic invention become clear, however, when considering the complexities of invention. Plato does not consider social contexts and dynamics particularly important to invention; he does not consider how creativity is always tied to social lives, if only through language itself; he primarily focuses on the composition of oral speeches, which neglects numerous other composing situations that people face; and, finally, there's little reason to think invention is a closed, one-way system that involves a direct sender-receiver transmission model of communication characteristic of the Shannon-Weaver model (see Shannon and Weaver, 1949). The enduring myth of the solitary writer who acts, thinks, plans, writes, and revises in an entirely autonomous, self-contained fashion has maintained its vitality throughout generations, however.

One of Plato's students, Aristotle, took a different approach to understanding invention that more formally considers how ideas are generated in practice. In some parts of his treatise *Rhetoric*, Aristotle conflated rhetoric and invention together, with the definition of "the faculty of observing in any given case the available means of persuasion" sufficing to define both terms to some extent (7). Aristotle approached rhetoric and invention as *techne*, as a craft or art that a rhetor could learn to more effectively engage in discourse. Aristotle found *topics* (or *topoi*) to be useful starting points for rhetors to begin a speech or text with. He identified 28 common topics that could be used for nearly any type of reasoning or discourse, as well as a number of other special topics that could be used as a starting point in specific types of discourse (Lauer, 7). In introducing many of what would become the hallmarks of rhetoric, including analysis of enthymemes, proofs, argument by example, the rhetorical triangle of speaker-text-audience, the rhetorical appeals, and the syllogism, Aristotle initiated a base for understanding rhetorical practice that included a relatively simplistic approach to invention.

Together, Plato and Aristotle set a foundation for understanding the generation of texts, discourses, arguments, and modes of address that would be influential in western society for thousands of years. This approach to rhetorical invention diverged heavily from another collection of rhetorical thinkers from Mediterranean antiquity: the loose assortment of rhetoricians collectively labelled as "the Sophists," who have sparked the interest of numerous scholars in recent decades (see Jarratt, 1998; Schiappa, 1991; Vitanza, 1997; Poulakos, 1983).

Sophistic invention, loosely defined, approaches the act of rhetorical invention as the *generation* of arguments, rather than as the *discovery* of them, as was favored by Plato and Aristotle. Invention, in this understanding, arises from the generation of arguments, perspectives, texts, and claims from social interactions, rather than from discrete, isolated individuals.

Sophistic invention is characterized, in its most basic forms, by an appreciation for opinion, partisanship, sociality, polyvocality, kairos, and interaction.

Stemming primarily from the *Dissoi Logoi* fragment left by an anonymous author, Sophistic invention examines multiple, competing arguments surrounding an issue. Sophistic invention values many voices, attempting to saturate the discussion of an issue with as many perspectives, points of view, and arguments as is possible. Sophistic invention values dissensus and considers disagreement to have productive capacities. Sophists generally did not believe in unified, complete, grand, and comprehensive truths, but rather considered truths to be something composed of a heterogeneous, discordant array of arguments that compete for attention among audiences. For Sophists such as the author of the *Dissoi Logoi* fragment, multiple arguments all calling for truths can exist simultaneously, and examining an issue from multiple angles and in multiple contexts becomes a generative, productive process. Rather than insist on single, all-encompassing truths, Sophistic pluralism allowed for the valuing of contrasting arguments, conflict, difference, and the generative clashing of ideas.

An important distinction between Sophistic and other modes of invention concerns its appreciation of opinion, *doxa*, and partisanship. Sophistic invention does not claim particular arguments to be automatically and intrinsically aligned with fundamental truth, as someone such as Plato might insist, but rather views all arguments as equally true, with audiences then judging which of those arguments is most *valuable*. This understanding of invention values partisanship: it appreciates perspectives that articulate a distinct and unique argument, though it does not allow them unfettered claims to absolute truth. A plurality of partisan arguments is a core goal of Sophistic invention. Rather than one person deciding on one truth based on dialectic, as Plato might have it, Sophistic invention encourages arguments to be circulated among audiences and

judged on their merits, their value, and their qualities. Relativism, conflict, agonism, disagreement, and subjectivity all find homes in Sophistic invention.

A second important distinction between Sophistic invention and other modes is the role that *kairos*, or ideal timing, plays within inventive action. Kairos differs from *chronos*, the other Greek word for *time*, which refers to a more objective and modular timing in Greek thinking, in that kairos is subjective, unique, and concerned with locating the ideal response for a particular situation. Kairos insists on context, environment, situation, opportunity, and possibility. A kairotic approach to invention, as suggested by Sophists such as the author of the *Dissoi Logoi* fragment, insists that particular contexts call for particular responses, and that there exist opportune and inopportune times for particular actions, arguments, and rhetorics. The *Dissoi Logoi* fragment argues that “nothing is always seemly or always disgraceful, but the right occasion takes the same things and makes them disgraceful, and then alters them and makes them seemly” (283). The “right occasion” or “the right moment,” in other words, is a controlling factor in occurrences such as invention, and context, environments, and timing work together to determine a statement’s value in a particular situation (289).

Lastly, Sophistic invention generally approaches rhetoric, language, and inventive action as epistemic, rather than as purely instrumental or functional. In this general approach to invention, the act of articulating some statement, argument, or discourse to the world is an epistemic one, reflecting knowledge, cultural attitudes, prevailing opinion, and ideas that are available to a culture. In sum, Sophistic invention values kairos, context, polyvocality, sociality, collaboration, and partisanship. The Sophists pursued *arete*—“excellence” or “virtue”—teaching their pupils that excellence was attainable through rhetorical practice and exercise.



Indeed, as we shall see, the Sophists valued many of the same practices that contemporary rhetorical inventors in social media environments often do.

### *Invention Before the 21<sup>st</sup> Century*

Many of the central issues considered by Aristotle— namely *topoi* (social commonplaces) and *stasis* (finding a starting point between two polarized positions)— would find their full development in the era of the Roman Republic and later the Roman Empire. Roman rhetoric is generally credited with formalizing the rhetorical canons of invention, style, delivery, arrangement, and memory, and with understanding rhetoric for the first time as intimately connected with the technology of writing (Lauer, 2004). At its core, Roman rhetoric offers a history of invention some level of insight into the power of *topoi* as social commonplaces embedded within a culture, into *status* or *stasis theory* as a starting point between two polarizing positions, into imitation as a form of invention, and into the inventive capacities related to the other four canons of rhetoric. Later in Medieval Europe, rhetoricians tended to interpret generating discourses and arguments as a means of channeling divine will (see Augustine, 1958).

In the Renaissance, appreciation for invention waned dramatically, as leading voices such as Francis Bacon (1952) and Peter Ramus (2010) viewed science as the primary mechanism for discovering truth and reality, deeming rhetoric a mere conduit for communication, delivery, style, and information transmission. The Romantic and Transcendentalist eras in Europe and the United States brought with them private, asocial, solitary, and isolated theories of invention. These include theories of invention offered by writers such as William Wordsworth, Samuel Taylor Coleridge, and Ralph Waldo Emerson, all of which replicated Platonic underpinnings

while valuing spontaneity, genius, creativity, and emotion, all the while fitting neatly into an emerging capitalist order (see LeFevre, 1987).

As the 18th and 19<sup>th</sup> centuries progressed, a new model of rhetorical invention emerged in the Americas and in Europe. Current-traditional rhetoric tended to value honing an idea or argument into neat arrangement, adherence to considerations of form, and accurately describing and representing themes, subject matter, and propositions (Crowley, 1985; Crowley, 1990). It was, in turn, surpassed in the 1960's by social-epistemic invention, which incorporates many of the central insights from philosophical movements that include poststructuralism, postmodernism, cultural studies, and neotraditionalism (Simonson, 2014). Rhetorical theory grew to appreciate the cultural, social, epistemic, and linguistic contributions to rhetorical invention that Modernist, Romantic, and Platonic understandings had overlooked. In short, movements that include poststructuralism, postmodernism, feminism, and cultural studies shifted invention theory to consider language an active participant in invention, viewing invention as dynamic and as generative, endlessly and intrinsically social. Karen Burke LeFevre (1987) counters Platonic, asocial, isolated myths of solitary creators with an approach that is collaborative (29; also see 62), epistemic (78), dialectical with a socioculture (35), and interconnected in an ongoing cultural process (40). Invention, in the social-epistemic view, is not only social, but also epistemic, interactive, collaborative, and contextual.

### *Invention, Power, & Privilege*

To close out this section, it's important to note briefly that the capacity to engage in processes of rhetorical invention is not available in the same ways to all people. In other words, invention is a privilege that is not allotted equally or equitably. The time, space, opportunity, and

social capital required for rhetorical invention tends to, in most societies, be based on exclusions. For instance, in many societies, women's rhetorical invention has been limited by patriarchal, misogynistic power structures. As Cheryl Glenn (1997) points out in *Rhetoric Retold*, women have not only been excluded from histories of rhetoric, but also denied the capacity to engage in rhetorical acts within systems of patriarchy and exclusion (see also Lunsford, 1995 and Glenn, 2018). This is not to say that women do not practice rhetorical invention, but rather to point out that social and political conditions, including power and violence, regulate and restrict capacities of individuals and groups to invent in particular ways. Invention is similarly limited on the grounds of race in racist social systems, or by class in systems that undervalue the voices of those without capital, land, education, or elite social status. Invention can also be limited by access to infrastructure, technologies, literacy, leisure time, or a receptive audience. As such, invention is always governed by power structures, by social dynamics, by marginalization, and by privilege.

In any case, theories of rhetorical invention grew in the 1990s and early 2000s to factor digital and internet media into their formulations, changing how we understand invention as social, collaborative, and multimodal in ways that weren't supported by prior media environments. Just as Roman invention theory, as showcased in the *Rhetorica Ad Herennium*, became more textual as literacy rose in prominence during that historical period, invention has changed in part due to shifting media environments. Invention in digital networks takes different forms than are practiced in print or oral modes of communication, but that are also in no way divorced or unconnected to those invention practices, either. As we'll see in the next section, invention occurs across internet media in ways that aren't encapsulated well by traditional understandings of rhetorical invention (see LeFevre, 1987; Crowley, 1985), that fail to capture

the dynamic, intensely social, distributed, and intertextual nature of internet media and environments.

### **Networking Invention: Invention on the Internet**

In recent decades, the ubiquity of digital technologies has inspired a number of evolutions in how people consider rhetorical invention (DeWitt, 2001; Lauer, 2004; Strickland, 1987). Douglas Eyman (2015) argues that “invention, as a function of digital rhetoric, includes the searching and negotiation of networks of information, seeking those materials best suited to creating persuasive works, as well as knowing which semiotic resources to address and draw upon (aural, visual, textual, hypertextual) and what technological tools are best suited to working with those resources” (66). This approach emphasizes digital literacy, network navigation, and multimodal creation, noting how “rhetorical invention in networked digital contexts arises from user interaction both with archives and with other users” and affirms the importance of social environments to digital invention (67). Eyman’s (2015) focus on production is shared by Brooke (2009), who reconfigures invention for digital environments by proposing what he calls *proairetic invention*, which hones in on digital invention’s tendencies toward creating links and connections, generating possibilities, resisting firm closures, and on its lack of distinct beginnings or endings (85).

Importantly, both Brooke (2009) and Sheridan, Ridolfo, and Michel (2012) draw upon New Materialist theory to point out that invention is both distributed and mediated (Brooke 2009, 66; Sheridan, Ridolfo, and Michel 2012, xxvii). Sheridan, Ridolfo, and Michel (2012) find that “rhetorical invention and rhetorical practice are distributed” across complex networks where an “interplay of elements” contributes to rhetorical action (100; 102). Sheridan, Ridolfo, and

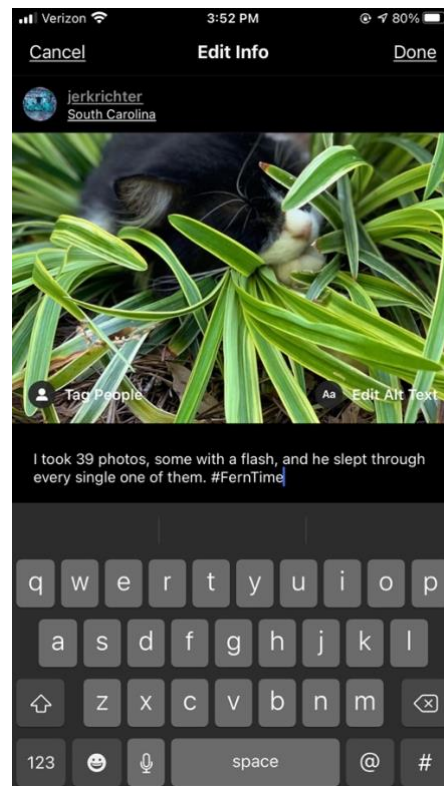
Michel (2012) extend this understanding of invention to public writing pedagogy, counterpublic theory, and to multimodal but not necessarily digital pedagogy. Their emphasis on complex sociality coalesces with models of invention that arise more specifically from digital cultures more specifically, such as the approach informed by the early blogosphere offered by Damien Smith Pfister (2014). Pfister (2014) argues: “The blogosphere’s more generative mode of invention relies on collaboratively piecing together communicative fragments to weave a polyvocal, even downright dissident, account” of some event or controversy (58). In this mode, rhetorical invention in the blogosphere resembles and enacts many of the core tenets that the ancient Sophists valued in understanding invention, namely the social generation of arguments, polyvocality, partisanship, and the collaborative weaving of distinct perspectives (Pfister 2014, 58; 53).

Other scholars have begun to connect rhetorical invention with social media in particular through the examination of invention in particular internet interactions such as online petitions and online dating profiles. Erin Brock Carlson’s (2019) research into rhetorical invention in MoveOn and Change.org petitions demonstrates the “clear linkage between invention and delivery in digital arenas,” implicating varied topics such as algorithms, circulation, and SEO into how we consider invention, as writers must invent for circulation and delivery in new ways (175). Similarly, Tomlinson’s (2013) research into rhetorical invention on online dating sites reveals intimate connections between invention and self-representation, audience, and impression management (126). As we see, the existing body of research into rhetorical invention and digital media offers a rich foundation that a full-fledged theory of social media rhetorical invention can generatively supplement.

Scholarship in rhetorical theory has showcased the dynamic, social, distributed, and intertextual nature of rhetorical invention in digital environments. This chapter builds on these theories of rhetorical invention, orienting their insights toward a New Materialist approach to social media rhetorical invention. I argue that because of its ubiquity, social impact, and cultural influence, social media rhetorical invention merits its own full-fledged and unique consideration, as well as more thorough engagement with New Materialist theory. As we've seen, rhetorical theorists across different historical eras have offered radically different approaches to the generation of texts, arguments, materials, and discourses through rhetorical invention. In each case, theories of rhetorical invention are tethered to and influenced by the communication media that are common to that historical moment. The roles of media and technologies as coparticipants in any rhetorical act should not be ignored, and social media technologies certainly merit this level of consideration.

For instance, a Romantic or Platonic understanding of rhetorical invention might position a human as the sole agent in the composition of an Instagram post caption, focusing exclusively on that person's conscious choices concerning diction, tone, style, and content. Human beings and their conscious intentions are undoubtedly an important part of most rhetorical actions that humans participate in, and ignoring these conscious wills would be unwise. However, ignoring the roles of media, technologies, and other non-human factors risks being equally erroneous. In just one example, a person captioning an Instagram post undoubtedly plays an essential role by choosing words, writing sentences, selecting hashtags, and adding necessary punctuation. The person does not invent alone, however, but rather engages with an interface, discourse conventions, participatory networks that they anticipate, and a platform that facilitates their interactions in that environment.

In fact, the act of writing an Instagram caption relies on an array of unseen actants that enable and contribute to the emergent act of invention (see Fig. 2.1). For instance, a physical infrastructure such as a smartphone network and server farm is needed to facilitate the invention act, and a platform is needed to code and maintain the interface or to structure how the post will circulate across networks through algorithms and user connections. The person composing the Instagram caption likely does so with a networked audience in mind, including friends, acquaintances, and a public, all of which likely influence the choices the person makes and thus influence the inventive act. As such, the person enters into discourse conventions that are regulated by social pressures, community norms, platform rules, and cultural practices and values.



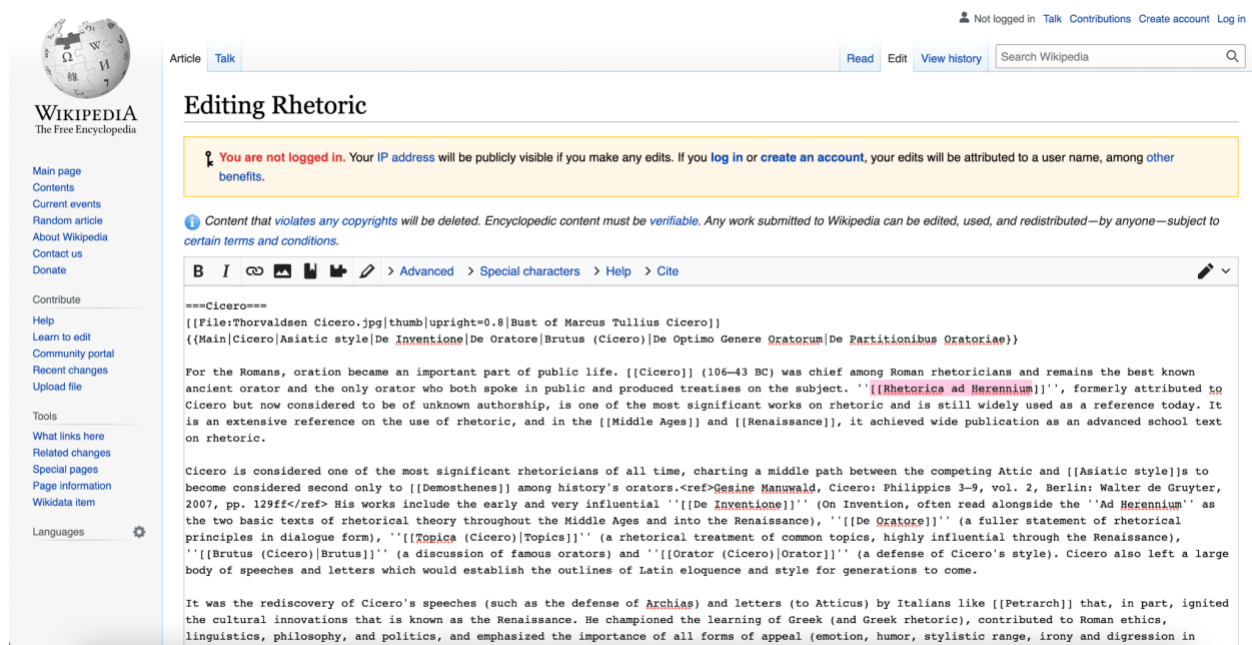
**Fig. 2.1:** Invention in an Instagram network on a mobile smartphone interface.

The Instagram post necessitates a human presence (generally, at least in conventional “assumed” usage of the platform), but that human hardly acts alone in an isolated, disconnected scene of invention. Instead, that person interacts with a technological tool in the form of hardware (a smartphone), with an interface (square photos, a text cursor, a photo selection tool, a “tagging” option), with a physical infrastructure (server farms and wifi routers), with platforms (Instagram and Facebook, who update code, add interface features, maintain regulated social environments, and maintain the platform financially), with discourse conventions (such as quirky joke captions, puns, pop culture references, or hashtags like #MeToo), with other humans (who create community conventions, react to composing choices, and form an invoked audience), with algorithms (who create delivery mechanisms and distribute content), and with discursive infrastructures (which support the interface and platform, regulate rules and codes of conduct, and structure platform use through Terms of Service agreements).

In other words, humans are always *acting with* other entities when engaging in rhetorical invention, instead of simply *acting on* other entities such as a social media platform. The human *acts with* interfaces, platforms, technological affordances, discourses, social conventions, and platform rules to nurture an inventive emergence. As such, *invention emerges from* the convergence of some or all of the intertwined factors that make up media environments. To fully conceptualize invention in social media environments, considering humans or technologies alone misses the large array of actants that, when they converge, facilitate rhetorical invention. A person cannot invent on a media platform without a physical infrastructure or without a technology or without an interface, and in some cases, such as a bot writing a sentence on Wikipedia or an artificial intelligence program that writes a short fiction story, the human isn’t even a necessary node in the equation (see Fig. 2.2). Invention in any media environment



requires an array of forces coming together, and I am certainly not arguing that this process is entirely new with social media. As just one example, the printing press requires a person, ink, lumber supply chains, literacy education, discourses to print, bodies to operate the machine, economic systems that demand texts, a language, repair persons, specialized operation knowledge, and other disparate factors. Social media environments reflect a similar reality: humans do not act alone, but act *with* an array of forces that coalesce in an emergent inventive act.



**Fig. 2.2:** A screenshot of the “Rhetoric” Wikipedia edit page.

In other words, when rhetorical invention occurs in social media environments, it arises from an interaction of multiple actants that contribute, participate, and assemble the resulting invention. Agencies forming a network converge and contribute to the resulting action, which is always a *shared* emergence in which no single actant works alone.

## Networks, Emergence, Invention: Or, How Invention Happens on Social Media

As we've seen, invention in networked social media environments is different than invention in other modes. In internet spaces, invention is often characterized by collaboration, community, social interaction, circulation, intertextuality, and engagement with digital interfaces (Richter, 2021; Pigg, 2014a; Smith Pfister, 2014; Arroyo, 2013; Carlson, 2019; Tomlinson, 2013). When an inventive act occurs in a networked internet environment, it requires an assemblage of actants to do so. Invention requires a coming together, an intersection, a convergence. Interfaces or humans or hardware do not invent on their own, but each influences the inventive emergence that results from an interaction. So, what are the primary actants at play when invention occurs in a social media space?

Invention in social media environments emerges from a dynamic assemblage of multiple actants, including human, cultural, technological, and infrastructural factors, which often include but don't always require humans, hardware, interfaces, communities, cultures, discourses, moderators, code, algorithms, and physical and discursive infrastructures (see Fig. 2.3). It is important to note that distinct boundaries between these participating actants are difficult to locate in some contexts and are seemingly non-existent in others. In general, though, most or all of the participating actants listed below contribute to rhetorical action in social media environments in complex, heterogeneous, and dynamic ways.

<b>Humans</b>	Humans participate in rhetorical invention by writing, recording, uploading, remixing, designing, and coding texts; by contributing bodies, intentions, and ideologies; and by designing, structuring, and implementing many of the other elements listed below.
<b>Hardware &amp; Technologies</b>	Hardware and technologies participate in rhetorical invention by supplying the material computer mechanisms that other participants rely upon. They are non-neutral, affective, and have their own agency.

<b>Interfaces</b>	Interfaces participate in rhetorical invention by organizing, structuring, and designing how, where, and in what contexts invention can occur in a particular digital environment.
<b>Communities, Cultures, &amp; Discourses</b>	Communities, cultures, and discourses participate in rhetorical invention by providing a social context; by supplying discourse and genre expectations, desires, and demands; by honing cultural practices and community values; and by inspiring ongoing rhetorical invention.
<b>Moderation</b>	Moderation functions participate in rhetorical invention by regulating content, by communicating and enforcing rules, and by proactively encouraging positive forms of participation.
<b>Software, Code, &amp; Algorithms</b>	Software and computer code help to shape, arrange, mediate, and design rhetorical invention environments. Algorithms participate in rhetorical invention by creating distribution expectations for humans, by organizing circulation and delivery, and by helping to shape relationships and social contexts.
<b>Physical Infrastructures</b>	Physical infrastructures participate in rhetorical invention by providing the collective material foundation that allows rhetorical action to occur in a particular society.
<b>Discursive Infrastructures</b>	Discursive infrastructures participate in rhetorical invention by crafting notions of tone, style, content, behavior, etiquette, and interpersonal relations in a particular invention environment.

**Fig. 2.3:** Rhetorical invention in networked social media environments requires the convergence of an array of forces that participate in inventive acts.

### *Humans*

No surprise here: writers, users, participants, community members, videographers, media professionals, cameraphone wielders, YouTube channel owners, TikTok uploaders, and all email users are enacting rhetorical invention online. Invention on social media requires humans, at least in most recognizable forms that are of interest to rhetoric and composition scholars (there are a number of important exceptions to this rule, though, such as Wikipedia bots that contribute to articles as just one of the more visible examples- see Kennedy, 2016). Humans are traditionally positioned as the sole agents in acts of rhetorical invention, and in most traditional modes, are considered the sole entity that becomes inspired, engages in action, and churns out a creation (LeFevre, 1987; Crowley, 1985). Invention theory has traditionally stopped here, for the

most part, considering all other entities mere objects for inspiring the inventing human (Simonson, 2014). But humans never act and invent alone, and in social media environments this is exacerbated in important ways. Humans become networked with other humans, become acquainted with an interface, work with and through technologies, and act alongside other contributors to rhetorical invention.

### *Hardware & Technologies*

Technologies, too, participate in invention processes. Technological tools help make social media invention possible in the first place. Keyboards, silicon chips, LED screens, virtual buttons, metatags, chairs, smartphones, wifi routers, computer desks, server farms, even undersea cables all are technologies that serve functions that make rhetorical invention possible.

Technologies enable practices and cultures, too, and help to shape them in important ways.

Technologies like the smartphone allow humans to communicate with each other across time, space, and geography (Frith, 2015), and technologies like the keyboard become so ingrained in our invention processes that we forget they're integral participants in much of the invention we call our own (Brown Jr. and Rivers, 2016).

Technologies that we take for granted, such as the technology of writing, shape thought and human behavior whether we're aware of them or not (Ong, 1986). Friedrich Nietzsche (2011) famously wrote of how, after exchanging a pen for a typewriter as a writing technology due to his failing eyesight, his writing and thinking process changed. Interestingly, Nietzsche wrote in a poem that the Writing Ball typewriter required that "patience and tact must be had in abundance" (1). In other words, the technology of the typewriter introduced new considerations into Nietzsche's writing process that other technologies, such as a pen and paper, did not feature.

Technologies impact every action that occurs online, and the internet could not exist without carefully designed technological capacities that are used and misused by humans in everyday practice. Additionally, technologies always contain political dimensions, and amplify some voices, viewpoints, and modes of being while delegitimizing or erasing others (Benjamin, 2019; Noble, 2018; Selfe and Selfe, 1994). In this vein, too, hardware and technologies contribute in important ways to how invention occurs in particular environments online.

### *Interfaces*

Interfaces participate in constructing the writing, discourse, and participatory environments common to social media (Sano-Franchini, 2018; Gallagher, 2019; Gallagher, 2015; Selfe and Selfe, 1994; Potts and Harrison, 2013; Arola, 2010). When a user of a social media technology engages an interface, that user is presented with prefabricated, intentionally fashioned sensory patterns and choices that work visually, but also in many cases sonically and tactilely. Interactions with an interface are affective, non-neutral, and dynamic. Designers often assume uses for an interface that is exceeded or disregarded by users, and no person's experience with or perception of an interface is exactly like another's (Norman, 2002). Interfaces help to structure what, how, and why we write: a famous example is Twitter's brief character limit, which restricts length of the written invention, and possibly the complexity of communication and the nuance or detail that it can communicate. Interfaces structure the information that we consume on social media, delineating areas for a news feed, for chat features, for shortcuts, for status composing, and for other features of a platform. Finally, interfaces mediate social contact, organize consumption and creation, and are the architectures of networked interaction. Interfaces, in so many words, are important participants in social media rhetorical invention.

Interfaces also provide templates for writing, recording, sharing, creating, designing, and for other forms of invention. In providing templates for writing and other forms of internet invention, interfaces arrange, frame, and organize how the resulting invention will appear and be distributed to others. John R. Gallagher (2015) writes that while templates such as those found in social media interfaces “constrain writing options,” they also form part of the discourse’s rhetorical situation, playing “a significant role in the production of rhetorical discourse in Web 2.0” through their “*predetermined* design and layout” (2). In Gallagher’s (2015) parlance, “templates standardize the choices available to writers, as well as the behavior that arises from those choices” (4). As common and important features of social media interfaces, templates for writing and other forms of invention *participate* in inventive acts without fully determining them. In her study of online petitions, Erin Brock Carlson (2019) writes that “templates used to create persuasive, participatory texts can be seen as persuasive and participatory themselves; as such, they can reveal connections between the template’s design and the texts they help generate” (183). In other words, templates, as features of an interface that structure, design, and arrange important forms of invention such as writing or video recording in internet environments, influence that inventive act in explicit but also subtle ways. But the impact of an interface on the process of invention goes even deeper.

Interfaces structure social interactions between users across internet networks. In short, a user of social media encounters networked others through a lens of the interface, which formats the communication mechanisms, arranges social interactions, and helps to negotiate shared action, participation, or conflict. Interfaces are political, and mediate experiences and interactions differently for different users. As Selfe and Selfe (1994) note, “interfaces can be mapped as complex political landscapes” that enact borders, power asymmetries, ideologies, and

contact zones (65). Interfaces make invention easier and more welcoming for some than they do for others, and frequently offer users only one “neutral” design choice that often caters to an assumed user who usually is white and male (see Brock Jr., 2020). Rhetorical invention, then, is hardly monolithic even when occurring on the same interface. Cultural epistemologies shape technology use, and technologies always “hail” their users, telling them in subtle and explicit ways who they should be when using that platform (Brock Jr. 2020, 83). Different people interact with and experience an interface in different ways, and as such, the interface participates but doesn’t determine the inventive act, leaving room for culture, affect, and other factors to contribute, too.

Lastly, interfaces mediate emotion as users communicate across internet networks. The mediation of emotion through digital networks has important implications for social interaction, information ecosystems, political actions, and democracy. Invention always contains meaningful affective, emotional, and experiential elements, and never occurs in a vacuum disconnected from the worlds of others (Simonson, 2014). Jennifer Sano-Franchini’s (2018) study of the Facebook interface reveals some important insights into how interfaces work, function, and impact human social interactions that can be generalized beyond Facebook alone. Sano-Franchini demonstrates through what she calls a “critical user interface analysis” how technological designs can inspire “mediated intimacies” and “new relational circuits” (387). The reaction capacities that many social media interfaces provide their users, including abilities to like, upvote, favorite, laugh, scowl, or downvote, contribute toward the emotional resonances a person has regarding an invention environment, thus shaping rhetorical choices that inventor will make. As Sano-Franchini (2018) points out, interfaces and user experience design (UX) help to nurture “affective orientations,” which I contend have important repercussions for rhetorical invention in

networked environments. Facebook, subject to Sano-Franchini's "critical user interface analysis," is revealed to sow discord, outrage, polarization, and provacateering through the design of its news feed, its algorithm, its emotive reactions, and through the interface's flattening of nuance and detailed discussions into short snippets (389). That is, Facebook's interface does not reward complexity, detail, nuance, or explication, and many of the popular cultural practices associated with posting on the platform do not, either. Instead, the Facebook interface presents "options to quickly post pre-formatted content," and in doing so "prioritizes experience and emotional reactivity to get users to spend more time on the site" (Sano-Franchini, 400).

In short, interfaces mediate emotions, affective resonances, and mediated intimacies, and in doing so contribute in multiple ways to the rhetorical invention that occurs in a space, on a platform, or in a particular community. Invention is affective, and is tied to worldview, ideology, lifeworld, and belief structure, all of which are reflected, reified, reinforced, and projected by web interfaces. Gallagher (2018) writes that "the template and writer are no longer standalone elements in the production of rhetoric... they cannot be so readily distinguished from one another" (3). Rhetorical invention in networked social media environments oftentimes occurs at the convergence of inventors, technologies, and interfaces, but what about the cultural, social, and community dimensions that affect rhetorical invention online?

### *Communities, Cultures, & Discourses*

Unique practices and cultures that develop in social media environments, both across platforms and in particular communities, influence the invention that occurs there. These practices can be intentionally supported by particular platforms, or they can arise when groups of people intentionally "misuse" the technology. Popular genres and discourses on a platform such



as Instagram include those as broad as the selfie or the #ThrowbackThursday post genre from early Instagram culture and as narrow the genre as the Half Baked Harvest cookbook story or the celebrity product testimonials common on the platform. Technologies help to create cultures, but cultures also help to shape how technologies are used, engaged with, and valued (Brock Jr., 2020). As such, technologies do not so much determine the behaviors of humans as they engage together in shared activities, but rather co-participate with those humans, acting *with* them to shape practices, cultures, and discourses online. Cultures exert influence on *how* technologies are used and on *how* they impact both the world and their users, even as those technologies *also* impact those same groups of people (Brock Jr., 2020, 6; see also 101).

Additionally, communities of participation, writing, practice, and discourse support rhetorical invention in networked environments. Invention in digital networks tends to be intensely social, and social elements, including interactivity, audience, reception, and identity influence invention in profound ways. Social interactions are a defining feature of social media, and are a primary reason that people join digital networks to begin with. Ann Amicucci's (2017) work studying writers on Facebook has demonstrated that the "rhetorically complex array of writing moves in which social network users participate" helps them to develop voice and persona in their writing, reinforcing the notion that social writing practices challenge a writer to invent for audiences in ways that are new and unfamiliar (36).

Social media and invention are complicated by audience in other meaningful ways. Writers in social networks can sometimes experience what Marwick and boyd (2010) call "context collapse," which involves generally unrelated audiences being combined in uncomfortable ways, a common feature in social media spaces featuring an individual's family, coworkers, friends, high school classmates, former acquaintances, and so forth. Inventors in

social media environments oftentimes navigate context collapse, as the demands of one audience may conflict with the demands and expectations of others. As such, writers in social media spaces must oftentimes pay careful attention to how they cater to particular audiences in their social media invention practices. In fact, as Elizabeth Tomlinson (2013) argues based on research on rhetorical invention and internet dating websites, invention in social media environments becomes even more connected to particular notions of audience than it has been in other media environments (117). In short, composing in social media environments demands strict and careful attention to audience in many cases, and amplifies the intertextuality that is present in some way within all discourses, especially as the frequent and easy responses available to audiences forces inventors to consider those audiences intertextually, considering how they might read, react, comment, or share in response to the original creation. When audiences are networked and participatory, invention takes on an aspect of intertextuality, as the ease of invention in the form of a simple comment, “like,” or “share” not only opens up the possibility of another individual responding intertextually, but also encourages the assumption on the part of the original creator that this might happen as well.

The intertextual nature of invention in digital environments becomes realized in real time comment threads, back-and-forths, exchanges, and interactions, as well as interactions that occur across months, years, or decades, such as when one writer edits an article on Wikipedia that still display edits from a decade or more ago (Kennedy, 2016). Social interaction occurs across a vast array of timescales in digital writing environments: writers Tweet at each other in the moment but also quote Tweet years-old Twitter posts to recirculate them; people comment on old Facebook photos to boost them to the timelines of friends; writers update reddit posts to provide

audience-requested information updates; and living texts such as Wikipedia are updated continuously in a distributed, ecological process that occurs across decades.

Lastly, invention in social media environments is impacted socially by the possibilities of digital aggression, harassment, and other forms of violence (Reyman and Sparby, 2020; Kelley and Weaver, 2020; Gelms, 2021; Gruwell, 2020; Karabinus, 2020; Gelms, 2020; Massanari, 2015). The threat of digital aggression and other forms of harm is not distributed evenly, and oftentimes mirrors power dynamics that disproportionately impact people of color, women, people who are disabled, and members of other marginalized groups. When a person engages in rhetorical invention by joining a digital network, they become vulnerable in all sorts of ways, and attacks based on gender, race, class, and disability are all too common. The threat of digital harassment and harm looms over nearly every act of rhetorical invention, and as such, represents an important but unfortunate contribution of communities and social contact to rhetorical invention on social media.

### *Moderators & Moderation*

One contributor to social media invention that is easy to overlook and undervalue is the moderator. Moderators on social media are tasked with examining and regulating content that is posted and are entrusted with negotiating conflict, interpreting liability policies and guidelines, and mediating disputes between users (Roberts, 2019; Gillespie, 2018). Moderators scour platforms for digital aggression, harassment, pornography, even terrorism, and in many locales are forced to appease government censors and hand over user data to authoritarian dictators (Gillespie 2018, 38). Moderation on many platforms occurs in hybrid ecologies, with community members, platform-employed moderators, everyday users acting as “flaggers,” AI detection

tools, “superflaggers,” and external review teams all contributing to the effort (Gillespie 2018, 116).

When a person begins to write or post something on social media, they enter into a social space with rules, regulations, legal responsibilities, and a multitude of other users. Much of the moderation that is enacted on sites such as Facebook relies on human laborers who encounter horrifying images, offensive language, and violent videos as part of their workday, and who are charged with deciding whether content violates platform policy or municipal law, often with little or no support from that platform (Roberts, 2019). Moderators on social platforms such as reddit have been forced to ban entire active subreddits with hundreds of thousands of members (Chandrasekharan, 2017), and on nearly any platform risk facing harassment, aggression, doxxing, and other forms of violence (Reyman and Sparby, 2020; Roberts, 2018; London et al., 2020). Additionally, moderation is not only about deciding what *isn't* permissible in a particular social environment, but is also concerned with encouraging beneficial forms of content and participation, with serving as a community manager, and with negotiating community values in practice (Gillespie 2018, 126; Richter 2021, 4). All in all, moderation is a vital part of what allows social media to operate, and for rhetorical invention to occur there.

Beyond allowing a platform to legally operate and keeping users as safe as possible, moderation also contributes to invention in other ways. First, most people know when they begin writing and participating on social media that they may be subject to platform rules, guidelines, and Terms of Service agreements, and if they aren't already aware, there's a good chance they will eventually find out as they participate over longer periods of time. The very presence of moderators in, say, a Facebook group can orient participants toward some subjects or content, and away from others. Moderators frequently embody “good” behavior on a platform or in a

networked community (though this is certainly not always the case) and can serve as exemplars of what particular groups of people consider positive behavior, which in turn may influence the rhetorical invention that occurs. Furthermore, in their roles as community managers and leaders, moderators of groups or communities can write “rules,” constructing codes of behavior and conduct that can be enforced in both public and in private, potentially impacting the community’s rhetorical invention practices.

Additionally, moderators and moderation can inspire, encourage, or demand edits to the posts of participants, or can delete them altogether. One of the features of social media writing that many other modes don’t feature in the same way is the plasticity, malleability, and impermanence of writing online (see Gallagher, 2019). A post can be written on reddit or Nextdoor, and then be edited for grammar, clarity, or additional information, as just one example. This does not hold true on all platforms, with Twitter being one example, but social media writing undoubtedly is malleable and editable in ways not supported by most other media. This is important for invention in social media environments, as participants can engage in editing, rewriting, or supplementing as a form of invention. For instance, a person posting in a Facebook group about gardening might be asked multiple times to supply the particular varietal of tomato she is growing. Taking advantage of the malleability of digital writing, however, this user might re-engage in rhetorical invention by editing the original Facebook post and adding the key information that possibly should have been supplied in the first place, including when prompted to do so by community rules or by a moderator. In any case, moderation serves as a factor in invention online in both direct and indirect ways (see Frith, 2014).

### *Software, Code, & Algorithms*

Computer software and code are integral components of rhetorical invention on the internet. Platforms, applications, operating systems, websites, word processors, and other programs all rely upon software and computer code to function, and they subtly but importantly help to shape a given invention environment. Software such as Google Docs, for instance, participates in rhetorical invention when it regulates language use through spellcheck features, when it eases the revision and edit tracking process, when it supports social and collaborative writing, and finally when it both supplies and limits design elements such as fonts, spacing, and plug-ins. As such, Google Docs serves as an example of software's unheralded role in invention, as software does not simply showcase the raw input of humans, but *mediates* it. Additionally, software and code are also intimately connected to another important feature of invention on the internet: algorithms.

At their core, algorithms are systems that receive input and return output. Algorithms behave somewhat like instructions and oftentimes help to accomplish a certain task or to solve a problem. Algorithms are common features of social media environments, where they curate content that one views on home pages, where they spread a user's posts across internet networks, and where they rank, evaluate, and sort information for its perceived relevance to other users. It is important to remember that algorithms can be manipulated for nefarious purposes (Bradshaw, 2020), such as the inauthentic behaviors that boosted r/the-donald to the front page of reddit in the leadup to the 2016 United States presidential election (Shepherd, 2020). Additionally, algorithms reinforce, articulate, reflect, and project bias, including biases related to race, gender, class, disability, and sexual orientation (Noble, 2018; Benjamin, 2019; Adams et al., 2020; Brock Jr. 2020, 152).

Algorithms participate in rhetorical invention in a few key ways. First, algorithms impact how a person perceives their creations will “move” in the world. As such, that person may make choices both implicitly and explicitly based on how they predict or experience their content being distributed through algorithmic means. In other words, a person’s experience writing time and time again on a platform may influence how they perceive an algorithm to interact with their content, which may certainly impact how they choose to invent. For instance, some users may find that one of their tweets or other social media posts “goes viral,” and finds audiences that weren’t anticipated. In this case, future acts of invention might be impacted if that user experienced harassment, aggression, or other forms of violence in response to that algorithmically viral experience. John R. Gallagher (2017) writes that “algorithms sort, distribute, and organize websites, writing, and content... in doing so, *algorithms* evaluate, structure, and influence writing and other discursive information” (25). In other words, algorithms exercise agency on writing or content that has been created, and as users perceive this algorithmic distribution, they carry that knowledge and experience on with them to future invention processes. Algorithms structure what users see on their feeds during their interactions and browsing on a site, and frame the sorts of participation that can, should, and might occur there, recursively impacting future invention.

Additionally, many writers inventing in social media environments write with an algorithmic audience intentionally in mind, with the hope that some of their conscious rhetorical choices can help to increase the spread and distribution of their creation (Carlson, 2019; Gallagher, 2020; Glotfelter, 2019; Beveridge et al., 2020). Writers have long engaged in search engine optimization (SEO) to help trigger Google’s PageRank algorithm, and including key words, phrases, terms, or content can help to expose a text to new audiences by catching the

attention of amplification algorithms, potentially leading to exposure, spread, and relevance.

Algorithms, then, in addition to code and software, influence invention and inventors in social media spaces.

### *Physical Infrastructures*

Physical infrastructures are necessary for social media invention. Infrastructures are relational and ecological, frequently appearing invisible, as they're oftentimes built to blend into the background (Star, 1999; Star and Ruhleder, 1996). While most people inventing in social media environments would likely never consider Amazon Web Services (AWS), their wall's electrical outlets, or their region's electricity plant to be partaking in their invention process, but they wouldn't get far without any of them. A typical social media user's everyday invention habits rely upon the physical infrastructures that surround them to be reliable, to be acting in unison, and to not break down. A variety of physical infrastructures shape and contribute to the rhetorical invention that occurs in social media environments: servers, "the cloud," microprocessors, silicon, semiconductors, electrical grids, power cables, fossil fuels, sunlight, sensors, trees, even human labor. It's easy to overlook physical infrastructure, but social media invention couldn't happen without it, and as such, it's a critical part of any act of invention that occurs in these spaces.

### *Discursive Infrastructures*

Discursive infrastructures can be documents, texts, forms, records, reports, scripts, documentations, or even archives that support everyday human functions in ways that are sometimes invisible because of how commonplace and taken for granted they can become (Frith,



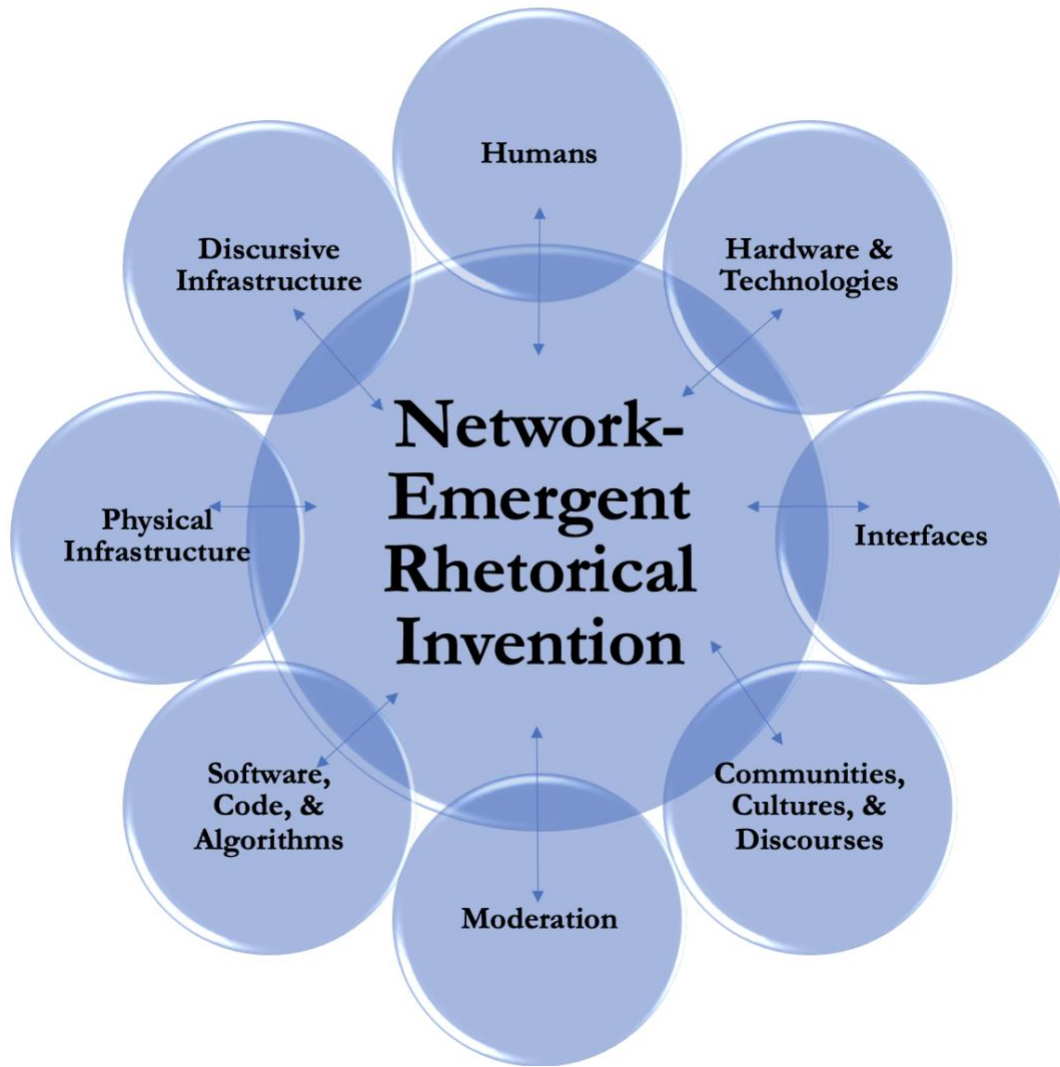
2020; Read, 2019). Discursive infrastructures are designed to not rise to most people's attention, to blend into the background as they support essential and integral functions. Importantly, though, as Star and Ruhleder (1996) point out, infrastructures are relational, and they exercise a form of agency, even as they appear invisible to the uncritical eye. Jordan Frith (2020) notes that infrastructures "are not just neutral substrates that support other practices... Instead, they shape those practices; they exert agency over everything from how we communicate to how bodies move" (406). As such, when invention occurs on social media, discursive infrastructures support processes that both directly and indirectly participate.

Additionally, discursive infrastructures such as "Rules" and "Terms of Service" documents in networked communities help attune participants to particular forms of behavior, reasserting visibly that we never compose or invent alone in networked environments (Richter, 2021). Discursive infrastructures maintain a close relationship with platforms and communities that they serve, which they help to regulate: in many ways, discursive infrastructures in social media environments such as "Rules" documents help to nurture social environments that serve the interests of their members, moderators, and the platform by orienting behavior, action, and rhetorical practices. Platforms rely upon discursive infrastructures in their "Terms of Service" agreements that allow the platform to function. When using many technology platforms, users agree to "Terms of Service" agreements that regulate their behavior on that platform, that decide who owns the content they contribute, that outline how their data will be collected, and that perform other legal and practical functions. Terms of Service agreements allow platforms to regulate the interactions that occur in that environment and allow users to know, at least in theory, what their interactions with the platform or technology might be characterized by. As such, the participation of discursive infrastructures in social media invention is far-reaching.

### ***Network-Emergent Invention: Four Key Characteristics***

To summarize, rhetorical inventions *emerge* in networked internet environments through the convergence of some combination of humans, hardware, interfaces, communities, cultures, discourses, moderators, code, algorithms, and physical and discursive infrastructures, none of which act alone or in isolation in the processes of invention. This distributed, New Materialist-inclined approach is what I call *network-emergent invention*, a conceptualization of rhetorical invention endemic to social media environments that factors in the emergent, dispersed, and shared coparticipation that is rhetorical invention in networked spaces. Network-emergent invention builds on previous models of internet rhetorical invention (see Eyman, 2015; Brooke, 2009; Carlson, 2019; Tomlinson, 2013; Pigg, 2014a; Sheridan, Ridolfo, and Michel, 2012), but is differentiated by its incorporation of insights from New Materialist theory as well as its specific and explicit focus on social media invention environments.

So, what is *network-emergent invention*? To theorize and conceptualize rhetorical invention for social media environments, I use the term *network-emergent invention* to refer to how social media texts, performances, interactions, and creations emerge from a complex collection of distributed, converging forces. Network-emergent invention understands social media invention to emerge from a network of actants that interact through the convergence of humans, hardware, interfaces, cultures, communities, discourses, code, algorithms, and infrastructures, all of which contribute to an inventive emergence (see Fig. 2.4). Network-emergent invention offers one way to consider the hybridized, ongoing, intertextual, distributed, and emergent nature of internet rhetorical ecologies that frequently characterize invention in social media environments.



**Fig. 2.4:** Rhetorical invention in social media environments arises from a distributed, emergent, and kairotic convergence of forces that transpires from entangled agencies.

By juxtaposing existing theories of rhetorical invention alongside insights from New Materialist theory and social media research, this network-emergent invention approach offers rhetoricians a more robust understanding of how invention in social media environments occurs through distributed, networked, entangled, and kairotic interactions. Network-emergent invention traces shared, ecological, and distributed agencies that converge kairotically in social media environments to allow an inventive act to emerge. Breaking with many traditional theories of invention, network-emergent invention does not locate invention as the sole realm of a single

actor or rhetor, but rather as a co-participation of an array of networked actants, all of which contribute to an inventive process that is observed today in social media environments. The distributed and ecological nature of invention online has been theorized by scholars such as Colin Brooke (2009), Damien Smith Pfister (2014), and Sheridan, Ridolfo, and Michel (2012), but social media environments demand particular attention due to their ubiquity, influence, and impact on human societies, which network-emergent invention focuses on. When invention occurs on Facebook, Twitter, reddit, or another platform, it does so in the convergence of some combination of humans, hardware, interfaces, communities, and a host of other actants, all of which contribute to an emergent resulting invention.

Network-emergent invention approaches the generation of texts, ideas, exchanges, forums, comments, videos, and feeds as a concatenating series of events unfolding together within a shared environment. Importantly, an environment's locus is not confined to one place or space, and is never entirely controlled by one, single actor, human or nonhuman, but is always a shared interaction, a co-participation and co-constitution that emerges, changes, and emerges again differently. In other words, composition in internet networks requires rhetorical invention that is *network-emergent*. Network-emergent invention, which is emergent, ecological, distributed, and shared, is also practiced every day in social media environments. It occurs when a user edits a reddit post on r/AmITheAsshole, when someone updates their Snapchat story, when a bot on Wikipedia edits a person's writing, when people quarrel about vaccines in Facebook comments, or when Gmail autosuggests an end to a person's sentence. All of these inventive emergences require some combination of humans, hardware, interfaces, communities, cultures, discourses, moderators, code, algorithms, and infrastructures as they emerge from shared networks, thus constituting network-emergent invention.

Network-emergent invention requires rhetors to assess and respond to complex, hybridized, and rapidly evolving rhetorical environments that compel response in some form, frequently through perception (“lurking”) but oftentimes through rhetorical invention (a comment, a *like*, a status update, a blog posting, a revision, an edit, a recirculation). Networks are gatherings, and when we compose in them, we compose within a gathering, a *taking-place*, a shared event with code, objects, people, discourses, and technologies. Network-emergent invention refers to the highly hybridized, fluctuating, and *emergent* nature of the internet rhetorical ecologies that frequently characterize invention in the social media environments that characterize network composition.

As a concept, network-emergent invention relies heavily on New Materialist theory, which considers connections and linkages over discrete actants, values networks over individual nodes, considers the distributed, ecological, and entangled natures of agencies, and stresses the importance of examining assemblages as a whole in addition to their distinctive parts. To showcase the contributions of New Materialism to the study of rhetorical invention, I draw upon the work of rhetorical theorists principally influenced by New Materialist writers such as Jane Bennett (see 2010) and Bruno Latour (see 2005). Rhetoricians have long engaged with New Materialist thought (see Gries, 2015; Edbauer, 2005; Brooke and Gries, 2017; Booher and Jung, 2018), and have drawn on both Bennett (see Jones, 2019; Stormer and McGreavy, 2017) and Latour (see Lynch and Rivers, 2015; Lynch, 2012; Walsh et al., 2017; Richter, 2020b; Pflugfelder, 2015) extensively. Network-emergent invention synthesizes and builds upon existent New Materialist-inclined models of invention from scholars such as Thomas Rickert (2013), Sheridan, Ridolfo, and Michel (2012), and Colin Brooke (2009), while simultaneously adapting them to particular environments such as a Twitter feed or a YouTube comments

section. Therefore, even as New Materialist-inclined models of rhetorical invention position invention as a distributed, ecological act, they don't foreground the dynamic processes of social media environments in the way network-emergent invention strives to account for.

To close this chapter, I offer four key characteristics of network-emergent invention that are central to social media invention, network composition, and network composition pedagogies. Invention in social media environments is networked, distributed, emergent, and kairotic. Additionally, the agencies that contribute to network-emergent invention are entangled.

### *1. Network-Emergent Invention is Networked and Distributed*

As outlined in the previous section, humans co-participate in inventive processes with an array of networked and connected technologies, interfaces, cultures, algorithms, and other actants. Network-emergent invention takes the first part of its name from the connections, linkages, assemblages, and relationships that allow something to emerge in the first place: networks. Importantly, network-emergent invention does not conceive of invention as the solitary activity of a single creator, but as a co-participation of multiple constellating actants, all of which are entangled together as they contribute to an inventive occurrence. In internet networks, humans encounter a highly hybridized constellation of multiply intertwined actants that they must navigate, assess, maneuver, interact with, and respond to (see Richter, 2020a). Humans are not the center of the action, though, but rather are one contributing actant in the convergence of a multitude of entities that form relationships, connections, and interactions, all of which contribute in various ways to a resulting invention.

Consideration of networks helps to trace shared, overlapping, collaborative actions, as “a network frame looks at the larger rhetorical social scene: at the collections and interactions of

various communicators and communications” (McKee and Porter 2017, 20). These actors are not all humans, but rather are a series of networks and assemblages that include humans, code, software, silicon chips, laptops, interface features, undersea cables, “Terms of Service” documents, discourses, internet servers, even cultural practices. In other words, participants are not all definitively discursive or material, but are a hybrid interaction of various actants gathered together kairotically, synchronously, emerging in a particular moment, place, and space. Jane Bennett (2010) writes that “alongside and inside singular human agents there exists a heterogenous series of actants with partial, overlapping, and conflicting degrees of power and effectivity” (33). The capacity to affect others in a network, to build connections and relationships that change how other entities work, is shared across a series of actants rather than being located in one central actant alone. As such, power and influence are distributed across the network, as each entity contributes but does not fully control what results or emerges.

When invention is distributed in digital networks, discrete entities such as a keyboard, a data center, a tired human, an iPhone, a charging cable, a pop culture reference, a silicon chip, and a string of other actants come together to produce a single Tweet (see Fig. 2.5). The activity associated with the rhetorically inventive act of producing the Tweet relies on the string of actants, all of which form a network that makes the invention possible. No actant in this scenario is extraneous or superfluous; the inventive process, at least in its current form, can’t occur without infrastructure, without a human, without computer code, without someone to maintain the platform; and even more so, it can’t occur without all of these entities being united in a network, with each distributed actant exercising partial, partisan, finite, and limited agency on the resulting invention (See Fig. 2.6). A Tweet can’t be posted on Twitter without a complex network of humans, technologies, interfaces, cultures, discourses, and infrastructures to support

its emergence. Additionally, this list is incomplete: the network stretches far beyond what one human can list in writing, all of it necessary for the inventive act to occur.



**Fig. 2.5 and Fig. 2.6:** An array of forces converge to allow a single Tweet to emerge.

As such, network-emergent invention is distributed, relying upon a complex, dynamic array of actants that come together in a particular moment to make a particular act of invention possible. A user posting a short video to TikTok can't make a quality video if their smartphone isn't performing, if they don't have an internet connection, if the platform application is glitching, if their creative inspiration is waning, if existing discourse conventions leave them uninspired, or if a moderator has suspended their account. For Latour (2005), "action is dislocal," and is "distributed, variegated, multiple, dislocated" (60). The entire network needs to be assembled if invention is to occur, and yet, invention happens countless times each day.

## 2. *Agencies in Network-Emergent Invention are Entangled*



No one acts alone when inventing online. In network-emergent inventive acts, agency is always shared, and we always act *with* and not *on* the world. While identifying invention as distributed is an important first step, it is important to also acknowledge that agency is always *shared* agency in some way, and that no entity acts completely alone. For instance, when a human takes a walk to check their mailbox, they rely and co-act with shoes that keep their feet clean, with gravel that makes their path easy to walk on, with oxygen molecules that allow them to breathe, and with institutionalized systems of government postage requiring taxation and address coordination. We become entangled with the environments that surround us, and we act with those environments even if it might seem at times as if we are acting on them or apart from them. Rickert (2013) argues that agency is “*material, affective, ecological, and emergent*” (129). Humans can never escape their connections to their world and to their surroundings, and the ways that we imagine rhetorical invention should reflect and account for these entanglements.

Invention within networked spaces entangles entities, too. The term *entanglement* is used by Timothy Morton (2011) to refer to a state in which entities are “dependent on each other,” a state in which they are interconnected to such a degree that it is difficult to tell where one ends and another begins (19). Clearly, in social media environments, entities such as a writer and an interface are not the same thing. They are *entangled* when engaging in rhetorical invention, however, and when tracing an inventive rhetorical act, there is no definite line in which they are separated: they are entangled, and act together in an interconnected manner throughout. Thomas Rickert (2013) asserts that “the stable self who articulates him- or herself through writing becomes osmotic, blurring into the surroundings, with the environs and particularly other people taking an active role in production” (100). In other words, when we engage in a process such as writing, *we write with* our surroundings, *with* the pencil or keyboard in front of us, *with* the mood

and ambience set by birds outside our windows, *with* the embodied physical positions our chairs force us into, *with* the social and cultural influences supplied by others that we can never part from.

In their New Materialist approach to rhetorical theory, Stormer and McGreavy (2017) begin “from an orientation that presumes connectedness and attachment between all manner of things,” that argues “action can ever and only be *acting with* the world, not simply *acting on* it” (3). In other words, participation in networks is always a coparticipation; agencies are always shared; and action is always co-action. We are entangled with our environments, and we can’t escape from them. When a reddit user writes on r/AmITheAsshole, they are impacted by the reddit interface, by the algorithms that sort comment visibility, by upvotes from others, by community rules and pressures, by platform management, by their own experiences with the issue at hand, by cultural forces, and by a whole host of other factors. The writer acts *with* these forces in the composition of a post, as the entities are entangled for the duration of the invention act. Invention requires entanglement, even if it’s not convenient to mention it. The distributed agencies that converge for rhetorical invention to occur are entangled together, each contributing in some way, and these entanglements enable network-emergent inventions to *emerge*.

### 3. *Network-Emergent Invention is Emergent*

Network-emergent invention is emergent, meaning that social media texts and participation arise from an interaction of multiple participants, not from any one participant acting on its own in an empty void. Humans do not invent alone *onto* the world, but rather work with their worlds to create. As such, no two acts of invention are completely alike. A person can copy a Facebook status into an Instagram caption, but the resulting invention is different, as

static writing alone is only one part of network-emergent invention: the interface will structure and spread the invention differently, the rules for participation maintained by both platform and community are different, the technological affordances and limitations are different, and the networked audience will be composed of different people who will in turn interact with the invention in divergent ways. No central actor is fully responsible when something emerges, but instead, all contribute to a materialization that requires multiple entities to come about.

*Emergent* as a term lends network-emergent invention emphasis on the convergence of multiple actants coming together to contribute to rhetorical invention, rather than one actant performing invention on the others. In addition, *emergent* serves as a reminder of the materiality of invention, which relies upon discursive, cultural, and social influences, but also requires material grounding in the form of infrastructure, technologies, bodies, even code to support an emergence. When something emerges, it does so not only at a convergence of agencies, but at a convergence of forces that come together only momentarily, as the rhetorical ecology will not ever be the same again, and the context, timing, and circumstances that allow a particular thing to emerge are unique to a given moment.

#### 4. *Network-Emergent Invention is Kairotic*

Lastly, network-emergent invention is kairotic. Kairos usually is defined as “opportune timing” or “ideal timing” for a particular action. In many cases, though, kairos is understood to be concerned with context, with particular situations, with responses to unique cases, and to a convergence of particular events in a given moment. It’s important here to consider that when any of the actants that contribute toward a network-inventive act change— such as changes to the interface, to the social environment, or to the discursive environments—the resulting

invention is almost certain to change, too. Invention in different subreddit communities requires different understandings of kairos, as does posting a Facebook status, commenting on a restaurant's Yelp! page, or complaining about your neighbor on Nextdoor. The timing (chronos) contributes, but so does the cultural moment, the "mood" of a social network, the previous posts concerning a given topic, the rhetorical ecology on other sites, the popular narratives and counternarratives, or the tone of what a given user has already read or heard about. All of these factors converge in kairos, a given context and situation that is unique, temporary, contingent, and singular.

As has been established, network-emergent invention relies upon a particular convergence of entities at a specific moment. Digital culture moves quickly, and posts oftentimes are made in response to a particular moment and exigence that changes day-to-day, sometimes even hour-by-hour. The kairotic nature of network-emergent invention demands that it frequently be multimodal as well, as rhetors must respond with different media for different situations and rhetorical ecologies. In addition, the kairotic nature of social media invention serves as a reminder of its similarities to ancient Sophistic approaches to invention, as both Sophistic and network-emergent invention value kairos, as well as context, polyvocality, sociality, collaboration, belief, and partisanship. Network-emergent invention is kairotic, emerging from a particular context that is composed of a rhetorical ecology made up of some combination of humans, technologies, interfaces, communities, algorithms, and other actants.

### **Conclusions: Network-Emergent Invention & Network Composition**

What does an understanding of network-emergent invention tell us about the larger concept of network composition or about network composition pedagogies? People inventing in

digital networks, including students inventing in networked social media environments as part of a composition course, enact network-emergent invention whether they are aware of it or not. Network-emergent invention is an integral part of network composition, as invention is a vital process for participation in digital networks. Insight into how rhetorical invention occurs in social media environments helps inform the larger concept of network composition in three key ways.

First, tracing the process and convergence that occurs when writers, technologies, interfaces, code, algorithms, infrastructures, and other actants come together provides digital rhetoric and composition scholars insight into how people compose, write, and invent in networked social media environments. Invention in social media environments is of great interest to both the public and to higher education, as social networks mediate information, communication, politics, and social lives in ways that they never have before. Second, considering network-emergent invention helps to inform what pedagogies centered on internet invention should value, practice, and enact. When student writers engage in network composition initiatives, such as the Slack learning network that is featured in Ch. IV and Ch. V, they engage in network-emergent invention as a core part of the pedagogy. In other words, the process of engaging in network-emergent invention is largely the same process that is responsible for the learning that occurs in network composition pedagogies (see Ch. IV and Ch. V). Lastly, insights into rhetorical invention in social media spaces helps showcase the limitations and challenges that accompany both network composition and network composition pedagogies, as is explored more thoroughly in Ch. VI, where network composition's connections to accessibility, digital aggression, digital racism and misogyny, and data/privacy are investigated.

In a dissertation with a primary research question of *How do student composers invent within networked social media environments?*, it's vital to first establish the dynamics of invention in social media spaces. Rhetorical invention is a part of human life that will no doubt evolve over coming decades. As Harrington (1962) professed in the 1960's, "each generation of rhetoricians must examine anew the concept of rhetorical invention" (373). Network-emergent invention traces social media invention processes as they emerge from a network of interacting actants through the convergence of humans, technologies, interfaces, infrastructures, cultures, discourses, code, algorithms, and infrastructure, all of which contribute to an inventive emergence. Invention on the internet is never static, and is rarely consistent, but it's nonetheless important, and means more for higher education, for literacy, and for the public than it ever has before. Communication, information consumption, social interaction, and cultural participation are increasingly occurring online, and insights into how invention occurs on social media stand to help shed some level of light on the implications of these important processes.

## CHAPTER THREE

### METHODS

As more and more instructors in composition studies and beyond engage in pedagogies that involve using social media tools for learning (see Mina, 2017; Vie, 2015; Faris, 2017; Davis and Marsh, 2012; Fife, 2010; Greenhow and Lewin, 2016; Herro, 2014; Van Den Beemt et al., 2019), the opportunity to consider what these tools can help students to *do*, as well as how best to make use of these tools in our classrooms, becomes more important than ever. So far, this dissertation has defined *network composition* and offered one theory for how composers invent in social media environments through *network-emergent invention*. In other words, we have established the exigence and importance of social media pedagogies in Chapter I's Introduction, and then established what factors are at play when composers invent in social media environments in Chapter II's formulation of network-emergent rhetorical invention. Here, in Chapter III, I introduce a qualitative study examining *how* invention actually occurs for student composers in social media learning communities in the form of data and insights emerging from an actual network composition pedagogical initiative. In a dissertation pursuing a primary research question of *How do student composers invent in networked social media environments?*, insights that are generated from student voices, student knowledge, and student experiences are of tremendous value.

In short, this dissertation features a qualitative case study with grounded theory components that draws on both emergent and *a priori* categories. A qualitative case study methodology benefits this research area best because it allows for data collection that is based on actual student writing and because it incorporates discussions with students participating in the study's pedagogy directly into its research design, ensuring that findings arise from students

themselves. Grounded theory is an inductive method of theory generation that emerges from data themselves. The qualitative case study outlined here is a modified grounded theory study that uses a loose codebook (see Appendix C). As such, it is a modified form of grounded theory research that, in engaging both emergent and *a priori* categories, results in a qualitative case study with grounded theory elements that offers insight into how student composers invent in a classroom Slack learning network. In this case, I am modifying grounded theory to make it as emergent as possible while still examining *a priori* conceptual categories that are of interest to the discipline of rhetoric and composition. These *a priori* categories will also be useful for developing social media pedagogies, while additionally providing more general insight into how composers invent rhetorically in social media environments. The *a priori* conceptual categories that this study pursues, which include Digital Literacy, Learning Ecology Formation, Rhetorical Invention, and Distributed Expertise, are all topics of interest for social media pedagogies as well as for scholars and instructors in fields of rhetoric, composition, education, and communication. Although I went into the study knowing I wanted to examine the four *a priori* categories, I remained open to their evolution and revision based on emergent data and evidence as well as multiple rounds of iterative coding. This qualitative case study features iterative data collection and theoretical sampling and involves conducting interviews with student participants as well as collecting records of Slack participation and reflective journal entries as artifacts for analysis.

The qualitative case study collects data from a real iteration of a network composition pedagogy in action: two ENG 1030: Composition & Rhetoric courses taught at Clemson University in the Fall 2021 semester. This study went through the IRB approval process and was revised based on IRB office feedback in an iterative, multistep process. The project was eventually approved, as it was considered exempt by the Clemson University Institutional



Review Board #2021-0344 under categories D1 and D2 (see Appendix A). These Composition & Rhetoric courses are typical First Year Composition courses that focus on introducing college students to writing, research, rhetoric, and digital composing, and the courses adhere to the Slack network composition pedagogy outlined and delineated in Chapter I. The qualitative case study collected data through interviews with students, through analysis of student reflective journals, and through analysis of student Slack participation itself.

The data was coded iteratively and reflexively as both the course and the case study progressed, adhering to grounded theory's emphasis on recursive, self-informing data collection and analysis methods. As initial and focused codes emerged, I engaged in a rigorous process of memoing in the Dedoose qualitative research software platform. Dedoose is a for-profit qualitative coding platform that is designed with researcher needs in mind that allows for data to be uploaded, for codes to be applied, and finally for codes to be indexed, catalogued, visualized, and quantified. This process resulted in the emergence of a number of conceptual categories that will be summarized, applied, and generalized for social media pedagogy practitioners in succeeding chapters. I also paid particular attention to *a priori* categories and engaged in a process of recursive memoing that allowed collected data to inform the further collection of more data in a recursive process. For instance, data collected in early weeks of Slack participation inspired five suggested discussion questions that were added to the Reflective Journal assignment prompt, and both Slack participation data and the Reflective Journals inspired questions that were asked during the interviews that were conducted with student participants.

In what follows, this chapter briefly overviews qualitative case studies and grounded theory methodologies. Then, this chapter outlines its data collection and data analysis methods. Ultimately, this qualitative case study results in the building of a theory of network composition,

and it additionally provides insight into “best practices” for network composition pedagogies through analysis of the emergent and *a priori* conceptual categories that emerge from student-provided data.

### **Qualitative Case Studies & Grounded Theory Research: A Review**

The methods that a study uses frequently serve as its conceptual and epistemic epicenter (Smagorinsky, 2008). The discipline of rhetoric and composition has a long history of engagement with qualitative research methods (see McKee and Porter, 2009; Nickoson and Sheridan, 2012), as testified by research published in journals such as *Written Communication*, *College Composition and Communication (CCC)*, and *Composition Studies*. However, as Richard Haswell (2005) points out in “NCTE/CCCC’s Recent War on Scholarship,” professional organizations in the discipline could do far more to support this sort of qualitative inquiry.

Qualitative research methods use interpretive frameworks to inform research problems in natural settings or contexts relating to how humans function and create meaning. Qualitative research methods frequently foreground the voices of participants, work inductively and deductively to establish categories and themes, create a complex description and interpretation of a problem, and work toward contributing to a larger discipline or conversation among researchers (Creswell and Poth 2018, 43). It is important to qualitative research to observe human activity in its natural setting and context, and to view the researcher as a key, subjective instrument in their work examining documents, observing behavior, and collecting participant interviews. An important and popular form of qualitative research is grounded theory inquiry, which this dissertation’s study takes up in modified form.

Grounded theory was first formulated by Barney Glaser and Anselm Strauss in 1967 in their book *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Glaser and Strauss (1967) argued that “the discovery of theory from data... systematically obtained and analyzed in social research” to be capable of providing researchers with “relevant predictions, explanations, interpretations, and applications” (1). For Glaser and Strauss (1967), a grounded theory is generated systematically from data that is coded for emergent conceptual categories, which involves a process of constant comparative analysis, memoing, theoretical sampling, adaptive data collection procedures, and multiple rounds of coding (37). Grounded theory research allows codes, categories, and a theory to emerge from data, and provides opportunity for refining categories in interesting, innovative, surprising, and unanticipated ways.

A student of Glaser and Strauss, Kathy Charmaz, updated their grounded theory methodology to be more amenable to theoretical developments in social constructivism, postmodernism, and cultural theory in her 2006 book *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Charmaz’s contribution to grounded theory research, and to the study articulated in this dissertation, occurs primarily in its social, constructivist, and symbolic-interactionist theoretical approach. Charmaz (2006) writes that grounded theory is a “construction-yours,” as each development in data collection, memoing, comparative analysis, and code refining guides further interpretation and data collection (xii). For Charmaz (2006), grounded theory is valuable for its emergent discoveries and its social, subjective meanings, as well as for its emphasis on implicit meanings, subjective interpretations, and collaborative interaction with participants to further develop the details and complexities of emergent conceptual categories (7; 10). In this study, I use Charmaz’s (2006) approach to orient

data collection and analysis, working from data toward codes and finally to conceptual categories (which are generally similar to the *themes* that are referenced in other qualitative approaches).

This dissertation's study deviates from traditional grounded theory in that it makes use of both emergent and *a priori* categories. Otherwise, however, it follows the general research, analysis, theoretical sampling, and recursive data collection procedure that traditional grounded theory studies generally practice. The *a priori* categories that this study examines are Learning Ecology Formation, Distributed Expertise, Rhetorical Invention, and Digital Literacy. These *a priori* categories were selected because of their importance to the discipline of rhetoric and composition as well as their potential to help the study to pursue its core research questions. Grounded theory research traditionally features only emergent codes, and as this study pursues emergent as well as *a priori* categories, it is categorized as a qualitative case study with grounded theory elements rather than as a traditional grounded theory study. As a method, grounded theory offers a number of benefits beyond the formal formulation of a theory, including the valuing of participant voices, the generation of insights grounded in real data, and room for human complexity, plurality, difference, and heterogeneity to be valued parts of the research process.

### **Inventing Network Composition: An Overview of the Qualitative Case Study**

I collected data for this qualitative case study with grounded theory elements during the Fall 2021 semester in two First Year Composition courses at Clemson University. This qualitative study asked students to respond to a variety of questions surrounding their participation in the use of Slack as a social media learning tool, and additionally used their actual participation in a Slack learning network as data for coding and analysis. Participation in this

study was limited to students enrolled in my ENG 1030 course at Clemson University in the Fall semester of 2021. While I did not collect much formal demographic data from participants in this study, there was an even gender breakdown of 11 female participants and 11 male participants. Additionally, all participants were enrolled in a first-year level composition course at a predominantly white university (PWI) in the American south during the 2021-2022 academic year. As such, this study and its findings should be understood to draw on a sample of predominantly (though certainly not exclusively) white first or second year students at a competitive R1 research university in the southeastern United States.

The study was built with three primary points of data collection obtained through human subjects research requiring Institutional Review Board (IRB) approval (#2021-0344): (1) Analysis of Slack posts and discussions throughout the semester, (2) Analysis of student reflective journals documenting experiences with the network composition initiative in the First Year Composition course, and (3) Interview data obtained from student participants (9 Zoom interviews conducted in Fall 2021). The study employed a modified grounded theory approach to "generate or discover a theory" based upon data and experiences supplied by participants (Creswell and Poth 2018, 82). The three forms of data collection (the interviews, the Slack posts and discussions, and the reflective journals) were designed, structured, and administered with a grounded theory approach in mind. In total, 22 students chose to participate in the research study, with 9 agreeing to participate in interviews. In total, I collected, coded, and analyzed over 396 pages of data, including 146 pages of Slack participation data, 139 pages of Slack Reflective Journal data, and 111 pages of interview data.

This study's purpose was to build a grounded theory for instructors of rhetoric and composition in college classrooms illustrating how they can engage social media tools in their

classrooms. The goal of this research was to collect data from students in interviews, in reflective journals, and in Slack posts in a classroom learning network, and then to code that data to build a theory concerning how students invent in networked environments, resulting in insight into how instructors can tailor their pedagogies to serve these networked writing practices.

I introduced the research study to students in class on September 7th, 2021. In class, I introduced the goals, aims, and procedures of the study, and then explained how students can voluntarily participate. When introducing this study, I took special care to ensure students knew that they were in no way required to participate as part of the class. I explained to students how data was to be collected (qualitative coding of student journals reflecting on the experience of writing in a Slack network, coding of actual Slack posts themselves, and coding of one-on-one Zoom interviews with students). I then fielded questions from students concerning the study and explained how they can revoke consent for their information and participation at any time and for any reason at all. I then distributed the informed consent document, asking students to consider signing the document if they consented to participation in the research study. I implemented informed consent procedures based on disciplinary best practices adhering to the *Conference on College Composition and Communication's* "CCCC Guidelines for the Ethical Conduct of Research in Composition Studies" as well as Clemson University Institutional Review Board guidelines (CCCC, 2018). I gave students time in class to ask me questions, to critique and respond to the informed consent document, to interrogate the study design and procedures, and to consider the benefits and potential risks of participation. No student was pressured or compelled to participate, and it was made absolutely and unequivocally clear to students that their participation was not required in any way, and that if they chose not to participate, they would not be penalized in any way.

In the end, 22 students consented to participate in the study out of the 42 students officially enrolled in the two Composition & Rhetoric courses.

In sum, the entire research process and timeline for data collection/analysis for this study consisted of:

- Informed Consent documents administered: September 2021
- Coding of Slack posts: September-January 2021
- First Reflective Journal assignment submitted: October 2021
- Interviews with student participants: November and December 2021 in Zoom
- Second Reflective Journal assignment submitted (with updated suggested questions informed by earlier data to reflect theoretical sampling): November 2021
- Qualitative coding of collected data: September, October, November, December of 2021 and January of 2022 (featuring theoretical sampling, primarily in interviews and in suggested questions for reflective journal assignments).

The study's data collection period lasted from September of 2021 until December of 2021, with coding and analysis occurring from September 2021 until March of 2022. Throughout the study design, data collection, and data analysis processes, I made explicit and intentional effort to factor my own researcher positionality into the study implementation and interpretation. As a white, cisgender, straight man teaching students from a diverse range of backgrounds, my positionality undoubtably impacted my pedagogy, my relationships with students, my ethos as a researcher, and my interpretation of data collected over the course of this study. As one mode of addressing researcher bias, I include copious quotations from participating students in the Findings chapters of this dissertation (Ch. IV and Ch. V) featuring the voices of a diverse range of participants from a variety of ethnicities, backgrounds, and positionalities. In this way, a diverse range of perspective, identities, opinions, and approaches appear in the study. These quotations from participating students include insight from across spectrums of gender, race, sexuality, and other positionalities, helping to diversify the perspectives the study presents beyond one researcher's interpretation alone.

## **Data Collection Methods & Procedures**

I collected data for this qualitative case study in three ways: (1) collection of students' posts in the shared classroom Slack network, (2) collection of student-created reflective journal entries detailing their experiences participating in a Slack learning network, and (3) in interviews with student participants conducted over a Zoom video call.

### *Collection of Slack Posts*

Data for this qualitative case study was first collected through analysis of Slack posts (see Fig. 3.1). This form of data collection was the most straightforward. As part of the First Year Composition course, students participated each week in a shared Slack network in what amounts to a major participation grade for the course. As part of this semester-long assignment, students "participated" in Slack each week with some sort of participatory action. Students drew from a "Modes of Participation" document that provided them with participation actions that they could use to contribute to the classroom learning network in some way, or students were free to create their own "Modes of Participation" if they wished. All of the "Modes of Participation" asked students to write, compose, or create in some way that concerns a topic of interest to the First Year Composition course, including participation related to rhetoric, literacy, composition, persuasion, the writing process, the emotions of writing, responses to writing, writing feedback, revision, collaborative writing, groupwork, or writing in online environments. As participation in Slack is the primary form of networked, social learning that students engaged in during the Fall 2021 semester, and was the focus of this study, this form of data collection was important to consider as a primary source when developing a grounded theory. These Slack posts also



coalesced well with the theoretical sampling procedure that grounded theory modes practice, as students were able to write about specific posts they've created in their reflective journals and the researcher was additionally able to ask students to refer to specific posts, sentences, links, and actions in interviews to further saturate an emergent code.

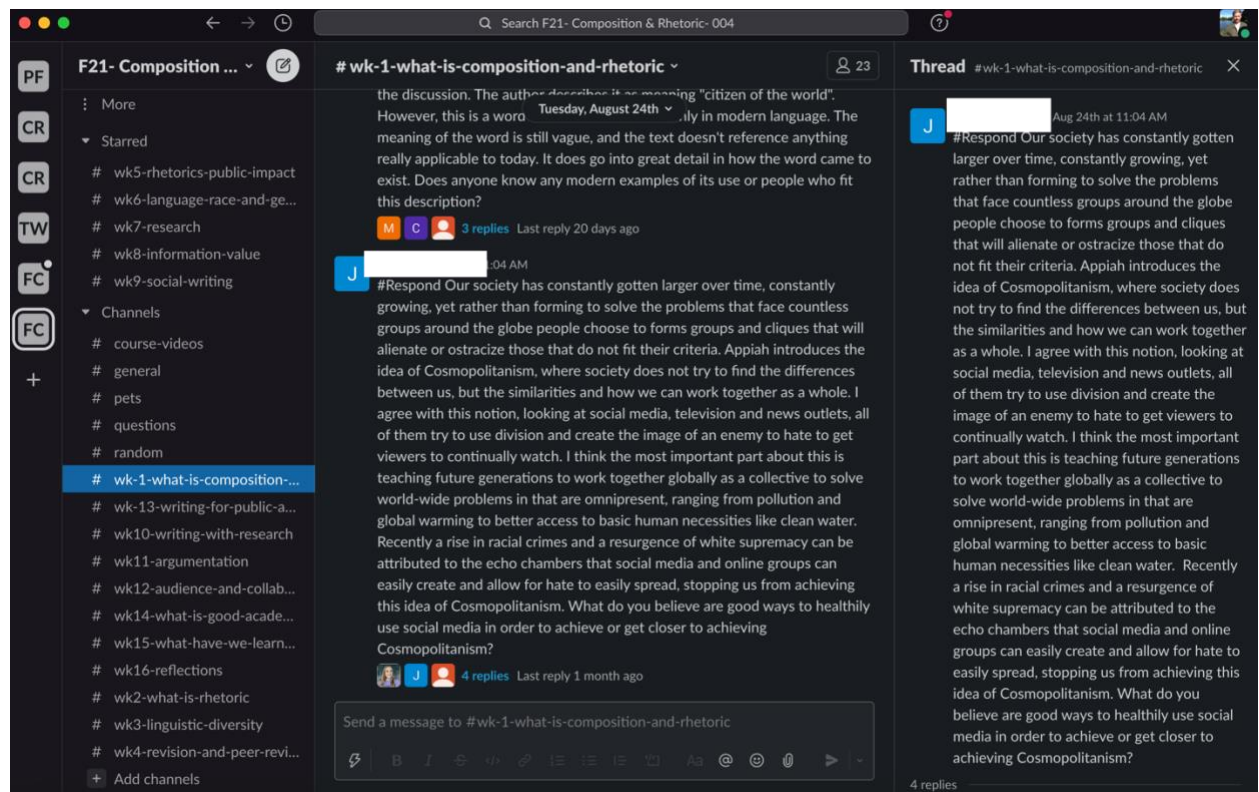


Fig. 3.1: A screenshot of Slack participation data from Jacob Richter's Fall 2021 Composition and Rhetoric course.

I then qualitatively coded data collected in Slack posts for emergent themes. During the semester and during the process of data collection, I copied Slack posts from study participants into Dedoose and coded them for emergent and focused codes before grouping the codes into conceptual categories. During the 16-week semester, I engaged in coding, memoing, and theoretical sampling, extracting Slack posts and comments from participating students into files

that were uploaded into Dedoose for purposes of coding. For each of the 15 weeks of the study, in roughly two-week increments, I went through and extracted participating students' Slack posts and comments into text files that were then uploaded into Dedoose and coded for open and focused codes before synthesizing them together to form conceptual categories. This period of coding also informed questions that were asked of students in reflective journal and interview data collection procedures as part of a theoretical sampling effort. Along the way, I engaged in an extensive memoing process, where I charted emergent codes, jotted down notes, engaged in constant comparison between codes and categories, and tracked evolutions, developments, and changes to each of the emergent conceptual categories in addition to the four *a priori* categories.

At the end of the course, I collected all participating students' Slack posts into a single file. The Slack channel was downloaded at the end of the semester into a password protected external hard drive as a single file. This downloaded Slack channel file was stored on the secure external hard drive, which did not leave the researcher's Clemson University office or home office. After this process was complete, I deleted the Slack channel itself, keeping only the writing of participating students on the secure external hard drive after the conclusion of the semester.

### *Collection of Reflective Journals*

Data for this study was also collected through collection of student-produced reflective journals that are part of the First Year Composition curriculum. Student reflective journals were collected twice in the semester during the normal operations of the First Year Composition course: during the 6th week (the beginning of the semester, as students were still becoming familiarized with Slack and with digital writing in the course) and during the 14th week (at the

end of the semester). These reflective journals are part of the normal functions of the course, and all students enrolled in the classes critically reflected on their digital writing as part of this assignment, with students who consented to participate in the study simply having their reflective journals collected and coded qualitatively in Dedoose.

The two reflective journal assignments that were submitted as part of the course were 3-4 page critical reflections on the experience of writing in a Slack channel. The reflective journal assignment was a 3-4 page reflection that students submitted in writing in the course's Learning Management System. The reflective journal entries from students consenting to participate in this study were stored in a folder on an external hard drive that was password protected. Once participants submitted a reflective journal entry into the course's LMS as part of the normal functioning of the course, I transferred the submitted Microsoft Word or PDF files of participating students to a folder in a secure external hard drive to keep the data safe, organized, secure, and private. I also at this point removed the participant's name from the document, and assigned a number designation to it (ie. Reflective Journal #3, Reflective Journal #8).

Open-ended questions for the reflective journal portion of data collection included questions such as:

- *What was your process like when composing a post in Slack?*
- *How did your experience of the network's social dynamics change throughout the semester?*
- *What sorts of emotions did you feel as you wrote and conversed with others in the networked discussion?*
- *Did you learn anything through sharing stories, experiences, responses, or reactions in Slack with your peers?*
- *Did you feel that interacting with others in Slack was beneficial to your learning of writing, rhetoric, or revision?*
- *How did you take advantage of social media affordances (commenting, liking, tagging, messaging, linking) to learn alongside and with others?*

A full list of questions provided to students during the reflective journal entry assignments can be found in Appendix D.

### *Collection of Interviews*

Lastly, I collected data through interviews with students enrolled in my Composition and Rhetoric class who were participating in the course's Slack pedagogy. Interviews are standard fare for grounded theory research and are generally an effective means of collecting data relating to human experiences of a phenomenon. Interviews allow researchers to gather enough data to allow for insights and themes to emerge, as well as to inform other pillars of data collection in grounded theory's generally recursive process. Interviews help to engage and account for the diverse local worlds, cultural complexities, multiple meanings and realities, power imbalances, and emotions, beliefs, and values of participants that are valued by researchers like Charmaz (2006). Interviews also help to build toward saturation, as there is ample opportunity for researchers to ask targeted and specific questions to more readily explore an emergent code or conceptual category.

I conducted one-on-one interviews with students about their writing process in our shared Slack network in 30-minute Zoom calls from November-December in the Fall semester of 2021. Students who had signed the informed consent document earlier that semester were eligible for participation in interviews and were recruited verbally in class sessions as well as through follow-up emails from their instructor. Interviews with students were conducted during the semester, from roughly ten weeks into the course until the end of the course, after about fifteen weeks or so. In total, 9 interviews were conducted with student participants. The interviews occurred on the digital video calling platform Zoom. They consisted of the researcher asking the

participant a series of questions. While on the Zoom call, the researcher and student looked at (using Zoom's "share screen" feature) the Slack network and the Slack interface in a web browser (or however a student uses Slack for the class). Students who participated in the study, and who volunteered to participate in interviews, signed up for a pre-scheduled time slot in a Google Doc. Later on, the interviews were transcribed with Otter.ai software and were coded qualitatively in Dedoose.

In adherence with grounded theory's theoretical sampling approach, data that was collected informed the collection of future data. Interviews represented a prime opportunity for the saturation of emerging codes and categories, as the researcher could directly ask participants about their writing in reflective journals and about particular decisions made in Slack. For instance, the "Inventing Rhetorically to Comment on Society/Politics/Culture" and "Storytelling/Personal Experience as Evidence" codes emerged early on in some of the first Slack participation data and reflective journal entries that I began coding. Interviews being conducted in subsequent weeks allowed me ample time, space, and contact with participants to ask questions about these emerging codes and to explore their details, contours, explanations, interpretations, and relationships between codes. These emerging codes influenced additions to the questions that I asked during interviews, including questions such as "What were your social interactions like in Slack?," "Did you learn anything about academic writing in your Slack interactions?," and "Did you find yourself monitoring your Slack posts after you'd posted them?" Similarly, I engaged in theoretical sampling throughout my tracing of the "Teaching Someone" code, which emerged relatively early on in the coding process and was explored in even more depth and detail in participant interviews, where the "Teaching Someone" code was explored in the context of *a priori* conceptual categories such as "Distributed Expertise" and

“Learning Ecology Formation.” Many codes that emerged from Slack participation data relatively early on, including Learning Writing/Rhetoric/Composition Skills and Social Media Literacies, were saturated further in reflective journals and then were probed and explored in far more depth and detail during interviews, eventually being elevated to the level of focused code and then conceptual category as the qualitative research process evolved.

Questions that were asked of students during interviews concerned the study's primary research questions inquiring into how student writers invent and compose in classroom digital learning networks. Questions that were asked included:

- "Would you describe your typical composing process each week in the Slack network?"
- "What do you think you learned from writing in Slack each week?"
- "Would you describe your interactions with other students in the Slack network?"
- "What activities did you engage in that you would consider to be involved with 'literacy'?"
- "Did you engage in participation in Slack beyond writing, such as creating a meme, sharing a link to an outside site, sharing an image or video, recording audio of yourself speaking, or some other means of participating?"

A list of questions asked during interviews with student participants can be found in Appendix E.

Once participants signed up for an interview session in a shared, private Google Doc, I initiated a Zoom call at the scheduled time and, after a brief introduction, began recording and asking the aforementioned questions. Once the interviews began, I asked the student to open up Slack on their computer or phone for them to look at. I mentioned that the participant can share their screen if needed, but they were not required to do so (the screen recordings were not collected as data). The interviews all lasted between 20-30 minutes. The Zoom call was recorded, and the file containing the interview and its transcription represents the data collected to be coded, analyzed, and memoed in Dedoose.

After the interview, I transcribed the sound file into a written document using the Otter.AI transcription service. The study participant's name was not recorded here, but instead was assigned a participant number (ie. participant #6, participant #12). All in all, 9 interviews were conducted, recorded, transcribed, and then coded. The interviews were all stored on an external hard drive that is password protected and that remained in the researcher's office or home for the duration of the study. The recordings, transcriptions, and all other data were made available to study participants by being uploaded to a Box folder with a link that was sent to each individual participant. Study participants also were able to retract or delete their interview from the collected data at any time by simply emailing me or asking me with no justification being needed.

### **Data Analysis Methods and Memoing**

While collecting data through interviews, reflective journals, and Slack posts, I began an extensive process of qualitative data coding that practiced grounded theory's commitments to theoretical sampling, recursive data gathering, memoing, constant comparison, and multiple stages of coding (open/initial, focused, theoretical). Data was qualitatively coded using the Dedoose qualitative coding software from September-December of 2021. In line with theoretical sampling procedures, data that was coded during the collection process informed further data collection later in the process. In this study, theoretical sampling occurred primarily through questions asked of student participants in interviews that were drawn from data collected in reflective journals and in Slack posts up to that point, as well as through questions that were suggested for student participants to respond to in the second reflective journal assignment that, again, drew upon already collected data. While I did not engage in inter-rater reliability

processes for this study, data triangulation between Slack posts, reflective journal entries, and interviews help the study to establish credibility, reliability, and dependability.

First, I began coding student Slack posts for emergent themes in September and early October of 2021, a process that I sustained in November and December of that year. This early Slack participation data allowed early initial/open codes to emerge and allowed me a starting place for examining emergent codes, categories, and the four *a priori* categories. A variety of codes began to emerge during this initial or open coding stage. These early, open, or initial codes included codes such as:

- “Critical Linking”
- “Critical Sharing”
- “Making a Meme”
- “Shares an Image”
- “Teaching Someone”
- “Understanding/Summarizing a Reading”
- “Phatic Communication”
- “Cosmopolitanism”
- “Reflecting on Society/Culture”
- “Writing Intertextually”
- “Storytelling/Personal Experience as Evidence”
- “Inventing Rhetorically to Comment on Society/Politics/Culture”
- “Inventing Rhetorically to Comment on the Internet/Social Media/Culture”
- “Connecting Course Content to Social Media Example”

Unsurprisingly, this early Slack participation data tended to mirror and reflect course content: students were free to participate on their own terms, but generally discussed topics and themes that were important to early weeks of the course, such as rhetoric, the writing process, and discussions of culture, politics, and persuasion, including on the internet and on social media (see Fig. 3.2).



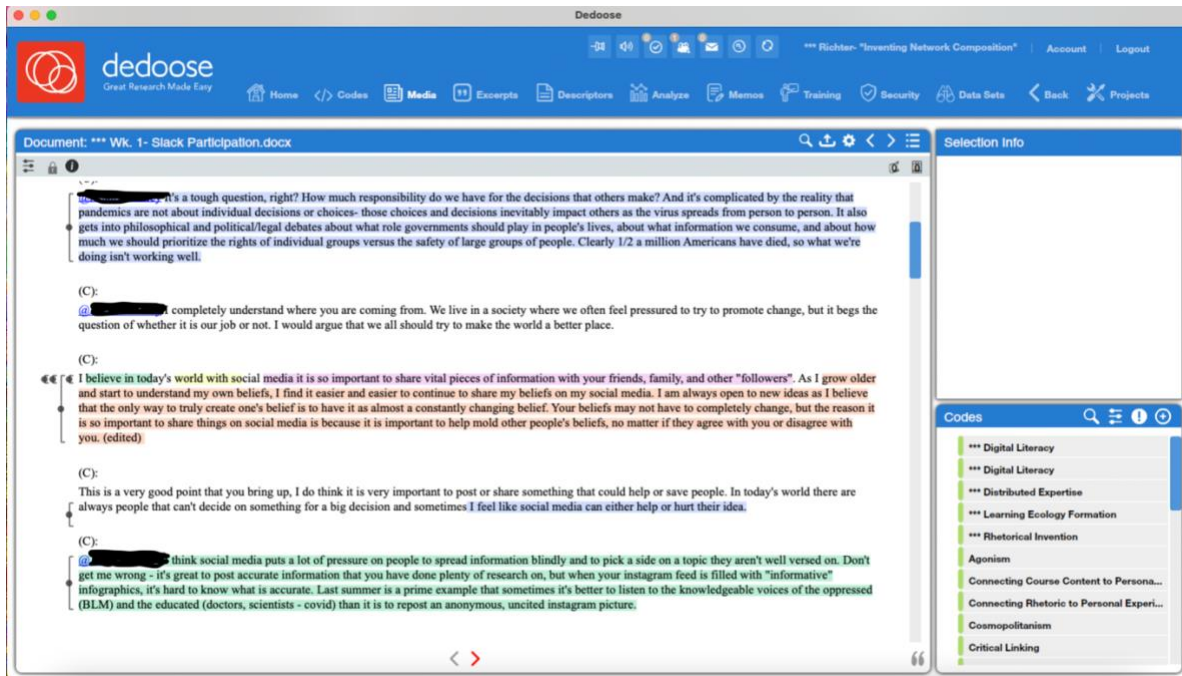


Fig. 3.2: Qualitative coding of Slack participation data from Wk. #1 in the Dedoose software platform, where codes such as “Inventing Rhetorically to Comment on Society/Politics/Culture” and “Connecting Course Content to Social Media” began to emerge.

In October, I also began to code the first reflective journal assignment that participating students submitted. This reflective journal assignment suggested five additional questions for student participants to answer that were drawn from data and codes that emerged in the first six weeks of Slack post coding as part of a theoretical sampling effort. The five additional questions drawn from Slack posts for further saturation in the first reflective journal assignment were:

- “Take a look at the Slack posts you’ve written/created so far. Have you ever used your personal experience as evidence to support a point you’re trying to make?”
- “Did you ever find yourself discussing the internet, social media, or something similar on Slack? What did you write about or think about?”
- “Did you ever make friends or get to know a classmate better on Slack? How would you describe that experience?”
- “Did you ever find yourself writing about rhetoric’s connection to media or social media on Slack?”
- “Did you ever find yourself writing about society, culture, or politics on Slack?”

I designed these questions after an extensive memoing process based on the first six weeks of qualitative coding of Slack participation data (see Fig. 3.3).

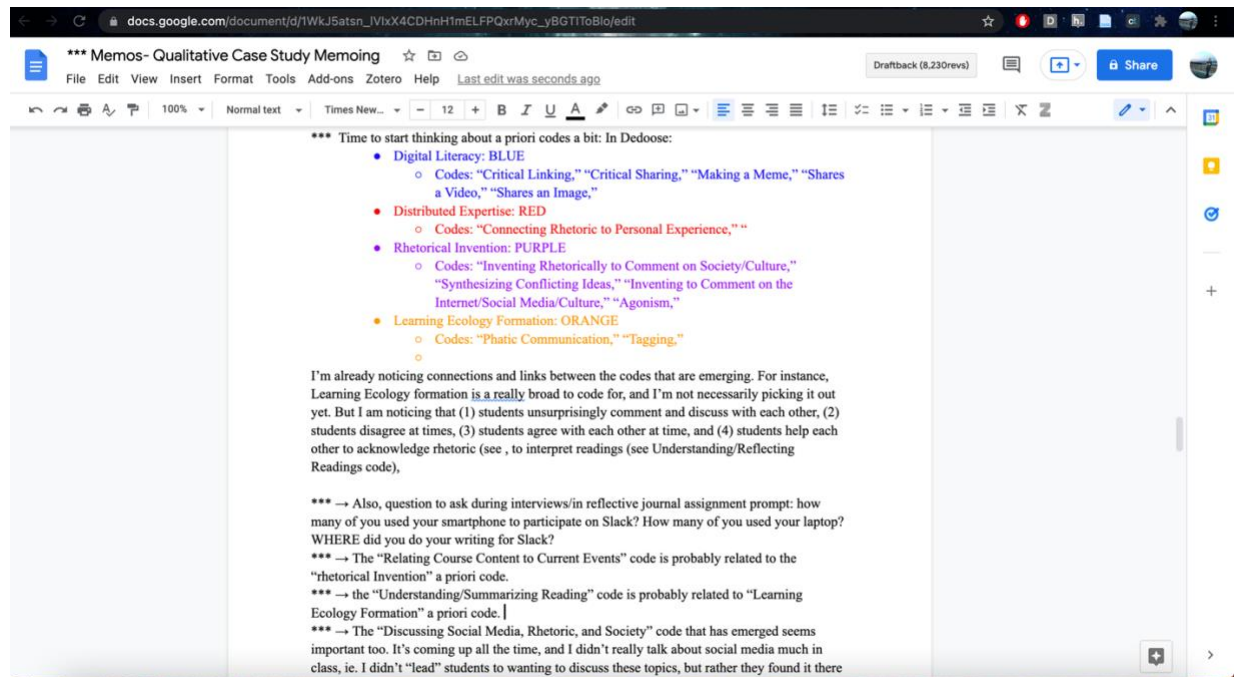


Fig. 3.3: The memoing process was vital to engaging in a constant comparison mode of inquiry, as well as for theoretical sampling. In this screenshot of my memoing process from Oct. 2021, about 1/3 of the way through the research process, I begin to fit some of my emerging open codes alongside my *a priori* categories in an early, preliminary sketch of comparative relationships.

Upon coding the first round of reflective journal assignments, numerous already emergent codes from the Slack participation data were looked for, explored, and further saturated. Additionally, a variety of brand new codes emerged. These new codes included:

- "Discussing Affordances/Challenges of Digital Writing"
- "Participating with Smartphone/Tablet"
- "Discussing the Internet Writing Process"
- "Reflecting on Social Learning or Learning From/With Others"
- "Pop Culture References as Evidence"
- "Agonism"
- "Connecting Course Content to Personal Experience"
- "Understanding/Summarizing Readings"

- “Inventing to Comment on the Internet/Social Media/Digital Culture”
- “Synthesizing Conflicting Ideas”
- “Storytelling/Personal Experience as Evidence”

I engaged in an extensive process of memoing while coding the first round of Slack Reflective Journals, noting a few important emergences in the data that contribute to my larger understanding of the *a priori* conceptual categories, of the emerging codes, and of network composition overall. First, as I coded the Reflective Journals with codes emerging from early Slack participation data, I noticed a number of codes appearing with extreme frequency, including codes like “Discussing the Writing Process” and “Reflecting on Social Learning or Learning From/With Others.” The frequency of these codes appearing in the data inspired me to narrow the codes a bit to be more specific and thus more insightful. For instance, “Discussing the Writing Process” became “Discussing the Academic Writing Process” and “Discussing the Internet Writing Process.” Similarly, “Metadiscussion of Slack Discussion” became “Commenting on Social Dynamics of Slack Discussion” and “Discussing Building Relationships with Classmates.” Finally, “Reflecting on Social Learning or Learning From/With Others” became “Teaching Someone,” “Reflecting on Listening To/Learning From Someone Else,” and “Commenting on Critical Reading of Others’ Ideas.” I engaged in constant comparison throughout, examining how each code interacted with other codes and how they became differentiated, narrowed, expanded, and supplemented by new data or by new analysis of existing data. Each of these codes was in turn narrowed into smaller codes, which then were placed conceptually in a hierarchy of open codes, focused codes, and conceptual categories that was emerging and rapidly being rearranged, adjusted, supplemented, and reorganized.

I also began conducting interviews with student participants in November. These interviews were a good opportunity to practice theoretical sampling. Initial codes and focused

codes collected during the September and October open coding phase inspired the addition of a number of questions that I asked student participants during interviews. These questions included “Did you ever find yourself either helping someone else, or else asking for or receiving help from someone else?,” “Did you ever discuss social media or technology’s impact on society in Slack?,” and “Did you ever share a link to a website on the internet, share a meme with your peers on Slack, or link a video for others to watch on Slack?” All the while, I continued coding Slack posts at both the open and focused code level. The interviews that I conducted uncovered codes such as “Commenting on Social Dynamics of Slack Interaction,” “Discussing the Emotional Experience of Writing/Writing on Slack,” and “Discussing Slack Helping to Increase Writing Confidence.” I then went back into already-coded Slack post and reflective journal data to reconsider them in light of these new codes in a recursive process.

Later in November, as the arc of the study progressed, I continued coding Slack posts and participant interviews at both the open and focused code levels. I began to observe relationships emerge between codes and emerging categories and explored them further during the theoretical sampling process in interviews and the second reflective journal assignment. In the second reflective journal assignment, which student participants submitted in late November, I added a number of questions that were drawn from earlier data collected from Slack posts and in interviews, including questions like “Did you ever write about the similarities/differences between academic and digital writing?,” “Did you ever find yourself teaching someone about some topic, idea, or concept?,” and “Has your experience or approach to participating in Slack changed at all over the course of the semester?”.

Around this time, my open and focused codes began to coalesce into conceptual categories. In grounded theory methodologies, conceptual categories emerge as focused codes

are explored, detailed, constantly compared, and finally saturated. The first conceptual category to emerge was Learning Writing/Rhetoric/Composition Skills, which was apparent after just a few weeks of coding Slack participation data but which really grew on my radar when coding the first round of Slack Reflective Journal entries. By the time the second Slack Reflective Journals were submitted, my conceptual categories had really begun to develop, and among my primary goals were to saturate these conceptual categories as much as possible with relevant codes, explication, exploration, and comparison. In line with theoretical sampling procedures, these additional questions helped me to fill out and saturate codes and categories like Learning Writing/Rhetoric/Composition Skills and Digital Citizenship that had emerged, in addition to the *a priori* categories of Learning Ecology Formation, Distributed Expertise, and Rhetorical Invention. In addition, in line with inductive methodology, the data inspired me to revise the original *a priori* category Digital Literacy to become Digital and Social Media Literacies, which is a category label more in line with the supporting data.

While most of my data collection and analysis occurred simultaneously in line with principles of theoretical sampling, about 1/4 of my coding and analysis occurred just after data collection had ended, occurring in late December of 2021 and early January of 2022. This was necessitated by the submission of 2<sup>nd</sup> Slack reflective journal entries and Wk. #15-16 of Slack participation data in the very final weeks of the Fall 2021 semester. Throughout the process, I also considered a number of potential conceptual categories that were ultimately placed within *a priori* categories, placed within emergent categories, or that remained at the level of focused code. Other potential conceptual categories that emerged, but that never rose to the level of actual conceptual category and instead remained at the “focused code” level enclosed in a

different conceptual category, included Collaboration, Agonism, Practicing Digital Writing, and Multimodal Composition.

I also sustained attention to my four initial *a priori* categories of Digital Literacy, Rhetorical Invention, Learning Ecology Formation, and Distributed Expertise. These codes were originally selected because of their importance, pertinence, and potential utility for my discipline of rhetoric and composition, as well as for their clear utility for this dissertation's aim to propose "best practices" for social media pedagogy design and practice. Upon coding for these four *a priori* categories in the open and focused coding stages, I found a few interesting developments had emerged. For instance, I noticed that codes subsumed under Digital Literacy were not appearing in anywhere near a frequency as codes for the other *a priori* categories. In the early and middle parts of recursive data collection and analysis, I grew away from incorporating Digital Literacy into the emerging conceptual schema, replacing it instead with Social Media Literacies, where the codes emerging from the data fit much better. However, as the data collection period progressed, codes such as "Discussing Affordances/Challenges of Digital Writing," "Discussing Online Video Creation Process," and "Monitoring Afterlife of a Slack Post" began appearing far more frequently, and the emerging conceptual schema needed to adjust once again based on emerging data. As such, Digital Literacy was elevated to the level of conceptual category once again and was renamed Digital and Social Media Literacies as a full-fledged category with its own accompanying codes that are supported better by the data than either would be on their own. I write more about this evolution of the Digital and Social Media Literacies *a priori* category in Ch. V.

In comparison to Digital and Social Media Literacies, I found the other *a priori* categories to be extremely well supported in the data right from the start. From the early parts of

data collection (the first six weeks of Slack participation data and the first submission of Slack Reflective Journal entries), categories like Learning Ecology Formation were supported by a variety of codes that appeared in the data, including:

- “Teaching Someone”
- “Commenting on Discussions Across Difference”
- “Agonism”
- “Phatic Communication”
- “Reflecting on Social Learning or Learning From/With Others”
- “Reflecting on Listening To/Learning From Someone Else”
- “Discussing Building Relationships with Classmates”
- “Seeking Help/Assistance/Advice”

The *a priori* category of Distributed Expertise was supported by codes like:

- “Connecting Rhetoric to Personal Experience”
- “Storytelling/Personal Experience as Evidence”
- “Connecting Course Content to Personal Experience”
- “Reflecting on Social Learning or Learning From/With Others”
- “Reflecting on Listening To/Learning From Someone Else”
- “Citing Positional Expertise”

The final *a priori* category of Rhetorical Invention was supported by codes that included:

- “Inventing Rhetorically to Comment on Society/Politics/Culture”
- “Inventing to Comment on the Internet/Social Media/Culture”
- “Inventing as a Response to a Social Interaction”
- “Discussing Invention of a Slack Post”
- “Discussing Challenges of Rhetorical Invention”
- “Discussing Social/Collaborative Rhetorical Invention”
- “Inventing with Multimedia”

From the start, these three *a priori* categories were supported by the collected data in a variety of ways, a trend that continued throughout the recursive data collection and analysis periods of the study.

While these *a priori* categories were well supported by data, there were certainly a large number of codes that emerged within these categories that were surprising, illuminating, and somewhat unanticipated. For instance, while I expected codes centering on horizontal, student-to-student relationships to be an important part of the Learning Ecology Formation category, I didn't anticipate the extent to which codes such as "Phatic Communication," "Reflecting on Listening To/Learning From Someone Else," "Seeking Help/Assistance/Advice," and "Discussing Building Relationships with Classmates" would become integral. Similarly, in the Distributed Expertise *a priori* category, codes related to personal experiences such as "Teaching Someone" and "Storytelling/Personal Experience as Evidence" appeared far more frequently than I'd expected, showcasing how the emerging data broadened my horizons on how the social media pedagogy functions.

I also noticed codes emerging from the data that didn't quite fit neatly into my existing *a priori* categories. At first, I merely observed the emerging codes, but over time they eventually coalesced into emerging categories that began as simple codes and code clusters before being expanded, compared, contrasted, grouped together, considered in relation to one another, and finally coded in a focused coding process. Eventually, these new codes inspired the re-coding of older data as part of a recursive analysis process to examine their candidacy for elevation to the status of conceptual category. For instance, early in the coding process, the code "Discussing the Challenges of Writing" emerged. After a while, though, and especially between forms of collected data (Slack participation data and Reflective Journal data, in this case), related codes such as "Revising/Editing an Original Post," "Reflecting on Rhetoric's Role in Media," "Discussing Process of Research," "Discussing Argument/Thesis Statements," "Discussing How Slack Writing Transfers/Informs Academic Writing," and "Discussing Slack Helping to Increase



Writing Confidence” began to emerge. These codes coalesced well together, inspiring the emergent conceptual category of Learning Writing/Rhetoric/Composition Skills, with each of the aforementioned codes providing insight into the category. Similar processes unfolded for the emergent category Digital Citizenship.

All the while, I continued coding at the open, focused, and theoretical levels (see Fig. 3.4). I also recursively went back and re-coded early weeks of Slack participation data and the first Slack Reflective Journal submission for codes that had emerged later on in the coding process, including going back to look for codes such as “Discussing Building Relationships with Classmates,” “Discussing Emotional Experience of Writing in Slack/Writing Online,” and “Discussing How Slack Writing Transfers/Informs Academic Writing.”

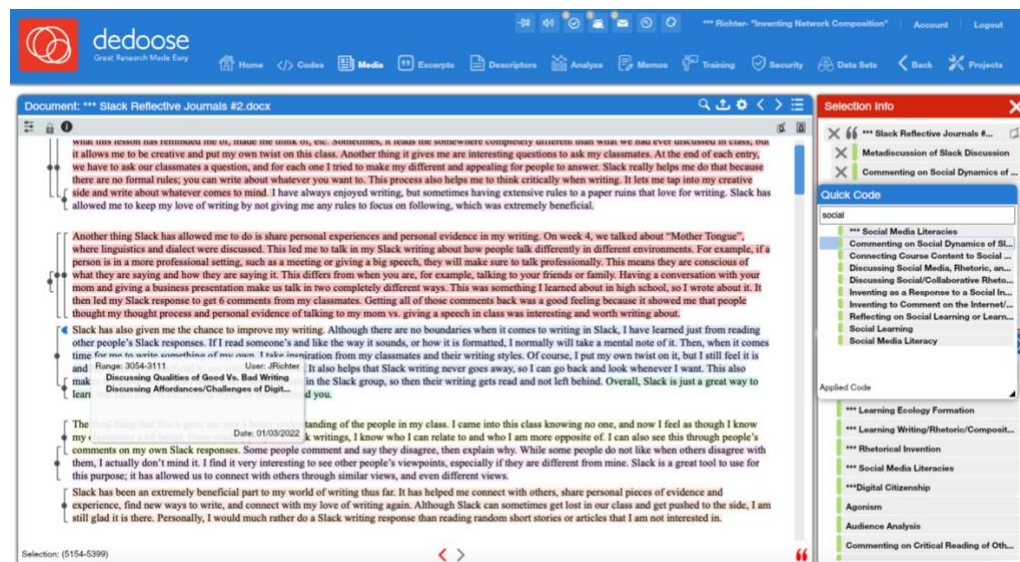


Fig. 3.4: Coding the second round of Slack Reflective Journal submissions in January of 2022.

In December, students submitted their final Slack posts for the semester. By January 2022, I’d conducted and coded all 9 interviews, coded 44 Slack Reflective Journal submissions,

and coded 15 weeks of Slack posts from participating students at both the initial/open and focused coding levels. I also sustained the process of theoretical coding that I'd begun in November, after most of the initial and focused codes had emerged from the data.

With all the data finally collected, I re-examined the conceptual categories that had emerged in all of the available data. Two conceptual categories had emerged:

- Learning Writing/Rhetoric/Composition Skills
- Digital Citizenship

These emergent conceptual categories form the “findings” of this qualitative study, in addition to the four *a priori* categories of:

- Learning Ecology Formation
- Distributed Expertise
- Rhetorical Invention
- Digital and Social Media Literacies

The Digital Literacy *a priori* code, in line with inductive methodologies, was renamed to Digital and Social Media Literacies to better reflect the supporting qualitative data that was collected.

All in all, I coded, analyzed, and theorized based on over 396 pages of collected data, including 146 pages of Slack participation data, 139 pages of Slack Reflective Journal data, and 111 pages of interview data.

## **Conclusions**

Methods oftentimes serve as an epistemic epicenter for a research project and for the insights that it offers, and this qualitative case study with grounded theory elements that contains both emergent and *a priori* categories is no exception (Smagorinsky, 2008). The findings of this study are outlined in Ch. IV and Ch. V, where emergent conceptual categories are presented,

discussed, and then mobilized into “best practices” for using social media technologies for learning in college composition pedagogies. These insights and “best practices” will be of interest for composition scholars, social media researchers, and instructors across the curriculum who use social media tools in their classrooms. In the next chapter, the emergent conceptual categories Learning Ecology Formation, Distributed Expertise, and Writing/Rhetoric/Composition Skills that arose in the study are considered, explicated, and generalized for the teaching of composition and writing alongside social media networks. Then, in Ch. V, focus shifts to the conceptual categories Rhetorical Invention, Digital and Social Media Literacies, and Digital Citizenship that emerged during the recursive data collection and analysis process. For this study’s codebook containing its codes, see Appendix C. The Appendix section also contains other pertinent materials, including the study’s IRB Exempt confirmation letter (Appendix A), some of the questions asked during interviews with participants (Appendix E), and the reflective journal assignment prompts provided to student participants (Appendix D).

As this dissertation pursues its primary research question *How do student composers invent in networked social media environments?*, the insights generated from student voices over the course of this study help to build and expand on what is encompassed by the term *network composition*, as well as helping to form insight into specific ways that instructors can better use social media tools in their classrooms to form social learning ecologies that nurture learning in a multitude of forms. As social media technologies become more and more common in college learning environments, insight into the rhetorical, literate, and digital practices that occur there can help instructors to better hone their teaching practices to build more productive social and collaborative learning environments. In this important endeavor, insights into a Slack social media pedagogy’s capacity to nurture Learning Ecology Formation, Distributed Expertise, and

Writing/Rhetoric/Composition Skills (Ch. IV), as well as Rhetorical Invention, Digital and Social Media Literacies, and Digital Citizenship (Ch. V) are of paramount importance.

Participation in civic, social, educational, and political life increasingly demands citizens capable of writing, learning, and communicating online, and social media pedagogies represent one implant way to nurture and cultivate these vital rhetorical capacities and practices.

## CHAPTER FOUR

### FINDINGS I: CULTIVATING LEARNING ECOLOGY FORMATION, DISTRIBUTED EXPERTISE, AND WRITING/RHETORIC/COMPOSITION SKILLS WITH SOCIAL MEDIA

Digital writing in social media networks in college courses can encourage a large array of practices, behaviors, actions, and mindsets of interest to scholars of writing, rhetoric, and literacy. An emerging literature has developed suggesting social media tools in rhetoric and writing classrooms to nurture critical rhetorical literacies (Vie, 2015), to encourage practices of meta-literacy (see Witek & Grettano, 2016), to illustrate important rhetorical choices in writing (Mina, 2017), and to help students transfer knowledge about important parts of writing processes (Shepherd, 2015). In this chapter, I contribute to this emerging discussion by offering the findings and results of the qualitative case study with grounded theory elements described in Ch. III, showing how composition and rhetoric pedagogies that make use of social media tools can cultivate learning ecology formation, distributed expertise, and writing/rhetoric/composition skills.

As the findings of this study demonstrate, when students write, participate, connect, and share *on their own terms* in a classroom social media network, they oftentimes form learning ecologies that showcase distributed expertise and demonstrate the learning of writing, rhetoric, and composition skills. After collection, coding, and analysis of 146 pages of Slack participation data, 139 pages of Slack Reflective Journal data, and 111 pages of interview data, two conceptual categories emerged—learning of writing/rhetoric/composition skills and digital citizenship—in addition to the four *a priori* categories of learning ecology formation, distributed expertise, rhetorical invention, and digital literacy. Additionally, the category of digital literacy was renamed “Digital and Social Media Literacies” to more accurately represent the data that was collected in the study.

This chapter overviews findings related to two of the *a priori* categories—learning ecology formation and distributed expertise—as well as one of the emergent categories: learning writing/rhetoric/composition skills. These categories are examined together because of their synergy, affinities, and many connections, while the remaining categories are examined in Ch. V. For each of the three categories, I detail the findings of the qualitative case study along with relevant codes and student-provided evidence in the form of quotations. After reviewing the data, codes, and quotations for each category, I propose some “best practices” for nurturing each conceptual category in college pedagogies that use social media tools. The findings of this study detailed in this chapter indicate that social media pedagogies can cultivate learning ecology formation, distributed expertise, and the learning of writing, rhetoric, and composition skills in an array of important ways that are of interest to compositionists, learning theorists, and instructors across the curriculum.

### **Conceptual Category: *Learning Ecology Formation***

To start, social media pedagogies in rhetoric and writing studies curricula have potential to nurture learning ecology formation. Of the four *a priori* conceptual categories that this study investigated, learning ecology formation was the category that received the most immediate, sustained, and continuous support across the student-provided data.

I approach learning ecologies as dynamic, evolving, emergent, social, situated, and distributed learning environments that are centered around shared generation of knowledge through engagement, participation, sharing, and collaboration. Learning ecologies, in other words, involve leveraging situated social connections and all that they entail (identity, difference, engagement, communication, collaboration) into opportunities for learning. One of the leading

voices in connectivist learning theory, George Siemens (2007), argues that learning ecologies are “the space that permits (even fosters) the formulation of learning content in new patterns” (63). Siemens (2005) points out that “the health of the learning ecology... depends on effective nurturing of information flow,” suggesting an intimate connection between humans, the technologies that connect them, and the relationships formed between the human-technology assemblage that is formed (6). While most classrooms can be described as learning ecologies, there is tremendous difference and variation in how learning environments nurture social learning, distributed generation of knowledge, collaboration, participation, and the nurturing of horizontal bonds between students.

In the case of a social media pedagogy using Slack in a composition course, the data shows that learning ecologies emerge in social interaction occurring in a variety of related processes, practices, and dynamics. Understanding learning ecologies as dynamic, emergent, social, and distributed learning moments centered around engagement, participation, and interaction, the codes supporting this category all illustrate actions in which learning ecology formation components are enacted. The findings of this study demonstrate learning ecology formation as formed through technologically mediated social interactions that involved sharing, teaching, listening, discussion, collaboration, critical reading, relationship building, question asking, cooperative invention, and intertextual writing. The codes that emerged supporting the learning ecology formation category were diverse and sustained, and they generally appeared across all three forms of data collection in equal measure (see Fig. 4.1).

<b>Phatic Communication</b>	<b>Agonism</b>	<b>Social Learning</b>	<b>Teaching Someone</b>
<b>Storytelling/ Personal Experience</b>	<b>Synthesizing Conflicting Ideas</b>	<b>Teaching Someone</b>	<b>Understanding/ Summarizing</b>

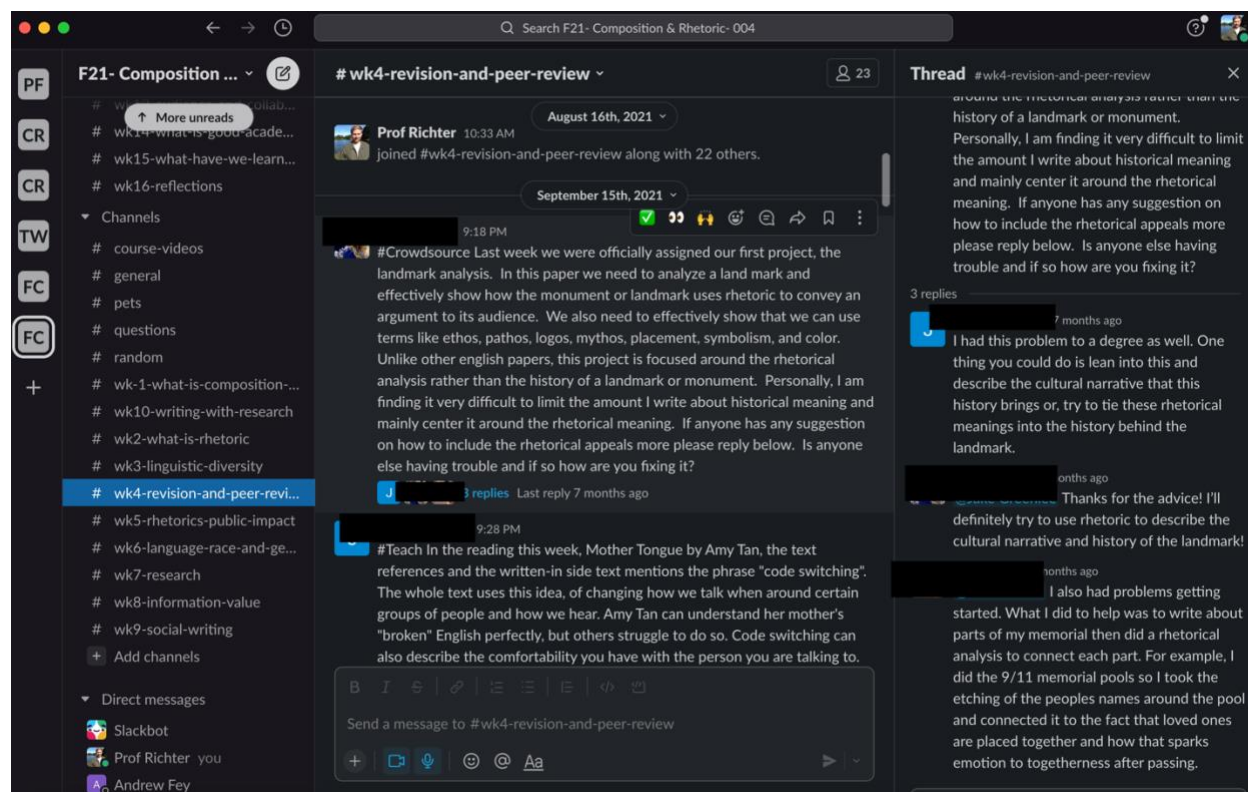
<b>as Evidence</b>			<b>Readings</b>
<b>Tagging</b>	<b>Writing Intertextually</b>	<b>Reflecting on Social Learning or Learning From/With Others</b>	<b>Commenting on Critical Reading of Others' Ideas</b>
<b>Discussing Social/Collaborative Rhetorical Invention</b>	<b>Commenting on Discussions Across Difference</b>	<b>Discussing Qualities of Good Vs. Bad Writing</b>	<b>Commenting on Social Dynamics of Slack Interaction</b>
<b>Monitoring Afterlife of a Slack Post</b>	<b>Seeking Help/Assistance/Advice</b>	<b>Discussing Building Relationships with Classmates</b>	<b>Referencing Previous Social Interaction</b>

**Fig. 4.1:** Some of the codes that emerged in the data in the “Learning Ecology Formation” conceptual category.

The codes that emerged during the data analysis and coding process indicate that the classroom Slack community supported learning in a variety of ways that involved interpersonal interaction, social participation, intertextual writing, and generative communication across difference. One code that showcases social media pedagogies’ capacity for cultivating learning ecology formation is “Reflecting on Social Learning or Learning From/With Others,” which was one of the most common codes to emerge throughout the entire data analysis process. As students posted each week in Slack, they not only engaged in pre-writing, invention, writing, revising, and idea organization, but also engaged in a complex process of audience analysis, message tailoring, listening, and learning through interaction with others. The “Reflecting on Social Learning or Learning From/With Others” code showcases the metacognitive process that students wrote about that traces the collaborative, cooperative, and collective learning that occurred through social exchange, communicative back-and-forth, critical consideration of potential responses, and critical idea synthesis. For instance, this sort of learning ecology formation is demonstrated in Fig. 4.2, which showcases a social interaction involving students



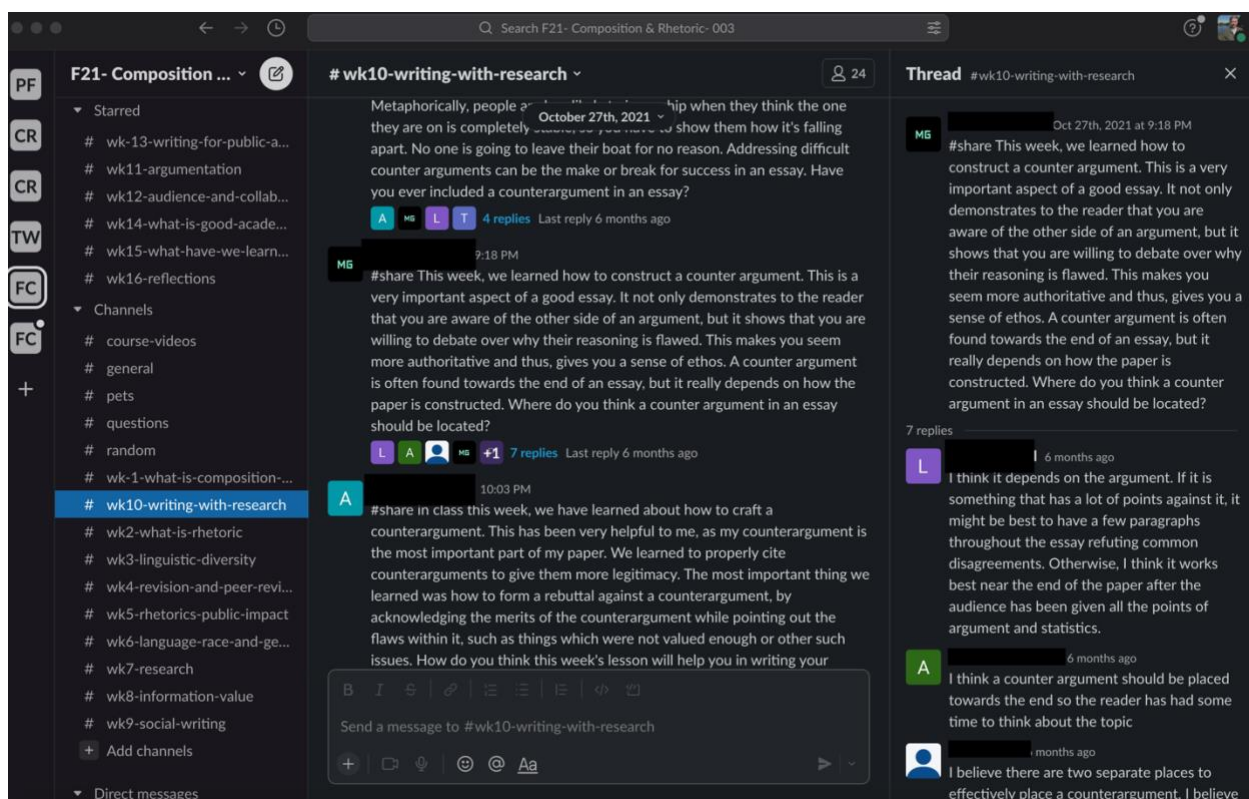
crowdsourcing a request for suggestions concerning an upcoming project and then evolves into a discussion of shared challenges that students were facing in the course.



**Fig. 4.2:** Learning ecology formation in the Slack social media environment oftentimes involved social interactions that helped students to learn, reinforce, and expand on their knowledge of writing and rhetoric.

As students reflected on social learning moments that they'd taken part in, they frequently commented on how forming relationships with others helped expose them to new perspectives, alternative mindsets and considerations, and different ways of understanding previous knowledge or shared experiences. One student reflected: "I do feel that interacting with others on Slack was beneficial to my learning of writing, rhetoric, and revision." Another wrote in a reflective journal that entry "small conversations in the comments are the key to the process of learning from others, as it helps you learn what people think of your thoughts and experiences

as well as allowing you to communicate your thoughts on another person's post." In these cases, the students' reflections on Slack interactions demonstrate how interaction with others in the digital learning community helped them to learn from, with, alongside, and in collaboration with others through idea exchange, perspective comparison, and intertextual writing. Students reported that Slack's "creative and engaging writing made it easier for me to learn from my classmates," as they "really appreciated the community the class developed through composing on Slack" that helped them to "learn from my classmates and improve my academic writing." The "Seeking Help/Assistance/Advice" code emerged early on and appeared throughout the Slack participation data, showcasing the ways students would ask each other questions, make recommendations based on prior knowledge or experience, and achieve commonality in discussing the difficulties of writing and college more broadly. For instance, Fig. 4.3 showcases a student asking their peers for their thoughts on where counterarguments should be located in argumentative writing projects, showcasing not only the seeking of assistance on a writing challenge but also learning ecology formation, as other students shared advice and expertise from a variety of different angles.



**Fig. 4.3:** Learning ecologies oftentimes arose as students asked questions of their peers, such as this student who inspired a multi-participant discussion by asking a question about counterargument arrangement in an argumentative writing assignment.

Similarly, the “Reflecting on Listening To/Learning From Someone Else” code that emerged illustrates how students in the course formed learning ecologies geared not only for sharing with others, but for actively listening, reading, and considering the voices of others as well. One student wrote about how they were “able to connect with other people... from being able to see their viewpoints on things we discussed in class.” This comment showcases how learning occurred, in part, through learning ecologies interpreting course discussion and content differently, with these plural interpretations then being shared, compared, contrasted, and analyzed in a collaborative social process in Slack. A student wrote that “I have seen a lot of other perspectives than mine and I’ve been able to learn from them... they also bring up other points that I also agree with that I just wouldn’t have thought about otherwise.” The “Reflecting

on Listening To/Learning From Someone Else” code displays how students learn not only through sharing, participation, and writing activities, but also from listening to and learning from others in the learning ecology.

Another group of codes that demonstrates social media pedagogies’ capacity for learning ecology formation are codes that conceptualize relationship building and social bond formation such as the “Phatic Communication,” “Discussing Building Relationships with Classmates,” “Commenting on Social Dynamics of Slack Interaction,” and “Referencing Previous Social Interaction” codes. One student wrote in a reflective journal entry that “My classmates supported me.” Another commented that they “loved getting to know my classmates better through Slack,” and a third mentioned how the Slack community had enabled them “to be able to learn from my classmates.” Across the duration of the semester, students built friendships, formed personal relationships, established good will and amicability, and transferred knowledge derived from both Slack and in-person interactions into a process of learning. Especially at the beginning of the semester, students engaged in phatic communication intended for relationship building rather than information transmission. In this case, phatic communication frequently segued into personal relationships later on in which more profound, in-depth connections between students were facilitated by these established relationships. Many students engaged in an extensive process of reflection in the reflective journal entries centered around the connections and relationships that they had built with other students throughout the arc of the semester. They commented frequently on the mood, tone, attitude, or character of the Slack community, and especially related this community dynamic to the sharing, writing, and discussions that they collaboratively engaged in. Students also referenced previous interactions both in Slack and in-

person in their writing, showcasing how relationship building, personal connections, and group dynamics facilitated social learning.

Another important code that emerged in the learning ecology formation category was “Agonism.” Agonism is an approach to knowledge generation that considers difference, disagreement, and discord to be potentially (but hardly always) productive for advancing discussion of some topic or issue (see Mouffe, 2013; also Richter, 2021). Agonism is an important part of learning ecology formation in a number of ways. Agonism acknowledges difference, disagreement, and discord, which were not uncommon to the Slack channel. The social media learning community studied here was not a group of like-minded friends who intentionally avoided disagreement, but rather is a heterogeneous collection of distinct, different individuals who oftentimes had a lot in common, but also maintained important differences. Students did not always agree with one another, and there were plenty of “hot takes” featured that diverged from standard, boiler-plate discussion board posts. One of the primary advantages of pedagogy studied here is that it allows students to participate on their own terms and with their own methods of communication. While this discussion quality certainly enhanced the social learning that occurred, it also introduced challenges related to potential harassment, bullying, aggression, or offensive language that could arise. Though no explicit incidents of this sort occurred in the Slack channel, it certainly was possible and was something the class discussed on multiple occasions. Discussing the potential of achieving agonism helped students consider how disagreement, discord, and difference can be generative and productive, as comparing and contrasting perspectives or opinions is a valuable mode of active learning when enacted within safe, hospitable, equitable parameters. A participant wrote that: “Some people comment and say they disagree, then explain why... while some people do not like when others disagree with

them, I actually don't mind it... I find it very interesting to see other people's viewpoints, especially if they are different from mine... Slack is a great tool to use for this purpose; it has allowed us to connect with others through similar views, and even different views." Another participant wrote that "Interacting with others in the Slack chatroom each week allowed me to further my knowledge while also sharing ideas with my peers... Participating in the Slack discussion pushed me to think deeply about my own thoughts and opinions."

Tracing agonism as it occurred in the Slack channel as well as students' reflections on these interactions in reflective journal entries and interviews showcases the dynamic ecologies of difference that developed involving students sharing, discussing, comparing, and contrasting their ideas, perspectives, values, and priorities alongside those of their classmates. It also showcases the synthesis of conflicting ideas that many students engaged in within the Slack channel, as when disagreement or difference arose, it was generally not accompanied by malice, but instead was accompanied by good will, generosity, and thoughtful listening to the ideas of others. In the Slack social media channel, digital agonism provided students an opportunity to explore ideas without endorsing them, to consider new evidence or unforeseen possibilities, and to consider the perspectives of others as valuable even if also unfamiliar. As such, agonism in digital networks represents a valuable opportunity for social learning, so long as attention to participant safety and well-being remain priorities. Considering this, agonism represents a valuable mode in which learning ecology formation is enacted and practiced for social learning, exposure to new ideas and perspectives, and engagement with course content. Commenting on learning through interactions across difference, one student reflected:

Although hesitant at first, I did find myself discussing social, political, and cultural issues in Slack. In my first Slack post I wrote about what I found to be the overall message in the reading "Making Conversation." I was very scared to post my thoughts because I didn't want other people's opinion of me to be swayed based on writing my take on the

Color Blind race theory. Diversity, identity, and culture are what make up a person, and should be embraced while coexisting. Often when learning to coexist people tend to ignore what makes them different instead of embracing it. South Carolina is a more conservative state, and coming from [a more liberal-leaning state], I was unsure how people would see me after I posted this. Fortunately, [student name] and [student name] were very respectful and agreed with me. We also are at a point in our lives where we understand that people can have different opinions and we are able to disagree with them as long as we are respectful about it. I think I was a little naive and judgmental when being nervous to post because I ignored the possibility that if someone didn't like what I had to say they would not comment and offer their insight on someone else's post, instead of getting into a debate on a public learning platform. (My redactions to maintain participant anonymity)

As we see, the possibility of disagreement, difference, and conflict were frequently on the minds of students as they wrote in the Slack channel, in this case when writing about an interpretation of a course reading that examines racial equity, diversity, inclusion, and globalism (see Appiah, 2006). In this case, the student narrates a learning moment in which they made connections across difference to focus on commonality rather than on conflict. Agonism is an emotionally vulnerable process that involves examining individual opinions, perspectives, and values in comparison to those of others, but it's also an exciting opportunity through social learning that can push students to examine new evidence, consider perspectives unfamiliar to them, and think deeply on topics they'd previously not fully considered. The opportunity to learn from others, and to teach others as well, is a valuable one for social media pedagogies to embrace.

Other findings from the learning ecology formation category show social media pedagogies can encourage practices of participatory social learning such as tagging others in writing, teaching others, synthesizing conflicting ideas, and social rhetorical invention. The Slack learning activity also encouraged practices of using stories and personal experiences as evidence for claims, summary of course content and readings, critical reading of others' ideas, and the seeking of help, assistance, and advice from peers.

Ultimately, the Slack learning community proved an effective way to nurture learning ecology formation in the First Year Composition course. One student mentioned how they “began to learn that my classmates are great writers,” signaling that learning ecology formation in the class was accompanied by positive emotional developments and impactful relationship building for at least some participants. Student participants were largely enthusiastic concerning the learning ecologies they formed in Slack with their classmates, reporting varied characterizations such as “I feel like this new type of learning is more interactive and stimulating than a normally structured assignment” and “I really felt an intellectual connection with my classmates when becoming involved in Slack conversations... whether we were speaking about societal topics or rhetoric for educational purposes, Slack within the curriculum always kept me stimulated every week.”

The social media learning community helped to keep students connected and helped them to learn and empathize with, share, and help one another. A student commented that:

“I think the thing I enjoyed the most about Slack over the semester was being able to talk to my classmates about projects. I know that I am the type of person who is afraid to ask questions especially when it comes to talking to other classmates. In some of the projects, I felt very overwhelmed at first and intimidated.... I have very strong opinions on the topic, and I felt that it was something that would be simple for me to write about. However, as time progressed and the due date kept getting closer and closer, the project became very daunting to me. I was struggling to make my paper long enough and to make an argument backed up by facts and not just my personal opinions. I also struggled with finding academic journals to back up my arguments. I posted about my struggles on Slack, and I found that many students were having the same difficulties I was especially in making their papers long enough. Slack quickly became a thing that I turned to when I was feeling intimidated by a project. It allowed me to connect to my classmates in the way that a regular classroom discussion would never allow me to.”



The social learning community helped students to form learning ecologies, student-to-student horizontal bonds, and helped them to learn more about writing by observing what rhetorical choices others have made. Another student wrote:

“One more thing about Slack that I like is reading other peoples’ writing. I feel that my writing has benefited from interacting with others in slack because I read other peoples’ work and when I see something I like it could potentially end up in my future writing. For example, if someone organized a paragraph very well or made a good thesis statement in class and posted it on slack, the next time I write it I might think of what they did. Writing in slack is sort of similar to other social media spaces that I use like Instagram or Snapchat. It is different because you’re not posting a picture along with the phrase that you write, but when you write about something in slack you know that there are going to be a lot of people reading it, just like you would in another social media platform. To me, knowing that other people are going to read my work makes me pay a little bit more attention about what I am writing and what I choose to say.

Finally, students commented on the community was formed online in the Slack channel, such as one student who expressed appreciation for community formation by saying “it surprised me how people were willing to include more personal stories than I anticipated.” Another student expressed a similar feeling in a Zoom interview:

“Like I said before, at first it was more of just kind of getting a grade and completing the assignment. But people really, it was surprising how people, like I said, opened up more than I anticipated. So then people kind of followed suit and also listed some of their, you know, personal experiences. So it became more close knit than I thought it was initially going to be. I thought it was kind of just, you know, be writing the six sentences or whatever, and then commenting on to others... Yeah, people are more, you know, open than I thought they would be.”

In nurturing social interaction, self-directed participation, and collaborative engagement across difference, the findings of this case study show how the Slack social media pedagogy supports learning ecology formation in generative ways.

### **Conceptual Category: *Distributed Expertise***

The Slack social media pedagogy also proved capable of cultivating distributed expertise among students. The findings of this qualitative case study exhibit distributed expertise that appears within the learning ecology characterized by attention to positional insight, discussion across difference, transferring prior knowledge, resource sharing, and social interaction.

From discourse arising from the field of digital media for learning (DML), Ito et al. (2013) point out that “Creating a program or environment where authority is shared and expertise is distributed, allowing for a broad range of ways to participate, only matters if there are also visible ways for young people to share and exchange expertise and discover resources” (78). In this perspective, distributed expertise arises in social situations such as learning communities when effective and valued participation is defined in part by participants themselves and when they feel empowered to share, interact, collaborate, and create in forms that they personally find generative. In other words, distributed expertise can arise when social interaction occurs on participants’ own terms, with their individual goals, choices, interests, and curiosities being valued parts of the social dynamic.

Though Ito et al. draw primarily on informal participatory fan communities to inform their understanding of participatory learning, their observations into social and interactive learning through decentering and distributing expertise are practiced in similar ways in a more formal social media learning community. Ito et al. (2013) add that “the design of connected learning environments is a distributed and evolving enterprise, where educators share authority and ownership with young people, technology makers, and cultural creators in developing shared infrastructures, norms, and practices... The whole is far greater than the sum of its parts” (78). In this sense, a sort of synergistic social dynamic develops in participatory learning communities

when participants are allowed to interact on their own terms, with their own goals and interests, and with their whole selves present (rather than leaving personal experiences and positional expertise behind when entering the classroom). Ito et al. (2013) argue that all involved stakeholders should have “opportunities to take leadership and contribute in diverse ways to the shared endeavor,” adding that “All participants should have a stake in and have influence over the project, regardless of age and expertise... Norms and expectations are collectively maintained” (75). The vision for social, participatory learning through distributing expertise offered by Ito et al., though originally intended for learning situations beyond college writing pedagogies, provides a number of opportunities for instructors at the college level to reconsider how distributed expertise can be productively promoted in digital learning communities. From the beginning, codes relating to distributed expertise appeared in the student-produced data in this study, especially in the Slack participation and reflective journal entry forms of data collection. Considering this, and the value of distributed expertise in learning communities offered by Ito et. al (2013), distributed expertise represents a compelling outcome for social media pedagogies in higher education to pursue.

Drawing upon Ito et al. (2013), I define distributed expertise as characterizing an environment in which expertise is plural, positional, situated, non-hierarchical, and culturally empowering. As the findings of this case study illustrate, social media learning communities have potential to encourage learning through distributed expertise in practices of sharing positional insight, having discussions across difference, transferring prior knowledge to new situations, resource sharing, and social interaction, among other practices (see Fig. 4.4).

<b>Connecting Rhetoric to Personal Experience</b>	<b>Citing Positional Expertise</b>	<b>Agonism</b>	<b>Connecting Course Content to Personal Experience</b>
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<b>Storytelling/ Personal Experience as Evidence</b>	<b>Connecting Rhetoric to Personal Experience</b>	<b>Pop Culture References as Evidence</b>	<b>Transferring Previous Knowledge into Writing/ Rhetoric Insight</b>
<b>Statement of Identity</b>	<b>Teaching Someone</b>	<b>Understanding/ Summarizing Readings</b>	<b>Reflecting on Social Learning or Learning From/With Others</b>
<b>Reflecting on Listening To/ Learning From Someone Else</b>	<b>Commenting on Critical Reading of Others' Ideas</b>	<b>Commenting on Discussions Across Difference</b>	<b>Critical Sharing of an Internet Link</b>
<b>Discussing Building Relationships with Classmates</b>	<b>Seeking Help/Assistance/ Advice</b>	<b>Providing Internet Link as Evidence</b>	<b>Analyzing/ Exploring a Disagreement</b>

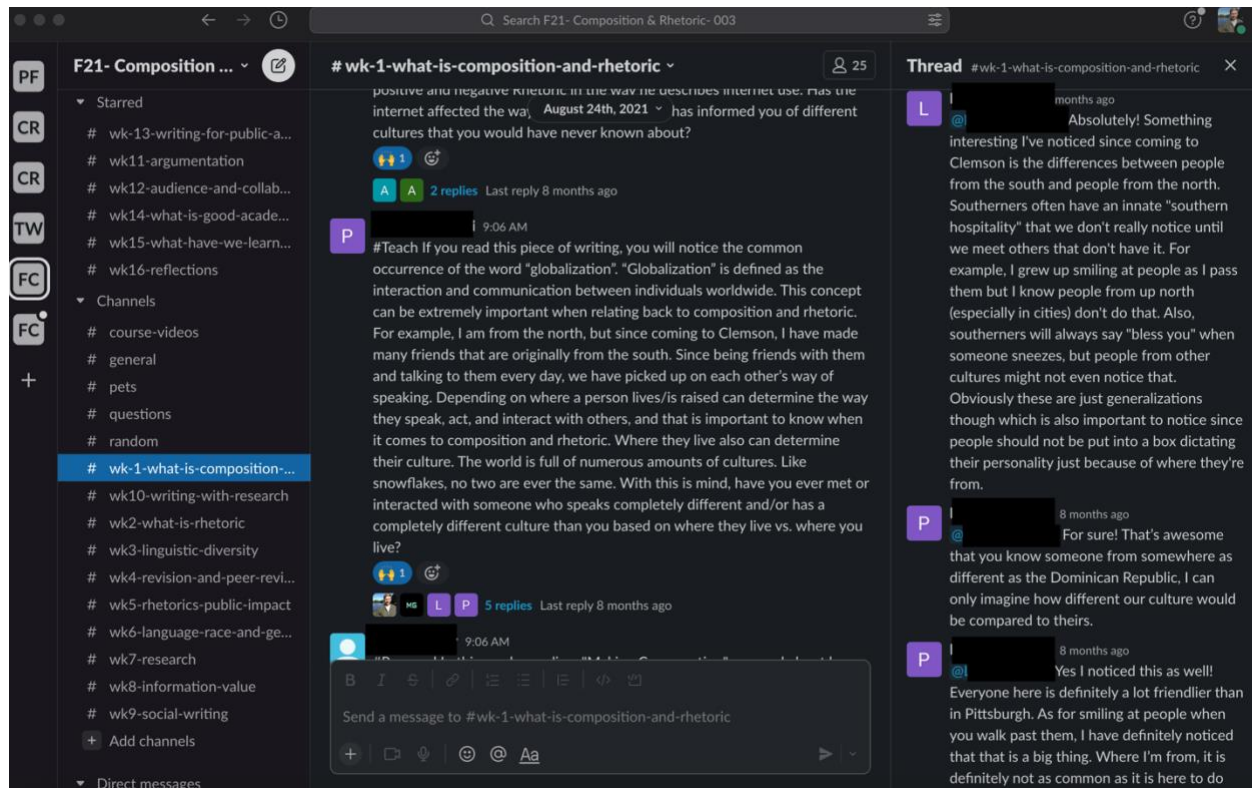
**Fig. 4.4:** Some of the codes that emerged in the data in the “Distributed Expertise” conceptual category.

One of the more prominent codes that emerged in the data is the “Storytelling/Personal Experience as Evidence” code. The “Storytelling/Personal Experience as Evidence” code showcases the willingness of students participating in the Slack social media network to broaden their horizons of what evidence is and can be to include personal experience, reflections on past situations, and on positional expertise. Stories are always rhetorical and can help others build empathy and sympathy for a situation, cause, or organization. They can also be a good way to advocate for a belief or passion and can be used to explain and justify particular points of view, perspectives, or ways of understanding events. As such, the “Storytelling/Personal Experience as Evidence” code commonly appeared in situations where students were discussing some larger social, cultural, or political phenomenon and decided to contextualize it within their own experiences. It often appeared alongside similar codes such as “Connecting Course Content to Personal Experience” and “Connecting Rhetoric to Personal Experience,” demonstrating the

ways the social media learning community helped to connect personal experiences with larger social, political, or cultural issues that were the topic of course discussion. Considering this, storytelling and references to personal experience commonly functioned as evidence for some larger point and worked to help explain both why someone believes how they do about an issue and why they feel that way. Stories arising from experiences also helped students to form social bonds and learn from one another, as one student commented that “without Slack, I never would have heard these people’s stories.” Stories from personal experience served to translate perspectives and points of view between students, and they helped to not only form social bonds and reciprocal learning relationships, but also to help others explore new ideas, encourage alternative modes of thinking, and to broaden what others within the learning space knew, understood, or appreciate about a particular situation.

The “Teaching Someone” code also emerged frequently. Students commonly engaged in practices of teaching others, explaining ideas, unpacking concepts, filling in important details, addressing gaps in understanding, and providing important context, background, or frame of reference. In many cases, students used the #Teach mode of participation to proactively teach other members of the learning community about yet unexplored aspects of course content or about specialized knowledge they’re privy to, such as when one student informed others about research they’d performed regarding dictionary definitions of key terms in a course reading (see Fig. 4.5). When students used the #Teach mode of participation, they engaged in both learning ecology formation and distributed expertise, which frequently worked together synergistically in this learning space. In using #Teach, students recalled prior knowledge to communicate important knowledge, context, detail, or background to others who might benefit from that added communication. These actions of distributed expertise, where students mobilized their own

expertise in the form of pre-existing or recently obtained knowledge, function as a core opportunity for students to learn socially by transmitting information, making connections, translating private perspectives into public statements, and addressing gaps or concerns in the course conversation that they're uniquely equipped to consider.



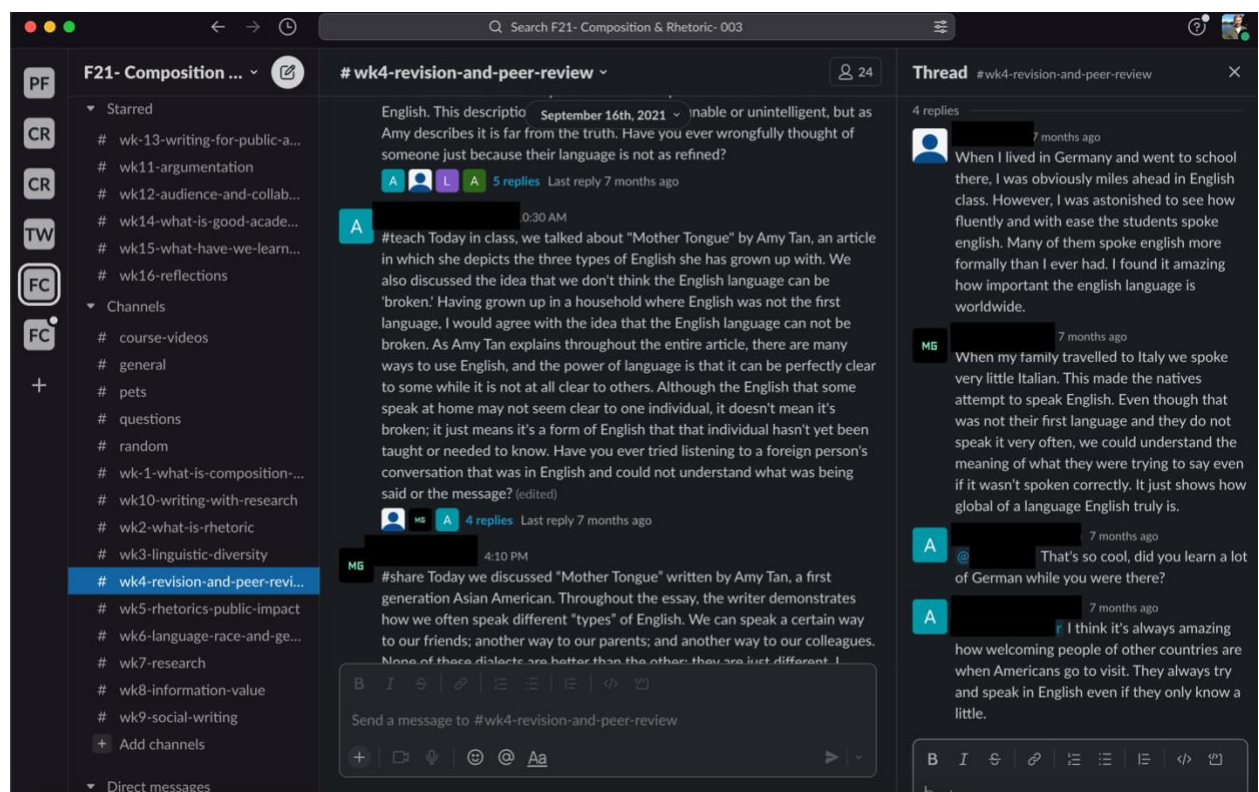
**Fig. 4.5:** A student uses the #Teach mode of participation to offer insights to others about globalism, cosmopolitanism, and the meaning of specialized vocabulary arising in a shared course reading.

In other cases, students used modes of participation beyond #Teach but engaged in some of the same teaching practices in slightly less formal ways. For instance, students commonly used #Share as an opportunity to share an experience or insight that they've had, but then also engaged in translation work to teach the learning community about what the experience or insight they're sharing means for culture, society, politics, rhetoric, or writing. Other times,

practices related to teaching actions occurred in comments when students would either comment on someone else's post with a teaching insight or when they would be pressed on their ideas expressed in a post and need to explain, contextualize, qualify, and reanalyze elements of what they'd originally written. As a learning activity, teaching others forces a student to conceptualize their ideas in language, to then explain those ideas in ways that others can appreciate and identify with, and then to translate the idea's relevancy, applicability, value, and contribution to the wider learning community. As such, teaching others is a valuable way that distributed expertise is enacted in social pedagogy. Giving students an opportunity to be experts of their own experience and of their own perspectives (and actively valuing that expertise) offers avenues for learning community enrichment through sharing of unique perspectives, solicitation of a plurality of voices, and of broadening of the context details that can enhance a discussion. One student wrote that "Slack has also caused me to think about other perspectives and make me appreciate what I have in the world," showcasing how the social learning activity encourages practices of self-reflection, metacognition, idea comparison, and synthesis of conflicting perspectives.

Other codes emerging in the data that inform how instructors can understand distributed expertise and its relationships to individual and group identity are "Citing Positional Expertise," "Statement of Identity," "Commenting on Discussions Across Difference," and "Commenting on Critical Reading of Others' Ideas." One of the important codes that emerged in this study is "Citing Positional Expertise," as this code gestures toward social justice opportunities that the social media pedagogy can offer to instructors and students alike. For instance, Fig. 4.6 showcases an interaction in the Slack learning community involving a student leveraging their experiences as someone who grew up in a home where English was not the first language to discuss linguistic justice, cultural hybridity, and social justice. When citing positional expertise,

students complicated understandings of cultural and social discussion topics by citing how their positional bearing within society, especially relating to race, gender, disability, sexuality, and class, helped them to form certain opinions, perspectives, understandings, and videos on the world. By considering how positional experience impacts how a person feels, thinks, and believes about the world or about society, students were able to not only engage in moments of reflection about identities and ideas, but also to consider the impact their ideas and beliefs can have on others.



**Fig. 4.6:** Leveraging their status as someone who grew up in a household where English was not the first language, a student shares insight into linguistic diversity, cultural hybridity, and social justice, to which others add on with similar experiences.

Examining positional expertise also provided students an opportunity to share how their positionality provides them unique, privileged, personal access to some of the pertinent affective



knowledge needed to truly understand sensitive issues. Many topics, like race-based police violence, anti-Transgender hate, or sexual harassment on college campuses, benefit when the voices of victims and survivors are foregrounded. Because these problems can disproportionately impact people already marginalized in society, citing positional expertise can be one way that experience can inform how we approach important topics (at a student's discretion). Citing positional expertise allows for a blending of the personal and the social to inform group discussion, and allows space for marginalized viewpoints (especially related to race, gender, disability, sexuality, and class) to be not only prioritized and foregrounded, but also actively valued and critically considered. In the classroom Slack learning community, the citing of positional expertise encouraged students to think beyond their individual perspectives, to critically reflect on how their privileges, marginalization (or lack thereof), advantages, and positional vantage points influence the ideologies they bring to the world. In other words, examining positional expertise helps students to consider what and why they believe what they do, who those ideas serve or neglect, and what these beliefs say about their relationships with others who are different from them. As such, citing positional expertise represents a viable opportunity to enact goals of social justice in a digital learning classroom.

Students also participated in discussions across difference, engaging in disagreements about interpretations, course material, politics, and current events. As exemplified by the “Commenting on Discussions Across Difference” code, participants in some cases articulated beliefs, shared them with unresponsive audiences, and still found a way to discuss the common topic in ways that were healthy, mutually beneficial, and without aggression. In an interview, one student said that in the Slack conversation, “everybody gets an equal voice.” In many cases, discussions across difference related to differences in personal preferences, contests in individual

choices, and divergent but not mutually incompatible interpretations of course readings or content. In other cases, outright political differences arose in conversation, with students either not continuing the conversation or doing so in a way that was mutually beneficial, polite, and full of listening, generally characterized by thoughtful articulation of ideas to a good-willed audience that, while unconvinced, was not disrespectful or dismissive, either. Social learning pedagogies generally do not (and should not) shy away from discussion of politics, culture, or society, and facilitating discussions across difference is one way to ensure these meaningful learning opportunities are respectful, healthy, and symbiotic. In these cases, generative difference or agonism can be approached in a way that can be beneficial for all involved parties (though this kind of generative disagreement is hardly *always* the case). Listening to the ideas, perspectives, and opinions of others was commonly reported as a learning opportunity by students, showcasing how a social media pedagogy offers avenues for learning through horizontal student-to-student bonds. One student reported in a reflective journal entry:

“The benefit to the scholarly feel of Slack is that it causes me to think about the deeper meaning of whatever I am writing about. It also gives me a greater appreciation for the insight of others and their thoughts on a subject. It helps me to think more critically about what my peers post and what my responses are. Often some of my more interesting ideas come from responding to someone else’s post. Responding to what someone else said requires me to think more in depth about what they said, and how it relates to the topic they are discussing. When I then respond, I then have a new perspective, not only on what their point is, but also on the original topic.”

In this case, social interactions involved listening to divergent perspectives, considering preconceived ideas and differences in opinion, then comparing and possibly synthesizing these differences together in a way that involves critical analysis, intertextual writing, and learning from another student.

Distributed expertise also took different forms that were productive for learning. From a practical standpoint, distributed expertise appeared quite directly and literally when students helped one another to complete assignments, address writing challenges, and overcome course difficulties, all of which appeared as the “Seeking Help/Assistance/Advice” code. The “Reflecting on Social Learning or Learning From/With Others” code demonstrates how students not only engaged in practices of learning from what other people have said or written as part of the digital community, but also have reflected on that process and on how it happened and what it meant to them. In this case, distributed expertise works both through communicating expertise to others as well as recognizing expertise others have that another student might not have, especially due to experiences related to race, gender, sexuality, disability, or class. Distributed expertise also was enacted in generative ways when students critically shared internet links as evidence or context to inform the discussions they partook in, as well as when students understood or summarized readings, as their interpretations shared in the Slack channel were oftentimes plural, diverse, divergent, and different, opening pathways for generative comparison and contrast. Lastly, distributed expertise also was enacted productively when students discussed building relationships with classmates, when they engaged in agonism, when they used pop culture references as evidence, and when they transferred previous knowledge into a writing or rhetoric insight.

A few longer quotations from students demonstrate larger activities related to distributed expertise that appeared in this study. First, students commented a number of times that they appreciated learning from the unique stories and insights of others, including one student who wrote:

“Through slack, I learned about their perspective on discussions that were had in class that day and about the ways in which they understood the topics relevant to our class. I feel that learning this information about my classmates was beneficial to the learning process, as discussing how others processed the information we were given made me consider it through different perspectives. It required me to think critically about my own perspective, and change it based on new information which I was presented with. On top of this, I learned some interesting stories from my classmates through this channel.”

Other students reported that the social network helped to give them a voice in class that they may not have had otherwise:

“Slack has been a huge help in being able to communicate with my classmates. I generally am a pretty quiet person in class and have a hard time sharing my ideas, so being able to share online has helped me meet my other peers without the pressure of talking in front of everyone. I felt lots of emotions when I wrote to others in Slack. There were feelings of growth and positivity.”

Finally, students commented time and time again how interacting with others online helped them to grow as writers, communicators, and rhetors:

“After composing my Slack post, I typically enjoy reading all other outstanding posts created by other classmates. I enjoy seeing which classmates shared similar ideas and posts and which classmates may offer a different point of view. Over the past few weeks, reviewing these slack posts from other classmates has proven to be very helpful in the sense of learning how to do research, write a persuasive and argumentative essay, cite sources, and recognize the importance of different languages and interpretations. These new ideas and different points of view all made it easier to learn how to work on the out of class assignments... This learning environment that is shared between my classmates and I is perfect for us to help not only each other, but also ourselves.”

In summary, the findings of this study show how distributed expertise can be generative for learning in social media environments through the facilitation of sharing positional insights, discussion across difference, the transferring of prior knowledge, resource sharing, and symbiotic social interaction. One student reported that “as a writer, Slack has helped me become more confident inside and outside the classroom and has helped teach me that my perspective, voice, and opinion matter and can be beneficial to others.” Helping students to more fully realize the

importance, value, and significance of their perspectives on the world benefits any writing classroom, and as we've seen, social media pedagogies can encourage students to gain confidence in their ideas, writing, and ability to impact others beneficially through digital communication.

**Conceptual Category: *Learning Writing/Rhetoric/Composition Skills***

Lastly, the Slack social media pedagogy proved a valuable way to help students to learn writing, rhetoric, and composition skills. The “Learning Writing/Rhetoric/Composition Skills” category was one of the first to emerge and demonstrates how learning ecology formation and distributed expertise, while valuable educational goals on their own, can also help students to build knowledge, skills, capacities, and confidence relating to core course priorities. The findings in this qualitative case study display the utility of social media pedagogies to nurture writing, rhetoric, and composition skill formation, including those related to the communicative capacities, mindsets, orientations, and attitudes generally valued by composition and writing instructors. Codes that appeared in the data centered around discussing writing processes, applying rhetorical insights to real-world situations, discussing challenges of writing, and learning socially show the value social media tools have in helping students to learn writing, rhetoric, and composition skills (see Fig. 4.7).

<b>Discussing the Challenges of Writing</b>	<b>Discussing the Academic Writing Process</b>	<b>Discussing the Internet Writing Process</b>	<b>Relating Course Content to Current Events</b>
<b>Revising/ Editing a Comment</b>	<b>Inventing with Multimedia</b>	<b>Discussing How Slack Writing Transfers/Informs Academic Writing</b>	<b>Seeking Help/Assistance/Advice</b>

<b>Discussing Qualities of Good Vs. Bad Writing</b>	<b>Understanding/ Summarizing Readings</b>	<b>Teaching Someone</b>	<b>Reflecting on Rhetoric's Role in Media</b>
<b>Reflecting on Social Learning or Learning From/With Others</b>	<b>Revising/Editing an Original Post</b>	<b>Discussing Affordances/ Challenges of Digital Writing</b>	<b>Meta-discussion of Slack Discussion</b>
<b>Audience Analysis</b>	<b>Discussing Process of Research</b>	<b>Discussing Argument/ Thesis Statements</b>	<b>Discussion of Counterargument/ Rebuttal</b>
<b>Commenting on Writing Across the Curriculum</b>	<b>Considering Information Value/ CRAAPP Test</b>	<b>Discussing Rhetoric in the World</b>	<b>Synthesizing Conflicting Ideas</b>
<b>Discussing Emotional Experience of Writing in Slack/Writing Online</b>	<b>Discussing Slack Helping to Increase Writing Confidence</b>	<b>Writing Intertextually</b>	<b>Connecting Slack Rhetorical Choices to Academic Rhetorical Choices</b>

**Fig. 4.7:** Some of the codes that emerged in the data in the “Learning Writing/Rhetoric/Composition Skills” conceptual category.

This study uncovered a number of codes in the “Learning Writing/Rhetoric/Composition Skills” category that showcase students helping one another to tangibly improve their writing skills or their performance for a particular assignment. The “Discussing the Challenges of Writing,” “Seeking Help/Assistance/Advice,” “Discussing Qualities of Good Vs. Bad Writing,” “Discussing Process of Research,” “Discussing Argument/Thesis Statements,” and “Discussion of Counterargument/Rebuttal” codes showcase students discussing, reflecting, or deliberating about the choices and challenges of writing. In a writing course, students discussing the intricacies of writing is hardly surprising. In terms of helping students to learn, reinforce, and expand on their knowledge of course content, the collaboration and sharing work students engaged in surrounding writing skills (such as in Fig 4.8, where a student uses #Draw to create a

pizza slice illustrating thesis statements) demonstrates network composition's ability to quite directly help students to learn course content with both breadth and depth. The presence of these codes does showcase, however, that students are not only reinforcing their existing knowledge of writing and rhetoric skills by sharing this knowledge with others, but also are reading and learning about the writing and rhetoric skills of others. One student reported that "Slack has allowed me to learn from my classmates and improve my academic writing," while another wrote in a reflective journal entry that "Slack has also helped me gain writing ideas... Interacting with other students on Slack definitely helped me become a better writer." As students asked for help, assistance, or advice on their writing projects, they engaged in a collaborative process of idea expansion, method comparison, perspective sharing, and learning through interaction with others.



**Fig. 4.8:** A student uses #Draw to illustrate their approach to ideal thesis statement construction for others in the learning community, demonstrating network composition’s ability to help students learn and reinforce course content as well as knowledge of writing skills.

Additionally, the processes of social learning showcased here indicate that network composition and social media pedagogies more broadly have utility across the curriculum, as course subject matter, readings, in-class discussion, and major course topics were all discussed in detail across the 16 weeks of the digital learning community’s operation. In other words, students sharing and discussing the content of a First Year Composition course in this study’s findings lends credence to the more generalizable realization that social media pedagogies can help



students to reinforce, explore, expand, and develop their understanding of course content in nearly any class, rather than being restricted to only composition and rhetoric courses.

Codes that emerged in this study related directly to writing, rhetoric, and composition skills additionally showcase expansion of students' intellectual horizons, as topics that generally would not be featured prominently in everyday life or in academic coursework (such as counterargument, argumentation, researching, or writing challenges) receive conscious and somewhat sustained attention throughout the semester in the social media environment. These codes demonstrate learning ecologies in action, showcasing students collaborating, sharing, and interacting in ways that benefit their capacities as writers and communicators. The rhetorical and communicative activities that students engaged in on the classroom Slack channel, as the findings of this study showcase, indicate that network composition pedagogies can help students to learn and engage with writing, rhetoric, and composition skills, testifying to the utility of social media pedagogies to help students expand their knowledge and capacities related to writing, rhetoric, and composition. These findings are of value to writing courses, to composition and rhetoric instructors, and to stakeholders across the curriculum, as students reinforcing, developing, and expanding their writing and rhetorical capacities is beneficial in nearly any course, major, or industry.

As students collaborated and participated alongside one another, they helped classmates to navigate challenges and develop solutions to writing problems, forming social bonds along the way. Students commonly reported that the social bonds and relationships that they formed with other students helped them to improve their writing and composition skills. A student wrote:

"I think interacting with others was beneficial to my learning, writing, and understanding of rhetoric. In my most recent slack post, I wrote about how I struggled with the introduction paragraph of an essay, and how I felt that these last two classes would help me to better gauge the strength of my paragraph. At the end of the post, I asked if anyone

else struggled when it came to writing an introduction, and three other students said it did. I learned a few tactics to help when it comes to writing and revising my essays in general. All three students- [names redacted] said that they will tend to start with writing the body paragraphs first, and then write an introduction paragraph that will be morphed around the body paragraphs. I will use their advice down the line, because I know I will be struggling with more introduction paragraphs in the future.”

Learning from, with, and alongside others in learning ecologies is one of the most impactful ways that network composition and social media initiatives can help students to learn writing, rhetoric, and composition skills. As this student shows, the challenges of writing that students can commonly encounter in a First Year Composition course can be complex and difficult to navigate, but discussing these challenges with collegial classmates can be of immense help.

Additionally, students discussed the writing processes that they engaged in as part of the course, as the “Discussing the Academic Writing Process” and “Discussing the Internet Writing Process” codes demonstrate. In these cases, students engaged in a process of comparison between writing situations, examining differences in audience, purpose, delivery, media, context, and situation. Comparing difference writing and communication processes involves not only naming components of these processes, but also tracing them across material and intellectual contexts while also raising a student’s consciousness about these processes through their engagement with others who work and think differently from them. In many ways, these codes testify to a level of transfer that students participating in the digital learning community engaged in. Writing for transfer has long been of interest to composition scholars (see Wardle and Downs, 2014; Shepherd, 2018) and the transfer of writing knowledge from digital to academic writing situations (and vice-versa) represents an important rhetorical activity that students engaged in on the Slack channel. The “Discussing How Slack Writing Transfers/Informs Academic Writing” code showcases a number of writing situations students engaged in involving taking insights into

rhetorical choices in one domain and then considering their utility in a different situation. One student reported how “After reading and writing slack posts for the past couple months, academic writing feels more comfortable than it did at the beginning of the semester.”

Discussing of writing processes, both online and in academic writing situations, shows the meta-rhetorical engagement students sustained across the semester involving naming, commenting, tracing, and expanding on writing and rhetorical capacities.

In a number of moments, students transferred an understanding of particular writing, rhetoric, and composition skills from one domain to another. For instance, in a reflective journal entry, a student commented that experimenting with writing in Slack helped them to transfer existing rhetorical capacities related to tone, sentence structure, context, and audience analysis into newly developed capacities that serve multiple contextual needs in a hybrid rhetorical environment. The student wrote:

“One of the main things I think will be useful is my newfound understanding of the line between formal, scholarly writing and casual writing. Prior to this course, I found it difficult to write in a professional yet more casual manner. I would either write long, complex sentences or text-speech. But somehow this platform has allowed me to exercise my semi-formal tone and find a happy medium between the two.”

In this instance, the student reflects on a process of transferring knowledge related to tone, sentence structure, context, and audience analysis from one rhetorical environment to another, in this case from academic writing situations to less formal digital writing situations and then back again. The student’s quotation showcases a level of experimentation that the Slack channel facilitated, as the platform and environment facilitated a setting where communicators could experiment with new tones, attitudes, and personalities in their writing. The processes that students engaged in related to discussing academic and digital writing processes, and their metacognitive and meta-rhetorical transfer work moving between the two, showcase the utility of

social media pedagogies to broaden and expand rhetorical capacities by nurturing knowledge transfer.

The findings of this study in the “Learning Writing/Rhetoric/Composition Skills” category also feature codes that emerged showcasing student writers engaging with digital writing situations in a critical way. Codes like “Discussing Affordances/Challenges of Digital Writing,” “Meta-discussion of Slack Discussion,” “Reflecting on Rhetoric’s Role in Media,” “Discussing Emotional Experience of Writing in Slack/Writing Online,” “Discussing Slack Helping to Increase Writing Confidence,” illustrate the critical, metacognitive, meta-rhetorical processes that students engaged in as they wrote on and about digital writing environments such as Slack. In this social media pedagogy, students engaged in extensive processes of comparing digital writing’s affordances and challenges, pointing out how it differs from traditional academic writing as well as how digital writing can be entirely different based on its context (say, on a public social media channel or in a classroom Slack channel). Several students compared their writing online in their personal lives to their writing in the classroom digital learning environment. They also engaged in extensive meta-discussion of the Slack environment, pointing out what they would change or do differently, how the Slack discussion evolved over the course of the semester, and how their perceptions of the environment oriented their participation across the semester. These metacognitive processes that students engaged in were extensive, and on several occasions they noted realities, processes, or patterns in the Slack conversation that I, as the instructor, had not been attuned to. For instance, some students noticed that others were inclined to participate early on in the week, while others began participating at the end or evenly throughout the week. These sorts of patterns emerged as students formed social bonds, interacted with one another digitally and in-person, and evolved in their participation

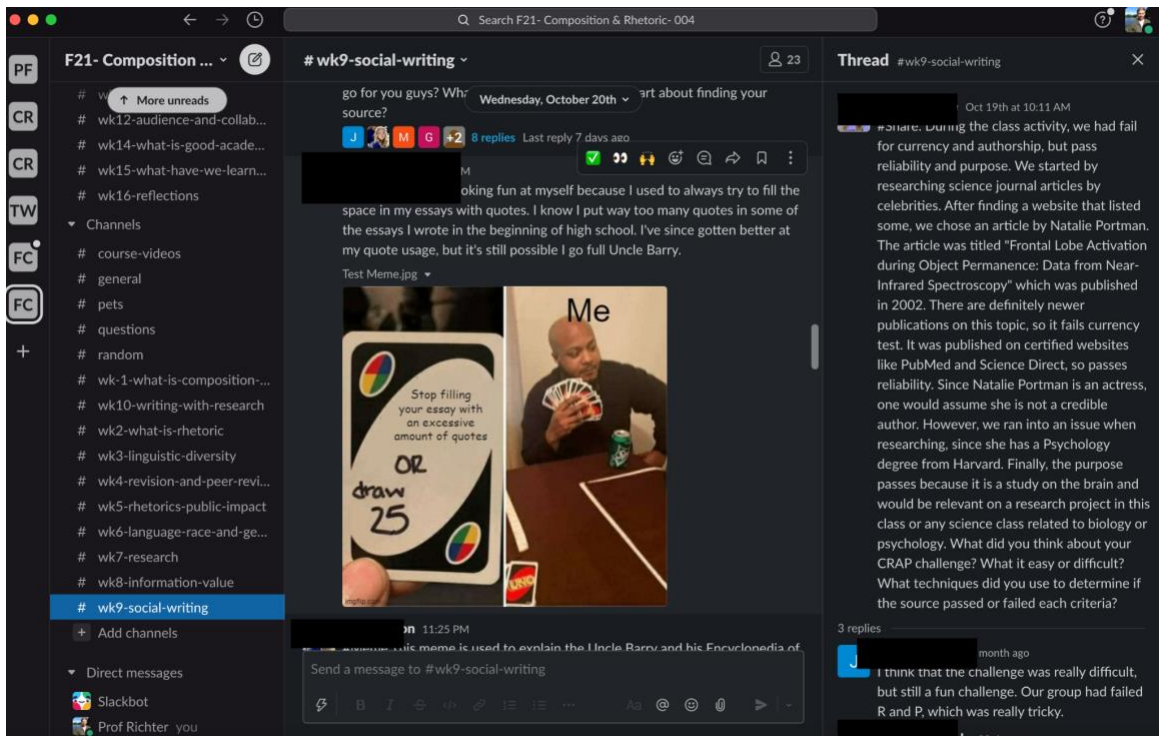
habits over a three-month period. Many students also reflected on the rhetorical strategies and actions that they noticed in media products such as television, music, or on social media platforms.

Participants in the study also reported that discussing writing, composition, and rhetoric with peers online in the Slack channel helped them to gain confidence in their writing abilities. One student wrote that “As a writer, Slack has helped me become more confident inside and outside the classroom and has helped teach me that my perspective, voice, and opinion matter and can be beneficial to others.” In several ways, the hybrid nature of Slack participation, containing both formal and informal elements, helped students to experiment with writing styles and to ask questions that they normally might not have asked. Improving confidence in writing and communication is, of course, a core goal of composition courses. Helping a student to realize that their “perspective, voice, and opinion matter” is also of interest to composition and rhetoric scholars, as this comment from a student gestures toward ideals for higher education that include improving communication skills, citizenship and social participation, and even distributed expertise. Students also discussed the emotional, affective nature of all writing, including digital writing.

Students also showcased capacities to participate in the digital learning environment in ways that are not directly related to the composition of a new post, as the “Inventing with Multimedia” “Revising/Editing a Comment,” “Revising/Editing an Original Post,” and “Writing Intertextually” codes showcase. To start, many students engaged in processes of editing posts to better communicate to their audiences, revising posts to include requested information suggested by commenters, correcting grammatical issues to avoid confusing their readers, and editing their comments to better respond to questions from others in the social learning environment. Revising

and editing original posts as well as comments helped students to better serve their audiences, to communicate to others more effectively, and to reassess their writing after it had been circulated to the larger community.

Additionally, many students invented with multimedia as part of the course's digital learning community. Multimodal composition helps students to build rhetorical awarenesses across media, format communication products based on messaging and audience needs, and work across communication environments to shape arguments (Shipka, 2011; Selfe, 2007; Takayoshi and Selfe, 2007; Palmeri, 2012; Vie, 2018). In the Slack channel, students invented multimodally by creating memes, sharing links to outside internet resources, posting screenshotted images, linking videos, and posting original drawings and diagrams, just to name a few forms of media. Participants in this study did not participate only through writing, and instead made use of links, outside media production programs, and existing visual content recirculated into the Slack channel (See Fig. 4.9). While digital writing was not the exclusive mode of participation on Slack, it does represent the primary way students participated, and it should be noted that digital writing was commonly blended visual modes of communication or with links to writing originally produced by someone outside of the course. Nonetheless, most participating students engaged in multimodal rhetorical invention at least once in the Slack channel over the course of the semester, and some even did so on multiple occasions.



**Fig. 4.9:** Students engaged in rhetorical invention in the classroom learning community with multiple media, including through the digital writing and meme creation showcased in this screenshot of the Slack channel.

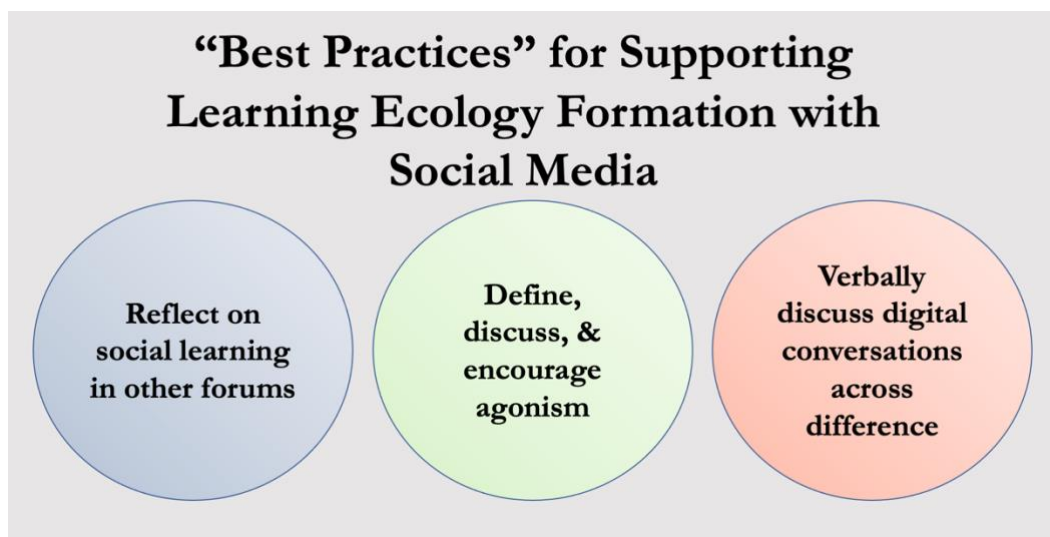
Finally, a few other findings emerged in this study that characterize the “Learning Writing/Rhetoric/Composition Skills” category in less-obvious ways. Students related course content to current events, demonstrating the ability to connect social and political happenings to rhetoric and writing as well as to other components of course content, including discussions of rhetoric as it appears in popular and public culture. Students summarized and collaboratively discussed their interpretations of course readings, and additionally discussed analyzing audience needs, reflected on writing across the curriculum, and considered the credibility and value of multiple forms of information.

## **“Best Practices” for Nurturing Learning Ecology Formation, Distributed Expertise, and the Learning of Writing/Rhetoric/Composition Skills with Social Media**

The findings of this study demonstrate social media tools to offer instructors opportunities to support learning ecology formation, distributed expertise, and the learning of writing, rhetoric, and composition skills in their pedagogies. In this section, I showcase three “best practices” for each category that instructors can consider engaging in within their social media pedagogies to most effectively support these important learning processes.

### *“Best Practices” for Nurturing Learning Ecology Formation with Social Media*

Based on the findings of this study, I offer three recommended “best practices” for instructors using social media tools in their pedagogies to help cultivate learning ecology formation. In summary, the findings of this study suggest that instructors using social media tools in their classrooms should discuss social learning in other forums, define and encourage agonism, and verbally discuss digital conversations across difference (see Fig. 4.10).



**Fig. 4.10:** “Best Practices” for nurturing learning ecology formation in social media pedagogies.



### *Best Practice: Reflect on Social Learning in Other Forums*

To start, instructors using social media such as Slack as learning tools should reflect on the dynamics of social learning in other forums, such as in an in-person class session or in written materials in an online course. Discussing social learning in other forums helps students to understand and then practice the goals of the Slack pedagogy, and additionally shed light on the engagements others in the learning community are participating in so that individual students have models of what generative, ideal interactions look like. Instructors should ask students to reflect on their social learning processes, including through discussion of specific interactions, moments, posts, comments, and communications that the group found interesting. Students should be given time to reflect verbally and in writing on their processes of learning from, with, and alongside others, as this is not only a core advantage of social media pedagogies, but also is a prime opportunity to reinforce the generative conversations across difference that digital discussions can provide. Stemming primarily from the “Reflecting on Social Learning or Learning From/With Others,” “Teaching Someone,” “Discussing Building Relationships with Classmates,” “Reflecting on Listening To/Learning From Someone Else,” and “Commenting on Critical Reading of Others’ Ideas” codes, reflecting on social learning in multiple forums allows for reflection, critical analysis, explication of successful practices, and discussion of how to replicate those successful interactions.

A similar beneficial practice for instructors to engage in is to discuss the relationships students have formed in-person and how they translate into the digital learning community, and then vice-versa. Discussing horizontal student-to-student relationships helps social learning opportunities to be maximized, as students may not be aware of the value social learning can

provide to them if it's not explicitly referenced, valued, or drawn upon. Discussing the ways that personal experience, stories, and first-hand knowledge can be valuable components of a learning ecology represents an important opportunity for students to learn from, with, and alongside one another. To further reflect on and encourage social learning, instructors can also consider verbalizing requests for help, assistance, and advice that arise in the social media community. Whether performed verbally in class, in a written course material, or in some other form, instructors should bring up specific questions that are asked, as these are likely to be of general interest to other students in the class. Requests for help, assistance, or advice can be opportunities for course-wide reiteration of key content, and these opportunities for reflection and discussion of challenging topics is important to not pass up.

*Best Practice: Define, Discuss, and Encourage Agonism*

The internet and social media spaces are often framed as echo chambers and filter bubbles (see Pariser, 2012). However, deliberation and agonism do occur online, though they are certainly not homogeneous or experienced equally along lines of race, gender, and class (see Richer, 2021). Students in digital social media learning environments should be encouraged to consider, recall, and reflect on generative disagreements in their lives (both in college and beyond) that resulted in learning, perspective adjustments, or changes in understanding of some issue, topic, or idea. Many of the students who participated in this study reported experiencing generative disagreement, and agonism was something that we discussed more than once in class, helping to orient students toward productive practices of disagreement that remain respectful, kind, generous, and grounded in mutual care. Even across realities of difference and heterogeneity, students can challenge one another intellectually, ideologically, and

philosophically in ways that are beneficial to all participants. Firm ground rules and community expectations for conduct (such as “Statement of Community Values” documents examined in Ch. VI) are essential to helping establish generative parameters for discussion, however, that avoid offensive language, bullying, aggression, or discrimination. Generative disagreements can be productive for social media learning communities, but aren’t commonly achieved automatically without conscious, intentional effort. Agonism is a valuable practice that instructors should define, explore, discuss, and encourage with students while still maintaining commitments to participant well-being, equity, and safety. Arising primarily from the “Agonism,” “Synthesizing Conflicting Ideas,” and “Writing Intertextually” codes, defining and discussing agonism can help orient students toward future interactions across difference that are generative for all involved.

Relating to pursuing agonism, instructors can also encourage students to practice synthesizing conflicting ideas both online and in other in-person forums. It’s almost impossible to participate in a social learning community centered around participation and not synthesize conflicting ideas at one time or another. Across the full arc of a course, so much discussion and back-and-forth occurs that conflicting ideas necessarily arise. Reconciling these conflicting ideas requires communication, rapport, listening, and prior relationships. As conflicting perspectives arise in discussion, practicing their comparison, contrast, and synthesis can be a valuable opportunity to listen across difference, adjust and hone arguments, and critically reexamine issues based on new evidence or insights. Listening to others in the social network is accompanied by teaching others, and as conflicting ideas, opinions, and perspectives arise, valuable opportunities for generating new connections and insights arise as well.

*Best Practice: Verbally Discuss Digital Conversations Across Difference*

Instructors should also consider discussing conversations across difference that students have had in the Slack channel. As students read, write, interact, and grow throughout the semester, their opinions and views on particular topics can evolve. Inspired by the “Commenting on Discussions Across Difference,” “Commenting on Social Dynamics of Slack Interaction,” and “Teaching Someone” codes, discussions across difference arise frequently in classroom social media channels, as students write and participate on their own terms and in their own ways. As such, difference appears frequently, commonly, and visibly, and this is certainly among the advantages of a social media pedagogy. A pedagogy that challenges students to mobilize their academic, personal, experiential, and positional literacies and experiences will necessarily bring differences into the classroom, and social media tools facilitate these sorts of active, participatory pedagogies in unique ways. In contrast with more passive, sage-on-the-stage type pedagogies, the active participation and interaction that digital writing in a course necessitates makes discussion across difference a feature, not a bug or anomaly. Considering this, instructors should verbally discuss digital conversations across difference that arise both in the social media space and beyond.

Another consideration instructors can implement related to encouraging discussion across difference involves phatic communication, or communication that is intended for relationship building and social bond formation rather than for direct information transmission. In many ways, embracing phatic communication (especially early on in the course) can help a learning ecology to more generatively engage in discussions across difference later on, as bonds and relationships will already have been formed. Building learning ecologies requires that students

get to know one another, form relationships, discuss what they have in common, and interact in processes that may not directly involve the instructor (but that arise out of course design). As such, phatic communication represents a valuable opportunity to form horizontal, student-to-student social bonds that pay off through learning later on. Especially early on in a semester or in a course, phatic communication should be encouraged and embraced, as social learning and learning ecology formation rely upon students forming horizontal bonds that facilitate perspective sharing, collaboration, discussion, and fruitful idea exchanges later on. Students also stand to benefit from emotional validation, community, group rapport, interconnection, and joy from relationships formed through phatic communication. Instructors should balance phatic communication with discussion of course content, engagement with complex ideas, and critical application of ideas, but should certainly not discourage communicative interactions centered around building relationships with other students.

#### *“Best Practices” for Nurturing Distributed Expertise with Social Media*

The findings of this study inspire three “best practices” for instructors to consider to best nurture distributed expertise in their social media pedagogy. To maximize learning through encouraging distributed expertise, instructors should define and discuss positional expertise, crowdsource requests for help or assistance, and explore disagreements as they arise in their social media pedagogies (see Fig. 4.11).



**Fig. 4.11:** “Best Practices” for cultivating distributed expertise with social media pedagogies.

*Best Practice: Define & Discuss Positional Expertise*

To start, instructors should provide students with definitions of what distributed expertise is. Additionally, instructors should examine specific examples and moments in which distributed expertise is demonstrated, pointing students toward concrete situations in which expertise on a topic strays from conventional norms and assumptions. By highlighting how expertise and insight into a phenomenon can be gained through personal experience, story sharing, and positional insight, in addition to expertise obtained more conventional marks of expertise such as formal qualifications or research, instructors can broaden what sorts of insights, commentary, knowledge, and know-how are valued in their classrooms. Actions highlighting distributed expertise can also help to increase student confidence in the value of their ideas, in the relevance of their experiences to inform discussions of important issues, and in the forms of knowledge that are elevated by the pedagogy. Inspired by codes in the data like “Connecting Rhetoric to Personal Experience,” “Citing Positional Expertise,” “Storytelling/Personal Experience as Evidence,” “Connecting Rhetoric to Personal Experience,” “Statement of Identity,” defining and

discussing distributed expertise helps students to intentionally enact these helpful and equitable practices.

In this sense, discussing and prioritizing distributed expertise in a social media pedagogy offers an opportunity to enact social justice in the learning space, as valuing expertise based on positional insights and knowledge— especially related to race, gender, disability, sexuality, and class— can broaden what knowledge, stories, and insights are valued by the classroom learning structure, potentially subverting dominant systems of power in momentary but important ways. Encouraging enactment of distributed expertise also allows students to bring their unique cultures, backgrounds, ethnicities, and interests into the classroom, as signaling to students that expertise and knowledge unique to a particular cultural group is valued helps to create environments that are more inclusive and hospitable for the sharing of cultural knowledge. Sharing of cultural knowledge, individual experiences, and community values with a digital learning community can result in moments of vulnerability for students, and actively encouraging distributed expertise is one way instructors can help to lessen this vulnerability and encourage productive attitudes toward these practices.

One effective way to encourage students to enact positional expertise is to discuss how personal knowledge can transfer into more formal academic knowledge. To help students to transfer and apply knowledge from their own lives and experiences into knowledge related to course content, instructors can verbally discuss this transfer and application within in-person courses or in other course materials. One of the codes that emerged in this study, “Transferring Previous Knowledge into Writing/Rhetoric Insight,” showcases how students would commonly use old experiences to inform new understandings of course content in the ENG 1030: Composition & Rhetoric class. This occurrence included applying old experiences as examples

of the rhetorical appeals, as an example of tailor a message for a specific audience, and to illustrate experiences with globalization when the course examined a reading that discussed it. Examining the process of transferring existing knowledge into course-related knowledge can help students to more consciously and unconsciously enact this valuable learning practice.

*Best Practice: Crowdsource Requests for Help or Assistance*

Inspired by codes such as “Seeking Help/Assistance/Advice,” “Teaching Someone,” “Understanding/Summarizing Readings,” “Reflecting on Social Learning or Learning From/With Others,” “Reflecting on Listening To/Learning From Someone Else,” “Commenting on Critical Reading of Others’ Ideas,” instructors should also crowdsource requests from students for help or assistance that arise in the social media environment. For instance, if a student in a writing course solicits feedback from classmates regarding the effectiveness of their introduction paragraph, instructors should bring introduction paragraphs up in class or revisit them in other course materials once again. Instructors should notice these moments as they occur in the social learning environment and then bring them up either verbally in an in-person course or in other course materials in an online class setup. If one student is facing a specific difficulty, problem, or challenge, there’s a fair chance that other students are encountering and navigating a similar challenge. Considering this, crowdsourcing and discussing requests for help, assistance, or advice can help to inspire learning moments for other students in the course who may be facing similar challenges.

Crowdsourcing requests for help or assistance helps distributed expertise to be enacted because it helps students to form horizontal student-student bonds as well as helping students to value their own insights, perspectives, and knowledge as beneficial to the larger learning



community. An important opportunity for instructors to nurture and encourage social learning is to discuss what it means to learn from classmates online and ask students to verbally share stories of their experiences learning from or alongside others in the digital learning environment. Pointing out fruitful moments of social learning can help students to note the benefits of these learning interactions and can additionally help students to enact these processes in future interactions. Highlighting successful social learning interactions as they occur in the social learning environment can help student reflect on those interactions, notice what approaches and attitudes made them fruitful, and helps them to replicate those methods in future interactions.

#### *Best Practice: Analyze & Explore Disagreements*

As disagreements arise in the social learning environment, discussing disagreement as a common occurrence as well as in specific practice can be a valuable learning moment for students. Disagreement encourages students to put their thoughts into words, consider how best to communicate them to potentially disagreeable audiences, explain components or details of their ideas when responding to comments, and synthesize conflicting perspectives together based on social interactions with peers. As many participants in this study mentioned, disagreement can be a productive and generative moment if handled in a way that respects all members of the discussion and is grounded in mutual respect. Stemming from codes such as “Analyzing/Exploring a Disagreement,” “Commenting on Discussions Across Difference,” “Discussing Building Relationships with Classmates,” and “Agonism,” instructors should consider analyzing and exploring disagreements with their students. One student wrote that “when composing posts and replying to others I also learned things from my classmates... I learned how to respectfully communicate with them over slack, even if I disagreed with them”

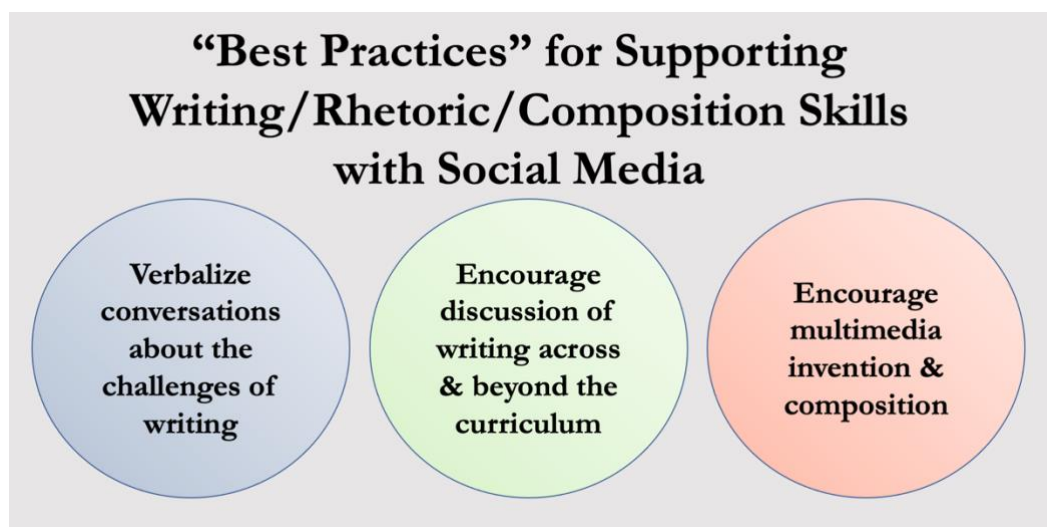
[sic]. Another student wrote that “while some people do not like when others disagree with them, I actually don’t mind it... I find it very interesting to see other people’s viewpoints, especially if they are different from mine... Slack is a great tool to use for this purpose; it has allowed us to connect with others through similar views, and even different views.” Considering these reflections, communication across disagreement is a valuable rhetorical aptitude for students to develop. Instructors can consider analyzing and exploring disagreement verbally and explicitly as an opportunity to nurture distributed expertise, discussing with students how differing viewpoints can be beneficial and generative if grounded in mutual respect and kindness.

An effective way to analyze and explore disagreements is to value how storytelling and personal experience can be approached as evidence to inform how the learning community conceptualizes and understands an idea or concept. Instructors can help the learning community to value storytelling and personal experience as evidence to encourage distributed expertise, and in doing so can help to make disagreements more generative for everyone involved. In making stories from experience and individual practice valued parts of the classroom, instructors not only signal to students that their cultures, backgrounds, perspectives, and values are respected in the course discussion, but also that they are important sites of knowledge that can inform classroom discussion on any particular topic. Stories help to orient humans and their cultures, and elevating personal experiences and storytelling helps to nurture distributed expertise in ways that can supplement more traditional forms of expertise, such as expertise obtained through research or through prior college coursework. Elevating stories and personal experiences can also open up opportunities to enact social justice in the classroom by honoring and valuing a wide range of knowledge forms that eschew traditional “sage on the stage” teaching models that risk reinforcing or projecting dominant structures of power.

Actively appreciating stories and personal experience in the digital learning environment also helps offer avenues for participation and contribution from students who are not comfortable speaking publicly in traditional ways in class. For instance, one student mentioned in an interview: “I generally am a pretty quiet person in class and have a hard time sharing my ideas, so being able to share online has helped me meet my other peers without the pressure of talking in front of everyone... I felt lots of emotions when I wrote to others in Slack.... There were feelings of growth and positivity.” As such, valuing experiences, stories, and insights in the digital learning space additionally offers students alternative avenues for participation, potentially opening up new possibilities for sharing, interaction, and learning.

*“Best Practices” for Nurturing the Learning of Writing/Rhetoric/Composition Skills*

The findings of this study inspire three “best practices” for instructors to consider to encourage learning of writing, rhetoric, and composition skills through social media pedagogies. To maximize learning potential related to writing, rhetoric, and composition skills, instructors should verbalize conversations about the challenges of writing, encourage discussions about writing across and beyond the curriculum, and encourage multimedia invention and composition (see Fig. 4.12).



**Fig. 4.12:** “Best Practices” for cultivating Writing/Rhetoric/Composition Skills in social media pedagogies.

*Best Practice: Verbalize Conversations about the Challenges of Writing*

Arising from codes like “Discussing the Challenges of Writing,” “Discussing the Academic Writing Process,” “Seeking Help/Assistance/Advice,” “Discussing Qualities of Good Vs. Bad Writing,” “Discussing Emotional Experience of Writing in Slack/Writing Online,” and “Discussing How Slack Writing Transfers/Informs Academic Writing,” instructors should verbalize conversations about the challenges of writing that arise in the digital learning environment in large-group settings to help encourage the learning of writing, rhetoric, and composition skills. If or when students bring up communication challenges that they’re facing in a particular assignment or in some other situation, instructors can consider bringing that issue up with the entire course as a way to generalize knowledge about appropriate responses and solutions. If one student is navigating a particular challenge, there’s a fair chance that others are as well. Discussing the issue, as it arises in the social learning environment, can help students to address the challenges of writing in both digital and in-person environments.

Discussing the challenges of writing is also a good opportunity to explore what students consider to constitute effective and ineffective writing. Discussing examples of effective and ineffective communication with students offers an opportunity to name what makes the communication successful as well as to translate these insights into future practice. As such, discussing effective and ineffective writing examples with students, especially when these examples are discussed in the digital learning community, can help to bolster those students' understandings of writing, rhetoric, and composition. Instructors can also encourage students to discuss effective and ineffective communication in the social media learning space to build those students' critical communication capacities, their understandings of particular rhetorical contexts and situations, and their rhetorical sensibilities.

Considering challenges entailed in writing processes can also be a good opportunity for discussing how writing confidence evolves over time. A surprising finding in this study was that participating in Slack helped to improve writing confidence. Considering this, it could be beneficial for instructors to commit to discussing digital learning communities and confidence in writing abilities as part of the course, especially at the end of the course. Encouraging students to consider the emotional aspects of writing, including emotions of excitement, confidence, frustration, and apathy that can be common to students as they write, can help them to reflect on the embodied, material nature of all writing practices. Connecting the social learning community, and its discussions of the writing and communication process, with writing confidence as an explicit goal can help students to consider what sorts of discussions might help them to build writing confidence and then could encourage them to enact them. By discussing confidences and doubts related to writing and communication capacities, students can exchange knowledge,

empathize with one another, consider unforeseen communication possibilities, and help others to find solution to their doubts.

*Best Practice: Encourage Discussions about Writing Across and Beyond the Curriculum*

Verbalizing discussion about writing across the curriculum, especially if it arises as a topic of conversation in the social media learning environment, can also help to develop writing, rhetoric, and composition skills. When students in this study discussed writing in contexts beyond the First Year Composition course, they deconstructed many of the central concerns of the course (including audience, genre, message, argument, evidence, and arrangement) in a multitude of discussions, including in routine social media composing situations but also in writing assignments in other courses. By discussing writing across the curriculum, including discussions of writing situations beyond the core scope of the course, students can examine components of writing and rhetoric as they appear in situations related to their writing course, but also to their other courses, their other major, or their future industry or career. Instructors can also encourage students to participate on social media by discussing their experiences writing across the curriculum in, say, a STEM or social sciences course. Discussing writing across the curriculum in the digital learning community serves as an opportunity for instructors to reinforce, expand, and supplement existing knowledge of important writing and rhetorical conventions.

Stemming from codes like “Commenting on Writing Across the Curriculum,” “Discussing the Internet Writing Process,” “Discussing Affordances/Challenges of Digital Writing,” and “Connecting Slack Rhetorical Choices to Academic Rhetoric Choices,” discussions of writing *across* the curriculum are also a good opportunity to examine writing situations *beyond* the curriculum, including examining internet and academic writing alongside one

another. Comparing internet and academic writing processes can also help students to learn writing, rhetoric, and composition skills. In Slack, a number of students continually examined how the audiences that they wrote to for particular assignments differed from the audiences they wrote for in the classroom learning community, which included their peers as well as their instructor. As audience analysis is a valuable part of the writing process in both academic and online settings, instructors can also compare and contrast the writing processes that they undergo in each setting, including how they brainstorm an idea, arrange the components of a message, provide evidence and support for their arguments, and distribute that message to various publics. By comparing academic and internet writing processes, instructors can help students to transfer writing and rhetorical knowledge between both domains, drawing on personal experiences writing on Instagram, reddit, or Snapchat as well as in more formal settings such as a lab report or a speech for a public speaking course.

*Best Practice: Encourage Multimedia Invention & Composition*

Inspired by codes such as “Inventing with Multimedia,” “Audience Analysis,” “Reflecting on Rhetoric’s Role in Media,” and “Discussing Rhetoric in the World” encouraging multimodal invention and multimodal composition can help promote environments where rhetoric and composition skills are developed with an emphasis on communication rather than simply to writing. Instructors of writing and composition have long articulated the value of multimodal approaches to composing (Yancey, 2009; Shipka, 2011; Palmeri, 2012; Eyman, 2015; Ball, 2004; Selfe, 2007) and social media pedagogies offer a valuable opportunity to encourage low-stakes multimodal invention. Over the course of data collection, students in the Slack learning community created memes, shared links, included images, created drawings, and

shared videos embedded into the Slack channel. Considering the opportunities for multimodal creation and distribution available in social media environments, instructors should encourage students participating in network composition pedagogies to branch out beyond writing and to create memes, videos, images, and other forms of communication beyond the typical written post. Encouraging low-stakes multimodal composition can help students to address audiences with visual and sonic media, tailor unique communication forms to particular contexts, and layer semiotic meanings across multiple modes of expression.

Instructors can also encourage comparison of academic and internet audiences, purposes, and goals in both the digital learning community and in more traditional verbal settings. By encouraging students to discussing and compare audiences, purposes, and goals in the two settings, instructors can build rhetorical sensibilities that are flexible, adaptable, and versatile for a multitude of communication situations. Multimodal composition is enacted commonly on the internet and is likely a familiar experience for students that can inform more formal discussions in class. Encouraging students to discuss audiences, purposes, and goals in both academic and internet situations can help students to transfer rhetorical knowledge, experience, and judgement between situations, helping to generalize that rhetorical knowledge for use in future contexts and communication situations.

### **Conclusions: Takeaways for Social Media Pedagogies**

This study's findings showcase the abilities of social media rhetorical environments to nourish communities in which learning ecologies can form, in which distributed expertise is cultivated, and where writing, rhetoric, and composition skills are developed. While some of the findings in this study were somewhat unsurprising to me, many of the codes that supported the



categories were unexpected. For instance, I was surprised as the “Commenting on Social Dynamics of Slack Interaction,” “Commenting on Writing Across the Curriculum,” and “Discussing Social/Collaborative Rhetorical Invention” codes emerged in the data, as I hadn’t had any inclination based on past experiences that these phenomena were occurring in the Slack social media pedagogy. In many cases, codes emerged that I expected might arise, but I was surprised by the extent to which they were demonstrated in the data. Anticipated codes that surprised me with the extent in which they were demonstrated included “Teaching Someone,” “Seeking Help/Assistance/Advice,” “Commenting on Discussions Across Difference,” and “Reflecting on Listening To/Learning From Someone Else.” While many codes surprised me, both by emerging at all and in the extent to which they appeared, some others I probably could have anticipated prior to completing the study. I was certainly surprised throughout by the depth and sheer variety of codes that supported each category, however. While I anticipated my *a priori* categories would be supported in the data, the actual codes that emerged supporting them were, generally, quite surprising. They especially were *illuminating*, telling me far more about a category than I knew before and also backing up these prior inclinations with both evidence and student expertise. Altogether, the findings of this study contribute learning ecology formation, distributed expertise, and the learning of writing, rhetoric, and composition skills as tangible learning outcomes for composition pedagogies that make use of social media. The findings also contribute to the emerging literature surrounding social media’s application in composition (see Vie, 2008; Vie, 2015; Witek and Grettano, 2016; Amicucci, 2020; Shepherd, 2020; Faris, 2017; Vie, 2017).

Overall, considering learning ecology formation, distributed expertise, and the learning of writing, rhetoric, and composition skills helps to address the research questions introduced in Ch.

I's Introduction: *How do student composers invent within networked social media environments?* and *What can this study tell us about potential 'best practices' for network composition pedagogies?* These findings also help to demonstrate the utility of network-emergent rhetorical invention, introduced in Ch. II on Invention in Digital Environments, as a tool for learning. In Ch. V, the other conceptual categories examined in this qualitative case study with grounded theory elements— rhetorical invention, digital and social media literacies, and digital citizenship—are examined in detail. The utility of network composition and social media pedagogies to develop learning ecologies, encourage distributed expertise, and promote the learning of writing, rhetoric, and composition skills represent important possibilities for stakeholders invested in all facets of rhetoric, composition, and digital communication.

## CHAPTER FIVE

### FINDINGS II: CULTIVATING RHETORICAL INVENTION, DIGITAL AND SOCIAL MEDIA LITERACIES, & DIGITAL CITIZENSHIP WITH SOCIAL MEDIA

Researchers have long been interested in how rhetors generate ideas (rhetorical invention), how they communicate those ideas across digital networks (digital and social media literacies), and finally how those communications can be mobilized for advocacy and activism in digital environments (digital citizenship). In rhetoric and composition studies, the topics of rhetorical invention (see Crowley, 1990; LeFevre, 1987; Lauer, 2004; DeWitt, 2001; Brooke, 2009; Tomlinson, 2013; Carlson, 2019), digital literacy (Selfe, 1999; Yancey, 2009; Eyman, 2015), social media literacy (Vie, 2008; Vie and Walls, 2017; Mina, 2017), and digital citizenship activities (see Sheridan, Ridolfo, and Michel, 2012; Ulmer, 2019; Jones and Trice, 2020; Richter, 2021; Pfister, 2014) have received at least some level of sustained attention across recent disciplinary history. Communicating in social media and other digital environments, especially communication that involves digital citizenship activities, is of tremendous interest to the teaching of rhetoric and composition. It is also of great interest to society at large, considering the outsized role that digital communication environments play in mediating personal, social, and political lives. The findings of this dissertation are relevant and helpful for both exigencies—pedagogical and civic—and help to orient an approach that instructors can use to foster important rhetorical practices among students related to invention, digital and social media literacy, and digital citizenship.

In this chapter, I overview findings of this dissertation's qualitative study related to two *a priori* conceptual categories—Rhetorical Invention and Digital and Social Media Literacies—as well as an emergent category, Digital Citizenship. The categories are examined in this sequence because they, to at least some partial extent, build on one another, as many of the activities

involving Rhetorical Invention led directly into activities involving Digital and Social Media Literacies as well as Digital Citizenship. Following a similar format as in Ch. IV, this chapter outlines the study's findings related to these categories before recommending some "best practices" for instructors using social media tools in their pedagogies. After collection, coding, and analysis of 146 pages of Slack participation data, 139 pages of Slack Reflective Journal data, and 111 pages of interview data, the findings of this study show social media pedagogies to encourage Rhetorical Invention, Digital and Social Media Literacy development, and practices of Digital Citizenship. These findings, in addition to those examined in Ch. IV, contribute to emerging disciplinary scholarship that connects social media and composition courses (see Yancey, 2009; Vie, 2008; Vie, 2015; Witek and Grettano, 2016; Richter, 2021; Gallagher, 2019; Shepherd, 2020; Faris, 2017; Vie, 2017). As personal, social, and political lives become ever more mediated by digital and social media technologies, the ability to communicate effectively across these spaces, especially for goals of learning and advocacy, becomes more important than ever.

### **Conceptual Category: *Rhetorical Invention***

Social media pedagogies have potential to encourage practices of rhetorical invention that can be helpful for education, learning, and the teaching of writing skills. Traditionally, invention is conceptualized as the formation of ideas, discourses, texts, and arguments in response to a particular rhetorical context (LeFevre, 1987; Crowley, 1985). Over the course of data collection and coding, I found students to be engaging in invention practices in the Slack learning environment that mirrored many of the core practices of network-emergent rhetorical invention (explored more formally in Ch. II on Rhetorical Invention in Digital Networks), namely

engaging in rhetorical invention while interacting simultaneously with other people, hardware, interfaces, communities, cultures, discourses, genres, code, and infrastructures. The codes that emerged from the classroom study of rhetorical invention in the Slack social media learning community suggest that as students participate, connect, and communicate together in the online space, they engage in a number of important rhetorical invention processes that are valuable in the instruction of rhetoric, writing, and communication. A number of codes emerged that showcase how students engaged in rhetorical invention within the social learning community (some of which are showcased in Fig. 5.1).

<b>Inventing to Comment on the Internet/Social Media/Culture</b>	<b>Inventing Rhetorically to Comment on Society/Politics/Culture</b>	<b>Synthesizing Conflicting Ideas</b>	<b>Agonism</b>
<b>Reflecting on Society/Culture</b>	<b>Storytelling/Personal Experience as Evidence</b>	<b>Understanding/Summarizing Readings</b>	<b>Inventing A New Mode of Participation</b>
<b>Inventing as a Response to a Social Interaction</b>	<b>Discussing Invention of a Slack Post</b>	<b>Discussing Social/Collaborative Rhetorical Invention</b>	<b>Critical Sharing of an Internet Link</b>
<b>Discussing Challenges of Rhetorical Invention</b>	<b>Commenting on Social Dynamics of Slack Interaction</b>	<b>Inventing with Multimedia</b>	<b>Discussing Invention in Specific Writing Situation</b>

**Fig. 5.1:** Some of the codes that emerged in the data in the “Rhetorical Invention” conceptual category.

To start, student participants frequently reported inventing as a response to a social interaction, including responding to what others had said about a topic in physical class sessions, in a previous week’s posts, or in a post or comment that week. Codes such as “Inventing as a Response to a Social Interaction,” “Discussing Social/Collaborative Rhetorical Invention,”

“Discussing Invention of a Slack Post,” and “Commenting on Social Dynamics of Slack Interactions” that emerged testify to the social, collaborative, and mediated invention practices that students engaged in within the Slack learning environment. Students commented repeatedly about how social, collaborative, and response-driven their invention processes in Slack turned out to be, which some noticed was also true across other invention situations. A student noted how “When composing a post in Slack, I will write down all of the main points from class including main discussion points, new tools we have learned, and discussions from small groups. I like to talk about the discussions that were had in small groups instead of talking about what the whole class talked about, so I can share information with the class that they have not heard.” Another commented on social invention based on Slack interactions themselves, commenting how they “have learned just from reading other people’s Slack responses... If I read someone’s and like the way it sounds, or how it is formatted, I normally will take a mental note of it... Then, when it comes time for me to write something of my own, I take inspiration from my classmates and their writing styles... Of course, I put my own twist on it, but I still feel it is and has been very beneficial to my writing as a whole.” Another student narrated their experience with rhetorical invention in the digital learning community by writing:

“When composing a post in Slack I go through a similar process every week. First I reflect on what we learned or discussed in class that week. Then I go to the Canvas page to find the different modes of posts so that I can choose something different from what I did the week before. After choosing my mode, I think about what I want to talk about and come up with an idea of what I will say. Lastly, I think of a question to ask everyone else, then I put it all together and create my post. I always make sure it is something that I would want to read or respond to had someone else posted it. Once I post, I check back a couple days later to view any responses on my post and respond back.”

As these quotations demonstrate, students reflected critically on their rhetorical invention processes in the networked social media environment, including calling attention to reading and

reflecting on academic social interactions, review of course content, devising of a form of digital participation, crafting of a message, and finally the monitoring of the reception and circulation of that invention.

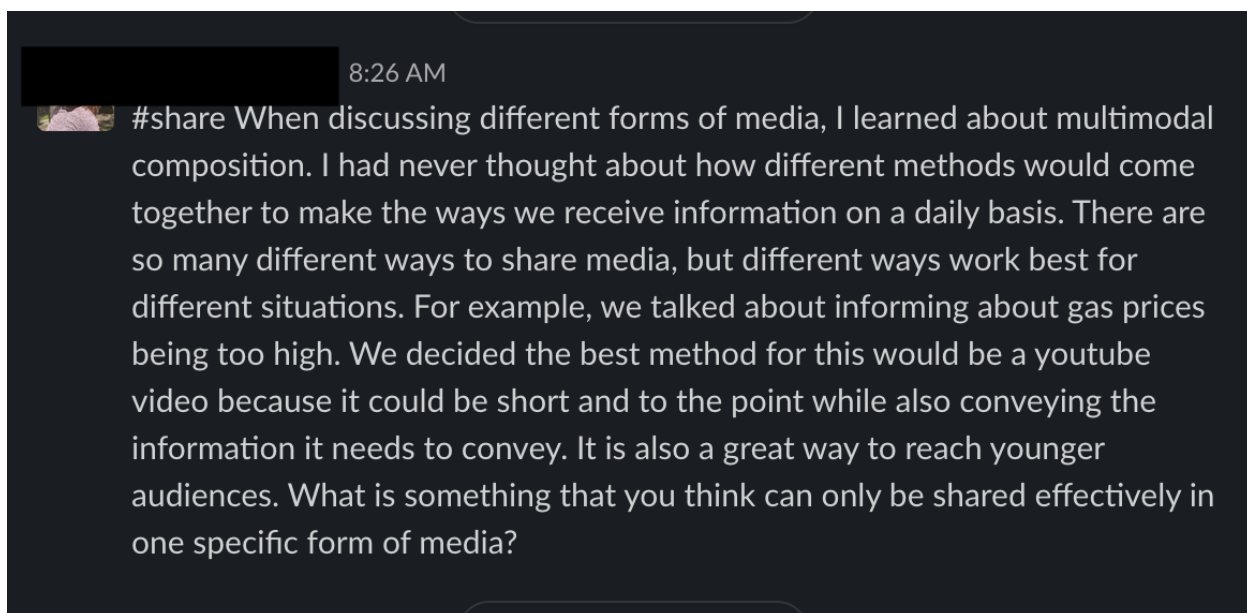
Participating in the classroom Slack channel also encouraged student participants to consider their own writing and invention processes, including their social elements, across multiple modes that included academic composing situations and digital composing situations. In these cases, students considered how they tended to generate ideas based on responding to class sessions, responding to readings, recalling past knowledge, conducting preliminary research, and discussing preliminary ideas with others. Students also wrote frequently about the challenges of rhetorical invention, including discussing difficulties generating ideas related to both the Slack channel and to major class assignments. A number of times, however, student participants commented how writing so frequently in the Slack channel helped them to generate ideas as well as to build habits and processes that made invention elsewhere easier.

For instance, one student participant noted in an interview that the Slack community “helped me coming up new and engaging ideas to write about because sometimes I would have really bad writer's block where I would just be sitting there and then I'd look at my phone and then I'd be like what can I talk about next, but having this spontaneous need to come up with these different ideas and concepts in the Slack helped me come up with good and related concepts in like the argumentative essay” and in other assignments. Another student wrote that “I really felt an intellectual connection with my classmates,” and another added that “small conversations in the comments are the key to the process of learning from others, as it helps you learn what people think of your thoughts and experiences as well as allowing you to communicate your thoughts on another person's post.” Engaging in invention processes

responding to conversations with other students showcases the development of horizontal, student-to-student bonds, and these processes demonstrate how asking students to discuss, converse, and interact with one another can help facilitate social learning through digital participation.

Another common code that was featured in Slack participation data throughout the semester was “Inventing Rhetorically to Comment on Society/Politics/Culture.” In the First Year Composition course, current events, political examples, and cultural analysis are all important parts of how the value of rhetoric and composition are communicated. Codes such as “Inventing Rhetorically to Comment on Society/Politics/Culture,” “Inventing to Comment on the Internet/Social Media/Culture,” “Inventing to Comment on the Internet/Social Media/Culture,” “Reflecting on Society/Culture” emerged that showcase how students invented rhetorically to comment on culture, society, social media, and politics (see Fig. 5. 2). This mode of rhetorical invention helps students to connect rhetoric, writing, and composition with the possibility of social change, and additionally helps them to engage in digital citizenship activities, which is examined in more depth later on in this chapter.





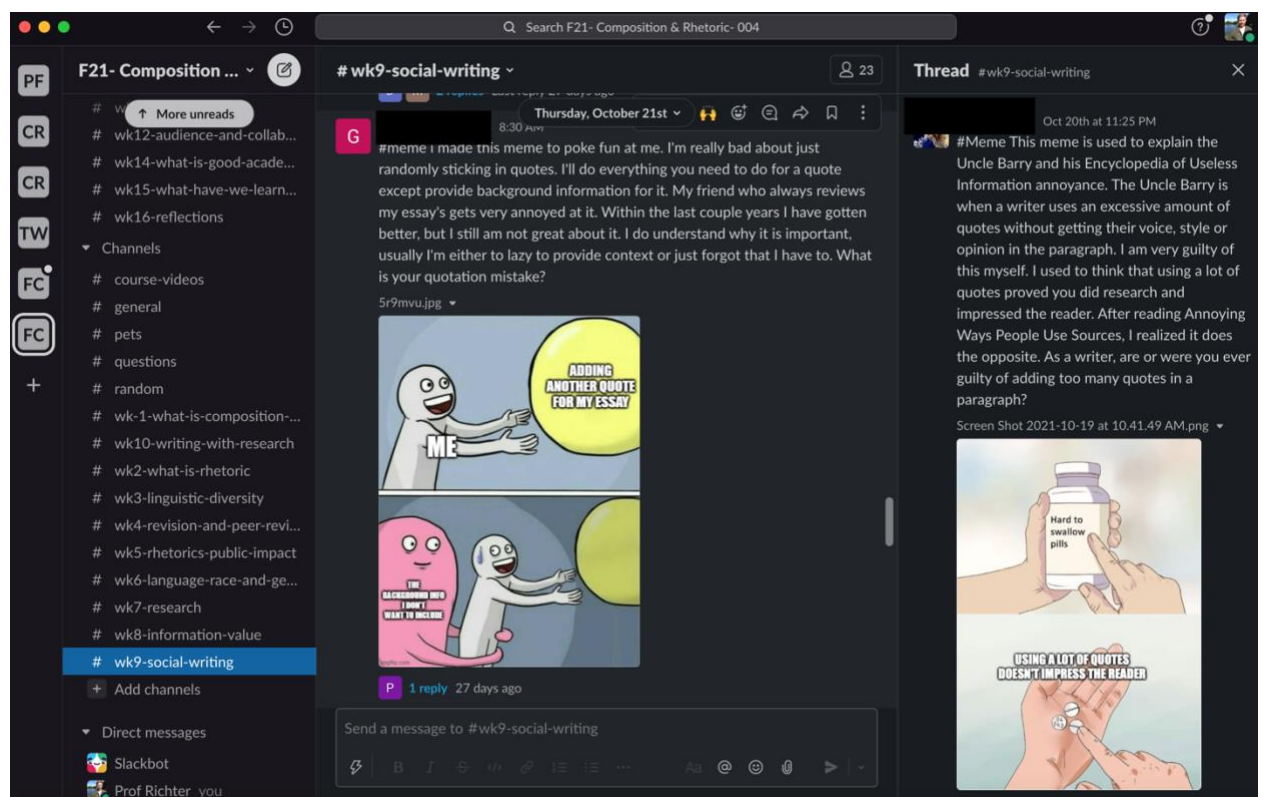
**Fig. 5.2:** A student engages in rhetorical invention using #Share to comment on the social and political issue of rising gasoline prices, reflecting on media choices and message circulation along the way.

As students discussed issues related to politics, social change, social justice, and equity in the Slack channel, disagreement and differences emerged. In many cases, disagreement and agonism fueled invention in the social media learning environment. Codes such as “Agonism,” “Synthesizing Conflicting Ideas,” and “Understanding/Summarizing Readings” show how student learners engaged with others across difference, synthesized conflicting perspectives and approaches to the world, and articulated their own opinions and speculations to others in the digital learning environment based on shared course content. In class, we discussed how disagreement, difference, and debate can be generative for a community *in some cases*, but only in situations where participants feel respected, valued, heard, and safe. As such, the course discussed what agonism is, and how discussions could be oriented toward being generative, helpful, enlightening, and beneficial for all. Concerning social rhetorical invention based on classroom community and culture, one student commented that “Often some of my more

interesting ideas come from responding to someone else's post." A second student wrote that "responding to what someone else said requires me to think more in depth about what they said, and how it relates to the topic they are discussing," as "when I then respond, I then have a new perspective, not only on what their point is, but also on the original topic."

As such, students engaged in discussions across difference, especially relating to politics, society, and culture. A third student wrote in a reflective journal entry that "When composing posts and replying to others I also learned things from my classmates... I learned how to respectfully communicate with them over slack, even if I disagreed with them.... communicating on a partly public platform helped me change the way I would respond in a more respectful and understanding manner." They went on to write that "While some people do not like when others disagree with them, I actually don't mind it. I find it very interesting to see other people's viewpoints, especially if they are different from mine. Slack is a great tool to use for this purpose; it has allowed us to connect with others through similar views and even different views." Agonism was not always achieved, but in some cases, a level of generative difference was found. Digital aggression and harassment (see Reyman and Sparby, 2020; Gelms, 2021) remain major concerns for a social media pedagogy, but at least one student felt comfortable enough with the discussion space to report how they "felt that Slack was such a safe space for me that even if someone disagreed with my opinions, they would still be respectful which was a positive thing." The same student additionally commented that "Slack allowed me to come out of my shell while also sharing about topics that were personal to me." A number of instances arose that required student participants to synthesize conflicting ideas, and a number of student participants reported this to be an important part of their learning process in the social media environment.

The findings of this study also demonstrate how students invented multimodally across video, visual, sonic, hypertextual, and other modes. Codes like “Inventing with Multimedia” and “Critical Sharing of an Internet Link” exemplify some of the multimodal rhetorical invention processes that students engaged in. Students reflected on inventing with multimedia, as some students narrated processes of sharing internet links in Slack with accompanying comments, sharing diagrams they’d drawn to organize idea progression in a writing assignment, and sharing a meme they’d made that illustrated confusion regarding proper MLA citation practices (see Fig. 5.3).



**Fig. 5.3:** Students engaged in multimodal rhetorical invention, such as these two students to shared memes they’d created that illustrate common challenges in the academic writing process regarding incorporating quotations into projects.

The findings additionally showcase rhetorical invention that involved translating personal experiences to inform the larger conversation. Students spent a good deal of time using

storytelling and personal experiences as evidence to inform their views and perspectives on social, cultural, and political topics. In this way, personal experiences were elevated as solicited, valued forms of evidence to supplement more formal and academic research, including the sharing of links, videos, and journal articles located as part of the larger course. Codes such as “Storytelling/Personal Experience as Evidence” and “Reflecting on Social Learning or Learning From/With Others” testify to how the social media environment encouraged rhetorical invention that included autobiographical, first-person writing and storytelling, especially to inform how students understood social, cultural, political, or course-related topics.

As the findings of this study demonstrate, social media pedagogies have the capacity to encourage rhetorical invention in ways that promote social learning, learning through interaction, multimodal invention, and agonism.

### **Conceptual Category: *Digital and Social Media Literacies***

Social media pedagogies can also help students to develop digital and social media literacies. Considering the varied, diverse, and nearly ubiquitous ways that contemporary students use digital writing and composing software (see Robinson et al., 2019; Moore et al., 2016; Rodrigo and Romberger, 2017; Buck, 2012; Amicucci, 2017), digital literacy is more impactful in the social, cultural, and political activities of the world than it ever has been before. Douglas Eyman (2015) defines digital literacy as requiring a person to “be able to read and write with a number of sign systems (e.g., coded web pages, video, audio, image, animation), each of which has its own functional and critical requirements” (45). Research in composition studies and in digital rhetoric has shown how social media can be an effective learning mechanism for teaching, experimenting, and generating digital literacy skills. Stephanie Vie (2008) writes of

“critical digital literacies” and the importance of being able to “effectively integrate technological literacy instruction,” as “we are increasingly asking students to assess, evaluate, and create multimedia texts in composition classes” (9; 14). Lilian Mina (2017) writes of social media composing environments helping students to practice “critical literacy,” including through examination of worldviews, beliefs, practices, critiques, and challenges (272).

I began this study with an *a priori* category of “Digital Literacy.” Over the arc of data collection, analysis, and theoretical sampling, however, I began to notice an emerging series of codes related to social media literacies. After months of examining and coding the data, I resolved to reform and rename the existing “Digital Literacy” category into a hybrid *a priori* and emergent category of “Digital and Social Media Literacies.” When collecting, analyzing, and coding the data in this study, I began to notice a cluster of codes appearing that I originally had grouped in the “Digital Literacy” conceptual category fit better in their own category centered around “Social Media Literacies.” Digital literacies and social media literacies have much in common, and in some disciplinary and popular forums, social media literacies are subsumed within a larger category of digital literacies. However, within this qualitative case study, the data and codes point toward “Social Media Literacies” and “Digital Literacies” to be similar conceptual categories that share many of the same supporting codes drawn from the data. As such, the data led me to cluster these codes together into a reformed and renamed “Digital and Social Media Literacies” category, which I then incorporated into the theoretical sampling, saturation, memoing, and open, focused, and theoretical coding processes. I approach social media literacies as reading, writing, sharing, and participation in networked social media environments. As a hybrid *a priori* and emergent category, the student-provided data exhibits the

abilities of social media pedagogies to help students to learn, practice, and enact digital and social media literacies.

In short, digital and social media literacies are essential to the work of most composition classrooms and help students to understand and participate in society, to articulate their beliefs to the larger world, and to articulate their thoughts through writing and other media on digital platforms. The findings of this study, as demonstrated by the codes shown in Fig. 5.4, suggest that social media pedagogies can encourage development of digital and social media literacies.

<b>Critical Linking</b>	<b>Making a Meme</b>	<b>Shares a Video</b>	<b>Shares an Image</b>
<b>Reflecting on Rhetoric's Role in Media</b>	<b>Critical Consideration of Language</b>	<b>Reflecting on Social Learning or Learning From/With Others</b>	<b>Discussing Affordances/Challenges of Digital Writing</b>
<b>Participation with Smartphone/Tablet</b>	<b>Discussing the Internet Writing Process</b>	<b>Inventing A New Mode of Participation</b>	<b>Commenting or Critique of Platform/Interface</b>
<b>Monitoring Afterlife of a Slack Post</b>	<b>Discussing Online Video Creation Process</b>	<b>Discussing Emotional Experience of Writing in Slack/ Writing Online</b>	<b>Critical Sharing of an Internet Link</b>
<b>Discussing How Slack Writing Transfers/Informs Academic Writing</b>	<b>Discussing Slack Helping to Increase Writing Confidence</b>	<b>Discussing Social Media, Rhetoric, &amp; Society</b>	<b>Statement of Identity</b>
<b>Writing Intertextually</b>	<b>Connecting Course Content to Social Media Example</b>	<b>Meta-discussion of Slack Discussion</b>	<b>Commenting on Critical Reading of Others' Ideas</b>
<b>Considering Information Value/CRRAAP Test</b>	<b>Inventing with Multimedia</b>		

**Fig. 5.4:** Some of the codes that emerged in the data in the “Digital and Social Media Literacies” conceptual category.

To start, a number of codes emerged that demonstrate social media pedagogies' abilities to encourage critical and creative practices related to digital and networked writing. Codes like "Discussing Affordances/Challenges of Digital Writing," "Discussing the Internet Writing Process," "Commenting or Critique of Platform/Interface," "Discussing Emotional Experience of Writing in Slack/Writing Online," and "Monitoring Afterlife of a Slack Post" demonstrate the practices that the social media pedagogy encourages relating to digital and internet writing. Digital and internet writing are important components of digital literacy, as participants on the internet compose Tweets, write posts and comments on reddit, send text messages on smartphones, craft online blogs, and perform other writing-based literacy actions online.

In the Slack learning community, students commonly discussed the affordances and challenges of digital writing, commenting in some form on what digital writing enables (viral circulation, social connections, and genres not supported in the same way by other media) as well as what it constrains (face-to-face connections, authenticity, and verbal interactions, for instance). Students actively considered digital writing's potentials, aptitudes, and capacities for action as well as the restraints, limits, and problems that can arise compared to writing in other modes. With this code, students showcased a critical reflective capacity involving connecting digital literacy with analysis of mode, audience, media, genre, culture, writing, and rhetorical action. As a testament to gaining these digital rhetorical capacities, one student wrote that "I think that my comfortability with Slack has made me a better digital writer... It has helped me bridge the gap between a virtual and physical audience... The use of Slack has allowed me to write in an online place, while still seeing the people I am writing to on a weekly basis." By exploring and critically examining some of the affordances and constraints entailed with digital and internet writing, students considered how digital writing practices, routines, and habits of

mind impact their literacy actions as they interact with social, academic, and cultural communities.

Similarly, the “Discussing the Internet Writing Process” code exhibits the reflective and communicative work that students engaged in involving critical consideration of invention, drafting, editing, revising, circulating, tailoring, and crafting communications in the Slack channel. Reflecting on the internet writing process helps to showcase the particular choices, possibilities, considerations, and challenges as well as differences between students’ experiences writing in social media environments compared to academic writing processes. Discussion of the internet writing processes that students have engaged in exhibits digital literacy in action, including a mostly informal assessment on the part of students on how digital writing can be used to achieve particular goals, purposes, and outcomes. Similarly, the “Discussing Emotional Experience of Writing in Slack/Writing Online” code also displays critical reflection on the affective, emotional, and relational nature of online writing (and indeed all writing), including reflection on how emotional and affective group relationships can be generative for social learning and learning of particular course content. All writing and invention is social (LeFevre, 1987; Simonson, 2014; See also Ch. II on Invention in Digital Networks), and as such is imbued with affective, emotional, and interpersonal components.

Students also reported following their Slack post’s circulation among their peers and the responses of their peers, an important part of digital literacy (see Gallagher, 2020; Gallagher, 2018) that is attested to by the “Monitoring Afterlife of a Slack Post” code. Students also engaged in extensive critique of digital platforms and interfaces, including the Slack interface but also platforms and interfaces they used as part of the course or that they encountered in their personal lives. Critique of platforms and interfaces, attested to the by the “Commenting or

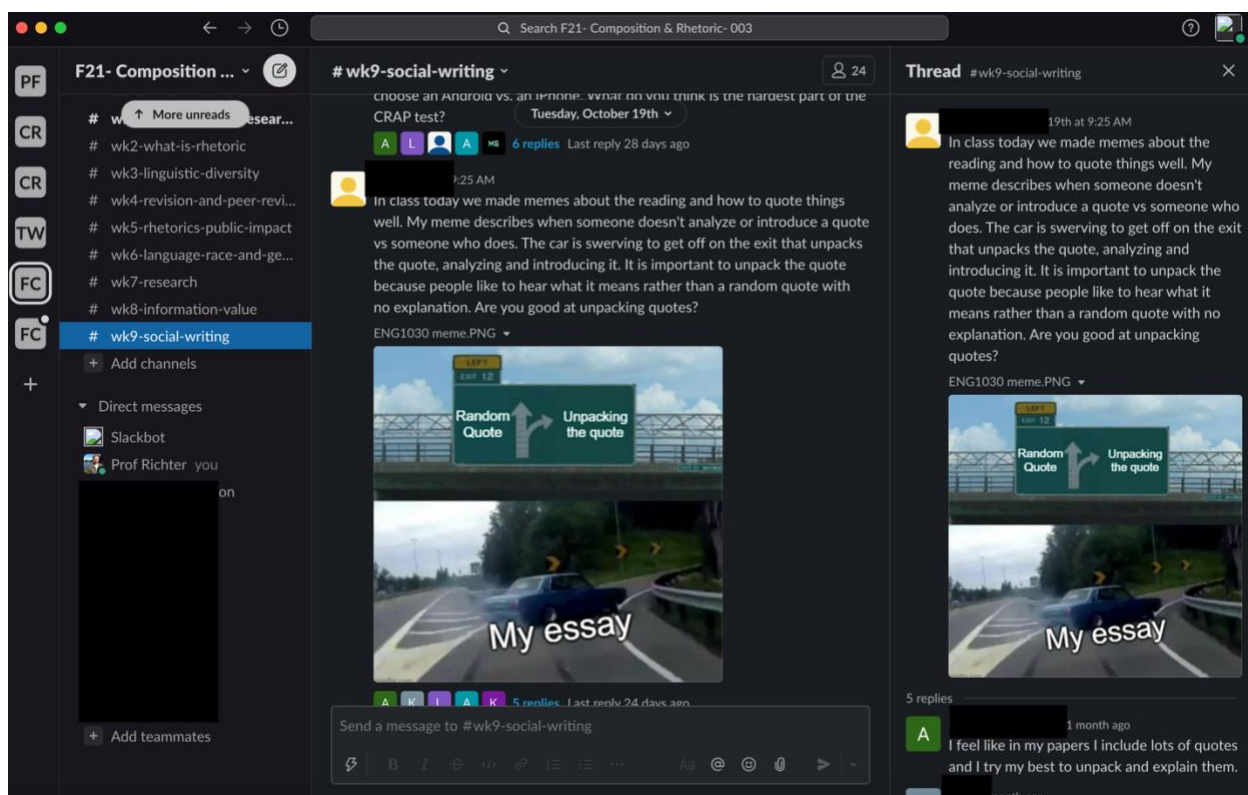


Critique of Platform/Interface” code, is an important part of digital literacy, as interfaces are non-neutral cultural products that reflect and reinscribe ideologies, perspective, and power structures (see Sano-Franchini, 2018; Potts and Harrison, 2013; Selfe and Selfe, 1994; Trice, Potts, and Small, 2020). As such, students learning about and practicing digital literacy work should engage in critique and deconstruction of platforms, interfaces, and technologies as part of their digital literacy education.

Other codes emerged that connect the digital literacy actions students engaged in within the Slack learning community with utility for academic writing processes. Codes such as “Discussing How Slack Writing Transfers/Informs Academic Writing” and “Discussing Slack Helping to Increase Writing Confidence” evidence the ways writing in Slack helped students to both transfer knowledge related to the rhetorical situation between academic and internet writing situations as well as to gain confidence in their writing and rhetorical abilities through digital writing activities. In a number of cases, students demonstrated transfer of knowledge from academic to internet writing situations, and vice-versa, and this seemed to trickle over into increases in writing confidence, which was reported in reflective journals and interviews on a number of occasions. Participants reported that their processes of gauging audiences, goals, rhetorical choices, and idea arrangements in writing situations had both much in common and much in disagreement between academic and online writing processes. This generative discord proved, for many students, to be a point of learning and critical reflective insight, as naming the differences and similarities between the two writing processes was generally productive.

Codes also emerged in this study indicating students engaging in multimodal invention processes that involve invention in media beyond digital writing. Codes such as “Discussing Online Video Creation Process,” “Critical Sharing of an Internet Link,” “Shares an Image,”

“Participation with Smartphone/Tablet,” “Making a Meme,” and “Shares a Video.” In their work posting videos, sharing internet links, creating memes, and engaging in other multimodal work, students showcased critical practices related to digital literacy. These digital literacy practices and reflective capacities included considering circulation and delivery of messages through digital networks, gauging audience desires and expectations for digital writing, and engaging in multimodal rhetorical invention with visual, sonic, and other media (see Fig. 5.5). One student wrote about having “used hashtags in my Slack writing... This is a way to categorize my ideas easily.” While digital writing represents the majority of Slack participation that students practiced, the sharing of links, creation of videos, and work inventing and communicating with other media showcases the multimodal invention practices that characterize social media participation, which oftentimes blended visual, sonic, hypertextual, video, and other media forms.



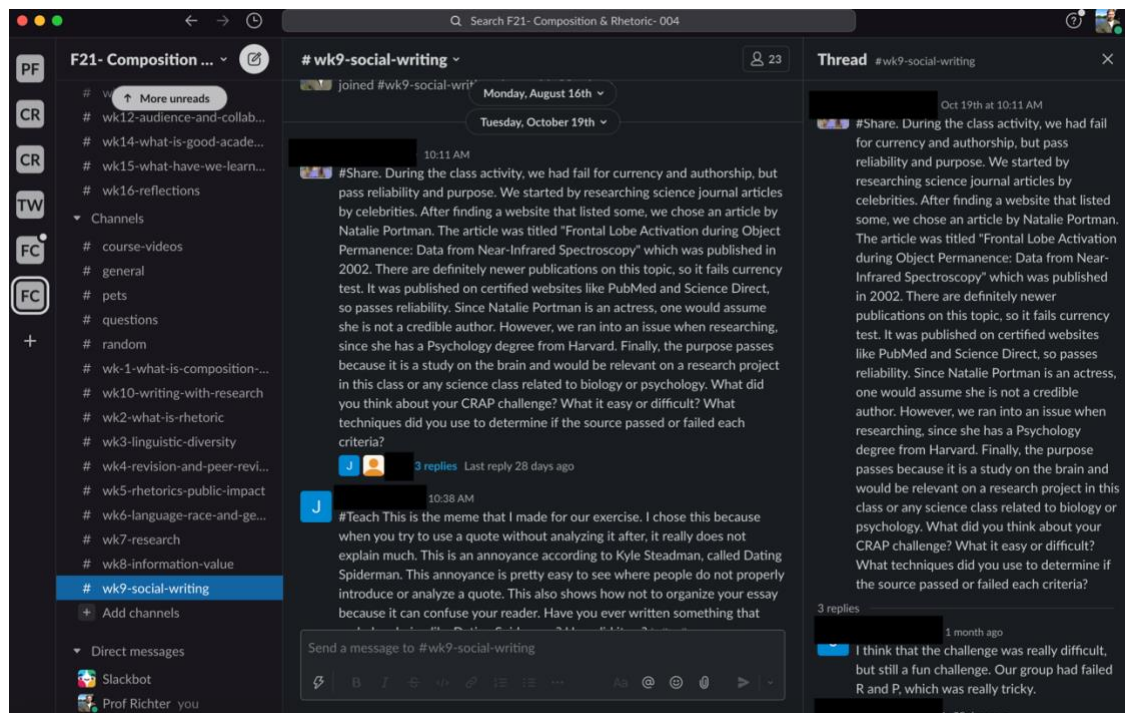
**Fig. 5.5:** A student shares a meme to the Slack page that blends written and visual communication, alongside cultural references, to share insight into challenges of writing.

Other codes that appeared in the data showcase varied literacy and participatory practices related to digital literacies. Codes like “Inventing A New Mode of Participation,” “Reflecting on Rhetoric’s Role in Media,” “Critical Consideration of Language,” and “Reflecting on Social Learning or Learning From/With Others” showcase digital literacy practices in action in a variety of ways and contexts. First, students created new modes of participation on several occasions, designing new ways to participate that weren’t provided by the course design from the start, but rather arose from students’ assessment of existing participation practices and then active supplementation. As participation is an important part of digital literacy, inventing a new mode of participation represents a valuable practice that students engaged in within this social media pedagogy. Students also reflected on rhetoric’s role in media, considering how different

media products and institutions (news organizations, social media platforms, celebrities, smartphones, etc.) use rhetorical strategies to address audiences, tailor messages, and achieve goals. They also critically considered language use of others and their own experiences learning from and alongside peers, both important practices within digital literacy environments. All in all, the social media pedagogy proved capable of promoting the learning of digital literacy practices in a multitude of ways.

A number of codes also appeared in the data that specifically and uniquely feature evidence of social media literacy development. While digital literacy and social media literacy have much in common, social media literacy obviously foregrounds the capacities to compose, read, write in create within social media environments that additionally is vital to digital literacy. In the data, codes such as “Discussing Social Media, Rhetoric, and Society” and “Connecting Course Content to Social Media Example” demonstrate how students not only learned more about how social media communication environments function, but also considered how the rhetoric, writing, and communication insights that were central to our course appear prominently in social media contexts. Students made explicit and detailed connections between social media communication environments, rhetoric, and social, cultural, and political issues. Connecting society and culture to social media communication environments, and doing so through digital writing and interaction processes, constitutes an important part of social media literacy. Students also engaged in the fashioning of digital identities and in intertextual writing, both vital components of social media literacies as well as digital literacies. They engaged in meta-discussion about the tone, content, behavior, and attitudes of others within the Slack discussion, and commented on critical readings of others’ ideas along the way. Participants commonly mentioned in reflective journal entries that they especially appreciated insights into social media

and digital literacies related to the appraisal and judgement of information, especially stemming from discussions on information value in class that used the CRRAAP test (Currency-Relevancy-Reliability-Authority-Authorship-Purpose) to appraise information (see Fig. 5.6). They also invented with multimedia, creating memes and drawings as well as sharing links in the Slack discussion.



**Fig. 5.6:** Students evaluate an information source that arose in class discussion for its currency, relevancy, reliability, authority, authorship, and purpose, demonstrating information evaluation activities that the social media pedagogy helped to support.

The social media literacies that students demonstrated contribute to their larger understandings of both digital literacies as well as rhetoric and communication in networked social media environments. A participant commented that “I enjoy using Slack because it gives you a whole new perspective on social media and how it can actually be a positive thing and can be used for learning.” Another noted how “Writing in Slack causes me to have to think a little

more out of the box as a writer, and approach Slack with a tone appropriate to the setting....

After years of writing standard five paragraph essays for teachers, I find it difficult to adopt the more casual tone needed for my Slack posts.”

One student discussed how discussion in Slack helped them to broaden how they understand social media environments more generally. They wrote:

“Slack has taught me a whole different aspect of social media. It’s a way to interact with people that isn’t in the traditional social media ways of likes and posts and comments. Slack is different in that it is an interactive and constructive platform versus one where you are always worried about other people’s reactions to your posts.”

Another student discussed how the social media platform helps them to learn from and alongside others:

“Small conversations in the comments are the key to the process of learning from others, as it helps you learn what people think of your thoughts and experiences as well as allowing you to communicate your thoughts on another person’s post.”

Similarly, a student participant commented on similarities between writing in Slack and writing other platforms in non-academic settings, writing that:

“Writing in slack is sort of similar to other social media spaces that I use like Instagram or Snapchat. It is different because you’re not posting a picture along with the phrase that you write, but when you write about something in slack you know that there are going to be a lot of people reading it, just like you would in another social media platform. To me, knowing that other people are going to read my work makes me pay a little bit more attention about what I am writing and what I choose to say. The audience of slack is also very similar to what I would have on Instagram because it is people that are my age and they live in a closed area to me which would be just like the followers that I have on Instagram.”

Finally, a participant wrote that:

“Overall, I feel that Slack has really helped me learn more about myself and has taught me some important lessons about communication. I am looking forward to continuing to learn more through my peers on this online platform. I am also excited to begin stepping outside my comfort zone by experimenting with different ways of sharing on Slack now that I am more comfortable with the basics. I believe that application is the most

important way to learn hands on and to remember information, so I am hopeful that my weekly reflection and real-life applications as I brainstorm for my Slack posts will continue to benefit my education.”

As these findings demonstrate, network composition and social media pedagogies encourage learning of digital and social media literacies through a variety of forms, practices, and processes. Network composition and social media pedagogies can encourage practices of digital citizenship, too, as the next section examines.

### **Conceptual Category: *Digital Citizenship***

As students wrote, shared, and participated in the classroom social media learning community, they frequently discussed issues related to politics, culture, current events, and rhetoric’s role within society. As I coded the student-provided Slack participation data, reflective journal entries, and interviews, I began to notice codes associated with what I would consider to be actions associated with advocacy, political discussion, cultural engagement, and social action. I understand practices involving networked digital technologies, civic action, and political or cultural advocacy to constitute digital citizenship activities. In other words, students were engaging in citizenship activities in the social media learning community. The codes supporting the emergent “Digital Citizenship” category generally center around social commentary, engagement with digital cultures, engagement with globalism and social justice, and with the sharing of internet links (see Fig. 5.7). As the findings of this study exhibit, social media pedagogies and learning communities have potential to encourage the practice and enactment of digital citizenship activities among students, which is of considerable interest for scholars and instructors of rhetoric, composition, and community.

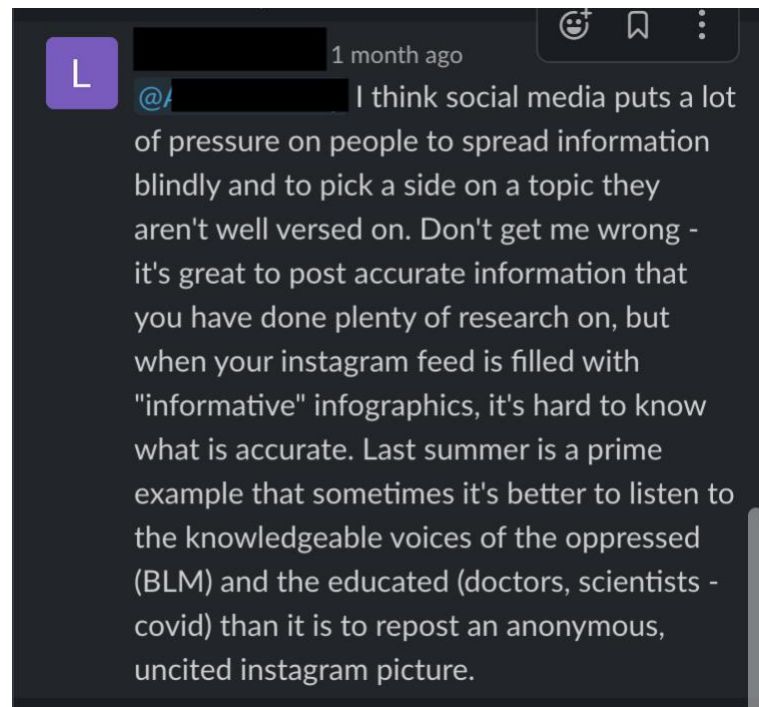
<b>Agonism</b>	<b>Commenting on Discussions Across Difference</b>	<b>Inventing Rhetorically to Comment on Society/Politics/Cultures</b>	<b>Inventing to Comment on the Internet/Social Media/Culture</b>
<b>Discussion of Rhetoric's Role in Media</b>	<b>Relating Course Content to Current Events</b>	<b>Cosmopolitanism</b>	<b>Reflecting on Society/Cultures</b>
<b>Discussing Social Media, Rhetoric, and Society</b>	<b>Critical Sharing of an Internet Link</b>	<b>Considering Information Value/CRAAPP Test</b>	<b>Inventing with Multimedia</b>
<b>Shares A Video</b>	<b>Discussing the Internet Writing Process</b>	<b>Advocating for Action or Change</b>	<b>Commenting on Critical Reading of Others' Ideas</b>
<b>Connecting Course Content to Social Media Example</b>	<b>Making a Meme</b>	<b>Discussing Online Video Creation Process</b>	<b>Discussing Emotional Experience of Writing in Slack/Writing Online</b>

**Fig. 5.7:** Some of the codes that emerged in the data in the “Digital Citizenship” conceptual category.

To start, codes such as “Inventing Rhetorically to Comment on Society/Politics/Cultures,” “Discussion of Rhetoric’s Role in Media,” “Relating Course Content to Current Events,” “Advocating for Action or Change,” and “Reflecting on Society/Cultures” that support the “Digital Citizenship” category showcase students engaging in practices related to political discussion, social and cultural critique, and engagement with current events. As students wrote and participated, they engaged one another in varied discussions about presidential elections, about representation in advertising, about US immigration policy, and about linguistic hybridity and accompanying language politics. Students engaged in rhetorical invention to comment on current events and additionally examined aspects of culture that include race,



gender, sexuality, disability, and language diversity. On a number of occasions, students discussed cultural topics such as code switching, mis/disinformation, and even animal testing in the cosmetics industry, engaging in cultural critique and criticism along the way (see Fig. 5.8). They also commented on rhetoric's role in media, focusing at various times on how visual rhetoric impacts corporate logo design and on how advertisers make use of ethos and pathos in particular celebrity endorsements to sell products to targeted audiences. Students engaged in personal and public reflection about their social and cultural attitudes, including examination of what they believed on a particular issues, consideration of why that is, and discussion across difference relating to divergent opinions.



**Fig. 5.8:** In a comment on someone else's post, a student advocates for better social media information sharing practices in light of recent racial justice protests associated with the Movement for Black Lives as well as in response to viral COVID-19 misinformation.

One student commented that “Slack has also become a platform to talk about our culture.” Another chimed in that “I often find myself unintentionally tying in some aspect of society, politics, or culture into my Slack posts... I mostly use them to connect my ideas to the real world,” adding that “using culture, society, and politics to aid my responses helps me connect what we have learned to what I have grown up knowing and practicing.” A third student commented in a reflective journal entry how they enjoyed discussing “specific issues that are occurring in the world” in the Slack discussion. These sorts of discussions, which sometimes featured the sharing of internet links, news stories, videos, and websites, involved practices related to digital citizenship that included critical sharing of links, commentary on social issues and current happenings, summary of public events, and discussion of political and cultural issues. A number of participants also reported either changing their minds or opinions relating to political and social issues, which I contend showcases learning moments characterized by a process of critical consideration, self-reflection, idea analysis, and synthesis of existing and new information. One participant commented “My perspective was changed by something written in Slack” in a reflective journal entry. Another wrote that “Often when one of my peers wrote a Slack post that was very interesting and informative I would find myself changing my mind on certain topics because I was given a different point of view... These topics presented were generative in which they were changing my mind on topics and making my mind grow.”

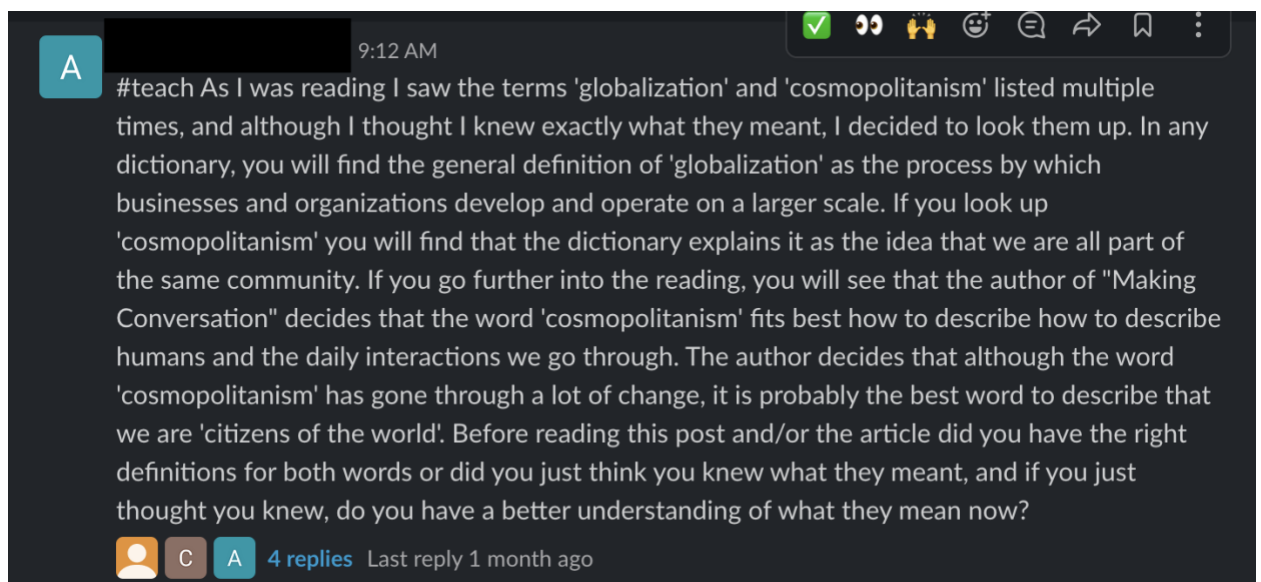
On the other end of the spectrum, some students discussed not wanting to discuss social or political issues at all. One participant wrote that “I avoided talking about social or political issues because I do not enjoy talking about them and it usually sparks disagreements... personally, there were not many cultural issues I feel I could write about effectively, so that was out of the picture.” They continued by writing: “I avoid talking about politics because it brings

the worst out in people, and I did not want to start any fiery debates in a friendly classroom atmosphere.” These sorts of statements were uncommon, though, and were greatly outnumbered by engagement with political, cultural, and social issues. Another student’s characterization of the discussion emphasized that “the majority of posts have some connection with what’s going on in the world today whether that be society, culture, or politics... There always seems to be a tie to the world and how it functions.” Overall, the social media pedagogy helped to elevate student voices, inform them of divergent or contrasting ideas, and allow them time and space to reexamine and rearticulate existing perspectives based on new information.

Students in the Slack learning network also connected politics, society, and culture with the internet and social media, as the “Discussing Social Media, Rhetoric, and Society” and “Inventing to Comment on the Internet/Social Media/Culture” codes testify to. In their discussions of rhetoric early on in the semester, when the rhetorical appeals and rhetorical situation were brand new to students, examining their applications and enactment in social media spaces proved a valuable learning moment that a number of students took advantage of. Social media proved to be a valuable test case for students to consider and examine, as many of the practices and actions familiar to students serve as valuable examples of the rhetoric, writing, and communication topics discussed in the ENG 1030: Composition & Rhetoric course.

Data supporting the “Digital Citizenship” category also showcase engagement with globalism, cultural difference, social justice, and equity. Codes like “Commenting on Discussions Across Difference,” “Cosmopolitanism,” and “Agonism” attested to the varied cultural commentary students participated in. Discussions across social, cultural, and political difference in online forums are important components of civic participation writ-large, and practicing these activities in a classroom setting allows space for commentary, sharing,

contextualization, idea expansion, and revision. Students compared conflicting ideas, examining how some Americans can be politically engaged with issues such as abortion and income inequality while others remain disengaged and dispassionate. They synthesized insights from a course reading on linguistic diversity and linguistic justice with examples from their own lives and even told collective stories about globalism, cosmopolitanism, and discussions across cultural difference that ended up being enriching personal experiences (see Fig. 5.9). Students disagreed in generative and productive ways at times, and many discussed the possibilities for social justice as these topics were discussed in class, including through various avenues such as standardized testing reform, material infrastructures, and racial diversity within college admissions processes. Along the way, students discussed these cultural, political, and ideological issues with an emphasis on social justice and the pursuit of equity, and in doing so showcased compelling actions of digital citizenship.



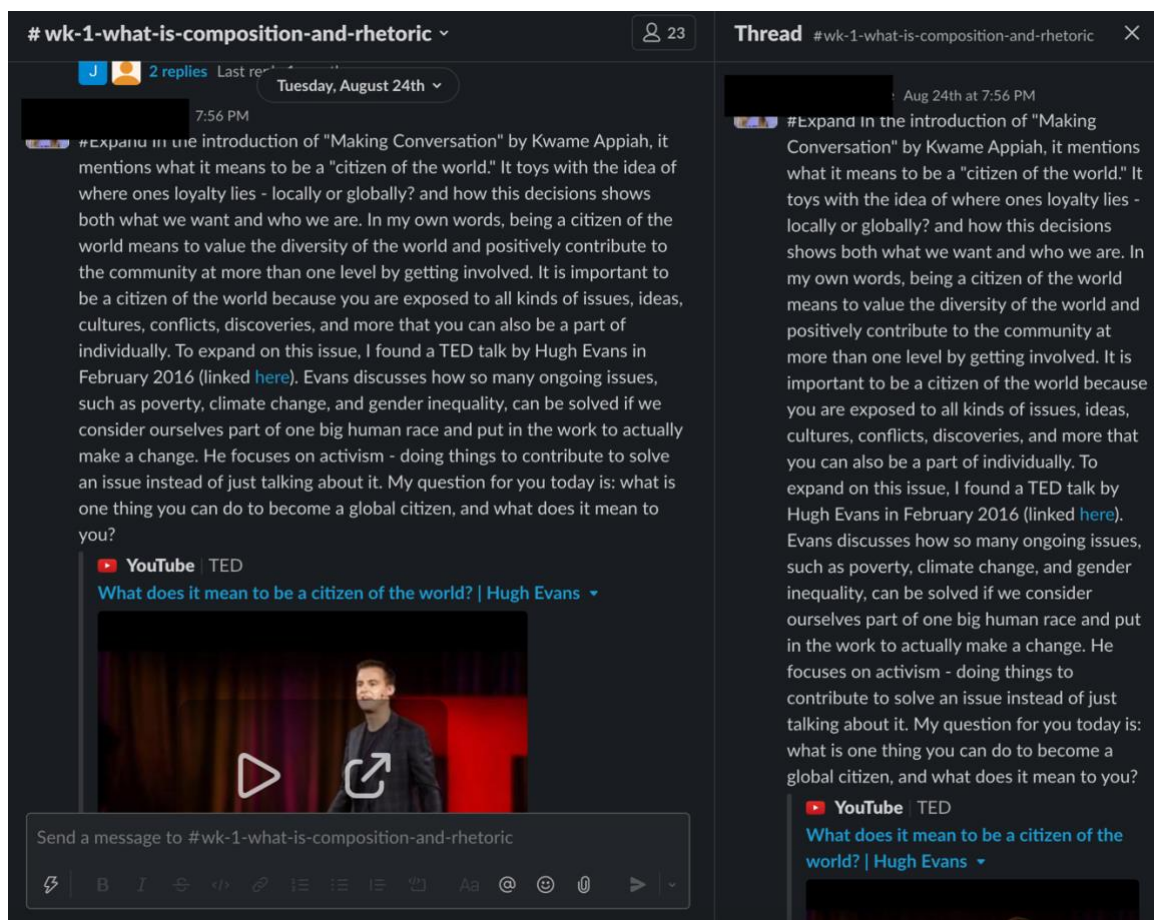
**Fig. 5.9:** A student uses #Teach to inform others about what cosmopolitanism is, leading to a discussion of cultural difference and globalism.

As students engaged in network-emergent rhetorical invention alongside classmates in the social media network, they engaged in many of the critical sharing, linking, circulation, and advocacy practices that can characterize civic participation online. They also critically examined their preconceived social, cultural, and political assumptions. A student commented that “I often find myself unintentionally tying in some aspect of society, politics, or culture into my Slack posts... I mostly use them to connect my ideas to the real world, and it just so happens to fall into one of those categories... Using culture, society, and politics to aid my responses helps me connect what we have learned to what I have grown up knowing and practicing.” One student even commentated, after a discussion in class on linguistic diversity that was extended into the Slack channel later that week, that “Slack has given me many new experiences,” including interacting with people with different linguistic histories and backgrounds than what they were accustomed to. Another mentioned that they “did feel that discussing some societal issues was interesting,” as they “got to see different points of view, as well as express to others my own take on the matter.” A core learning action facilitated by the social media pedagogy is exposure to new ideas, new perspectives, new evidence, and new stories. One student wrote:

“One of the advantages of Slack is that classmates can challenge what you believe to be true. This is something that people lack in today’s world. People surround themselves in person and on social media with people that are like themselves. This causes much polarization in the world because you only hear ideas similar to what you believe. Slack is an environment that encourages different opinions. Hearing different beliefs is important because it challenges our views so we can strengthen our views or change our views. This is one of the many strengths to Slack.”

Finally, students commonly shared links in the Slack channel to outside internet sources, texts, and videos, as is showcased in the “Critical Sharing of an Internet Link” code. Recirculating links across networks is an important digital citizenship activity, as individuals link to news sources on Twitter, share evidence in Discord channels, embed photos in reddit communities,

and share misinformation in Facebook Groups. Including links to websites showcases critical engagement with research, an understanding of how to summarize complex ideas while also supplying evidence from outside sources, and an understanding of how to supplement a social media post with added credibility, detail, and documentation (see Fig. 5.10). It also showcases an appreciation for both visual and sonic rhetoric, as well as video culture, as outside links commonly were YouTube videos.



**Fig. 5.10:** A student shares a link to a TED Talk hosted on YouTube to advocate for global citizenship related to poverty, climate change, and gender inequality.

In summary, engaging weekly in the classroom Slack channel encouraged what I considered to be digital citizenship activities. Students commonly engaged in rhetorical invention

online to comment on society, politics, and culture, and some engaged in discussions about the internet, social media, and digital culture with their peers. A student commented “I think that my comfortability with Slack has made me a better digital writer,” as “the network allows creativity and individuality in an online setting” that remains “interactive and constructive.” As students considered difference, politics, society, and culture, they engaged digital literacy practices for purposes of social critique, political commentary, and cultural analysis. As such, social media pedagogies prove viable mechanisms for encouraging some forms of digital citizenship activities.

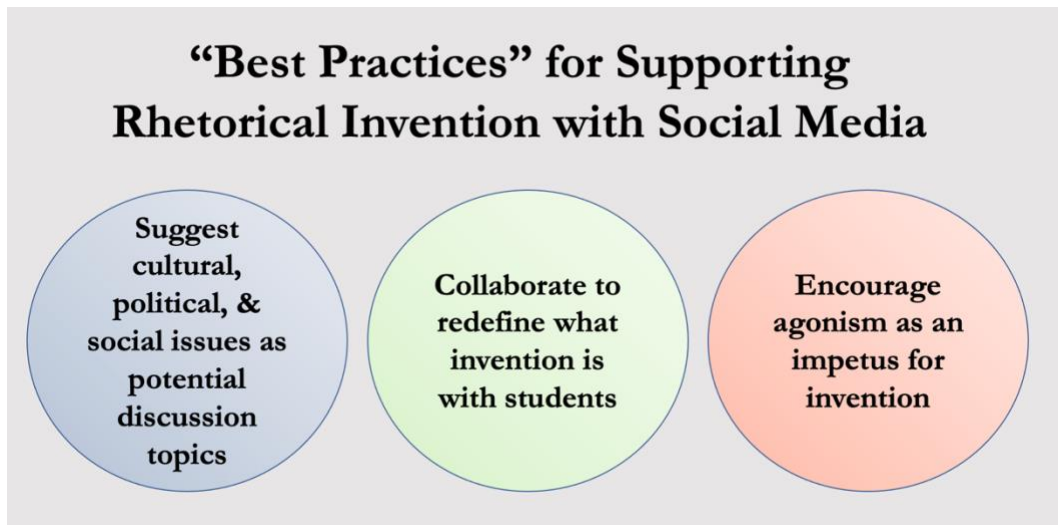
### **“Best Practices” for Nurturing Rhetorical Invention, Digital and Social Media Literacies, and Digital Citizenship in Social Media Pedagogies**

The findings of this study demonstrate network composition and social media pedagogies’ utility for helping students learn through engaging in rhetorical invention, developing digital and social media literacies, and practicing digital citizenship activities. In this section, I overview some pedagogical “best practices” for nurturing rhetorical invention, digital and social media literacies, and digital citizenship in college courses utilizing social media. Instructors can consider implementing or prioritizing some of these pedagogical “best practices” in an effort to maximize the pedagogy’s ability to support rhetorical invention, digital and social media literacy development, and practicing of digital citizenship activities.

#### *“Best Practices” for Nurturing Rhetorical Invention with Social Media*

To most effectively support practices of rhetorical invention in their courses, I encourage instructors using social media in their pedagogies to consider suggesting cultural discussion

topics to students, to collaboratively and continually redefine invention as a learning community, and to encourage agonism as an impetus for invention in their course designs (see Fig. 5.11).



**Fig. 5. 11:** “Best Practices” for supporting learning through rhetorical invention in social media pedagogies.

*Best Practice: Suggest Cultural, Political, and Social Issues as Potential Discussion Topics*

To start, instructors can consider encouraging students to examine cultural, political, and social topics as a catalyst for rhetorical invention. Inspired by the “Inventing Rhetorically to Comment on Society/Politics/Culture,” “Inventing to Comment on the Internet/Social Media/Culture,” “Reflecting on Society/Culture,” and “Storytelling/Personal Experience as Evidence” codes, this “best practice” supports the rhetorical invention work that students frequently engage in relating to social, political, and cultural topics. As students in this case study commonly engaged in rhetorical invention to explore and expand on connections among rhetoric, culture, society, media, and the internet, instructors can jump-start these important discussions by highlighting pertinent news stories, current events, and historical phenomena. Suggesting cultural, political, and social issues that connect to course content in some way



(whether it be in a rhetoric and writing course or in some other offering) can help students to envision unforeseen connections, to articulate and then contrast perspectives alongside those of others, and to learn through both invention of something new and the exposure to the inventions of others. In doing so, they engage in practices of rhetorical invention that connect course topics to larger cultural phenomena, expanding their understanding of both along the way.

*Best Practice: Collaboratively Redefine what Invention is with Students*

Stemming from codes such as “Inventing as a Response to a Social Interaction,” “Discussing Invention of a Slack Post,” “Discussing Social/Collaborative Rhetorical Invention,” “Discussing Challenges of Rhetorical Invention,” “Writing Intertextually,” and “Inventing with Multimedia,” I invite instructors to periodically discuss, define, and expand on how rhetorical invention works with students. Asking students to reflect on their theoretical, situated, and specific invention processes, in all of academic, informal, and at-home situations, can broaden how students consider invention as well as facilitate learning, growth, and transfer related to invention. If instructors collaboratively define, redefine, and discuss how invention works with students, they can help students consider the roles that purpose, mindset, physical location, materiality, mood, context, and exigence play in invention. In examining the rhetorical invention that students engage in as part of the course’s social media learning community, instructors can also help students to consider rhetorical invention in digital environments and can even challenge students to reflect on network-emergent rhetorical invention (see Ch. II on Rhetorical Invention in Digital Networks). Considering the roles that humans, hardware, interfaces, communities, cultures, discourses, moderators, code, algorithms, and physical and discursive infrastructures can play in

invention helps students consider invention as a broad, situated, specific, and tangible rhetorical activity.

Rhetorical invention is an important opportunity for learning about both a vital stage of the writing process as well as an opportunity to learn through the activity of writing. Instructors can define, discuss, and expand on conventional notions of rhetorical invention in ways that both pluralize how people consider invention, potentially making invention easier or at least more practicable, as well as more accurately and expansively consider the important roles that forces beyond the individual human play when ideas and texts are generated. Redefining and expanding on conventional notions of invention can also help students to acknowledge and learn from the social invention processes that they engage in. It can also help students to broaden their understandings of invention beyond writing alone to encompass multimodal invention processes such as meme creation, video editing, and recording of sonic media. It also is an activity that can encourage students to consider common challenges of rhetorical invention (and potentially share or discuss solutions) as well as help students consider the intertextual, social, collaborative invention processes that they engage in within networked environments.

*Best Practice: Encourage Agonism as an Impetus for Invention*

To encourage rhetorical invention as an avenue into learning, instructors can also encourage agonism as a driver of invention. To start, instructors should consider defining and discussing agonism with students. Discussing how disagreement and discord can be effective catalysts for generative topic expansion, productive idea comparison, and beneficial sharing of conflicting ideas can be of benefit to a classroom learning community. Arising from the “Agonism,” “Discussing Social/Collaborative Rhetorical Invention,” “Inventing as a Response to

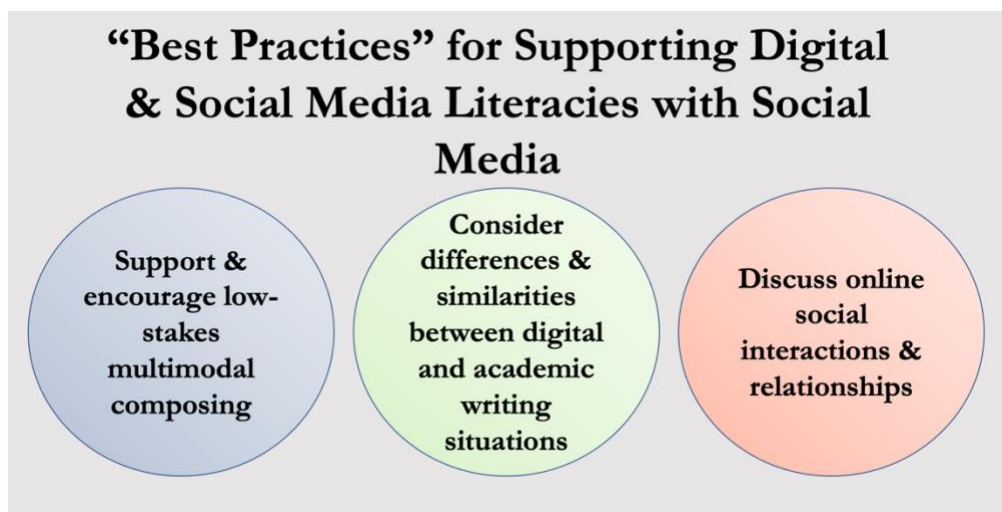
a Social Interaction,” and “Synthesizing Conflicting Ideas” codes, this “best practice” helps students to consider how disagreement and discord can be generative in a discussion. It also helps them to consider what modes of social conduct can allow for rich discussions across difference to flourish. Richter (2021) uses the term *network agonism* to describe how communities navigate complex interpersonal, social, and rhetorical dynamics to facilitate generative parameters for discussions across difference that can sometimes result in productive deliberation (14). Network agonism, as a practice that rhetors engage in within social media environments that connects interaction with invention, can also be leveraged for purposes of learning. As such, encouraging agonism in social media networks serves as a valuable “best practice” for instructors to consider as an impetus for rhetorical invention as a learning opportunity.

Instructors can encourage students to discuss, both verbally and in the social media forum, what makes networked agonism fruitful or productive, or alternatively what makes it fall short of these goals. Considering how agonism can be achieved through discussions of interpersonal conduct, social norms, and respectful behavior can orient students toward more mutually beneficial digital and interpersonal relationships in their online and academic writing lives. Agonism can result in learning in some situations, and instructors can normalize it and increase its frequency by defining, discussing, and exploring it with their students.

#### *“Best Practices” for Nurturing Digital and Social Media Literacies with Social Media*

To most effectively encourage learning and engagement related to digital and social media literacies, I encourage instructors using social media tools in their courses to promote low-

stakes multimodal composing, to compare digital and academic writing processes with students, and to discuss online interactions and relationships with their students (see Fig. 5.12).



**Fig. 5. 12:** “Best Practices” for supporting digital and social media literacy development in social media pedagogies.

*Best Practice: Support & Encourage Low-Stakes Multimodal Composing*

An important way that students can develop digital and social media literacies is through multimodal composing using some combination of visual, sonic, written, or other media. Multimodal composition can oftentimes be framed through classroom initiatives that ask students to complete an isolated, particular project (Sullivan, 2015; Shipka, 2011; Palmeri, 2012). However, I contend that multimodal composition can be practiced in low-stakes, informal, participatory forms in social media channels. This “best practice,” drawn primarily from the “Critical Sharing of an Internet Link,” “Making a Meme,” “Shares a Video,” “Shares an Image,” “Inventing with Multimedia,” and “Discussing Online Video Creation Process” codes that appeared in the data, can support students’ practical work engaging digital and social media literacy skills in action through low-stakes, participatory, interactive multimodal composing.

Instructors can encourage their students to engage in low-stakes multimodal composing in classroom learning environments as a way to support digital and social media literacy development while also drawing on students' at-home, non-academic literacies. In this case study, students made memes illustrating frustrating ways writers use outside sources in their writing. They also shared visual diagrams of their idea arrangements for a larger writing project, shared drawings that visualized the rhetorical appeals, and linked videos of public political speakers to illustrate ethos and pathos in popular persuasive culture. Instructors can also encourage their students to share links to information and sources on the internet, as linking to outside texts allows students to discuss cultural artifacts that inform important parts of the course. They can also encourage students to share images, videos, podcast episodes, and other media in the social learning community in an attempt to pluralize the forms of information students are interacting with and learning from. Instructors can also consider critiquing platforms, interfaces, and technologies with their students, as an important part of both social media and digital literacies is an ability to critically examine contours and biases embedded within digital tools.

*Best Practice: Consider Differences & Similarities between Digital and Academic Writing Situations*

Supporting digital and social media literacy development also benefits from considering digital writing's unique possibilities, affordances, and challenges. Drawn from the "Discussing Affordances/Challenges of Digital Writing," "Discussing the Internet Writing Process," "Discussing Emotional Experience of Writing in Slack/Writing Online," "Discussing How Slack Writing Transfers/Informs Academic Writing," "Discussing Slack Helping to Increase Writing Confidence," and "Writing Intertextually" codes, this practice can help students to synthesize

experiential knowledge from their own writing lives with learned knowledge in class. By considering differences and similarities between digital and academic composing situations, students can not only build digital and social media literacies, but also can develop well-rounded rhetorical mindsets, capacities, and practices. Classrooms can also consider how the possibilities, affordances, and challenges of digital writing (especially in social media environments) can help students to transfer rhetorical knowledge from non-academic domains to academic composing situations. Instructors should consider verbalizing discussions of internet and academic writing processes as they arise in the social learning environment, as these discussions are valuable modes of transferring knowledge of the internet writing process into knowledge of the academic writing process (and vice-versa).

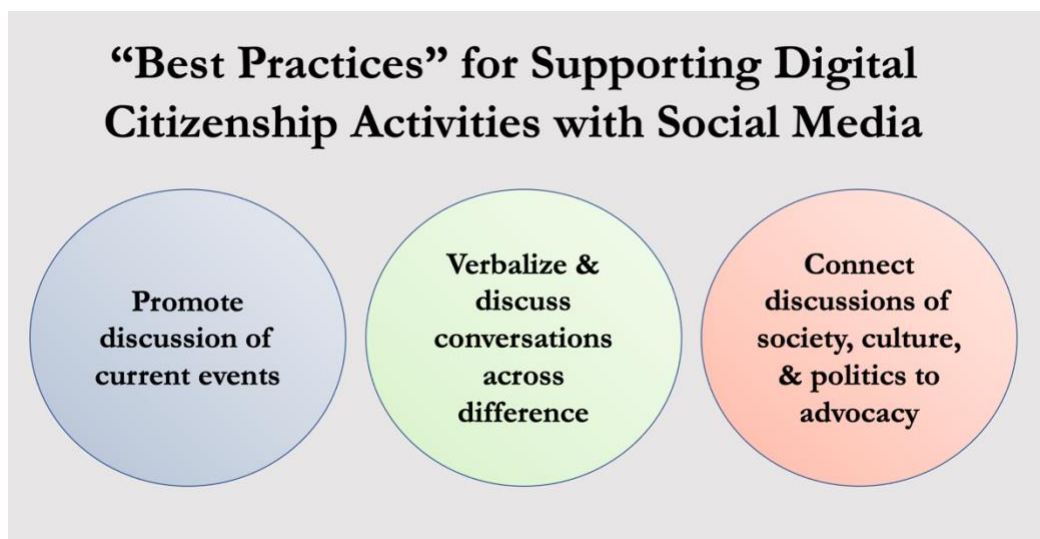
*Best Practice: Discuss Online Social Interactions & Relationships*

Arising primarily from the “Writing Intertextually,” “Reflecting on Social Learning or Learning From/With Others,” “Meta-discussion of Slack Discussion,” “Commenting on Critical Reading of Others’ Ideas,” “Statement of Identity,” and “Discussing Emotional Experience of Writing in Slack/Writing Online” codes, a final “best practice” that instructors can consider is discussing online social interactions and relationships with their students to support digital and social media literacy development. Even as digital aggression and harassment remain vital challenges for networked learning environments to work against (Reyman and Sparby, 2020; Johnson-Eilola and Selber, 1996; see also Ch. VI on Challenges for Network Composition), the ability to learn and interact positively alongside others is a valuable ability for a contemporary communicator to have. As such, I encourage instructors to discuss online social relationships and interactions with students, actively considering what contributes

to making them generative, productive, or effective. Instructors should also consider reflecting with their students on the emotional experience of interacting online with others, including reflections on what it is like to learning with, from, and alongside others in a networked environment. They can also critically consider with their students how identities work in the classroom learning community, how social learning is mediated by a digital interface, and how writing for and alongside others can be an affective, emotional experience.

### *“Best Practices” for Nurturing Digital Citizenship with Social Media*

To support actions of digital citizenship in their social media-equipped courses, I encourage instructors to consider implementing the following “best practices” in their pedagogies. In summary, promoting discussion of current events, discussing conversations across difference, and connecting discussions of society and culture to advocacy can help social media pedagogies to maximize opportunities for practicing of digital citizenship activities (see Fig. 5.13).



**Fig. 5.13:** “Best Practices” for supporting digital citizenship activities in social media pedagogies.

### *Best Practice: Promote Discussion of Current Events*

Discussing current events is a simple and relatively low-stakes way to help students engage with social and political topics through digital participation, writing, and interaction. Stemming from codes like “Relating Course Content to Current Events,” “Inventing Rhetorically to Comment on Society/Politics/Cultures,” “Inventing to Comment on the Internet/Social Media/Culture,” and “Discussing Social Media, Rhetoric, and Society” codes, promoting discussion of current events can help students to engage in citizenship activities online. In a number of cases, students in this case study discussed cultural topics like electric cars, code switching, mis/disinformation, and animal testing in the cosmetics industry. As part of the ENG 1030: Composition & Rhetoric course, students not only discussed current events and political happenings in class, but also examined websites like ProCon.org and Kialo.com that offer advantages, disadvantages, complications, and implications for various public policy topics. These sorts of discussions and resources spurred plenty of discussion of current events and why they matter. Digital citizenship activities involve plenty of flashy, high-stakes, direct political participation, including public activism and advocacy. However, digital citizenship also includes less formal, lower-stakes citizenship activities such as considering political and cultural events alongside others in a classroom learning space. Considering a broader and more expansive definition of digital citizenship allows a social media learning community a chance to help students not only learn about current events, but also through writing about them alongside others. Instructors should consider promoting discussion of current events in the classroom learning community, as a valuable precursor to more active, public, and tangible digital citizenship activities is simply engaging with these issues in the first place, which a social media learning community is equipped to help students engage in.



*Best Practice: Verbalize & Discuss Conversations Across Difference*

Instructors can also verbally discuss conversations across difference as they arise in the digital learning community. Inspired by codes such as “Commenting on Discussions Across Difference,” “Relating Course Content to Current Events,” “Cosmopolitanism,” and “Reflecting on Society/Cultures,” discussing conversations across difference can facilitate digital citizenship activities. By discussing difference as it arises, instructors have a variety of opportunities to facilitate critical reflection and exploration. When moments of disagreement and discord arise, instructors can bring them up to the class in in-person settings to discuss those topics and perspectives if they are appropriate for class discussion and that the participants agree to have their interaction showcased in a larger group discussion. Instructors can also help students to discuss how experiences participating online, in college classrooms, and in many other settings can be impacted by positionality, gender, race, disability, and other forms of difference or marginalization. Verbalizing discussions across difference can also help students to reflect on their own identity and perspectives, considering why they believe what they do and how their perspectives are informed by larger differences in society. Discussing conversations across difference can also orient students toward productive practices, approaches, and attitudes to interacting with others who are different from them, especially along lines related to marginalization such as race, gender, disability, or sexual orientation.

*Best Practice: Connect Discussions of Society, Culture, & Politics to Advocacy*

Finally, instructors should help students to connect discussions that occur in the social learning environment to the level of advocacy. Primarily arising from codes in the data such as

“Advocating for Action or Change,” “Inventing Rhetorically to Comment on Society/Politics/Cultures,” and “Relating Course Content to Current Events” codes, this “best practice” tries to help students connect discussion of political and cultural topics toward advocating for a particular response or change. While discussing current events, cultural topics, and difference represent viable beginning steps toward practicing digital citizenship activities, translating these discussions into low-stakes advocacy for particular changes, even in a classroom learning environment, can be a precursor to more tangible forms of action. As such, instructors should consider helping students to connect discussions of society, culture, and politics to advocacy, even in low-stakes classroom situations. There are clear limitations to the digital citizenship activities that students can enact in classroom social learning environments, and it’s important to note that the “Advocating for Action or Change” code appeared less frequently in the data than other codes that focused more on discussing an issue or problem rather than advocating to others for a particular response. Nonetheless, making the jump from discussing a topic to advocating for a particular response or change is a valuable part of digital citizenship activities that likely must occur before more tangible or public actions.

If instructors can help students make the cognitive and rhetorical leap from topic discussion to advocacy, persuasion, even activism, they can help to maximize the growth related to digital citizenship activities that social media pedagogies are capable of supporting. To accomplish this next level, instructors can comment directly in the social media channel and ask for tangible actions that students think could or should be taken when political discussions arise in conversation. They can also address these possibilities verbally with students in class, drawing on discussing in the social learning network as examples and opportunities for advocacy. Social media learning environments can help students to engage in digital citizenship activities. If

instructors can help students connect discussion of social, cultural, and political topics to further action and advocacy, they can facilitate a rhetorical shift from theory to practice that can result in meaningful differences in the world.

## **Conclusions for Social Media Pedagogies**

The findings of this qualitative study establish social media pedagogies to be viable ways to encourage rhetorical invention, digital and social media literacy development, and digital citizenship learning activities in college courses. These learning outcomes that social media pedagogies are capable of supporting, in addition to those examined in Ch. IV, contribute to the emerging scholarship on social media use in composition pedagogies (see Yancey, 2009; Vie, 2008; Vie, 2015; Witek and Grettano, 2016; Richter, 2021; Gallagher, 2019; Shepherd, 2020; Faris, 2017; Vie, 2017). The findings of this study, like those examined in Ch. IV, included elements that both surprised me and were somewhat anticipated.

For instance, I expected for the conceptual category of Rhetorical Invention to be well supported, but codes supporting this category like “Inventing as a Response to a Social Interaction” and “Discussing Challenges of Rhetorical Invention” were unexpected and helped to further illuminate the category. In contrast, I did not expect or anticipate the category of Digital Citizenship to emerge. The category was entirely unexpected and the data lead me toward the category’s formation in a relatively long process, as it emerged first in the Slack participation data but was fully confirmed in the reflective journals and especially the interviews with students. Additionally, a number of codes surprised me with the extent in which they appeared. At the beginning of the study, I may have been able to predict that codes like “Connecting Course Content to Social Media Example,” “Discussing Affordances/Challenges of Digital

Writing,” “Commenting on Discussions Across Difference,” and “Discussing How Slack Writing Transfers/Informs Academic Writing” might appear, but I was nonetheless surprised at how often, frequently, and prominently they appeared in the data. Other codes such as “Discussing Slack Helping to Increase Writing Confidence,” “Commenting or Critique of Platform/Interface,” and “Monitoring Afterlife of a Slack Post” were entirely unanticipated and unforeseen.

Students, citizens, and professionals of the 21st century need to be able to generate ideas online, to communicate in digital and social media spaces, and to engage in advocacy and political engagement in networked environments. Instructors shouldn’t automatically incorporate social media into their pedagogies, however, without critical analysis of accompanying challenges, issues, and concerns. In the next chapter, Ch. VI on Challenges for Network Composition, I examine how instructors can responsibly and equitably incorporate social media tools into their pedagogies by considering accessibility, digital aggression, digital discrimination, and data and privacy issues. The abilities for social media pedagogies to encourage learning ecology formation, distributed expertise, rhetorical invention, digital and social media literacies, digital citizenship, and the learning of writing, rhetoric, and composition skills are extremely compelling for educators, but require active, conscious attention to challenges if they are to be as equitable, just, and beneficial to students as possible.

## CHAPTER SIX

### CHALLENGES FOR NETWORK COMPOSITION

For 21<sup>st</sup>-century students, the ability to learn, write, and participate online has become more important than ever. Network composition pedagogies stand to be of tremendous benefit to the teaching of writing, composition, and rhetoric. As Chapter IV demonstrated, network composition pedagogies can cultivate Learning Ecology Formation, Distributed Expertise, and the development of Writing/Rhetoric/Composition Skills. Additionally, as Ch. V showcased, network composition pedagogies also have potential to nurture Rhetorical Invention, Digital and Social Media Literacies, and Digital Citizenship in beneficial and compelling ways.

However, as instructors encourage particular rhetorical practices by asking students to participate in social media environments, such as asking students to compose in a Slack channel or on Facebook (see Vie, 2008; Shepherd, 2015; Amicucci, 2017; Vie, 2017; Amicucci, 2020), reddit (Shepherd, 2020), or Yammer (see Faris, 2017), a number of challenges necessarily arise. To participate in public, civic, professional, and social life in the 21st century, digital-rhetorical capacities are important rhetorical assets, and network composition pedagogies in composition classrooms have shown themselves to be promising opportunities to nurture, cultivate, and practice these capacities. It is important to keep in mind, however, that network composition pedagogical initiatives in composition classrooms are not an *automatic* good or net positive. Instead, they should be accompanied by a series of strategies and tactics that resist potential accompanying problems, obstacles, and complications. Network composition pedagogies stand to benefit the teaching of writing and composition, but also have potential to risk reinforcing exclusionary, discriminatory, ableist, or inequitable realities, especially for members of marginalized groups.

As such, network composition pedagogies face a number of challenges. Composition and writing instruction is growing ever-more digital, more networked, and more global, and as these trends exacerbate over time, social inequality and marginalization in digital spaces on the basis of race, gender, sexual orientation, and disability is likely to persist. The challenges that arise for writers, instructors, and digital rhetors when participating in social media environments—especially in educational settings such as college composition classrooms—are important opportunities for practitioners of social media pedagogies to act on. Challenges accompanying network composition, which include accessibility, digital aggression, digital discrimination, and data/privacy, are important opportunities for social media pedagogies to expand how they serve their stakeholders. Though these issues are in no way unique to digital social environments, they’re nonetheless important considerations for instructors to prepare for, as accessibility, aggression, discrimination, and data/privacy work in both familiar and unique ways online that equitable pedagogies should take into account.

This chapter analyzes challenges for network composition related to accessibility, digital aggression, digital discrimination, and data/privacy. I conclude by examining a “Statement of Community Goals and Values” document that can be collaboratively composed by a classroom to serve as a “Rules” document that orients participant behavior, sets standards for decorum, encourages positive contributions, and enforces codes of conduct that work toward maintaining healthy, equitable, and safe rhetorical ecosystems for participants (see Appendix F). This document, collaboratively constructed by interested stakeholders, has potential to orient positive and generative community dynamics among participants in a digital learning network. Nonetheless, challenges exist that network composition’s stakeholders must assess, address, and

navigate beyond the construction of such documents. This chapter begins to consider and address these challenges.

### **Accessibility Challenges for Network Composition**

Among the most important challenges for instructors using social media tools in their classrooms is the opportunity to serve more students by considering technology accessibility. Accessibility refers to the abilities of systems to be available, useable, and convenient for as many people as is possible, especially for people with disabilities. Many technologies can be either inaccessible or not fully accessible for a person with a disability, as social, technological, and cultural systems oftentimes “assume” particular bodies or behaviors for their users, which inevitably fail to encompass an entire spectrum of human heterogeneity and difference (see Wilson and Lewiecki-Wilson, 2003). First Year Composition students use technologies in a variety of heterogeneous, varied, diverse, and creative ways in their composition work (see Moore et al., 2016; Robinson et al., 2019), and as such, attention to accessibility stands to benefit all.

In general, accessibility initiatives attempt to foreground the needs of individuals with some combination of physical, mental, visible, or invisible disabilities. Discussions of accessibility frequently draw from disability studies scholarship to help orient their inclusivity practices in classrooms or pedagogy. Jay Dolmage (2016) comments that “disability studies challenges the idea that disability is a deficit or defect that should be cured or remedied” and “disrupts the idea that an individual with disabilities can be defined solely through her disabilities” (20). Dolmage has written elsewhere about the need to infuse more discussions of ableism and access into higher education (see Dolmage, 2017) as well as the need to be more

active in connecting writing programs with disabilities services offices that many universities maintain (see Dolmage, Wood, and Helquist, 2020). Considering equity, access, inclusion, and disability is vital to establishing network composition pedagogical initiatives in college classrooms as a pedagogical practice that values students with disabilities, that foregrounds access in its practices, that avoids assuming abled bodies as its only users, and actively takes steps to reduce its contributions to ableist ideologies as much as is possible.

If network composition pedagogies in college courses are passively, tacitly, or substantially uncommitted to anti-ableism and accessibility, they should not be practiced. Social media pedagogical initiatives will likely never be fully and entirely accessible to every body, every student, or every individual, but numerous actions, practices, and orientations exist that can make network composition or similar pedagogies substantially more accessible, inclusive, and equitable. Foregrounding these access considerations is vital for network composition pedagogical initiatives, and not as add-ons after the “real” pedagogy is designed, but as holistic, organic, authentic priorities from the very start. Doing so requires priorities, resources, mindsets, orientations, and attitudes that technologies alone cannot solve. As such, accessibility must be approached as an ongoing commitment, a perpetual practice, and an evolving responsibility for care, inclusion, and forethought. For instance, when selecting a platform for a network composition pedagogy from a long list of available options, accessibility should be prioritized right from the start as a key part of the selection process.

Scholars from digital rhetoric and beyond have suggested modes for making higher education pedagogies more inclusive and accessible (Wood and Madden, 2014; Seale, 2013; Friesem, 2017). Stephanie Vie (2018) suggests that digital writing pedagogies embrace a Universal Design for Learning (UDL) framework for accessibility (61). In Vie’s UDL model for



embedding technologies in classrooms, instructors should engage in at least three practices to make their pedagogies more inclusive for students with disabilities. First, instructors should only use technologies in their courses that make distinct, conscious, and intentional efforts to be as accessible as is possible. No technology will ever be fully accessible for every person, but companies, products, and services that elevate accessibility to be not just a buzzword, but an everyday and routine commitment, should be prioritized for inclusion in composition pedagogies. Secondly, Vie (2018) argues that instructors should provide alternative technologies for students to make use of if a suggested technology or platform is insufficiently accessible. For instance, an instructor suggesting students use the video production platform Adobe Premiere Pro Rush might alternatively suggest that students wishing to work with subtitles work instead in Adobe Spark Video, as Premiere Pro Rush does not support subtitle inclusion at the time of this writing. Lastly, Vie suggests instructors encourage students enrolled in the course to actively critique the technologies used for their accessibility or lack thereof. By critiquing constraints, limitations, and likely problems arising from technologies, students are at least oriented toward considering concerns of accessibility in their multimodal or social media compositions, and students with accessibility concerns may benefit from elevating discussions of accessibility into conscious awareness.

Instructors using social media tools such as Slack in their courses can engage in a few key practices to ensure their courses are as accessible, equitable, and available as is possible. To start, instructors can explicitly discuss access with their students, both verbally in an in-person course and in written, video, or discussion materials in an online course (or some combination thereof). Discussing ableism and accessibility is an important practice that, while somewhat obvious, is still not as common in higher education as it should be. Simply discussing disability

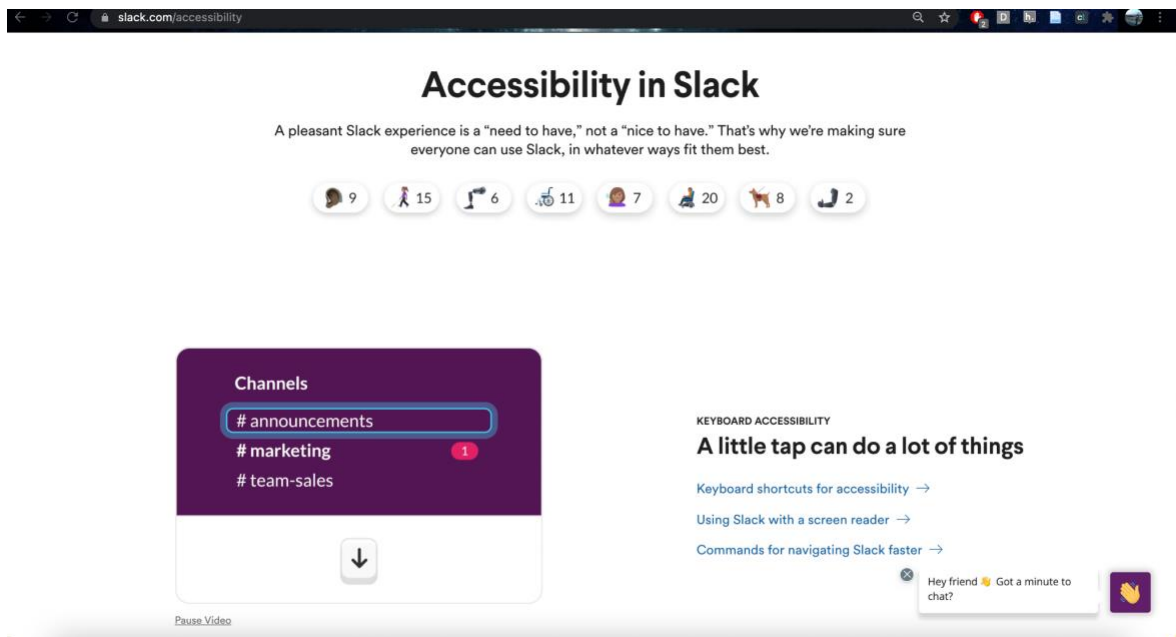
(both visible and invisible, apparent and hidden) is not going to make a course activity accessible, but it does bring the issue to student consciousness, make disability an open topic for attention, and provide a forum for airing concerns, issues, and challenges that the course needs to address.

A second strategy instructors incorporating social media tools into their pedagogies can engage is establishing connections and relationships with disability services offices on their campus prior to the beginning of a course. As Dolmage, Wood, and Helquist (2020) argue, ample opportunities exist “for engaging with students, disability service offices, and the accommodations process more fully to ensure that our teaching practices provide equal opportunities for our students” (1). Building relationships with disability services offices can help to ensure courses and course activities, including use of social media technologies, take appropriate steps to practice accessibility right from the start. Establishing a relationship between disability services offices and writing programs on a shared campus also helps instructors to connect their students with appropriate agents capable of advocating on their behalf, agents who can help connect students with helpful resources, assistive technologies, and other modes of helping students to be successful.

Lastly, instructors engaging network composition can take special care and attention to choose platforms and technologies for their classrooms that are as accessible as possible for the widest range of student learners. Network composition pedagogies are not limited to Slack, of course, but rather can be practiced on other platforms that include varied environments such as Yellowdig, Yammer, Mastodon, Discord, and Moodle. These platforms all offer varying degrees of commitment to accessibility, and in line with Vie’s (2018) recommendation for choosing social media technologies that make distinct efforts to be accessible, instructors should certainly

foreground accessibility opportunities when choosing a platform for their network composition pedagogy.

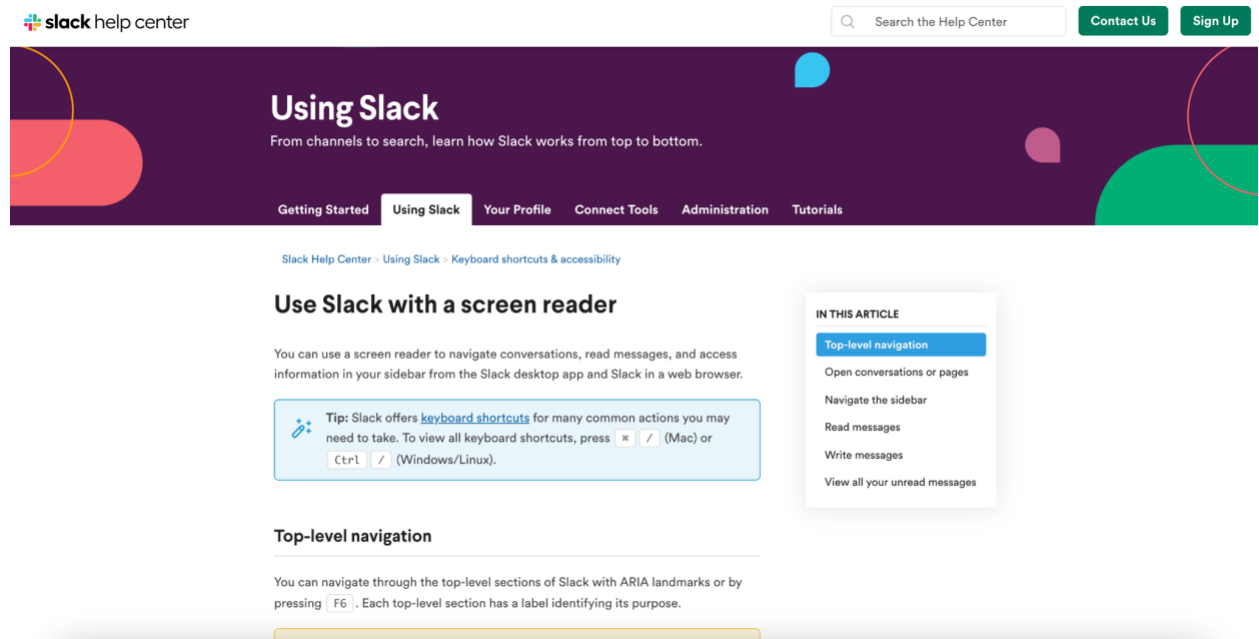
For instance, I chose Slack for my course and for the study outlined in this dissertation for a few key reasons. Slack is, first off, a platform supported by a large corporate infrastructure, meaning they're likely to be making accessibility updates frequently and with appropriate care and attention due to the potential for public scrutiny. The platform serves millions of users, and as such puts a good deal of emphasis, attention and resources toward supporting users with disabilities or with access needs (see Fig. 6.1). Slack is also available to students on smartphone and tablet applications, and some students may find the mobile nature of these applications to be more accessible to them. On the platform's "Accessibility" page, the text begins with "A pleasant Slack experience is a 'need to have,' not a 'nice to have'... That's why we're making sure everyone can use Slack, in whatever ways fit them best" ("Accessibility in Slack"). Showcasing a commitment to accessibility, the statement not only demonstrates the platform's values of inclusivity and access, but also provides instructors using the platform with a helpful guide to point students or student accessibility services employees toward when designing their network composition pedagogy. Reflecting this, a good practice when teaching with Slack is to provide this link directly on course materials such as a syllabus or a Learning Management System.



**Fig. 6.1:** The “Accessibility in Slack” page demonstrates the platform’s commitments to access, accessibility, and flexibility in technology design.

Additionally, as a platform that is screen reader compatible in its desktop, mobile, and tablet applications, Slack provides a guide and tutorial for using the platform with screen reading assistive technologies in a step-by-step manner (“Use Slack with a screen reader”) (see Fig. 6.2). The platform also provides a guide to users wishing to navigate the site with their keyboard alone, suggesting alternatives for platform navigation that don’t make use of mouses or laptop pads for Mac, Windows, and Linux users (“Navigate Slack with your keyboard”). The platform also provides guides and how-to’s detailing changing from light mode to dark mode to improve visual accessibility, on adjusting zoom levels, and on incorporating third party platforms into the application for assistive purposes (“Accessibility in Slack”). Slack’s commitment to accessibility and to helping as many users as possible to be successful using their tool, as demonstrated by the pages and platform design focused on accessibility, screen reader capability, and keyboard-only

navigation, showcase a tool designed for accessibility that make the platform an adequate choice for a network composition pedagogical initiative.



**Fig. 6.2:** Slack’s “Use Slack with a screen reader” page provides students, instructors, and student accessibility services personnel with a step-by-step guide to using the platform with screen assistance technologies. A link to this page should be included in course materials such as syllabi in network composition pedagogies.

Slack is certainly not accessible for every person, student, or body, and no technology can claim to be. However, the platform does meet Vie’s (2018) suggestion that social media pedagogy practitioners consciously choose and assess classroom technologies based on their demonstrated, practiced commitments to accessibility. Engaging in these initiatives will not make network composition pedagogical initiatives completely and all encompassingly accessible, but they do begin to orient practitioners toward better and more inclusive practices surrounding incorporating social media technologies into the college composition classroom.

## Digital Aggression Challenges for Network Composition

A second challenge that instructors engaging network composition pedagogies must attend to is digital aggression, harassment, and bullying. In social media spaces, human beings frequently encounter very different rhetorical environments that can reflect social attitudes involving digital aggression, especially toward marginalized groups. Users in social media environments routinely face threats of aggression, bullying, trolling, harassment, hostility, antagonism, doxxing, and coordinated brigading. Sometimes digital aggressions are microaggressions or intentional use of a wrong pronoun, and sometimes they're a coordinated doxxing campaign that draws unwanted attention to a person based on sexist, bigoted, and anti-feminist views that a community harbors.

Scholars have analyzed digital aggression and harassment since at least the early 2000's (see Rheingold, 2000; Sternberg, 2012; Hinduja and Patchin, 2010; Citron, 2014). Adrienne Massanari (2015) writes of the #GamerGate scandal, where "toxic technocultures" in male-dominated video gaming communities on the platform reddit harassed, defamed, bullied, doxxed, and tormented a female video game journalist in a movement that brought issues of aggression and harassment online into the mainstream. #GamerGate helped to make the harassment, aggression, and hostility faced by minoritized groups every day a mainstream issue in the world, and helped to draw attention to questions that include how to make social media rhetorical environments more inclusive, more equitable, and more welcoming for all. Other scholars have proposed rhetorical technofeminist approaches to handling "toxic troll commenting cultures" in social media comments (see Clinnin and Manthey, 2018), have suggested strategies for disrupting "negative memetic behaviors" in 4Chan's oppressive digital cultures and for developing pedagogies capable of nurturing "ethical digital citizens" (see Sparby 2017, 94), and

have suggested modes for studying digital harassment campaigns that still take care for researcher safety (see Kelley and Weaver, 2020). Still other researchers recognize the role of interfaces and moderation teams in keeping online participants safe (Brown Jr. and Hennis, 2020; Brown Jr. 2015), explore how community values and rules for participation are nurtured by particular platforms (see Potts and Harrison, 2013; Trice, Potts, and Small, 2020; Trice and Potts, 2018), and recognize the importance of crafting ethics of responsibility in digital environments (Reyman and Sparby, 2020).

So, how can network composition pedagogies and other social media teaching initiatives protect students, instructors, and other stakeholders from the dangers of digital aggression and harassment? First, instructors engaging network composition should discuss digital aggression and harassment with their students. This discussion should include definitions of digital aggression, should include examples, and finally should include discussion of how that particular classroom learning community will handle digital aggression if or when it arises in their social media learning community.

Secondly, another response that instructors engaging network composition could engage in is reviewing pertinent university rules, guidelines, and codes of conduct surrounding bullying, hate speech, aggressive conduct, and microaggressions. As a discussion community embedded in university coursework, a network composition learning environment certainly is subject to the accompanying rules and policies that university maintains. Like in-class discussions, which can include aggression, harassment, and bullying at times, university policies help to preemptively prevent some instances of aggression, while creating enforcement and justice mechanisms in other instances.

Lastly, instructors using social media tools in their classrooms could consider the collaborative drafting of a “Statement of Community Goals and Values” document (see Appendix F). These documents, which are discussed in more depth later on in this chapter, could serve as a shared place to discuss, debate, codify, and standardize the rules that a classroom learning community wants to regulate their behaviors. For instance, a “Statement of Community Goals and Values” document that is collaboratively drafted by all class members in a Google Doc could define what digital aggression means to the class so that if it ever arises, there will be less confusion about whether an aggressive act has occurred. As such, “Statement of Community Goals and Values” documents are important (though limited) opportunities for network composition stakeholders to suggest inclusive forms of behavior, to orient participants toward constructive discussion, conversation, and critique, and to build hospitable environments in which each voice is valued and respected. Approaches that combine attention to discussing digital aggression, to examining university policies and codes of conduct, and to crafting detailed codes of community behavior can potentially help social media pedagogies to be more hospitable, inclusive, and equitable.

### **Digital Discrimination Challenges for Network Composition**

A third challenge for practitioners of network composition to anticipate, assess, and maneuver is the challenge of digital discrimination. The internet and digital environments can exacerbate, amplify, reinforce, and extend social processes of marginalization, including racism, misogyny, ableism, homophobia, classism, xenophobia, anti-trans violence, and other forms of discrimination and marginalization. Digital discrimination is a vital challenge for network

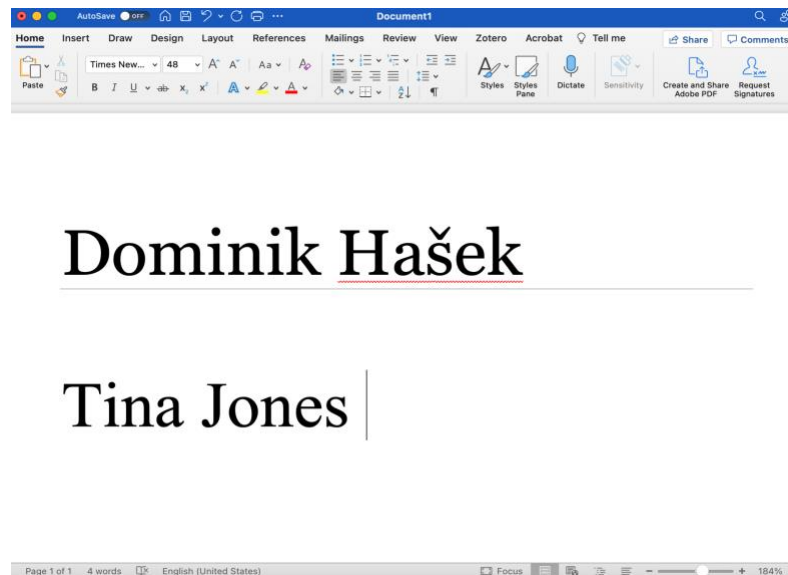


composition pedagogies to address, as these issues inevitably arise in social learning environments.

Participation in internet environments is not homogeneous, and not everyone is welcomed into internet communities in the same way or allowed to participate in similar forms. For instance, rhetorical invention is at times governed by the threat of violence, harassment, and aggression in response to the generated discourse. It follows, then, that the inventive mindsets, processes, and activities of cisgender white men might be radically different (and more comfortable) in social media invention environments than for, say, members of marginalized groups, who can oftentimes experience aggression, hostility, and outright attack based on what they invent (see Nakamura, 2002; Reyman and Sparby, 2020). In other words, a place like Twitter can seem a safe invention environment for an individual privileged in society, while simultaneously being a hostile environment for invention for individuals who are not members of privileged groups within that power structure. Platforms have been relatively slow to react with “Rules” updates and changes to terms of service, and routinely underinvest in platform moderation (see Roberts, 2018; Gillespie, 2018). Moderators on reddit have been forced to ban entire active subreddits with hundreds of thousands of members (Chandrasekharan, 2017), and on nearly any platform risk facing harassment, aggression, doxxing, and other forms of violence (Reyman and Sparby, 2020; Roberts, 2018; London et al., 2020). It’s clear that social media spaces can be (and oftentimes are) inhospitable rhetorical environments for many members of marginalized communities, and that social media platforms are either incapable or unwilling to invest the resources in moderation teams, “Rules,” and other forms of participation regulation. Clearly, social media environments pose a danger to students on college campuses beyond pure classroom situations, too, including concerns surrounding the health and safety of campus

communities, the dangers of cyberbullying and stalking, and general digital literacy and disinformation concerns that can impact nearly any group of people, including college students (Linvill, 2019; see also Linvill et al., 2019).

Discrimination on the internet follows many of the same patterns, processes, and arrangements as it does in other environments, and it can exacerbate some, too. No digital technology is neutral in how it shapes social relations between people, especially when factoring in how technologies reinforce, reinscribe, alter, or amplify existing inequalities related to race, gender, disability, or sexual orientation (Benjamin, 2019; Selfe and Selfe, 1994; Noble, 2018). Technologies that appear “neutral” from an uncritical or privileged vantage point can reinforce racism, misogyny, and other power hierarchies. All technologies, including social media platforms such as Slack, Facebook, or Twitter, amplify some ideologies at the expense of others, and oftentimes are safer and more generative spaces for cisgender, heteronormative white men than they are for members of marginalized groups. As Andre Brock Jr. (2020) notes, whiteness is an intrinsic and fundamental part of western technologies and software, and as such projects the prevailing attitudes, beliefs, and practices of a white and male “assumed” or “ideal” user (39; 151). He writes that “whiteness structures application design,” and certainly platforms such as Slack are implicated in this insight (38). Even a platform such as Microsoft Word, which is used by millions of rhetoric and composition students each year, underlines names deemed “unfamiliar” if they deviate from standard English, in doing so branding them as non-normative and divergent, possibly even autocorrecting them to something deemed closer to “standard” English (see Fig. 6.3).



**Fig. 6.3:** Microsoft Word underlines what it considers non-standard words, including last names that deviate from “standard” English as just one instance of everyday digital technologies elevating some ideologies, languages, and names over others. Microsoft Word allows users to change the language their spellcheck and autocorrect features work in, but in the English language setting, names considered common are not provided a red line underneath, while names deviating from “standard” English are.

Beyond the cultural ideologies present in technologies and platforms themselves, instructors need always be prepared for more overt and direct forms of digital discrimination, such as the use of racist or sexist language in the social learning network, the intentional misuse of another person’s gender pronouns, or overt heteronormativity expressed in an aggressive, discriminatory way. Instructors using social media tools in their courses can draw on a number of scholarly resources to consider particular elements of digital discrimination more deeply (for instance, see Johnson-Eiola and Selber, 1996; Gruwell, 2020; Gelms, 2020; DeLuca, 2020; Kelley and Weaver, 2020; Clinnin and Manthey, 2018; Linvill, 2019; Trice, Potts, and Small, 2020), but will need to be ready to confront digital discrimination preemptively, directly, swiftly, and head-on.

So, what can network composition's stakeholders do to address digital discrimination, racism, misogyny, and other forms of violence in their pedagogies, programs, and classrooms? Similarly to potential responses to digital aggression online, a first step to address digital discrimination, racism, and misogyny in social media environments is to reaffirm university and programmatic policies regarding hateful language, violent conduct, racial slurs, microaggressions, stereotyping, pronoun usage, and inaccurate assumptions based on race or gender. When embedded within a university classroom, social media learning communities are governed by the rules, policies, and codes of conduct upheld and enforced by those universities.

Second, a network composition pedagogical initiative should be governed by a shared set of standards, "rules," and governing codes of conduct that all participants agree to abide by. One form these rules might take is as a "Statement of Community Goals and Values" document that is collaboratively generated by participating stakeholders. This collaboratively authored document could help students and instructors alike to outline definitions of what digital discrimination and digital racism are, what forms they can appear in (both obvious and less obvious, visible and less visible), and what the community can do about it. In social media environments, power dynamics influence how participants interact with others, how they are treated, the reception their writings receive, and how often they encounter hostility, malice, and aggression online.

Considering this, if network composition pedagogies want to enact steps to prevent acts of digital discrimination before they occur, discussing racism online and how it can be prevented represents an adequate starting point. Approaching discrimination as an important, pervasive, and embodied phenomenon in the digital writing classroom serves to benefit all students enrolled in the course, but especially those from marginalized groups who are not adequately served by

“just writing” and by “normal conduct.” Instead, creating a dialogue, both verbally and in the social media learning community, can not only establish digital discrimination and marginalization as important considerations for social media pedagogical initiatives, but also can help to orient responsible, critical, and informed responses to create better environments for writing and rhetorical action to flourish in. Here, it’s important also to elevate the voices of students and instructors from marginalized groups, who likely have insights to contribute to the group discussion of digital marginalization based on their unique positionalities, experiences, and perspectives. These discussions can even be extended into consideration of platform choice, as platforms such as Slack risk reflecting predominantly white epistemologies, as its original design was targeted for business, technology, and industry workforce sectors that have long struggled with diversity, equity, and inclusion. In this case, students can be offered opportunities to critique the platform and its values, biases, and epistemologies, as well as to examine how the platform has been used for advocacy and activism, as was the case for at least one prominent Asian-American group that used Slack to coordinate a channel called Letters for Black Lives that engaged in community building, advocacy, and resource sharing (see Basu, 2020).

Not all instructors infusing network composition into their teaching practice will need to consider digital discrimination in this much depth, but for those who have the time and interest, conversations about power and marginalization online can be a valuable way to push back against unjust systems in modest ways. Discussing the issue of digital discrimination and its pervasiveness serves as a viable (though limited) opportunity to examine how hostility, hospitality, safety, and violence are all implicated in power dynamics that converge in social interactions online.

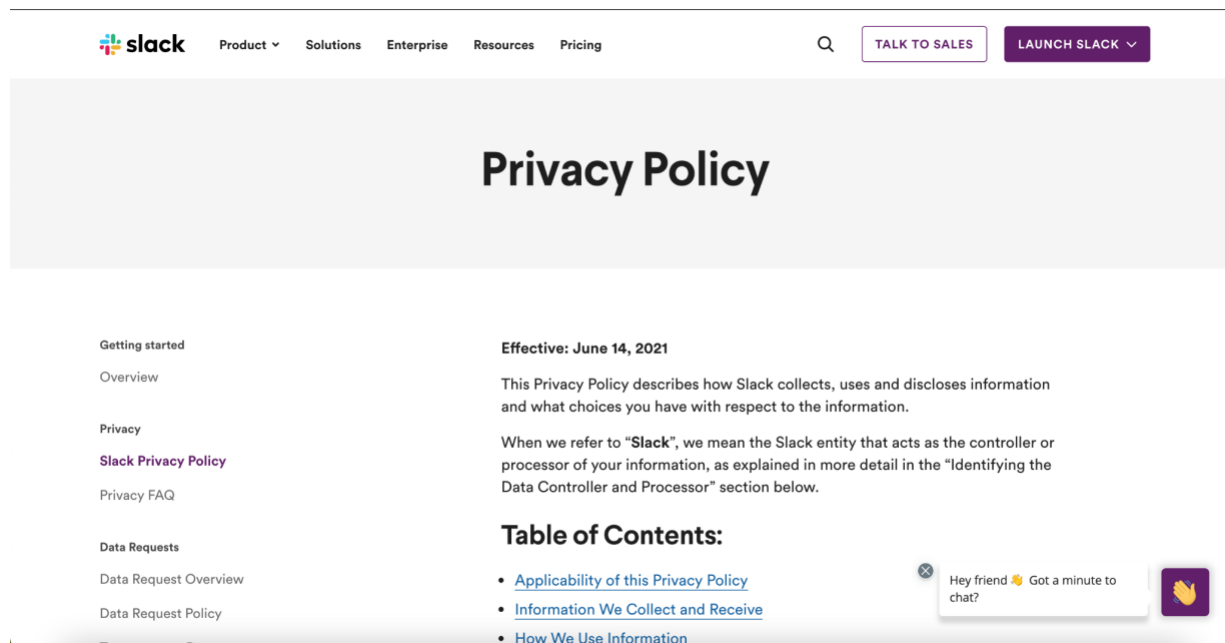
## **Data, Privacy, & Surveillance Challenges for Network Composition**

The final challenge for network composition's stakeholders relates to the collection of data, to privacy, and to consistently assumed surveillance. Williamson, Bayne, and Shay (2020) write of the "datafication of higher education," noting that "the scale and diversity of educational systems and practices means that datafication in education takes many forms, and has potential to exert significant effects on the lives of millions" (351). Composition and surveillance scholars Estee Beck and Les Hutchinson Campos (2020) note that "writing can serve as a vehicle for creating, developing, deploying, and sustaining systems of surveillance," and argue that "for rhetoricians, it is time to watch our watchers" (4). Ann Hill Duin and Jason Tham (2020) note that big data, data analytics, and surveillance are increasingly being used in the assessment, deployment, design, and actual learning entailed in writing pedagogies, particularly through Learning Management Systems (LMS) and other software (2; see Laflen and Smith 2017 for more on LMS use in composition studies). In fact, participation in writing studies courses and in digital writing more generally nearly universally compels a user into compulsory compliance with the data dictates of hugely powerful corporate organizations. The ubiquitous, assumed, and culturally normalized practices of data gathering are practices that a network composition pedagogy would need to grapple with, as the learning opportunities afforded by social media pedagogies oftentimes are coupled to monetization of human activity and social participation through processes of data acquisition and aggregation.

Mandatory, assumed, constant data collection is not intrinsic to digital writing, but rather is a learned cultural practice normalized to serve corporate and government interests, tether technological innovation, capability, and convenience to monetization, and annex human social interactions to the dictates of capitalism. Even more sinister is the attunement of most users to a

particular set of what Nick Couldry and Ulysses A. Mejias (2019a) call *data relations*, or “commodified social relations” that normalize extraction of data from systems, processes, things, and social activities that previously were beyond the reach of monetization by capital (343). An important agent of autonomous data collection in Couldry and Mejias’ (2019b) model is the *platform* (think Slack or Facebook), which stabilizes the process of transforming social relations, professional obligations, and everyday activities into capital for appropriation by corporations (43). Jessica Reyman (2013) argues that “we should not forget that when users access, read, network, post, or compose within many online spaces, they are simultaneously giving up information about a wide range of their online and offline activities and, ultimately, giving up control and ownership of their contributions” (514). This realization poses a number of challenges for composition studies and for network composition pedagogies, which make extensive use of platforms and data extraction-subsidized “free” services in their everyday functioning.

For instance, the privacy policy that students and the instructor tacitly agreed to in this dissertation’s case study is supplied by the Slack platform, which updated its privacy policy in June of 2021, about three months before students began writing in the Slack learning network that the study draws data from (see Fig. 6.4). A full examination of Slack’s privacy policy is beyond the scope of this chapter, but a few important lessons for network composition pedagogies and for social media pedagogy practitioners can be drawn from examination of how Slack collects data, and in turn for how this data collection impacts this iteration of a social media pedagogy.



**Fig. 6.4:** The Slack privacy policy, which outlines what data the platform collects, how it manages that data, and what a consumer’s rights are regarding the data that is collected when using the platform.

Slack’s privacy policy (see Slack, 2021) calls for broad, flexible, and vaguely defined opportunities for the platform to gather, aggregate, store, and manage users’ data when using the platform (see Fig. 6.5). The privacy policy states that “Slack may collect and receive Customer Data and other information and data (“Other Information”) in a variety of ways.” This data collection includes customer data, as “Customers or individuals granted access to a Workspace by a Customer (“Authorized Users”) routinely submit Customer Data to Slack when using the Services.” Slack also reserves the right to collect other extraneous, broadly defined information about its users, stating that “Slack also collects, generates and/or receives Other Information.” In participating on the Slack platform, a user agrees to a broad range of information collection processes, nearly all of which are defined broadly, flexibly, vaguely, and principally in Slack’s interest rather than the user’s.



Slack's privacy policy is in line with many other social media platforms and is hardly an outlier in its collection of user data for purposes that are not clearly communicated to users. Regardless, in participating on a Slack platform, a user is allotted almost no agency concerning the collection of personal or activity-based data, and Slack provides almost no opportunity for user agency around data. Behavior such as this is conventional for most commercial internet platforms, and while certainly a public policy issue that is challenged with legal (see the European Union's General Data Protections Regulations), personal (such as leaving or refusing to join platforms), or social (see discussion of Mastodon in Glaser and Oremus, 2018) mechanisms. Nonetheless, network composition's utility within university communities that serve semi-vulnerable populations such as students amplifies the need to respond carefully and critically to mass surveillance and data collection.

### Information We Collect And Receive

Slack may collect and receive Customer Data and other information and data ("**Other Information**") in a variety of ways:

- **Customer Data.** Customers or individuals granted access to a Workspace by a Customer ("**Authorized Users**") routinely submit Customer Data to Slack when using the Services.
- **Other Information.** Slack also collects, generates and/or receives Other Information:
  - I. Workspace and account information. To create or update a Workspace account, you or your Customer (e.g. your employer) supply Slack with an email address, phone number, password, domain and/or similar account details. For details on Workspace creation, [click here](#). In addition, Customers that purchase a paid version of the Services provide Slack (or its payment processors) with billing details such as credit card information, banking information and/or a billing address.
  - II. Usage information.
    - **Services metadata.** When an Authorized User interacts with the Services, metadata is generated that provides additional context about the way Authorized Users work. For example, Slack logs the Workspaces, channels, people, features, content and links you view or interact with, the types of files shared and what Third-Party Services

**Fig. 6.5:** Slack’s (2021) description of the information that is collected and received from users. This agreement, written by Slack alone, serves as justification for data gathering. A user not willing to consent to this data collection policy is unable to participate on Slack.

The privacy policy on Slack (2021) also explicitly mentions that data will be collected regarding a user’s workspace and account information, services metadata, log data, device information, location data, and cookie information. And, importantly, this is not an extensive list, as Slack additionally “collects, generates and/or receives Other Information.”

For network composition pedagogies, the realities of ubiquitous data collection put administrators, instructors, and especially students in a difficult position. Administrators and instructors should be wary of mandating student participation in ethically questionable data systems as a ticket toward success in a college course. Likewise, students might be equally wary of abandoning what little data rights and agencies they have simply to fulfil requirements for a course that they are enrolled in, which is a common occurrence in higher education. Here, the challenge of response is a daunting one that public policy stakeholders, administrators, and instructors will all need to navigate: how do we exercise our agencies in systems of assumed, seemingly automatic data collection?

If the answer is to simply reject participating and learning on digital platforms because of data collection that occurs ubiquitously on nearly every other platform, writing programs and pedagogies stand to lose a valuable opportunity for social learning. There are certainly opportunities for resistance to mandatory and ubiquitous data collection, however, and network composition’s stakeholders certainly have options to oppose the seemingly necessary tradeoff between limited higher education budgets and the need for free or inexpensive software that is subsidized by the collection of data. Admittedly, most instructors using social media tools in their courses are unlikely to consider data and privacy at the depth and level described here. For

those who do, however, opportunities for resistance can be both fruitful and generative for their environments of learning.

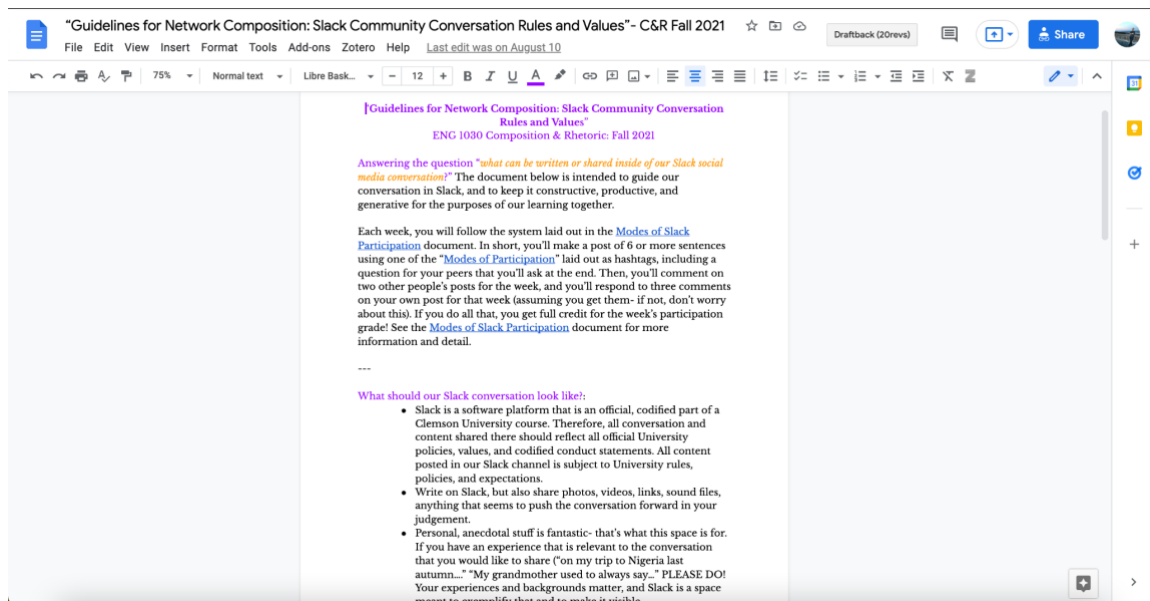
First, network composition's stakeholders can educate themselves, composition programs, students, and administrators about the need for attention to agency, autonomy, privacy, and consent surrounding data collection. Second, stakeholders can actively critique the privacy policies and Terms of Service agreements of the platforms they use, pointing out inconsistencies, points of benefit, and forms of data exploitation that rely on turning social interaction into monetizable forms. Third, stakeholders can reject platforms and software that does not meet their standards, and then can compare privacy policies and data collection practices between competing software to determine which platforms best meet their needs. Lastly, composition and rhetoric courses are uniquely positioned to write, compose, and create around the issues of data, privacy, and surveillance, and projects can be designed that resist automatic, unfettered data collection, and conversations can be had that do the same.

Reliance on platforms, software, and hardware do not automatically force network composition pedagogical practitioners into passive resignation regarding the collection of data. Rather, the opportunity exists for resistance through writing, discussion, communication, and multimodal creation. A network composition pedagogy could certainly be designed for Mastodon, which would remove the question of platform data collection from the equation. In the case of students who don't wish to participate in conventional ways, such as an undocumented student wishing to protect their family's privacy and well-being, instructors can remove requirements for usage of real names and other identifying information on the platform and suggest internet browsers such as DuckDuckGo that minimize data collection. Resistance to ubiquitous, assumed, and nonconsensual data collection is an opportunity that composition's

stakeholders, as one of the largest course communities on many campuses, are uniquely positioned to pursue.

### **“Statement of Community Goals and Values” Documents**

Instructors have important opportunities to nurture equitable practices around their network composition classroom learning environments. A number of beneficial practices surrounding accessibility, digital aggression, digital discrimination, and data/privacy have already been suggested in this chapter, so I now turn toward one particular form of cultivating equitable behaviors in network composition pedagogies: collaborative construction of “Statement of Community Goals and Values” documents by students and instructors themselves (see Fig. 6.6). A “Statement of Community Goals and Values” document is a collaboratively designed set of “Rules,” guidelines for behavior, codes of conduct, and social discussion values that are written by network composition’s stakeholders in their own language and with their own unique circumstances in mind. “Statement of Community Goals and Values” documents are created by a social learning community for their own benefit and based on their own values, priorities, and wishes.



**Fig. 6.6:** The “Statement of Community Goals and Values” document that Jacob Richter’s ENG 1030: Composition and Rhetoric course collaboratively drafted to outline rules, values, and equitable practices for their Slack learning environment. Beneath this instructor-provided base language, students collaboratively designed how they wanted their network composition learning ecology to be practiced, paying attention to varied concerns such as tone, professionalism, social interaction, accessibility, and social decorum.

“Statements of Community Goals and Values” are valuable components of network composition pedagogies and especially to the iteration of a network composition pedagogy that this dissertation studies. To begin the semester, the Composition & Rhetoric course collaboratively designed a “Rules” document for their network composition community to abide by, to consider, and to attune themselves to as they participated together each week. The instructor began the semester by providing some basic ground rules for students to follow in the Slack discussion, including basic but important rules concerning hate speech, racist or sexist language, bullying, and other vital concerns. From the very start of the network composition pedagogy, students knew there were rules they should abide by when participating in the Slack channel.

The rules that the class adapted for classroom discussion and participation are similar to what people tacitly agree to when participating in other networked communities, such as a Facebook group or a reddit community (see Richter, 2021; Trice, Potts, and Small, 2020; Johnson-Eilola and Selber, 1996). When a person joins a Facebook group or a reddit community, they agree to a set of community “Rules” that are different from the platform’s terms of service rules, and that are community-specific and unique to a particular group. These “Rules” documents range in the sorts of behavior they hope to encourage and discourage among participants: some are primarily restrictive, and prohibit forms of behavior that detract from the health and safety of the community, while others are more prescriptive, and focus on encouraging positive behaviors, such as properly attributing authorship on digital assets, encouraging equitable forms of discussion, and avoiding any sort of bullying, harassment, or aggression, especially when based on race, gender, or some other power structure. Importantly, “Rules” documents can encourage generative relationships, productive forms of sharing, agonism and deliberation, even healthy disagreement. However, “Rules” documents are always written by particular groups of people, but then are applied to participants beyond those particular groups. As such, “Rules” documents are prone to bias, prone to obliviousness, and prone to missing important parts of online interaction that aren’t experienced universally by all participants. For instance, a group of white men designing rules for a community may not be able to anticipate the aggression and harassment in online spaces that is often experienced in unique ways by women or by members of marginalized groups. One way to address this problem, at least partially, is to solicit the voices of marginalized groups when constructing “Rules” documents for a virtual community or for a classroom learning network.

“Statements of Community Goals and Values” documents serve as “Rules” for network composition pedagogical initiatives. Composed collaboratively in class using a shared Google Doc, students are free to contribute the values, practices, and aspirations for the networked community that they wish to see practiced and implemented in the Slack channel discussion. These practices function as rules for conduct, behavior, and decorum within the community, but also as a statement of community values. For instance, student stakeholders might codify in the “Statement of Community Goals and Values” document a need for a formal definition of “mansplaining” so as to avoid this misogynistic practice. Additionally, they might want to create a “positive” rule that could encourage practices of healthy social relationships governed by values of mutual respect, reciprocity, and kindness, just as one example. Constructing “Rules” documents or “Statements of Community Goals and Values” documents can help networked communities to attune themselves to shared values, orientations, and codes of conduct. This bears relation to the Greek concept of *decorum*. Decorum is a term from classical rhetoric that refers to the rules, guidelines, and values of address (Hariman, 1992). Decorum is how one carries oneself, how one presents oneself to a community, how one interacts with others, and how one embodies values of their culture. Importantly, decorum can also appear as a community wide performance of social values.

While no document or course exercise can claim to address or pre-empt *all* potential harassment, aggression, or unjust behavior, this collaboratively composed “Statement of Community Goals and Values” document is one way to address some of these issues in an ongoing, collaborative dialogue that anticipates some of the needs of marginalized voices and considers the needs of involved stakeholders. In other words, this “Statement of Community Goals and Values” document values the voices of student participants and allows them to engage

in a metacognitive critique of the online networked conversation. This can potentially pre-empt digital aggression or other unjust behaviors that can plague online composition courses, and at minimum challenges students to reflect on their own participation practices in networked spaces, including how they engage others, how they engage difference online, how they engage social customs, and how they engage privilege in their online learning communities.

Preliminary “Rules,” right from the start, should prohibit hate speech, misogynistic speech, ableist language, racist language, and behavior that is transphobic, inequitable, or discriminatory toward any group. The goal of “Rules” documents, when it boils down to it, is to protect students, but they also can serve to nurture healthy, productive relationships *between* students. Horizontal, student-to-student bonds are an important part of network composition, and this sort of learning ecology formation is a primary deliverable that social media pedagogies can provide. In other words, learning ecology formation can be encouraged by nurturing and rewarding *good* behaviors as much as by prohibiting *bad* ones.

Finally, it is vital to maintain open communication, especially with students who might not want to publicly voice their concerns or needs to the class. Instructors should allow students to contribute anonymously to “Statement of Community Goals and Values” documents instead of making them divulge identities to the course that they may not be comfortable going public with. In a multitude of ways, “Statement of Community Goals and Values” documents help to make network composition pedagogies generative, beneficial, and healthy, and they additionally help to address some of the accessibility, aggression, racism, and data collection processes considered in this chapter.



## **Network Composition for Writing Program Administrators**

For each of the four primary challenges for network composition pedagogies—accessibility, digital aggression, digital discrimination, and data/privacy—this chapter has offered suggestions and practices instructors can use to address, but not eliminate, each of the particular challenges. However, instructors are not the only stakeholder with opportunities to address these challenges in composition programs. There is also a role in the development, design, and implementation of social media pedagogies for Writing Program Administrators (WPA) as well. Writing Program Administrators have a multitude of opportunities to address, orient, and demonstrate how their programs can, could, or should utilize networked learning platforms. From a position of leadership, WPAs manage what technologies are available to instructors in their programs, determine learning outcomes in introductory composition courses, and design major programmatic assignment prompts. In doing so, WPAs have an opportunity to infuse social media tools into their programs in ethical, hospitable, and principled ways that have potential to address the challenges this chapter has examined. Considering opportunities for using social media tools at the programmatic level can be a rewarding opportunity to use technologies more critically, creatively, and adeptly (see Miller et al., 2020).

Nearly all composition programs value composing in and across digital spaces. For instance, in the ENG 1030: Composition & Rhetoric course that this dissertation's qualitative case study was conducted in, there is a "Composing in Electronic Environments" learning outcome that the program requires students and instructors to pursue. As such, it's clear Writing Program Administrators contribute to the priorities, values, execution, and principles that the writing program pursues. In their article "Managing Digital Technologies in Writing Programs: Writing Program Technologists & Invisible Service," Rodrigo and Romberger (2017) point out

how WPAs oftentimes engage in non-visible service to their programs by orienting attitudes and practices regarding technology use. Rodrigo and Romberger (2017) argue that WPA labor oftentimes involves a “more complex understanding of digital technologies” that demonstrates “technological awareness and expertise, and that WPAs even work frequently as “Writing Program Technologists” in addition to their work as Administrators (69). In other words, in their roles as Writing Program Technologists, WPAs oftentimes must make tough choices surrounding how the program will engage with digital technologies, and these choices can sometimes touch upon accessibility, digital aggression, digital discrimination, and data/privacy. This contribution from WPAs certainly can (and should!) include commitments to helping students to cultivate learning ecology formation, distributed expertise, rhetorical invention skills, digital and social media literacies, writing and rhetoric skills, and digital citizenship activities, all of which can be nurtured by network composition pedagogies.

To encourage accessibility in writing and social media activities, Writing Program Administrators and practitioners of network composition pedagogies can implement a few key practices that can help nurture learning with social media tools while also ethically serving students. In particular, WPAs can connect program instructors with student accessibility services offices, building impactful relationships along the way (Dolmage, Wood, and Helquist, 2020). WPAs can also address accessibility in both theory and practice during orientations, teaching demonstrations, programmatic events and gatherings, and in course materials and official policies. WPAs can also lead by example, and not only practice accessibility daily in their courses but also publicize, share, and spotlight these practices for others to observe and learn from. WPAs can heed Vie’s (2018) suggestions and lead by example, encouraging technologies that are relatively accessible, prompting students to critique those technologies, and providing

alternative technologies to use in the class, too. WPAs can work as communicators of accessibility needs to program instructors, including in the enforcement of university policies surrounding accessibility. They can also advocate for funding that would support accessibility training, availability of accessible technologies, and support for instructors to engage in professional development opportunities devoted to accessibility.

Additionally, to address digital aggression prior to and when it inevitably arises, WPAs certainly have a role to play. The first role WPAs can play in combating digital aggression involves simply defining what digital aggression is for stakeholders, and explaining how it can be avoided, handled, or ideally prevented. In providing definitions, examples, and hypothetical (or real) scenarios, WPAs can help instructors to prepare for their own social media pedagogical uses, including building the appropriate mindsets. WPAs can inform instructors of how privilege, positionality, and identity can make digital spaces less safe and healthy for some users, particularly users from marginalized groups. They can bring issues such as mansplaining to the attention of instructors and can point out ways for dealing with conflict and for building toward productive discussions and disagreements, rather than unproductive, hurtful, or unsafe ones. Finally, WPAs can help instructors to consider ways to teach their students about digital aggression online, including through devising lesson plans, assignments, and educational materials.

Next, in pursuit of preventing and addressing digital discrimination, WPAs have opportunities to make social media learning environments as safe and hospitable as possible for female, Black, Latinx, indigenous, transgender, and other marginalized students. First, bringing up issues of digital discrimination in programmatic events, professional development meetings, and in official materials can represent an impactful first step toward at least making program

stakeholders aware of these issues. For instance, it's not always easy or convenient for white instructors to "shift out of neutral" (see Shelton, 2020; see also Edwards, 2018), but attention to subtle, quiet racism that usually flies under the radar of white instructors can be an important way that instructors make their learning environments more culturally hospitable for marginalized students. WPAs can set a tone of anti-racism and can showcase in their own practice how technology use, social media tools, and anti-racist, equity-minded practices can intersect. Additionally, WPAs should serve as translators of responsibility, opportunity, and care for their programmatic stakeholders, and should help their programs to enact these opportunities for supporting marginalized groups whenever possible. They can also supply their programs and instructors with model "Statement of Community Goals and Values" documents that can be drawn upon in LMS modules, on program websites, or in programmatic repositories.

Finally, to resist ubiquitous data collection, Writing Program Administrators can encourage teaching and exploration of what Williamson, Bayne, and Shay (2020) call data literacies. Data literacies involve encouraging students, instructors, and other program stakeholders to develop "critical skills of using and evaluating data" in an attempt to develop "critical orientations" (359). These critical orientations "allow educators and students to interrogate the claims accompanying data systems, question the validity or reliability of the data produced, and pose ethical challenges to the uptake and use of data in education" (359). In helping their programmatic stakeholders to be aware of data collection, storage, and management, WPAs help them to initiate forms of resistance, as well as to help program stakeholders build appropriate mindsets, attitudes, mindsets, and orientations toward data collection. Ensuring that program stakeholders have data agency, at least to some extent, is an important form of care for student and instructor privacy in the 21st century. The ability to make

informed choices surrounding data collection is a vital chance to exercise data agency in a writing program, and as such, WPAs should help their instructors, students, and other stakeholders make informed choices about how they allow others to collect and use their data.

In their roles orienting the values, practices, and priorities for composition programs, Writing Program Administrators have an opportunity to assist in incorporating network composition pedagogies into their programs in ethical, intentional, and equitable forms.

## **Conclusions**

If you have an inequitable practice and you put the word “digital” in front of it, you’re going to have an inequitable digital practice. In other words, inequalities and marginalization from all sorts of realms of life reproduce themselves in digital environments. As this chapter showcases, the advantages and opportunities that network composition pedagogies in classrooms afford—including opportunities for cultivating learning ecology formation, distributed expertise, and writing/rhetoric/composition skill formation discussed in Ch. IV, and opportunities for nurturing rhetorical invention, digital and social media literacy development, and digital citizenship discussed in Ch. V—are only practicable if they are balanced out by commitments to challenges of accessibility, digital aggression, digital discrimination, and data/privacy. The many benefits of giving students chances to connect, learn socially, and interact with one another introduce great opportunities for the digital composition classroom, but they also introduce great challenges that will need to be revisited time and time again in the coming decades of digital writing. It is to these coming decades, the possible futures and opportunities for evolutions and mutations in network composition, that we now turn to in Ch. VII. Though network composition

pedagogies exist in inequitable worlds, they do not necessarily need to reproduce all of those inequalities in their practices. That's a challenge worth taking up.

## CHAPTER SEVEN

### FUTURES FOR NETWORK COMPOSITION

If you've made it this far, you probably find network composition and social media pedagogies more broadly to be at least intriguing modes of learning. In networked communication environments, people need to be able to learn alongside one another through participation, interaction, and connection, and network composition is one valuable mode of helping students and communicators to nurture these abilities. In this short concluding chapter, I'll take some time to reflect on what has been established about network composition pedagogies so far before moving into consideration about what could come next for network composition and the study of social media learning environments. The future for network composition is promising and could include innovations related to application across the curriculum, design of the social learning initiative, and imaginative expansion of what network composition can *be* and *do*. The chapter will then examine how exactly network composition matters for contemporary communicators by examining its impacts on not only education, but also on public, professional, civic, and social contexts. Inventing network composition, which the students and professionals who contributed to this dissertation have been helping to do, is a fruitful and generative endeavor. Taking some time to review what's been established, such as what network composition is and what it can *do*, as well as considering what can happen in the future, can help to expand what we consider to be valuable, possible, and worthwhile when designing and enacting social media pedagogies.

## **Deliverables: What Has Been Learned about Network Composition?**

So far, this dissertation has offered a number of recommendations for how instructors can both theoretically consider and practically approach using networked technologies as tools for learning and connection in their college classrooms. In Ch. I, I introduced the project's core ideas and vocabularies of network composition and network composition pedagogies. I then reviewed relevant research published on using social media tools in composition courses, established the dissertation's exigence by referring to tangible calls for further research, detailed the project's specific contributions, and finally overviewed the pedagogy and platform that the dissertation is built upon. I established the project's exigence, purpose, and original contributions by referring to five specific calls for further research that occurred at the disciplinary, subdisciplinary, pedagogical, methodological, and theoretical levels. The dissertation responded to:

- Kathleen Blake Yancey's (2009) call for pedagogies and models of composing that fully engage affordances of networked technologies and practices of social media.
- Douglas Walls and Stephanie Vie's (2017) call to integrate social media into higher education.
- Stephanie Vie's (2015) call for social media pedagogy development.
- Michael J. Faris' (2017) call for empirical studies on student social media usage.
- Damien Smith Pfister's (2014) call to more deeply consider invention in online environments.

Responding to these five specific exigencies, the dissertation sought to address a primary research question of *How do student composers invent within networked social media environments?* It also sought to respond to two secondary research questions: *How can network composition pedagogy initiatives in First Year Composition courses cultivate the formation of learning ecologies, rhetorical invention, digital literacy, and distributed expertise?* and *What can this study tell us about potential 'best practices' for network composition pedagogies?* Ch. I



introduced network composition and set the basis for the theoretical, methodological, pedagogical, and argumentative work that succeeding chapters engaged in.

To set the scene for readers and establish a theoretical contribution to the discipline of rhetoric and composition, Ch. II traced evolutions in conceptualizing rhetorical invention as it grew to be understood as social, distributed, entangled, and kairotic. The chapter then extended these social models of rhetorical invention into social media communication environments, introducing the term *network-emergent rhetorical invention* to describe how networks of writers, technologies, interfaces, code, algorithms, infrastructures, and other actants come together to contribute to emergent inventive acts. These first two chapters established an exigence for network composition, reviewed pertinent literature, situated this research within larger disciplinary and cultural conversations, and offered readers an updated and expansive understanding of rhetorical invention that takes social media environments cohesively into account.

The dissertation then shifted toward understanding network composition and rhetorical invention as modes of learning in college classrooms, detailing the methods and methodology of a qualitative case study with grounded theory elements in Ch. III. Following this discussion of its methods, the findings of the qualitative case study were exhibited through analysis of both *a priori* and emergent conceptual categories as well as accompanying codes and “best practices” for pedagogies inspired by them. In Ch. IV, the dissertation examined how social media pedagogies can support learning ecology formation, distributed expertise, and the learning of writing, rhetoric, and composition skills through analysis of some of the case study’s findings. Ch. V examined the rest of the case study’s findings, showcasing how social media pedagogies can support learning through rhetorical invention, digital and social media literacies, and digital

citizenship. Both findings chapters offered “best practices” for instructors to consider enacting in their own pedagogies based on the findings of the case study to most effectively maximize student learning. To address potential concerns and associated problems with social media pedagogies, the dissertation then examined challenges to network composition, considering accessibility, digital aggression, digital discrimination, and data/privacy in Ch. VI. Along the way, the dissertation took care to contextualize its contributions and arguments alongside others, to support its arguments with original research and findings, and to consider issues related to equity, accessibility, and student well-being.

In many ways, network composition and network composition pedagogies represent a promising opportunity for students to connect and share with one another, to learn from and with others, and to write and participate with digital technologies in ways that are valuable within and beyond the classroom. As deliverables, the approaches to *network-emergent rhetorical invention* as well as the challenges of social media pedagogies related to accessibility, digital aggression, digital discrimination, and data/privacy certainly can representation actionable paths for stakeholders in rhetoric and composition and beyond to adopt. Similarly, the findings of this dissertation’s case study showing network composition’s abilities have potential application beyond composition studies, additionally representing a valuable deliverable for interested stakeholders. On the other hand, even considering all that has been established in this dissertation through both its theoretical contributions and the contributions of its qualitative case study, there is also plenty left to be discovered. In other words, the dissertation has established a series of opportunities for further research, for future inquiry, for new applications and potentials for social media pedagogies. What these potential future inquiries might look like is an open question, but based on what has been established so far, some potential futures for network

composition might examine its utility across the curriculum, its potential to nurture other forms of learning that weren't directly explored in this study, and finally its application in other modes, pedagogies, platforms, and applications. These potential futures for network composition are explored in the next section.

### **Futures: What's Next for Network Composition?**

A number of opportunities exist for future research and pedagogy development related to network composition. One promising direction for future research in network composition is in its utility across the curriculum. Instructors in STEM, business, education, humanities fields, and other disciplines use social media tools widely and in a multitude of ways (Delello et al., 2015; Smith et al., 2020; Zheng et al., 2018; Greenhow et al., 2009; Herro, 2014; Fahser-Herro and Steinkuehler, 2009; Greenhow and Lewin, 2016). Examining these pedagogical applications in relation to a larger understanding of network composition can be a fruitful exercise that could establish cross-disciplinary, cross-curricular applications helpful for student learning at a variety of levels. Instructors across the curriculum, including in STEM, business, education, and the humanities, can enact network composition pedagogies in their classrooms and then report on the learning that occurs there. Similarly, instructors in K-12 settings, in community colleges, and in settings other than major R1 universities can experiment with network composition pedagogies, too. In my own future scholarship, I'd like to research network composition's utilities in technical and professional communication (TPC) curricula.

Second, instructors can consider the utility of network composition pedagogies to encourage learning practices that weren't prominently considered in this dissertation. A number of learning activities were hinted at within this study's data collection and analysis process but

weren't sustained enough or in enough depth to rise to the levels of code or category. With that said, I could envision a similar study focused on different material and in a different institutional setting generating quite different findings. For instance, I wouldn't be surprised if another similar study were to find categories like, for instance, collaboration or social justice enactment. I could even envision categories like learning digital reading skills, intercultural communication, collaborating for social justice, and learning visual communication skills emerging from a similar study. A network composition pedagogy featured in an earth sciences, business administration, engineering, or computer science course could work very differently and supply rich insights into how social media tools can supplement and extend learning in those disciplines. It's also worth considering the role that researcher and instructor subjectivity, priorities, values, and assumptions play in a research study like this one. Certainly, a study conducted by a research team at a different institution and by a researchers from a non-cis white male demographic could turn out very different results. Similarly, a course or pedagogy designed in a different way could turn out findings that look very different from what is offered in this project. This dissertation offers one approach to network composition, but it does not unilaterally claim to represent all social media pedagogies, nor does its case study represent all possible instantiations of network composition pedagogies. Instead, this study's qualitative findings represent one study's contribution based on one pedagogical framework based on two ENG 1030: Composition & Rhetoric courses based on one instructor-researcher's values, priorities, and course design. Other instructors, teaching both in writing classrooms and beyond, should continue to examine network composition's potential for learning, including examining its potential for different learning outcomes based on different applications in different settings.

Lastly, stakeholders invested in using social media tools and digital writing environments for learning can consider engaging network composition in other modes, other pedagogies, other platforms, and other learning situations. Simple but promising changes could examine social media pedagogies built around using other platforms, such as Discord, Yellowdig, or Facebook Groups, in the composition classroom. Instructor-researchers could also consider a different form of student participation, deviating from the “Modes of Participation” outlined in Fig. 1.2. Instructor-researchers can make any number of changes to the pedagogy and study outlined here, obtaining findings that could fill in existing gaps in either this study or in literature on social media use as a learning tool in higher education. For instance, a study or pedagogy involving the platform Discord that occurred at a community college in the pacific northwest could uncover different but promising findings. Forms of having students engage and connect with one another extend far beyond the pedagogy outlined here and far beyond what Slack, as just one platform among many, can offer. Experimentation related to other modes, other forms of participation, other pedagogical frameworks, and other learning environments can help to both broaden and hone what social media tools can do for writing instruction and beyond.

All in all, it’s important to approach network composition not as a static entity but rather as an opportunity for further research that embraces a plurality of courses, pedagogical frameworks, learning goals, and modes of classroom participation with social media. Just as students participating in the Slack pedagogy examined here were continually inventing and reinventing what network composition *is*, as chronicled here, future students and instructors will reinvent what network composition can *be*.

## **The Stakes: Why Network Composition Matters for Contemporary Communicators**

As this project has demonstrated, network composition and social media pedagogies are capable of nurturing a variety of outcomes, processes, activities, and capacities that are beneficial to communicators and learners. The exigencies from academia, college life, and the discipline of rhetoric and composition are quite clear. For instance, the evolution of rhetorical invention has necessitated student communicators to be adept composers in network-emergent contexts such as those that occur on social media, which Ch. II on Invention in Digital Networks establishes. Similarly, the importance of considering accessibility, digital aggression, digital discrimination, and data/privacy when using social media in higher education is vital, which Ch. VI on Challenges to Network Composition showcases. Even more directly, the value of network composition for nurturing learning ecology formation, distributed expertise, learning of writing/rhetoric/composition skills, rhetorical invention, digital and social media literacies, and digital citizenship is clear, which Ch. IV and Ch. V on Findings demonstrate. Network composition matters for contemporary student communicators for all of these reasons and more, and I contend that it has value both as a mechanism to teach course content and also as an end in itself. The ubiquity, relevance, and consequence of social media communication is immense, and as such, a writing or communication education cannot afford to omit it. The academic and educational exigence and contribution of network composition are apparent, but there also are a number of broader public, professional, civic, and social contexts that network composition can inform as well.

First, network composition and network composition pedagogies stand to benefit global publics that rely more than ever on communicating effectively and healthily in social media communication environments. Learning how to learn from others (as the learning ecology

formation category showcases) and how to pluralize how expertise is understood (as the distributed expertise category showcases) are a valuable skills for student to practice in any context. Even more directly, the skills that communicators require relating to digital and social media literacies are ever-present outcomes for instructors to help students work toward. The practices students engage in within network composition initiatives—including critical sharing of internet links, reflecting on rhetoric’s role in media, discussing affordances and challenges of digital writing, and critiquing platforms and interfaces—are digital literacy practices that students can draw upon across their entire literate lives. Similarly, global publics rely upon effectively communicating messages in digital environments, and many of the practices common to network composition, such as agonism, audience analysis, teaching others, engaging in discussions across difference, and critically reading the ideas of others encourage these beneficial communicative behaviors. Global publics benefit from citizens who are empowered, capable, competent, and aware communicators, especially when those communicators are using emerging media to circulate their messages. Network composition’s abilities to support rhetorical invention, learning of writing/rhetoric/composition skills, and digital and social media literacy development helps to nurture communicators who are able to engage effectively in intertextual writing, deliberate across difference, critically read and share online, and make full use of the multimodal communicative media possibilities that social media affords. In other words, network composition has shown an ability to support the very practices that emerging global publics need as the 21<sup>st</sup> century unfolds.

Network composition also has potential to be of benefit in professional applications, contexts, and rhetorical situations. Though it is not formally explored in this dissertation or in its qualitative case study, the learning outcomes that students engaged within the network

composition pedagogy will almost certainly serve them well in the workforce, in future academic communication situations, in industry settings, and in the larger arcs of their professional careers. The findings of this study, especially related to learning ecology formation, distributed expertise, learning writing/rhetoric/composition skills, and digital and social media literacies, will likely prove valuable beyond a single First Year Composition course. In many ways, network composition pedagogies can be said to support mindsets, habits, and orientations toward both communication and social interaction that workplaces will value. Working as part of a team, which professionals will likely need to do more and more, benefits from those professionals having some level of learning ecology formation experience. Similarly, professionals will likely need to communicate across media in visual, sonic, and other modes, showcasing the value of digital and social media literacies to professional contexts. The skills that network composition is capable of helping students to enact—especially those encompassed within learning ecology formation, learning writing/rhetoric/composition skills, and digital and social media literacies—will be of tremendous importance in many people’s professional lives. Students may be writing to and learning from one another on Slack in their workplaces. They may even be discussing writing processes, reflecting on media, considering rhetorical aims and goals, inventing with multimedia, teaching others, engaging in discussion across difference, and so many of the other important activities that network composition has proven capable of supporting.

Additionally, there is utility for network composition to nurture capable citizens more equipped for political and democratic participation than they would be without it. As is demonstrated most prominently in the digital citizenship and digital and social media literacies categories within this dissertation’s findings, network composition can help students to comment on society and politics, can help them to discuss social media and society, and can help them to



advocate for an action or change. Network composition can even encourage practices related to cosmopolitanism, discussions across difference, agonism, and cultural criticism. As high-profile scandals related to social media platforms and their impacts on democracy grow ever-more commonplace and routine (think of Cambridge Analytica, mis/disinformation, and COVID-19 information scandals in recent years), citizens will need to exercise critical, creative, and adept literacies to respond effectively for the sustenance of democracy. The writing and rhetorical skills that network composition has proven capable of nurturing offer citizens of contemporary democracies opportunities to engage in digital citizenship activities in a low-stakes, informal, classroom environment that can conceivably help them consider how to practice these activities effectively, carefully, and critically. If universities have a role to play in rhetoric's valued tradition of the *paideia*—educating students for citizenship—the rhetorical abilities that network composition has proven to support will be of immense value. Obviously, the contributions of any writing and rhetoric course activity can be modest at best, but helping students (even in small, limited measure) to more critically engage digital citizenship as well as digital and social media literacies is a valuable end in itself. Network composition's potential to encourage political, social, and cultural deliberation as well as with digital citizenship activities are one of its most far-reaching possibilities.

Finally, an opportunity exists for network composition and network composition pedagogies to make a meaningful difference in a student's life outside of the classroom by helping them to live better lives online, an important part of many people's social and interpersonal lives. Certainly, the learning ecology formation activities that students engaged in can be impactful as students form out-of-school or extra-academic learning ecologies in TikTok communities, on subreddit pages, and in other digital arenas. Additionally, the findings of the

case study showcase Slack writing transferring and informing academic writing, and there's little reason to think this sort of transfer doesn't happen elsewhere. In many ways, learning how to view expertise along distributed and culturally inclusive lines can help students lead more fulfilling lives, especially online, and the same can be said of learning ecology formation as well. One student wrote that:

"With the help of Slack, I was able to improve in the world of writing, as well as opening up my social circle. Slack is not something that I would have expected I enjoyed, but I truly did. I have been told for years that I should write more for fun, just to take advantage of what some would call a "gift". This has never really appealed to me much, but I like to believe that maybe Slack can help me do that more. I genuinely do enjoy writing, I just needed a reason to start, and I think Slack could have been that reason... Slack has helped me with meeting new people, improving my writing quality and style, and tapping into my hidden love for writing."

Another student wrote that the networked social learning community helped them to move beyond their comfort zone and improve as a communicator:

"In the end, I do think that Slack has been a positive part of the semester... It has improved my academic writing skills... By pushing me out of my comfort zone and providing the opportunity to interact with other students in a way that I normally would never do in my writing, Slack was very important to my development as a writer."

A third student honed in on the emotional growth that the network composition pedagogy helped them to achieve, commenting on learning how to productively disagree with others and to participate safely in cultural discussions in a safe and welcoming environment:

"Another experience I had with Slack was I found myself talking about political issues. As an education major, there are lots of topics in politics right that can potentially affect me. I ended up doing my "Mapping the Controversy" project on the topic of banned books and my groups "Talking Head" project was about technology addiction in children. Both topics can potentially be highly politicized, and I posted about both on Slack. I was interested to see that change in myself about how comfortable I was to share my thoughts on Slack. I felt that Slack was such a safe space for me that even if someone disagreed with my opinions, they would still be respectful which was a positive thing. Slack allowed me to come out of my shell while also sharing about topics that were personal to me without having the fear of being disrespected."

Finally, a student commented that the network composition pedagogy helped them to gain writing confidence and learn about both communication and interpersonal interactions:

“Whether it be through how many comments I receive, or people agreeing with me, Slack has allowed me to feel much more confident in the quality of my writing. While I never thought Slack would be this useful in my writing, I am very grateful that I have gained so much knowledge and quality to my writing for years to come.”

As these comments demonstrate, writing online alongside others in a social learning community helped to play a number of important roles in students’ lives beyond simply engaging formal learning outcomes. In just these few brief comments from participating students, network composition has helped students to rekindle a love for writing, to get to know others, to learn from classmates, to gain writing confidence, and to participate in cultural discussions that they might not have participated in otherwise.

The findings of this study and dissertation provide multiple reasons for network composition to be taken up by others, and certainly the communicative, professional, citizenship, and personal advantages outlined here are important reasons as well. Ultimately, though, the voices of students lending their endorsements to the pedagogy serve as its most compelling affirmation. My hope is that future students continue to find similar experiences with network composition and that instructors hone, improve on, and expand the insights showcased here.

### **Conclusions: Why Bother with Network Composition?**

In the end, network composition and network composition pedagogies probably make modest contributions to how scholars understand the teaching of writing, to how educators approach emerging technologies, or to how people interact and learn online. Just because a

contribution is modest doesn't mean it can't be meaningful, however. My hope is that this project contributes to what I believe is an important goal: figuring out how to learn, participate, and share together in online spaces in ways that are generative for all of the people involved.

If this project helps even a single student to #Collaborate with a classmate, helps someone to #Teach about their culture, or helps a student to #Comment on the conversations happening around them, it will have been a worthy endeavor. My hope is that others can benefit from this pedagogy, from the findings of this study, and from these theoretical contributions. I know I have and my students across the semesters have reported similar feelings. Inventing network composition isn't a straightforward process, but in small, incremental ways, my students have been doing it all along as this pedagogy and mode of learning evolves and develops. In the end, inventing and reinventing what network composition is and what it can be represents a compelling opportunity to learn more about learning, to communicate about effective communication, and to find better ways to act socially in social media environments. Inventing network composition, in other words, is a process that is only beginning. This dissertation has showcased what network composition has done, has detailed how it can be explored in future research, and has provided plenty of analysis and commentary along the way. Now, it's up to readers to make those possible futures into a reality.

## APPENDICES

## Appendix A

### Institutional Review Board (IRB) Approval Form



To: Jordan Harris Frith  
Re: Clemson IRB Number: IRB2021-0344  
Exempt Category: D1,D2  
Determination Date: 09-Jun-2021  
Funding Sponsor: N/A  
Project Title: Jacob Richter's Dissertation Research: "Inventing Network Composition: Rhetorical Invention and Participatory Learning Ecologies in Digital Pedagogy"

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The Office of Research Compliance determined that the proposed activities involving human participants meet the criteria for exempt review under 45 CFR 46.104(d).

**Principal Investigator (PI) Responsibilities:** The PI assumes the responsibilities for the protection of human subjects as outlined in the [Principal Investigator's Responsibilities](#) guidance.

**Non-Clemson Affiliated Collaborators:** This determination only covers Clemson affiliated researchers on the study. External collaborators will have to consult with their respective institution's IRB office to determine what is required for their role on the project.

**Progress Report:** A progress report is not required. Exempt determinations do not have to be renewed or extended.

**Modifications:** In general, investigators are not required to submit changes to the Clemson University's IRB office once a research study is designated as exempt as long as those changes do not affect the exempt category or criteria for exempt determination (changing from exempt status to expedited or full review, changing exempt category) or that may substantially change the focus of the research study such as a change in hypothesis or study design.

If you plan to make changes to your study, please submit an amendment request to the IRB office. All changes must be reviewed and approved prior to implementation.

**New Funding:** Notify the IRB office If new funding is received for an active study. IRB review of the new award must be completed before new funds can be spent on human research activities, as the new funding source may have additional or different requirements.

**Reportable Events:** Notify the IRB office immediately if there are any unanticipated problems involving risk to participants, complications, adverse events and/or any complaints from research participants by submitting the reportable event form within InfoEd.

**Study Personnel Changes:** Notify the IRB office if the PI of the study changes. The PI is not required to notify the IRB office of other study personnel changes for exempt determinations. The PI is responsible for maintaining records of personnel changes and appropriate training.

**CITI Training:** All study personnel are required to complete the [CITI human subjects training course](#).

**Non-Clemson Affiliated Sites:** A site letter is required for off-campus sites. Refer to the [guidance on research site/permission letters](#) for more information. An amendment is required to add additional sites to the study.

**International Research:** Clemson's approval is based on U.S. human subjects protections regulations and [Clemson University human subjects protection policies](#). Researchers should become familiar with all pertinent information about local human subjects protection regulations and requirements when conducting research in countries other than the United States. We encourage you to discuss with your local contacts any possible human subjects research requirements that are specific to your research site, to comply with those requirements and to inform Clemson's IRB office of those requirements so we can better help other researchers prepare for [international research](#) in the future.

**New IRB Application:** A new application is required if the study remains open for more than 5 years after the initial determination.

**Closure:** Notify the IRB office when the study can be closed or if the PI leaves the university. Closure indicates that research activities with human subjects are no longer ongoing, have stopped and are complete. Human research activities are complete when investigators are no longer obtaining information or biospecimens about a living person through interaction or intervention with the individual, obtaining identifiable private information or identifiable biospecimens about a living person, and/or using, studying, analyzing, or generating identifiable private information or identifiable biospecimens about a living person.

**Contact Information:** Please contact the IRB office at [IRB@clemson.edu](mailto:IRB@clemson.edu) or visit our [webpage](#) if you have questions.

Clemson University's IRB is committed to facilitating ethical research and protecting the rights of human subjects. All research involving human participants must maintain an ethically appropriate standard, which serves to protect the rights and welfare of the participants. This involves obtaining informed consent and maintaining confidentiality of data.

Institutional Review Board  
Office of Research Compliance  
Clemson University  
<https://www.clemson.edu/research/compliance/irb/>

IRB Number: IRB00000481  
FWA Number: FWA00004497

## Appendix B

### Modes of Slack Participation- Fall 2021

#### **Slack: Composition as a Social Network** **ENG 1030: *Composition & Rhetoric*** **Fall 2021**

**Slack is a social media environment which allows participants to write, share, link, compose, assemble, record, converse, discuss, ruminate, reflect, and collaborate.** *Each week, you will make a post in the Slack channel.* You can post and respond as much as you'd like, but you must write/compose at least one post. This post should be at least **six sentences**, or an equivalent level of video, audio, or visual production. Your post must end with at least one question. Other students will respond to your question, and you must respond to at least two of their answers with generative, insightful knowledge. After you have made your post, comment, respond, or answer the questions of at least two other students' posts. **If you have made your Slack post for the week in one of the "Participation Modes" listed below, asked your colleagues a question at the end of your post, responded to at least two other classmates' questions, and then answered at least two questions asked of you, you have earned full participation points for the week.**

**Each week, your post should contain the hashtag of the mode of participation you've chosen** that week (ie. #Share, #Teach, #Act, #Make). If for Wk. 2, I've chosen to use #Crowdsource as my Mode of Participation, I should tell my peers that by using #Crowdsource in the Slack channel. You should also post your participation response in the appropriate week's channel, ie. if it's Week #3, you should post your response in the Wk# channel (left side bar) in Slack.

**You should end each post with a question addressed to your peers.** This question can be open-ended ("Do you all envision Amy Tan's points about linguistic justice as applying to your own life?"), or it can be more direct and literal ("Do you all think I have an effective counterargument?") "Am I representing the author's ideas correctly?").

\*\*\* To sum it up, each week's post should contain: (1) **A post of at least six sentences that engages one (or more) of the outcomes listed below** (or create your own!), (2) **The appropriate hashtags** as outlined above, (3) **A question at its end addressed to your classmates**, included in your post as its final sentence, (4) **At least two responses to what other people write in response to your question** in your post (if more than two people respond to you, you don't have to keep responding if you don't want to; and if two people don't comment on your post, you can just respond to the existing comments). You should also (5) **Comment on at least two of your peers' posts**, either answering their question or at least responding to it. \*\*\*

Tldr; Each week, you'll make a post of six sentences with that week's hashtag that ends with a question for the class, then you'll answer/respond to two questions that your peers have made, and then you'll respond to two questions that have been asked on your post. If no one asks you questions, you don't have to do anything more!

\*\*\* Also: These Slack participation responses must be completed before Thursday's class during the allotted week, sometime between 5:00PM one week and 5:00PM the next. I won't check for exact times, but they can't be done later on and can't be done late! It's the one exception to our "no late penalties" policy this semester. You have the full week to do each participation response, and they can be done at absolutely any time, even on your phone if you want. But they can't be done later on-- the idea is to have an ongoing learning conversation, and that doesn't happen belatedly! Also, for the rules governing how we all should be behaving and participating in our Slack learning network, see the "[Guidelines for Network Composition: Slack Community Conversation Rules and Values](#)" document.

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**Each week, you will make something, whether it be through writing or some other mode.** Be creative, and push boundaries. It's okay to not be boring! **You can participate in a number of ways.** The "**Modes of Participation**" for this Slack environment are:

- (a) **#Share:** Share an experience of yours that relates in some way to the course content, readings, discussions, assignments, or activities for the week. How can your personal, individual experience inform the course concepts this week? How can your perspective, culture, or background influence how we as a class collectively understand ideas, rhetoric, writing, or society?
- (b) **#Teach:** Explain an important concept, idea, term, phenomenon, or perspective to your classmates. What is most important about this term, idea, or concept? What should students in Composition & Rhetoric know about it or focus on? What's pertinent for our course? What might an average person now know or understand about it?
- (c) **#Crowdsource:** Have a question on an assignment? Crowdsource an answer from your peers. Unsure about a course concept or what a term means? Crowdsource an answer from your peers. Curious about what your peers think of some news story, phenomenon, event, or shared experience? You get the idea.
- (d) **#TellAStory:** Share a story from your personal experience that is relevant to something discussed in class, in a reading, in an assignment, or that is related to writing/rhetoric in some way.
- (e) **#Meme:** Use ImgFlip.com/MemeGenerator to create a meme that explains, explores, engages, or remediates some concept or phenomenon from the course. \*stay appropriate- no memes that reinforce problematic perspectives\* Then, in four or five sentences, explain the meme's premise, lesson, and main ideas to the class. What does it convey? What is it trying to say?
- (f) **#Connect:** What two or more ideas have you come into contact with, either in this course or in this conversation on Slack, that you can connect to something we haven't discussed yet in this Slack space?
- (g) **#Practice:** Put an idea or concept from our course into practice. Turn something abstract from our readings, our discussions, or our assignments into material, concrete practice. Reading about revision this week? Reading about language diversity? Download a



smartphone application and refresh your memory on a foreign language. Discussion social media rhetorics in class? Use a hashtag on your next social media post and see if it connects you with another network or group of people. Tell us about your revision process as you composed/discarded/rewrote a Tweet or Instagram post/caption. Put some idea or concept from the class into practice.

- (h) **#Expand:** Share a link, video, or site that expands on some aspect of the course we've discussed so far. Provide us an example or illustration of a course topic or term, or give us an application of an idea in another culture, or expand on our knowledge of a concept or idea in a way that we have not explored so far. If you provide a link or video, summarize for us what it argues and shows, and then tell us why it matters for our course in particular.
- (i) **#Respond:** What is a provocative, compelling, or interesting idea have you encountered in this week's readings, activities, assignments, or Slack discussion? Do you agree or disagree with something you've encountered, and why? What have you noticed that is most important, and why? What more could be said about this topic, idea, or issue?
- (j) **#Make:** Create some product, object or artifact that explains, explores, or visualizes some component of the course, and then write about it and share a photo of it in the Slack channel.
- (k) **#Moderate:** Moderators perform valuable work in online communities. Moderators mediate disputes between participants, orient discussion toward shared goals, and ensure a safe, equitable environment for all to share and participate in. Make a post that performs one of these tasks in relation to the networked conversation our classroom community is engaging in.
- (l) **#Act:** Do something in the world that enacts some component of our course. Talk to a friend or family member about some component of the class so far and then tell us about it. Try to persuade your friends to try a new dining hall for dinner, and then tell us what rhetorical strategies you used to make your case. Use rhetoric or communication to make the world better in a modest-but-meaningful way.
- (m) **#Record:** Record a short audio file (MP3 or any file others can open in the Slack channel).
- (n) **#Draw:** Create a visual production using digital or print tools (ie. markers, crayons, etc.) that explains or visualizes some component of the course. You can visualize your writing process on a particular assignment; you can visualize
- (o) **#Reflect:** Reflect upon a particular movement, reading, series of events, or other experiences you've had that relate to the content of this course in some way. What is important or valuable about what you're reflecting on? What have you learned in hindsight? What do you know or understand now that you didn't know or understand then?
- (p) **#Comment:** Comment on the conversation happening around you in Slack. What is it like to write in a social network in a college course? What do you like, dislike, or

appreciate about it? What emotions do you feel when writing, discussing, and conversing with others? What are your

- (q) **#Poll:** Create a poll for your peers and get their feedback on some question, concern, problem, or challenge that you are facing.
- (r) **#Link:** Share a link to some digital site, video, archive, database, song, picture, image, or other text that is relevant in some way to the course. Know a song that relates in some way to our reading, discussion, or assignment for the week? Share a YouTube video of the song and tell us how they connect. Notice a parallel or overlap between a magazine cover, photograph, or movie with some component of our course? Link the image or movie trailer in the Slack channel and tell us about the connection. Get creative.
- (s) **#Translate:** Find some idea, concept, phenomenon, or word in one of our readings or in our class discussion, and translate it into basic language for your classmates. What is most important about that idea? What do students in this course need to know about it?
- (t) **\*\*\*\*\* #XXX: \*Make your own!\*** After reading through and using some of the above strategies for writing in our course's network, create your own way of participating with a hashtag of your own creation. Be creative. Do something cool, interesting, innovative. Stray outside the lines. Go rogue. Play by your own rules. Go off on your own. Take matters into your own hands. You get it, right, or should I repeat this idea endlessly?

And then you're done! **The goals of this Slack channel are both simple and complex.** On one hand, we're hoping to learn from and with one another, to share our experiences, to share our perspectives, our critical capacities, and our knowledge of culture and society. This can seem mundane and everyday, but represents a valuable mode to come together and turn over important ideas, concepts, and modes of being in the world. On a more complex level, we're creating an ecology of learning, generating new knowledge that none of us could generate alone, building an archive of rhetorical and cultural materials, and enacting a mode of being in the world that is both new and unknown (writing and participating digitally in a network as the central core of the course) while also being strangely familiar (connecting with other humans beings).

## Appendix C

### Loose Codebook

Note: The codes showcased here represent an illustrative, but not comprehensive, survey of the codes collected in this qualitative case study.

<b>Code</b>	<b>Code Description</b>	<b>Example of Code</b>
<b>“Discussing the Academic Writing Process”</b>	Commenting on the general process of composing a written artifact; reflecting on steps and actions in the process of completing a writing assignment; discussing course content relating to formal instruction concerning the writing process	“The process I went through while composing a Slack post or response differs significantly from the process I normally go through when composing a piece of writing for an English class... I also had more freedom in what could be posted to slack vs what would typically be submitted in a traditional english assignment”
<b>“Reflecting on Social Learning or Learning From/With Others”</b>	Describes a student looking back on learning from someone else or learning alongside others	“My favorite part of using Slack was being able to get to know and learn new information about my peers that I may not have gotten to learn about in class”
<b>“Making a Meme”</b>	Describes a student making a meme as a form of communication or reflecting on once having done so	“#share My meme is poking fun at how a student might feel when they realized they forgot to add in-text citations as they were writing their essay”
<b>“Commenting on Discussions Across Difference”</b>	Describes students reflecting on discussions that feature disagreement, difference, discord, or opposing views	“Often when one of my peers wrote a slack post that was very interesting and informative I would find myself changing my mind on certain topics because I was given a different point of view. These topics presented were generative in which they were changing my mind on topics and making my mind

		grow”
<b>“Critical Consideration of Language”</b>	Describes students examining language and its impacts with critical, imaginative, and analytical mindsets	“We talked about “Mother Tongue”, where linguistics and dialect were discussed. This led me to talk in my Slack writing about how people talk differently in different environments”
<b>“Discussing Affordances/Challenges of Digital Writing”</b>	Describes discussion of digital writing; commenting on what digital writing can or can’t do; discussion of affordances/challenges of Slack; discussion of interfaces and writing; commenting on how Slack enabled a particular piece of writing to come about	“Through Slack, there are many features available to the user to help them communicate with their audience. I can bring my message to my audience, composed of you, my professor, and my classmates through the use of these features. The ones which I used most often were the standard textbox for chat, and the reply function. There are many other features which I did not use, such as file attachments, emojis, and the ability to embed code in a slack post”
<b>“Connecting Rhetoric to Personal Experience”</b>	Describes a student connecting something they’ve done with rhetoric or rhetoric-adjacent concepts such as ethos, kairos, etc.	“Another thing Slack has allowed me to do is share personal experiences and personal evidence in my writing”
<b>“Agonism”</b>	Describes discord and difference as it arises in discussion that results in something generative and helpful being discovered	“I also learned things from my classmates. I learned how to respectfully communicate with them over slack, even if I disagreed with them”
<b>“Storytelling/Personal Experience as Evidence”</b>	Describes situations in which personal experience or stories from life become evidence to support or refute some larger idea about the world	“My roommate told me a few weeks ago that she strongly believes the moon landing was fake. I discovered that I wasn’t sure what my opinion was, so I decided that I would

		figure it out through my research. After researching through dozens of sources, I ended up disagreeing with her...”
<b>“Teaching Someone”</b>	Describes a participant engaging in the act of teaching another person about a concept or idea; or, describes a participant reflecting on teaching someone else in the past	“#Teach The Civil Rights Movement in the 1960s and 1970s was extremely important to getting closer to achieving equality in our country. One of the movements biggest effects was that, it created a large cultural narrative around it”
<b>“Understanding/ Summarizing Readings”</b>	Describes a student interpreting, explaining, analyzing, or translating a course reading for the rest of the class	“#Share Today in class we reviewed the essay "Mother Tongue" written by Amy Tan. As we discussed the ideas behind the English language and the failure of Americans to be sympathetic to nonnative speakers...”
<b>“Pop Culture References as Evidence”</b>	Describes a student supporting a point or argument with a shared reference to popular culture that other students are likely to understand	“I do believe that any publicity is good publicity, and the release of Kanye's new album is the perfect example of that”
<b>“Phatic Communication”</b>	Describes instances in which students build relationships and social bonds through discussions around non-course content	“I did learn more about my classmates through Slack. My classmates have posted a couple stories or something that has related to them and their past. I feel like Slack is a way for all of us to get to know each other a little bit more with only seeing each other in class for two days a week.”
<b>“Statement of Identity”</b>	Describes participants stating who they are and how their experiences impact their	“In today’s world, diversity, culture, boundary, and values are buzzwords that we

	views of the world	constantly see on the news or hear reported in current events. I find the importance of these words lie within a person's identity. Diversity, identity, and culture are what make up a person..."
<b>"Inventing Rhetorically to Comment on Society/Politics/Culture"</b>	Describes rhetorical invention in the Slack channel involving commentary on politics and culture	"Although hesitant at first, I did find myself discussing social, political, and cultural issues in Slack"
<b>"Inventing to Comment on the Internet/Social Media/Culture"</b>	Describes rhetorical invention in the Slack channel involving commentary about social media and the internet	"This past week on Slack was very interesting.... One of the ideas mentioned by one of my classmates was over the Social Dilemma documentary on Netflix. We discussed how social media is addictive and how it is bad for society as a whole"
<b>"Synthesizing Conflicting Ideas"</b>	Describes a student working to incorporate two or more incongruous ideas together	"Seeing other perspectives has been one of the best parts about slack"
<b>"Discussing Social Media, Rhetoric, and Society"</b>	Describes students discussing topics related to social media, rhetoric, and society	"Slack has taught me a whole different aspect of social media. It's a way to interact with people that isn't in the traditional social media ways of likes and posts and comments. Slack is different in that it is an interactive and constructive platform versus one where you are always worried about other people's reactions to your posts"
<b>"Connecting Course Content to Social Media Example"</b>	Describes instances in which as student examines relationships between course ideas and social media	"When talking about rhetorical methods used in advertising, I spoke about the power of social media and how TikTok has completely changed my view on some of the products I use and buy"

<b>“Discussing the Challenges of Writing”</b>	Describes students reflecting or discussing difficulties they’ve encountered during the writing process	“Ultimately, writing on Slack, I believe, has made me a better communicator. The posts we create must be brief while still thoroughly covering a specific topic and posing a question, and I believe that the mix between creating a concise yet interesting and informative post has helped me become a better communicator”
<b>“Relating Course Content to Current Events”</b>	Describes students making connections between current events and topics of course discussion	“The idea of "Fake News" is something that I think affects peoples view on rhetoric. It has shown people that not everything you see is true and it is only being said for manipulation. I think that rhetoric can be used in a negative way, but in nature is neutral because it depends on the person who uses it”
<b>“Revising/Editing an Original Post”</b>	Describes students going back to a post on Slack to edit or revise it	“What traditions do you celebrate around this time of year? How do you perceive traditions that are different from yours? (edited)”
<b>“Seeking Help/Assistance/Advice”</b>	Describes students writing out questions in the Slack channel for their peers asking for help or advice	“I am finding it very difficult to limit the amount I write about historical meaning and mainly center it around the rhetorical meaning. If anyone has any suggestion on how to include the rhetorical appeals more please reply below. Is anyone else having trouble and if so how are you fixing it?”
<b>“Reflecting on Rhetoric’s Role in Media”</b>	Describes students critically considering the roles that rhetoric plays in popular	“ #Share This week we learned about using different forms of media to

	media	communicate with people. We talked about how some subjects are better communicated with a video and some are better on paper. Some can even be both”
<b>“Cosmopolitanism”</b>	Describes students discussion globalism or global citizenship	“I found the idea of cosmopolitanism interesting. The idea that everyone is part of one big community, not matter their country or status, and that everyone is equal to respect and consideration”
<b>“Discussing How Slack Writing Transfers/Informs Academic Writing”</b>	Describes students discussion lessons learned in Slack writing processes and how they impact academic writing processes/activities	“My writing has benefitted from the slack platform in the way that I can organize my thoughts and put them in a coherent manner. It has helped me get to know my peers and relate to their thoughts”
<b>“Inventing with Multimedia”</b>	Describes students creating texts for the Slack discussion involving audio, visual, or other media beyond writing alone	“#share I wanted to share my workshop video I made in class. I got the idea to make a horror movie spoof on Henry. In my video Henry is the monster thats stalking the woods of South Carolina”

### Full Code Organization into Conceptual Categories:

- **Learning Ecology Formation:**

- Codes: “Phatic Communication,” “Tagging,” “Agonism,” “Social Learning,” “Teaching Someone,” “Storytelling/Personal Experience as Evidence,” “Synthesizing Conflicting Ideas,” “Teaching Someone,” “Understanding/Summarizing Readings,” “Writing Intertextually,” “Reflecting on Social Learning or Learning From/With Others,” “Reflecting on Listening To/Learning From Someone Else,” “Commenting on Critical Reading of Others’ Ideas,” “Discussing Social/Collaborative Rhetorical Invention,” “Commenting on Discussions Across Difference,” “Discussing Qualities of Good Vs. Bad Writing,” “Commenting on Social Dynamics of Slack Interaction,” “Monitoring Afterlife of a Slack Post,” “Seeking Help/Assistance/Advice,”



“Discussing Building Relationships with Classmates,” “Seeking Help/Assistance/Advice,”

- **Distributed Expertise:**

- Codes: “Connecting Rhetoric to Personal Experience,” “Citing Positional Expertise,” “Agonism,” “Connecting Course Content to Personal Experience,” “Storytelling/Personal Experience as Evidence,” “Connecting Rhetoric to Personal Experience,” “Pop Culture References as Evidence,” “Phatic Communication,” “Statement of Identity,” “Teaching Someone,” “Understanding/Summarizing Readings,” “Reflecting on Social Learning or Learning From/With Others,” “Reflecting on Listening To/Learning From Someone Else,” “Commenting on Critical Reading of Others’ Ideas,” “Commenting on Discussions Across Difference,” “Critical Sharing of an Internet Link,” “Discussing Building Relationships with Classmates,” “Seeking Help/Assistance/Advice,” “Transferring Previous Knowledge into Writing/Rhetoric Insight,”

- **Learning Writing/Rhetoric/Composition Skills:**

- Codes: “Discussing the Challenges of Writing,” “Discussing the Academic Writing Process,” “Discussing the Internet Writing Process,” “Relating Course Content to Current Events,” “Revising/Editing a Comment,” “Revising/Editing an Original Post,” “Synthesizing Conflicting Ideas,” “Writing Intertextually,” “Seeking Help/Assistance/Advice,” “Discussing Rhetoric in the World,” “Understanding/Summarizing Readings,” “Teaching Someone,” “Reflecting on Rhetoric’s Role in Media,” “Reflecting on Social Learning or Learning From/With Others,” “Discussing Affordances/Challenges of Digital Writing,” “Metadiscussion of Slack Discussion,” “Audience Analysis,” “Discussing Process of Research,” “Discussing Argument/Thesis Statements,” “Discussion of Counterargument/Rebuttal,” “Commenting on Writing Across the Curriculum,” “Considering Information Value/CRAAPP Test,” “Inventing with Multimedia,” “Discussing Qualities of Good Vs. Bad Writing,” “Discussing Emotional Experience of Writing in Slack/Writing Online,” “Discussing How Slack Writing Transfers/Informs Academic Writing,” “Discussing Slack Helping to Increase Writing Confidence,”

- **Rhetorical Invention:**

- Codes: “Inventing Rhetorically to Comment on Society/Politics/Culture,” “Synthesizing Conflicting Ideas,” “Inventing to Comment on the Internet/Social Media/Culture,” “Agonism,” “Inventing to Comment on the Internet/Social Media/Culture,” “Reflecting on Society/Culture,” “Storytelling/Personal Experience as Evidence,” “Understanding/Summarizing Readings,” “Reflecting on Social Learning or Learning From/With Others,” “Inventing as a Response to a Social

Interaction,” “Discussing Invention of a Slack Post,” “Discussing Social/Collaborative Rhetorical Invention,” “Critical Sharing of an Internet Link,” “Discussing Challenges of Rhetorical Invention,” “Inventing with Multimedia,” “Commenting on Social Dynamics of Slack Interaction”

- **Digital and Social Media Literacies:**

- Codes: “Critical Linking,” “Critical Sharing of an Internet Link,” “Making a Meme,” “Shares a Video,” “Shares an Image,” “Reflecting on Rhetoric’s Role in Media,” “Critical Consideration of Language,” “Reflecting on Social Learning or Learning From/With Others,” “Discussing Affordances/Challenges of Digital Writing,” “Participation with Smartphone/Tablet,” “Discussing the Internet Writing Process,” “Inventing A New Mode of Participation,” “Commenting or Critique of Platform/Interface,” “Monitoring Afterlife of a Slack Post,” “Discussing Online Video Creation Process,” “Discussing Emotional Experience of Writing in Slack/Writing Online,” “Discussing How Slack Writing Transfers/Informs Academic Writing,” “Discussing Slack Helping to Increase Writing Confidence,” “Discussing Social Media, Rhetoric, and Society,” “Statement of Identity,” “Writing Intertextually,” “Connecting Course Content to Social Media Example,” “Metadiscussion of Slack Discussion,” “Commenting on Critical Reading of Others’ Ideas,” “Considering Information Value/CRAAPP Test,” “Inventing with Multimedia,”

- **Digital Citizenship:**

- Codes: “Agonism,” “Commenting on Discussions Across Difference,” “Inventing Rhetorically to Comment on Society/Politics/Cultures,” “Inventing to Comment on the Internet/Social Media/Culture,” “Discussion of Rhetoric’s Role in Media,” “Relating Course Content to Current Events,” “Cosmopolitanism,” “Reflecting on Society/Cultures,” “Discussing Social Media, Rhetoric, and Society,” “Critical Sharing of an Internet Link,” “Cosmopolitanism,”

## Appendix D

### Reflective Journal Questions

**Reflective Journal Entry #1:** *What's it like to Write/Participate in a Slack Social Learning Network?* (ie. what we do with Slack in class).

**ENG 1030, Composition & Rhetoric:** Fall 2021

**Your Goal:** Respond honestly and with detail to any/all/some of the question prompts listed below. You do not have to respond to all of them; instead, answer and respond to the ones that seem interesting to you.

**The Goals of this Assignment:** Our course's fifth Learning Outcome (as stated on our syllabus) is "Composing in Electronic Environments." To pursue this goal, we write together in a shared Slack learning network each week in an attempt to *practice* writing in electronic environments. The goal of this smaller project (see syllabus) is to reflect critically and creatively on this social media writing and participation activity. Social media is an important way in which humans communicate, connect, participate, and learn in today's society. Your goal here is to be as critical, detailed, specific, and honest as you can. There is no right or wrong answer- but think critically about your own experience writing in Slack for these five weeks, and about how the conversation could be better. It's totally fine to have Slack pulled up in front of you and to quote from your own writing/posts, too.

**Project Details:** 3-4 double-spaced pages; detail is good!; great to use the first-person "I"; Due October 8th (Thursday)

**Potential Questions for you to Respond To/Answer** (or make up your own!): **Reminder- Just answer the questions you find interesting/compelling/worthwhile :) You do not need to answer all of them.**

- What was your process like when composing a post in Slack?
- What was your experience like "getting to know" your peers through the network's social function?
- What was your invention process like when you composed in Slack each week? How would you describe it? How did you come up with each post?
- How did your experience of the network's social dynamics change throughout the semester, ie. throughout the semester so far?
- Did you learn from other people?
- Did you feel that interacting with others in Slack was beneficial to your learning of writing, rhetoric, or revision?
- Have you shared an image, a video, or a link in Slack? What did you share/link/post, and why?
- How were you challenged to think critically when writing in the Slack environment?
- Did you learn from others when participating in Slack?

- What sorts of emotions did you feel as you wrote and conversed with others in the networked discussion?
- Did you learn anything through sharing stories, experiences, responses, or reactions in Slack with your peers? What specifically?
- Does writing in this Slack network remind you of writing in other social media spaces, such as on Facebook, Twitter, or Instagram? How is it different, and how is it the same?
- Take a look at the Slack posts you've written/created so far. Have you ever used your personal experience as evidence to support a point you're trying to make?
- Did you ever find yourself discussing the internet, social media, or something similar on Slack? What did you write about or think about?
- Did you ever make friends or get to know a classmate better on Slack? How would you describe that experience?
- Did you ever find yourself writing about rhetoric's connection to media or social media on Slack?
- Did you ever find yourself writing about society, culture, or politics on Slack? What changed about how you approached the Slack network throughout the semester?
- Did you monitor your posts in the days after you posted them?
- Do you think writing on Slack made you a better writer?
- Do you think you learned anything about audience, digital writing, or about rhetoric by writing in the Slack network?
- What was your experience like writing in Slack with others around in the social network?
- Did you find the discussion in the social network to challenge your thinking or preconceived perspective on certain issues?
- How did you take advantage of social media affordances (commenting, liking, tagging, messaging, linking) to learn alongside and with others?
- "Did you engage in participation in Slack beyond writing, such as creating a meme, sharing a link to an outside site, sharing an image or video, recording audio of yourself speaking, or some other means of participating?"
- Did the Slack discussion push you to think deeply about particular ideas, about particular perspectives, or about your own position in the world?
- What influenced the particular ways you would write, share, act, or behave socially? What did you like or dislike about writing in this network?
- Were you pushed to think critically? What moments or interactions stand out to you as memorable?
- When you wrote a Slack post, who was your audience, and what did they expect of you as a writer?
- What features of the Slack interface did you use, and which did you ignore? Why?
- Did you comment on the same people's posts each week, or did you change it up, and why?
- What was your best/worst Slack post, and why?

- How could our Slack conversation be better? What would you change? What would you do differently?

## Appendix E

### Interview Questions

**Baseline Questions for Theoretical Sampling** (Asked in every interview to saturate codes/categories that have emerged in reflective journals & Slack participation data):

- What were your social interactions like in Slack? (Code = “Reflecting on Social Learning or Learning From/With Others,”).
- Did you ever find yourself learning from others? (Code = “Reflecting on Social Learning or Learning From/With Others,”)
- Did you ever find yourself teaching others? (Code = “Teaching Others”)
- Did you find yourself monitoring your Slack posts after you’d posted them? (Code = “Afterlife”; Cat: Social Media Literacies).
- Did you ever find yourself connecting rhetoric or writing to your own personal experiences, such as sharing a story? (Code = “Connecting Rhetoric to Personal Experience,”; Cat = Distributed Expertise).
- Did you get to know others or build any relationships in Slack? (Code = “Phatic Communication,”)
- Did you ever discuss social media or technology’s impact on society in Slack? (Code = “Discussing Social Media, Rhetoric, and Society,”)
- Did you ever find yourself either helping someone else, or else asking for or receiving help from someone else? (Code = “Discussing the Challenges of Writing,”)
- Did you learn anything about academic writing in your Slack interactions? (Code = “Discussing the Academic Writing Process,”).
- Did you ever relate course content to current events in Slack? (Code = “Relating Course Content to Current Events,”)
- Did you ever write in Slack about society, politics, or culture? (Code = “Inventing Rhetorically to Comment on Society/Politics/Cultures,” ).
- Did you ever share a link to a website on the internet, share a meme with your peers on Slack, or link a video for others to watch on Slack? (Category: “Social Media Literacies”).
- Has your experience or approach to participating in Slack changed at all over the course of the semester?
- What was your process like when composing a post in Slack?
- How does your composing in Slack compare to your composing on other social media platforms, such as Facebook, Twitter, Instagram, or Snapchat?
- Moments that stand out to you?
- Did you ever disagree with someone or witness disagreement?
- Have you ever taken an online course, and do you think Slack would be helpful for students in online courses?

- Did you learn anything about reading or about writing while participating in Slack? (Social Media Literacies/Literacies).

**Primary Questions** (some of these questions asked based on data collected in earlier theoretical sampling questions):

Questions that will be asked of students during interviews will concern the study's primary research questions, which involve how student writers invent and compose in classroom digital learning networks, include:

- "Describe your typical composing process each week in the Slack network,"
- "what do you think you learned from writing in Slack each week,"
- "describe your interactions with other students in the Slack network,"
- "describe your interactions with your instructor in the Slack network,"
- "what activities did you engage in that you would consider to be involved with 'literacy'?"
- "Did you engage in participation in Slack beyond writing, such as creating a meme, sharing a link to an outside site, sharing an image or video, recording audio of yourself speaking, or some other means of participating?"
- What was your invention process like when you composed in Slack each week? How would you describe it?
- What was your general experience writing and composing in the Slack conversation?
- What did you enjoy or alternatively not enjoy about writing in Slack with your peers?
- Did the Slack discussion push you to think deeply about particular ideas, about particular perspectives, or about your own position in the world?
- Did you learn from your peers when discussing ideas and issues in Slack?
- How does your composing in Slack compare to your composing on other social media platforms, such as Facebook, Twitter, Instagram, or Snapchat?
- Did your understanding of particular ideas change?
- Were you challenged in any way?
- What was central to your experience writing in this digital social network?
- What influenced your experience?
- What influenced the particular ways you would write, share, act, or behave socially? What did you like or dislike about writing in this network?
- Were you pushed to think critically? What moments or interactions stand out to you as memorable?
- When you wrote a Slack post, who was your audience, and what did they expect of you as a writer?
- What features of the Slack interface did you use, and which did you ignore? Why?
- Did you comment on the same people's posts each week, or did you change it up, and why?
- Did you make any friends on Slack during the semester?

- Describe your social relationships with other students on the Slack network. Did it help you to learn better?
- Did you enjoy the social component of this learning initiative? What features of Slack did you find yourself using most often (for instance, reactions, tagging, saving, direct messaging, etc.?).

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**Supplemental Questions** (drawn from 1st/2nd Reflective Journal Assignments to probe those data further):

- Has your experience or approach to participating in Slack changed at all over the course of the semester?
- What do you think you've learned from participating in Slack this semester? What have you learned from other people or from social interaction?
- Do you think participating in Slack has helped to improve your academic writing skills in any way? How so?
- Did you find yourself discussing social, political, or cultural issues in Slack? If so, what did you discuss or write about?
- Did you find yourself monitoring a Slack post for comments/responses after you'd written it?
- Did you have discussions on Slack that pushed you to think differently about some topic or issue? Did you find these discussions generative?
- Did you find yourself discussing rhetoric and social media with your classmates?
- Did you find yourself discussing the challenges of writing or of a particular assignment with your classmates on Slack?
- Did you ever write about the similarities/differences between academic and digital writing?
- Did you ever find yourself teaching someone about some topic, idea, or concept?
- Did you share links to internet resources/websites as part of the Slack discussion?

**Questions from 1<sup>st</sup> Reflective Journal that you can still answer/respond to:**

- What was your process like when composing a post in Slack?
- What was your experience like "getting to know" your peers through the network's social function?
- What was your invention process like when you composed in Slack each week? How would you describe it? How did you come up with each post?
- How did your experience of the network's social dynamics change throughout the semester, ie. throughout the semester so far?
- Did you learn from other people?
- Did you feel that interacting with others in Slack was beneficial to your learning of writing, rhetoric, or revision?



- Have you shared an image, a video, or a link in Slack? What did you share/link/post, and why?
- How were you challenged to think critically when writing in the Slack environment?
- Did you learn from others when participating in Slack?
- What sorts of emotions did you feel as you wrote and conversed with others in the networked discussion?
- Did you learn anything through sharing stories, experiences, responses, or reactions in Slack with your peers? What specifically?
- Does writing in this Slack network remind you of writing in other social media spaces, such as on Facebook, Twitter, or Instagram? How is it different, and how is it the same?
- Take a look at the Slack posts you've written/created so far. Have you ever used your personal experience as evidence to support a point you're trying to make?
- Did you ever find yourself discussing the internet, social media, or something similar on Slack? What did you write about or think about?
- Did you ever make friends or get to know a classmate better on Slack? How would you describe that experience?
- Did you ever find yourself writing about rhetoric's connection to media or social media on Slack?
- Did you ever find yourself writing about society, culture, or politics on Slack? What changed about how you approached the Slack network throughout the semester?
- Did you monitor your posts in the days after you posted them?
- Do you think writing on Slack made you a better writer?
- Do you think you learned anything about audience, digital writing, or about rhetoric by writing in the Slack network?
- What was your experience like writing in Slack with others around in the social network?
- Did you find the discussion in the social network to challenge your thinking or preconceived perspective on certain issues?
- How did you take advantage of social media affordances (commenting, liking, tagging, messaging, linking) to learn alongside and with others?
- "Did you engage in participation in Slack beyond writing, such as creating a meme, sharing a link to an outside site, sharing an image or video, recording audio of yourself speaking, or some other means of participating?"
- Did the Slack discussion push you to think deeply about particular ideas, about particular perspectives, or about your own position in the world?
- What influenced the particular ways you would write, share, act, or behave socially? What did you like or dislike about writing in this network?
- Were you pushed to think critically? What moments or interactions stand out to you as memorable?
- When you wrote a Slack post, who was your audience, and what did they expect of you as a writer?
- What features of the Slack interface did you use, and which did you ignore? Why?
- Did you comment on the same people's posts each week, or did you change it up, and why?
- What was your best/worst Slack post, and why?

- How could our Slack conversation be better? What would you change? What would you do differently

## Appendix F

### “Statement of Community Goals and Values” Document

#### **“Guidelines for Network Composition: Slack Community Conversation Rules and Values”** ENG 1030 Composition & Rhetoric: Fall 2021

Answering the question “*what can be written or shared inside of our Slack social media conversation?*” The document below is intended to guide our conversation in Slack, and to keep it constructive, productive, and generative for the purposes of our learning together.

Each week, you will follow the system laid out in the Modes of Slack Participation document. In short, you’ll make a post of 6 or more sentences using one of the “Modes of Participation” laid out as hashtags, including a question for your peers that you’ll ask at the end. Then, you’ll comment on two other people’s posts for the week, and you’ll respond to three comments on your own post for that week (assuming you get them- if not, don’t worry about this). If you do all that, you get full credit for the week’s participation grade! See the Modes of Slack Participation document for more information and detail.

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What should our Slack conversation look like?:

- Slack is a software platform that is an official, codified part of a Clemson University course. Therefore, all conversation and content shared there should reflect all official University policies, values, and codified conduct statements. All content posted in our Slack channel is subject to University rules, policies, and expectations.
- Write on Slack, but also share photos, videos, links, sound files, anything that seems to push the conversation forward in your judgement.
- Personal, anecdotal stuff is fantastic- that’s what this space is for. If you have an experience that is relevant to the conversation that you would like to share (“on my trip to Nigeria last autumn...” “My grandmother used to always say...” PLEASE DO! Your experiences and backgrounds matter, and Slack is a space meant to exemplify that and to make it visible.
- Follow the golden rule of feedback and peer review: “give the feedback you’d want to receive.”
- Constructive feedback and critique on a peer’s idea or writing is encouraged, so long as it remains productive. Slack features low-stakes writing, so don’t worry about grammar or about syntax. Students have a right to use their own languages and dialects.
- Your most pressing goal should always be to **ADD VALUE TO THE CONVERSATION** and to **HELP YOURSELF AND OTHERS** through difficult course materials, readings, and viewings.

- If you find yourself diverging from a topic, it's perfectly acceptable and even encouraged to begin a new thread.
- Tag others when possible. Make connections visible. Give credit when credit is due. Celebrate good ideas. Celebrate your peers.
- Use "topics" and "tags" to organize the conversation.
- Take the time to *edit* and *revise* your pins and comments before you post them. No one likes reading typos unless they're intentional.
- If someone responds to your post, respond back to them to keep the conversation going (and earn points!).
- You may use any name you would like on Slack. If you desire to avoid using your legal name, for any reason at all, you may make this adjustment in the settings (email your instructor for help on this). Use your preferred name, your preferred pronoun, and your preferred identity- whatever you are most comfortable with! This is your digital space, and you should feel welcomed and appreciated here.

What is not permissible in our Slack conversation?:

- Avoid "Phaedrus" responses: comments with no/little content such as "I agree." with no elaboration, substance, or further thought. Kind phrases such as "I like your idea" are great and recommended, but add something else beyond them. Add value. Add substance. Something like "I agree with you, but another way of looking at it is X...." work best.
- Slack is Clemson University property, so it is subject to all politics of the University, including those relating to speech, expression, language, and the sharing of content.
- Language with any sort of resonances that are sexist, racist, misogynistic, ableist, or offensive in any way will be strongly reprimanded and, if warranted, follow the same penalty procedures that inappropriate writing in any Clemson University setting would be subject to.
- When unsure of something's appropriateness, consultation with your instructor is the best bet (email [JDRicht@G.Clemson.edu](mailto:JDRicht@G.Clemson.edu)).
- Your instructor reserves the right to remove any comment, pin, or conversation component, and to remove any points derived from that inappropriate conversation component.
- Show respect. Demonstrate kindness. Learn, and share your interests with others.

What does it mean to be constructive, productive, and generative in a networked learning space?:

- You are learning *with* others. You are also learning *from* others in addition to helping, assisting, and sharing with your classmates.
- Be respectful, kind, and generous in this space. Make friends if you can. It's not a competition.
- Help us to build, construct, and maintain an environment of learning.

- Ask questions! Show curiosity! Demonstrate interest! Be invested!
- Emojis and memes go a long way (so long as they're appropriate).

By enrolling in this course, you have agree to the above conversation criteria. Now, let's get started!

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