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Thesis of Michael P. Lynn

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts Composition, Rhetoric, and Digital Media

Nova Southeastern University Halmos College of Arts and Sciences

April 2022

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COMPOSITION, COMPUTERS, AND COVID-19: THE ROLES OF MULTIMODAL COMPOSITION AND DIGITAL TECHNOLOGY IN THE COVID-19 PANDEMIC.

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree

Master of Arts in Composition, Rhetoric, and Digital Media

Michael Lynn

Halmos College of Arts and Sciences

Department of Communication, Media, and the Arts

Nova Southeastern University

May 2022

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ABSTRACT

The shift toward remote and online learning brought on by the COVID-19 pandemic has had a significant impact on teaching multimodal composition at all levels. Part of this shift towards rethinking multimodal composition came from the challenges of moving what would be inperson classes online. Drawing on the New London Group's definition of multimodality (1996), this thesis examines the relationship between remote learning throughout the pandemic and the modalities and technologies used by composition instructors and students in first-year writing. Using interviews with six first-year writing instructors from a private university, this project explores how instructors encouraged students to compose multimodal texts and the contexts in which students composed during the pandemic. Ultimately, this thesis emphasizes the value of multimedia production as a flexible resource in remote composition classrooms for encouraging rhetorical thinking and facilitating student collaboration.

*Keywords: Multimodality, multimedia, multiliteracy, remote learning, hybrid learning, COVID-*19

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This thesis also once again reminded me that we can learn a lot from history and that older conventions can be embraced in a new setting for remixed meaning making. To the reader of this thesis, I encourage you to also look back to the greatest minds of the past to create stellar works of the future. Use the ever-growing tools available to you and compose something magnificent—even if it's just for yourself! The COVID-19 pandemic has been an exhausting experience for the many that endured it. On behalf of lost time, use multimodality and digital technology to your advantage and get creative! In short, I thank you, the reader, for taking the time to analyze this thesis and I hope it motivates you to do something productive and creative.

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CONTENTS

Introduction

The definition of multimodality in composition studies evolved with available technology. The age of the Internet marked a drastic shift from how we previously viewed the relationships between digital technology and multimodal texts, as documented by The New London Group in 1996. The New London Group produced one of the first updated definitions of multimodality. This updated definition of multimodality was adapted from "multiliteracies" and documented a shift towards composing with digital technology (Pandey & Kang, 2021). Digital technology evolved with our understanding of multimodality in composition pedagogy (such as multimodality's role in composition classes, the subsections of multimodality, emerging technologies to enrich multimodal composition, and collaboration among students and instructors) (de Silva Joyce & Feez, 2018). Students returned to physical campuses after up to two years of attending remote courses (starting in March of 2020 through early 2022). During this time, students and instructors adopted an array of digital composition assignments with multimodal composing techniques in the COVID-19 pandemic's remote setting, regardless of prior experience with this form of pedagogy (Xie, Rice, & Griswold, 2021). The multimodal composing techniques used in the COVID-19 pandemic include asynchronous discussion boards, supplemental multimedia material, alternative assignments for a lack of in-person projects, adapting lesson plans to both online and remote classrooms, and creating flexible materials for a wide range of learning styles.

Given the increase of multimodal texts created with digital programs in the 21st century, the influence of remote technologies and their utilization during the COVID-19 pandemic's lockdown affected the definition of multimodal composition and experiences made with multimodality. As seen in the COVID-19 pandemic, the shift to a remote setting documented the shared relationships between students and instructors with technology. These shared relationships include using mobile technologies and accessible computer applications to create multimodal texts, which have aided students for the loss of in-person interactions during the remote classroom setting. Multimodal composition has an extensive history, but the technologies used to support multimodal assignments in composition classrooms have evolved dramatically in recent years, such as the introduction of collaborative web-based documents (such as Microsoft OneDrive and Google Docs), mobile devices, remote classroom platforms (such as Zoom, GoToMeeting, Microsoft Teams, and Google Meet) and varying degrees of user-friendly applications to enrich and produce multimodal texts (such as GIMP, Canva, Inkscape, Audacity, and DaVinci Resolve). The technology used in the remote setting became integral to online and remote classrooms by situating students in a technologically enriched environment, supporting their diverse learning styles, and providing engagement through supplemental materials (such as videos, infographics, podcasts, asynchronous discussion boards, synchronous online classrooms, tutorials, and more).

During the COVID-19 pandemic, instructors reworked their curriculum to assist and instruct students enrolled in remote classes. From the initial lockdown in March 2020 and onward, remote learning taught both instructors and students to redefine usage and implementation of multimodality and technological applications in the classroom. Instructors' modified multimodal lesson plans include projects that can be worked on both remotely and synchronously with other classmates, rather than being bound physically together to peer review and share ideas in a traditional classroom setting. Instructors included multimodal supplemental material for multiple ways to reinforce composition courses' learning objectives (Romero-Ivanova, Shaughnessy, Otto, Taylor, & Watson, 2020). During the initial lockdown, both students and instructors utilized remote classroom platforms and technologies to communicate in real time with aural modalities (speaking in class); visual modalities (an instructor's shared screen); and linguistic modalities (live chat boxes for students to interact with each other in real time) (Joia & Lorenzo, 2021). For instructors unfamiliar with technologies and devices that assist with teaching multimodal conventions and hosting remote classrooms, such as the ones previously mentioned, they would have to revise their curriculum—with the help of other instructors—to suit the needs of their students (Greenhow, Staudt Willet, & Galvin, 2021).

As early as the Winter 2021 semester, students returned to physical classrooms in a hybrid setting (some students would attend class in person, while others were remotely attending class) and transitioned to fully in-person courses during the Fall 2021 semester. This study explores how the definition of multimodal composition evolved through the remote and hybrid classrooms associated with the COVID-19 pandemic. More specifically, this study examines how technology and multimodality were used in the remote learning environment during the COVID-19 pandemic and how shifts in teaching multimodal assignments and composing texts with digital technology proliferated the classroom after the return to in-person classrooms.

The goal of this thesis is to unpack the relationships between accessible and user-friendly technology utilized in remote classrooms and situating this relationship in physical classrooms. The findings in the research process demonstrate effective usage of user-friendly and accessible technologies to compose multimodal texts. The research process examined the rhetorical decision and meaning making related to the genres that best complement the goals of students' assignments. Further, this thesis will also showcase how extensions and plugins made for digital platforms and their shared relationships with multimodality have benefited students' respective

learning needs. As opposed to a one-size-fits-all approach to pedagogy, multimodality is shown to be a means of communication and collaboration with other peers.

Multimodality's definition predates electronic technology and traces back to cave drawings, hieroglyphics, and the invention of writing's separation from aural traditions (Benson, 2014). This research project begins with the New London Group's modern and digitally oriented definition of multiliteracies in 1996 (New London Group, 1996). The New London Group defines multiliteracies as "a word (they) choose to describe two important arguments we might have with the emerging cultural, institutional and global order: the multiplicity of communications channels and media, and the increasing salience of cultural and linguistic diversity" (p. 63). During the 21st century, the Internet and desktop computers created new avenues for students and instructors to communicate, compose, research, and modify texts through digital technology. The literature review traces the patterns and precedents of digital technology's shared relationship with multimodal composition in pedagogy. The literature review examines remote classrooms associated with the COVID-19 pandemic and the return back to the physical classroom. The literature review segues into the methodology, documenting interviewed instructors' experiences with digital technology and multimodal composition prior to and in the COVID-19 pandemic.

The COVID-19 pandemic generated a notable amount of insight regarding the accessibility and flexibility of the available digital technologies to produce multimodal texts. This thesis examines the jargon used when referring to multimodality and its shared relationship with existing technology in years prior to the COVID-19 pandemic, versus the experiences instructors had with a mandatory introduction to evolving digital technologies in the remote classroom setting. This research documents the historical changes made to the utilization of

digital technologies to produce multimodal texts, such as the difference between the initial novelty of using computer programs to create a text versus the rhetorical decisions behind producing multimodal texts and maintaining remote classroom engagement from the perspectives of current instructors. This study reflects on how remote learning platforms have provided ways for instructors and students to communicate synchronously and asynchronously through digital technologies and multimodal compositions, such as auditory feedback recordings, discussion boards, and collaborative documents that can be edited in real-time with others (Pereira, Fernandes, & Flores, 2021).

As newer generations become acquainted with multimodal composition and digital literacy earlier in their lifetimes, the importance of technology's role in composition becomes more apparent over time (Squire, 2021). Experiences made with multimodality and evolving digital technology assist institutions to bridge the gap between generational differences of digital literacy and for instructors to properly assess multimodal texts (Shepherd, & Goggin, 2012). While not all instructors have had equal experience with utilizing multimodality and technology within their classrooms, this thesis explores how the COVID-19 pandemic may have changed some instructors' goals or expected outcomes for their courses as a result of having more experience with technology, multimodality, and feedback from both students and other instructors.

This thesis explores how instructors used accessible digital technologies and multimodality to maintain student engagement in the remote classroom setting. This includes comparing the technological and multimodal experiences that college instructors had prior to and in the COVID-19 pandemic. Interviews were conducted that researched the recent history of technology and multimodal composition in the classroom setting. Some of the main focal points of the background research include the changes of terminology addressing multimodal composition, multimodality's evolution of genres, the digital technology influencing multimodal classrooms and further exploring multimodal composing strategies.

Some of the main assertions in this thesis include that the remote setting of the COVID-19 pandemic introduced instructors and students to technologically-enriched methods of instruction—regardless of the familiarity with said technologies prior to the pandemic, that remote learning greatly influenced pedagogy and our understanding of multimodality, and that multimodality encouraged communication, collaboration, and composition in pedagogy. This thesis documents the lasting impressions and increased reliance on remote technologies and multimodal composition after the transition back to the physical classroom. These long-lasting impressions include emphasizing accessible digital technologies for lesson plans that accommodate various learning styles, utilizing digital technologies for multiple modes of communication, collaborative remote environments for peer review and group assignments, and an overall increased usage of digital technologies to produce multimodal texts.

With increasing digital literacy in younger generations of students, a technology-rich and multimodal second-year composition course (COMP 2000) would be best situated for a modern audience of students, regardless of their discipline or field of study. A COMP 2000 course would emphasize user-friendly and free-to-use technologies, wherein students can compose with equal access to the digital technologies at hand, regardless of prior experience with said technologies or socio-economic status. The recommendations for a general education second-year composition course demonstrates how a student with any major or discipline can implement digital applications and multimodality throughout their academic career. The structure of a

modern COMP 2000 course complements students' preferred learning style and allows them to express their ideas creatively within their assignments.

The evolving definition of multimodal composition serves as the exploration of composition in modern times. The usage of asynchronous communication and collaborative digital programs created a unique set of circumstances for pedagogical discourse in the initial COVID-19 lockdown in March 2020. This initial transition to the remote classroom created a surge of confusion and disorganization, prompting a need for communicating remotely between instructors and students. Through remote technology, multimodality served as the backbone for remote learning—especially as a means of communication, collaboration, and composition strategies in pedagogy. With a diverse range of influences that multimodality had in its extensive history, this study explores where the definition of multimodality currently stands and the potential future that can be further explored within pedagogy—especially as the digital composition technologies expand with multimodality itself.

Literature Review - The Evolution of Multimodality's Definition

Situating the Exigence

In order to understand the definition of multimodality in the present day, we must first contextualize the origins of multimodality's definition. This examination of multimodality's history shows the shared relationships between multimodal composition and its users. The history of multimodality shows the relationships with technology and its users within pedagogy. Technological advancements created new opportunities for multimodal composition to expand its definition, based upon the ways that multimodal composers create with various modalities. The present day shows that multimodal composition covers a wide range of modalities through genres such as podcasts, video content, comic books panels, infographics and more (Gatta, 2013). To fully understand the expansive nature of multimodality's definition, the direct relationships between multimodal composition and technology are also taken into consideration across all disciplines, especially through the usage of digital technologies in academia.

Documenting the progress of multimodality's definition derives from the usage and evolution of technology and the shared perspectives of both instructors and students. The expansion of multimodal composition grew with digital applications becoming more user friendly, technology withstanding digital applications, and an expanding population of digitally literate users (Cope & Kalantzis, 2000). Some of these technologies are defined by The New London Group's assessment of technology, "in short, technologies emerge in specific historical contexts, and become part of the diverse social fabric of everyday life where they shape and are shaped by the social practices through which uses are mediated" (Cope, & Kalantzis, 2000). This assessment by The New London Group documents digital technology during the early age of the Internet and the relationships with the interconnectedness of its users (p. 74). Although digital technology and multimodality steadily progressed forward, there was reluctance and setback from both students and instructors who were hesitant to learn about lesson plans requiring digital literacy and dismissed the importance of digital technology for composition assignments (Kiernan, 2020). To help progress multimodality's understanding, there were scholars and instructors who advocated for multimodality and digital technology to create milestones for composition courses and redefine multimodality itself.

By starting with a definition of multiliteracy by the New London Group in 1996, around the time that the World Wide Web began its integration into public usage, the evolution of digital technology and multimodality's modern definition can be traced into the present day (New London Group, 1996). The literature review section begins with a brief history of multimodality's origins, progressing from the New London Group's definition and into the general understanding of multimodality in the present day. The literature review consists of historical scholarly documentation of multimodality's changing presence in pedagogy and the jargon used to describe genres that use multimodality in the present day. The documentation of multimodality's changes in the classroom and the evolving shared relationships with available technologies provide insight into the attitudes instructors had towards the utilization of multimodality in higher education composition courses. The documented changes with multimodality in pedagogy showcase changes in communication styles and changes in accessible materials for classrooms with varying learning styles, attending to students' specific needs and ways of composing assignments.

The scholarly discourse surrounding multimodal composition and its ever-evolving definition shifted in the COVID-19 pandemic due to academia abruptly transitioning to remote classrooms in the nation-wide quarantine that all students were affected by in 2020 (Benmoussa,

Ahriz, Mansouri, & Qbadou, 2021). The shift into the remote classroom documents changes in jargon associated with multimodality, noted by experiences by instructors and feedback provided by students. The mandatory lockdown of the COVID-19 pandemic affected pedagogy by exposing all instructors and students to digital technology and multimodality. Instructors and students had to adapt to some form of a digitally enriched classroom structure, which created a challenge for courses that were not designed for a remote and digital environment. Multimodality and digital technology became commonplace for every course, providing instructors and students an opportunity to test and provide feedback about the digital classroom.

The History of Multimodality and its Definition

Multimodality's definition changed in light of the COVID-19 pandemic's pedagogical shift to remote learning, which differs greatly from the origins of multimodality. Starting from rhetoric's earliest forms in 4th Century BCE Greece, multimodal themes were found through writing technology and a shift away from embodied delivery (Benson, 2014). Benson notes in "We Have Always Already Been Multimodal: Histories of Engagement with Multimodal and Experimental Composition" that "In an era when direct haptic control—via touch screens and voice recognition tools—is altering our interactions with technological tools, critical users should critically interrogate how these tools naturalize certain forms of interaction." (p. 175). While written texts were invented as a new form of composition technology (as opposed to oral traditions of public speaking), the effects of writing were debated on how it would further affect rhetorical decisions and message delivery (p.169). In a similar way, digital technologies and mobile technologies were not solely invented to enrich composition, but the invention of mobile technologies contributed to a critical analysis of how digital technologies can be used in the

composing process. Some examples of digital technology's influence on composition include the mobility and accessibility of smart devices and desktop computers to produce multimodal texts. Benson notes that as technology and communication environments evolve, so will the means of communication through multimodality (p. 175). While it is difficult to condense the entirety of multimodality's history into the literature review alone, Benson describes milestones that convey historical patterns that lead us to the present day. For example, Chapter 2 describes the emergence of writing in 4th century Greece, challenging the conventions of spoken word and evolving written texts (p. 173). Spoken word had not lost its importance, but writing had emerged as a separate entity to compose ideas through the technology that was available. Chapter 4 discusses the Industrial Revolution in the nineteenth century and its effect towards increased literacy rates (p. 173). This chapter describes that while literacy rates had increased, elocution skills also increased. As composition technology evolved through this span of time, so did the technology that produces multimodal texts.

While technological advancements have drastically changed since multimodality's origins, multimodal composition's definition is defined by the New London Group in "A Pedagogy of Multiliteracies" (New London Group, 1996). The New London Group defines multiliteracies as "a word (they) choose to describe two important arguments we might have with the emerging cultural, institutional and global order: the multiplicity of communications channels and media, and the increasing salience of cultural and linguistic diversity" (p. 63). The authors define a multiliteracy's perspective as "one that understands literacy as a negotiation of multiple linguistic and cultural differences through the design and redesign process." By this definition, multimodal composition became situated for the age of the Internet. With the implementation of desktop computers and access to the Internet in public schools, the expanding definition of

multimodality complemented emerging digital technologies in 1996—such as public schools increasing from 3% internet access rates in 1994 to 92% in 2002 (Kleiner, 2003). DOS-based desktop computers and CD-ROM programs used in the early age of the Internet coincided with the New London Group's definition of multimodality. Prior to the expansion of digital technology, literacy was often associated with print-based compositions, but now included visual, aural, and gestural modality genres in composition (Thibaut & Curwood, 2018). As desktop computers and other digital devices made their way into the classroom setting, user interaction with these devices evolved along with the applications available on said devices.

For students to exist in a digital and technologically based pedagogical environment, digital literacy includes the ability to comprehend—and produce—digital and multimodal compositions (Lohani, 2019). The 21st century created an abundance of new technologies for students to access across all levels of academia, including computers with increased processing strength and access to the World Wide Web, mobile technologies, web-based programs used to produce multimodal texts, free-to-use editing software, collaborative documents, and programs made to aid users with physical limitations (such as speech-to-text and closed captioning) (Kurt, 2018). Multimodality's definition has a relationship with the growth of digital technology used to compose multimodal texts. To implement multimodal strategies in pedagogy, instructors familiarized themselves with the digital technology students use to produce multimodal texts.

In the introduction to Jason Palmeri's "Remixing Composition: A History of Multimodal Writing Pedagogy," Palmeri states that composition drastically changed as a result of digital technology and multimodality. From Palmeri's perspective as an instructor, composition once consisted of the "complex, multifaceted process of composing *words*," as opposed to the multiple genres of multimodal composition (Palmeri, 2012). In contrast to Palmeri's earlier days

as an instructor, Palmeri noticed a trend where students were composing beyond written text and included images and sounds (e.g., audio essays, collages, digital videos, flash animations, and websites) in their texts to convey their points. Palmeri describes the changing definition of composition by stating that he was once familiar with the definition of composing texts prior to the rapidly expanding digital technology that would influence the methods of composing texts in the classroom (p. i). Palmeri notes that using digital technology to create multimodal texts was a stark contrast to the traditional written composition format that he was well versed in (p. i).

Palmeri's experience of unfamiliar composition conventions was recognized in the 1996 definition of multiliteracies by The New London Group: the multiplicity of communications channels and media, and the increasing salience of cultural and linguistic diversity (p. 63). The new genres of communication created with digital technology were unfamiliar to "traditional" composers, as was the initial case for Palmeri. As expanding technologies continued to influence composition, scholars had mixed attitudes towards the digital change, like that of other historical inventions in composition (as was the case with the introduction of written text in 4 BC Greece, as aural storytelling was considered the "traditional" form of composition). Palmeri reflects on multimodal composition's extensive history of invention by noting that "we can better understand new(er) digital media if we contextualize them in relation to old(er) media." (p. 89). In other words, all media was new at some point and texts embodying multiple modes of communication have a history that expands well before our understanding in the present day. The emergence of digital technologies opened a plethora of potential in composition for digitally literate composers. For others that were reluctant to change, they fought against the digital era with claims about keeping the "traditional" form of composition alive through written texts (Selfe, 2000).

The evolution of technology reshaped the definition of multimodality and differentiated multimodality from multimedia, which was used interchangeably earlier in their respective origins (Lauer, 2009). Lauer argues that multimedia texts are inherently multimodal texts - moreover, multimedia texts combine multiple modes through a single medium of technology (p. 229). The differentiation of what multimodality and multimedia consists of helped solidify the ongoing evolution of how multimodality can be applied in academia; multimedia is used more so in a public setting, whereas the term "multimodality" is used by scholars and in academia (p. 226). The term "multimedia," can be used as an introduction to multimodal concepts, providing a general audience with an understanding of multimodal conventions (p. 225). The definition of multimodality adapts with emerging technologies and multimedia that situate multimodal lesson plans.

One such case of technological invention strongly influenced pedagogy and shaped our overall understanding of composition and communication (Lutkewitte, 2016). Mobile technology greatly impacted the world of composition and communication during the beginning of the 2010s (p. vii). During the introduction of mobile technologies, "smart devices" were depicted with imagery of young students' hyper-fixation to their devices for leisure (p. 22). Scholars have analyzed students' usage of mobile technologies, including advising students how to think critically about what they're composing and how they're utilizing mobile technologies (p.24). As opposed to the initial novelty of mobile communication platforms, mobile devices have become normalized into society to the extent that they are no longer noticeable (p.23). Mainstream perceptions towards mobile technologies have since changed since the early 2010s and mobile devices cannot be ignored as they became more widely used than their initial debut (p.1).

limitations of multimodal texts—especially texts created, edited, or even brainstormed through digital applications, such as those found on mobile devices (p.2).

Digital technologies and applications made accessible to them continue to evolve and reshape themselves in the present day. One of the main limitations of these digital devices has been the accessibility to them or even accessibility to the utilization and critical assessment of them. For example, if a student has access to a mobile device, they may not necessarily be equipped with the skills needed to produce strong multimodal texts without taking the time to understand the platform or the applications inside of the platform. Similarly, even if a student is well equipped with said technologies, some cannot financially afford access to said device. There are other instances where students with disabilities may need additional assistive technologies for user friendliness towards their individual needs. As digital technology evolves, the means of accessible technology must work together with pedagogy and composition for students to utilize the potential benefits of digital composition platforms. With increased accessibility and understanding of these technologies, the definition of multimodality can be better understood through holistic approaches to teaching how to compose with them.

How Multimodality Changed with Accessible and Digital Technology in Pedagogy

As opposed to the New London Group's definition of multimodality from 1996, the genres of multimodality have become synonymous with multimodal composition in the present day. Technology and digital applications have allowed for multimodality to prosper with new genres, such as the creation of blogs, websites, comics, videos, podcasts, newspapers, magazines, books, and so on. Multimodal composition and growing digital devices expanded upon the New London Group's 1996 definition of multiliteracies and early influences on what would soon

become multimodal composition in a modern and digitally influenced era of pedagogy. One of the New London Group's focuses in their definition of multiliteracies was "...that literary pedagogy must now account for the burgeoning variety of text forms associated with information and multimedia technologies" (p. 61). As students and instructors demonstrated the expanding digital technology and applications of multimodality, pedagogy reformed itself.

Pedagogy encouraged digital applications and multimodality to further expand into the classroom—remote or otherwise. Since The New London Group's 1996 publication, the growth of digital technology in academia supplemented classrooms with the ability for students to collaborate on documents synchronously and asynchronously, communicate with one another through multiple forms of communication (such as text, audio, live video conferences, and pictures), and express ideas through user-friendly and accessible digital applications made for both mobile devices and desktop computers. While these forms of composition and communication continue to evolve since The New London Group's 26-year-old publication, the COVID-19 pandemic enforced a lockdown in 2020 that would situate pedagogy in a remote environment, encouraging both instructors and students to utilize digital technology for their assignments. The COVID-19 lockdown also encouraged students to contact their classmates and instructors through the digital technologies. While the long-lasting effects of the World Wide Web were not fully explored during The New London Group's publication, the potential usage of the Internet and pedagogy continue to reshape instructional practices and further enhance brainstorming, research, composition, communication, and editing texts.

In the COVID-19 pandemic, the shift to the remote classroom meant that instructors had to translate their courses to a remote environment and utilize digital platforms to replace face-toface interactions. This meant that instructors facilitated a fully digital, remote, and online classroom setting in which students had the option to keep their webcams turned off and, in some instances, communicate predominantly through chat boxes (depending on the instructor and institution). Instructors had to find ways to assist students with their respective needs. Especially during the initial move to remote courses, accommodating for each individual student had challenges for instructors than the courses originally intended to have face-to-face interactions, such as technological limitations (moreover, loss of in-person social cues, which can be entirely lost by a student not having their microphone and/or webcam enabled during class), diverse learning styles, varying understandings of digital literacy, and so on (Lau, 2021). To accommodate for students' diverse cultural backgrounds, socio-economic statuses, technological accessibility, and learning styles, pedagogy is constantly changing and adapting to engage students by offering technologies made to overcome the challenges of a remote classroom with supplemental materials (Smith, 2020). Digital applications—including plugins for web browsers, editing software, photo manipulation programs, graphic design programs, and slide presentation programs—gradually evolved to accommodate individual students' unique needs and became more accessible by supplementing student engagement and strengthening the composition of multimodal texts in diverse classroom populations. (Burgan, 2021).

The varying background knowledge of digital devices and potential limited access to digital applications or technology can be resolved through applications that use low CPU usage, are free to students (or low in cost), user-friendly interfaces, and instructors that can properly navigate these technologies (and troubleshoot potential problems associated with said technologies) (Hosseini, & Kinnunen, 2021). It is almost easier to fit a one-size-fits-all approach to curriculum, but the usage of a wide array of easily accessible materials (and supplemental materials) can resolve a wide range of the previously mentioned challenges through a flexible

form of pedagogy. With the usage of these readily available digital technologies found in remote classrooms in the COVID-19 pandemic, students produced multimodal texts with more resources to guide them compared to the origins of implementing the World Wide Web and its features into the classroom (Lutkewitte, 2016). Easily accessible materials made remote classrooms engaging for students with varying backgrounds and learning styles and are part of a critical lesson for scholars studying how to further enrich composition courses.

Multimodality serves as a strong resource for students to express their ideas, especially where students have a wide variety of backgrounds, methods of retaining information, and skill sets. Even in the COVID-19 pandemic, technology helped foster multimodal composition in remote classrooms and through a shared digital environment where students can collaborate with one another asynchronously or synchronously (Jandrić, Bozkurt, McKee, & Hayes, 2021). A modern American student population has a decent understanding of technology, access to the Internet, digital literacy, and even exposure to multimodality (and understanding of multimodal conventions, such as unpacking the 5 modes of multimodality in writing assignments). By expanding on the definition of multiliteracies from the New London Group in 1996, the genres of multimodality provided more insight towards the multiple modes featured in any compositional text, better known as the 5 modes of multimodality (aural, gestural, linguistic, spatial, and visual) (New London Group, 1996). Instructors challenged compositional conventions through the shared relationships between the 5 modes of multimodal composition and the usage of digital technologies to produce them.

One such example of challenging compositional convention with shared relationships between the 5 modes of multimodal composition and digital technologies include visual modalities. Visual modalities, contrary to a broad overview of the genre, expand well beyond pictures and videos and can include the formatting, fonts, colors, and sizes of a written text. Second-semester composition students can also use visuals and connect them to verbal cues through metacognition for a more holistic approach towards understanding the visual mode and multimodality in general (Andersen, 2016). The usage of images, as was the case of Andersen's article, shows the importance of supplemental materials and why the loss of in-person interactions would require extra stimuli for retention of information in the remote classroom. The usage of video essays and infographics are also engaging forms of supplemental material that embody the visual mode and can be used as an engaging form of composing that breaks the conventions of written texts.

Assignments that emphasize the visual mode can be used as a point of reference for rhetorical decision making with both digital texts and written texts (Türkgeldi, 2021). The hierarchical arrangement of information, visuals (such as pictures or videos) in place of texts, timing of video essays, and shot composition / picture quality are rhetorical decisions that can be found in infographics, video essays, and slide presentations. Rhetorical decisions are also found in written texts, including visual data, fonts, colors, and overall formatting under the visual mode. All five modalities are not entirely mutually exclusive and can connect with one another (as opposed to the idea that texts that emphasize a certain modality alone [such as infographics and visual modes]). By viewing the five modalities as connected entities, students can better understand how multimodality functions in all forms of composition, rather than focusing attention on an emphasized modality within a genre.

Multimodality's connected aspects also prompt engagement in pedagogy through the multisensory stimulation and increase cognition. Steph Ceraso argues that sonic composition is a holistic, interactive and stimulating form of composition for students to engage with, rather than limiting multimodal composition assignments to the digital environments that they are often associated with (Ceraso, 2018). The usage of multimodal texts in the classroom emphasizes students to consider the 5 modes of communication outside of the digital texts (in this case, the aural mode). Ceraso discusses how the 5 modes of communication are not bound to digital technologies and can be used to explain multimodality in written texts. Ceraso argues that cognitive behavior in the classroom is affected by multimodal composition assignments (pp. 3-6). Sonic compositions grab the attention of students, as if they are being spoken to, and their minds focus on the information being presented to them, as auditory compositions stimulate more senses of the human mind than simply reading through text documents.

As a result of the increased stimuli that improves cognitive function, the composition of multimodal texts leads to students to consider the accessibility of their assignments and maintaining engagement in the classroom. Consideration of accessible materials was necessary for remote classrooms' loss of in-person interactions and engagement with peers and instructors in face-to-face courses (Weir, Wohlman-Izakson, & Gilic, 2020). The flexibility of pedagogy for students' varied communication styles and learning styles were also taken into consideration in remote classrooms. Instructors had to critically think about their lesson plans and maintain engagement and accessible materials for their remote students (Squire, 2021). The flexibility of multimodality assisted students in the COVID-19 pandemic. The usage of digital technology and implementation of multimodal assignments showed that multimodality was situated for a modern audience and that digital technology was used to assist individual students' needs in a turbulent era of history. To achieve this feat, multimodality had to be situated with the digital technologies associated with the COVID-19 pandemic and reworked based on trial and error, including the

sharing of information and practices between other instructors, institutions, and feedback from students (Pereira, Fernandes, & Flores, 2021).

Multimodality and Technology for Hybrid/Online Writing Instruction

With the evolution of multimodality's definition, curriculum was adapted with the digital technology made available in the present day. A challenge of encouraging multimodal texts, however, was the assessment of multimodal genres and encouragement to produce multimodal texts with digital technology that some instructors did not familiarize themselves with. (Khadka & Lee, 2019). As stated by Khadka & Lee:

The situation has created an uneasy gap between theory and practice and between students' preferred literary practices and actual instruction in writing classrooms. Multiple studies into student literacy practices have found our students are writing more than ever with a great variety of composing technologies and forums widely available to them, but the primary focus and medium of our instruction has mostly remained traditional print (p. 3).

Students are continuously finding new ways to express themselves through composition and contributing to the ever-evolving topic of what composition and multimodality consist of. As the understanding of multimodality changes with technological advancements, instructors are held to a standard to constantly update their courses with the inclusion of new genres in composition. The main way for instructors to learn and adapt their curriculum is through their personal experiences, such as communicating with their colleagues and working directly with the needs and feedback of their students. In the case of the COVID-19 pandemic, students' needs had varied by the individual, as each student had varying emotional states in remote classrooms

(Doody, Schuetze, & Fulcher, 2020). The emotional cognizance of students is a strongly important element for instructors, as seen through learned experience in remote classrooms. The ecological role that pedagogy has between an instructor and their respective students—and the students' shared experiences with one another—has been an important subject for course structure (Ringer & Morey, 2021). The digital ecology that students share showcase their collaborative efforts for assignments and discourse held with one another. The collaborative interactions that students share assist in redesigning the classroom structure and contribute to a modern understanding of multimodality.

Multimodality stands for more than just a vehicle for collaborative efforts in the classroom, but a pedagogical strategy that can be implemented in any discipline or major. Multimedia exists as both a way for students to compose and as supplemental material for students to learn through a variety of cognitive patterns (VanKooten, 2016). While technological issues were a concern in remote classrooms, the usage of multimodality and digital devices as supplemental materials served as an effective method of engaging students with interactive classroom discussion in a limiting pedagogical environment, as noted by previous studies and scholarship related to e-learning (Ananga, 2020). If student engagement can be maintained in remote classrooms, the usage of multimodality's genres can engage and support a wide array of students with varying learning styles and backgrounds.

Through the perspectives of instructors, the COVID-19 pandemic has been unpredictable in the ways that it can affect pedagogy and its chaotic nature overall. The ideal method of providing emotional support for students and creating a stimulating classroom structure (especially in a remote classroom) is to be flexible and to challenge students' minds, especially because engagement in remote classrooms lags behind engagement in physical classrooms (Hall, 2020). Supplemental materials have been used for students to collaborate in study groups and group projects through smart phone applications, supporting the digital literacy of modern students (Al Abiky, 2021). Instructors have noted that reflective writing and collaborating with instructors in other disciplines proved to be as beneficial to the asynchronous discourses from students using mobile devices (Saidy, & Sura, 2020). While the New London Group accounted for the expansion of multimedia, the concrete concepts of asynchronous communication, reflective writing styles, and usage of digital devices to communicate in classrooms further solidified the definition of multimodality since the broad beginnings of their definition of multiliteracies in 1996.

Assessment of Multimodal Pedagogy and Technology during the Pandemic

As seen from the perspective of instructors and teachers, the remote classrooms associated with the COVID-19 pandemic made contributions to the understanding of modern pedagogy. It is important to note that a good portion of these precedents existed well before the pandemic and digital technologies were used to sustain engagement and communication, compensating for the loss of in-person interactions. The usage of digital technology in remote classrooms facilitated habitual patterns, such as archiving lectures and presentations into digital portfolios, both for the sake of archiving materials and for students to use later. The archival process of recording lectures and presentations is an integrated feature of remote classroom platforms (such as Zoom and Microsoft Teams) (Weir, Wohlman-Izakson, & Gilic, 2020). While these items existed prior to the COVID-19 pandemic, digital tools became more well-known in the academic sense. Instructors unfamiliar with using these digital platforms to their full potential, such as Zoom, GoToMeeting, and Microsoft Teams, made better use of these platforms by communicating with other instructors to practice using digital platforms and providing feedback from their own experiences. Weir, Wohlman-Izakson, & Gilic (2020) describe that both cognition and accessibility have increased with the help of digital supplemental materials accompanying lesson plans. The supplemental materials include auditory plugins or elements designed to read an assigned reading aloud and asynchronous discussion rooms for students and instructors to communicate. The expanding and accessible digital technology included in multimodal lesson plans branch into a flexible form of pedagogy. The flexible and accessible technology supplements lesson plans for a wide range of learning styles.

As noted by Klondike (2020) in In Search of Virtual Connectedness: A Comparative Essay in the Development of New Pedagogies for Remote Learning Environments, a comparative study documented the previously mentioned asynchronous feedback was beneficial for students sharing their ideas with their instructors but was limiting as the students were reluctant to work with one another. While the students in Klondike's study were reluctant to use discussion boards, platforms like Discord were used outside of the classroom for students to work on assignments together in a remote and synchronous environment (Wahyuningsih & Baidi, 2021). Platforms like Discord, Slack, GroupMe, and WhatsApp were used prior to the COVID-19 pandemic for communication, and as an alternative discussion board through the COVID-19 lockdown. Students have used remote classrooms to collaborate with one another on projects through multimodal digital devices, including documents made to share and edit with other students both synchronously and asynchronously. The collaborative and multimodal elements include auditory feedback and text comments shared through remote digital platforms (Maffetone & McCabe, 2020). The Google Drive suite (Docs, Sheets, and Slides) existed well before the pandemic, but they were embraced during the pandemicas a free-to-use software designed to share and

collaborate on by multiple students in a digital classroom, as opposed to sharing physical digital devices with other students in face-to-face classrooms.

The initial shift to remote learning in the COVID-19 pandemic caused a chaotic transition in translating lesson plans to a remote setting, especially through accommodating for the loss of holistic learning experiences through in-person projects, labs, and other hands-on assignments (Mishra, Gupta, & Shree, 2020). The usage of multimodal applications kept classroom assignments operational for remote classrooms. While limitations were noted from the lack of inperson interactions, the stimulated sensory experiences associated with multimodal learning were beneficial for students to complete their assignments and increase cognition, despite the lack of exposure to in-person gestures of communication. The usage of multimodal composition to provide remote learning in a global pandemic was not taken into account during the drafting of The New London Group's definition of multiliteracies. The learned experiences of the COVID-19 pandemic exemplified the flexibility needed for classroom structures, and the preservation of students' unique experiences through feedback and asynchronous communication. The feedback provided by students reshaped pedagogy and expanded upon The New London Group's ideas of multiliteracies with the technologies provided to them by instructors and the assessment of their multimodal assignments.

The usage of multisensory forms of composition allows for students to provide their points of view and interact with genres deemed unorthodox by some instructors that challenged the composition process. Auditory feedback and aural modalities are such examples of preserving students' unique perspectives through a revisitation of podcasts, soundscapes and sonic composition (Jones, 2010). Instructors encouraged students to compose reflectively in their assignments, allowing students to assert their viewpoints from their own perspectives and supporting students with aural multimodal composition techniques (Hinds, 2021). Podcasts serve as a vehicle for students to become acquainted with sonic composition and using composition techniques that engage students—especially in the remote setting (Greene, 2018). As noted within the Jones article:

At the same time as I point to these issues of access, I argue that multimodal composing can be a creative, effective part of the invention process for students at urban and traditional universities—and not only because it incorporates technology students are already using in their extracurricular lives (in fact, they may not be using the specific technologies that I am interested in experimenting in my classes). Such technology is useful because it incorporates performance, a tangibly rhetorical approach to expression that can be useful during the invention process in writing (p. 89).

The usage of multimodality's growing list of subsections proved to expand on the New London Group's definition of multiliteracies on a multitude of levels for remote courses. From the students' perspectives, multimodal composition is used in and outside of the classroom through digital applications with similar uses and interfaces. The digital era of composition became more apparent in recent years and evolved into an even grander topic of conversation through pedagogy.

From the instructors' perspective (by contrast), it can be concerning to present multimodal techniques, such as podcasting, for an aural multimodal lesson. In instances where instructors aren't familiar with digital composition techniques, instructors made collaborative efforts with technical experts to learn more about digital composition technology (Givens, Holdsworth, Mi, Rascoe, Valk, & Viars, 2020). Instructors collaborated in a similar fashion as their students by communicating with other instructors through social media platforms to troubleshoot issues and to update their practices (Greenhow, Staudt Willet, & Galvin, 2021). Despite the generational differences and varying levels of digital literacy, the collaborative resources found through multimodal platforms provided a network for instructors and students with varied levels of experience or digital literacy to the ever-changing landscape of multimodal communication and composition.

Conclusion of Literature Review: Overall Findings

Since the genesis of multimodality, multimodal composition evolved and reshaped itself from its interactions with its users and the technology used to implement it. The New London Group's 1996 definition paved the way for a modern understanding of multimodality, especially within remote classrooms. The rapid expansion of technology between 1996 and 2022 has been astronomically large to the extent that no scholar could have accurately predicted the long-lasting effects of technology and its usages by the masses. Digital literacy increased dramatically since the inclusion of computers in pedagogy and exposure to the rapid growth of digital technology. With the skills used for digital literacy are the skills needed for multimodal conventions, resulting from the creation of ideas with the help of digital technology and prosumer culture of multimedia.

At the time the New London Group created a definition of multiliteracies with a wide scope to expand on future digital technology, the foundation of a modern multimodality definition would grow with its genres. As previously noted, the New London Group described "...that literary pedagogy must now account for the burgeoning variety of text forms associated with information and multimedia technologies" (p. 61). Unbeknownst to the scholars in 1996, digital technological advancements with user-friendly interfaces would create a multitude of accessible tools for students across the world. New multimodal composing practices now complement various learning styles in the modern day. These practices are successful in that engagement in the remote classrooms associated with the COVID-19 pandemic were maintained well enough for students to continue their education while in quarantine. Regardless of students' disciplines and majors, multimodality proved to be a vehicle for students and instructors to collaborate and communicate synchronously and asynchronously through multiple communication styles, including auditory feedback and through asynchronous discussion boards with features to upload other forms of multimedia. The combined lessons learned through the resituating of digital technology and multimodal composition in remote courses showed the flexibility of classrooms that accommodate for the wide range of learning styles made applicable to any major or discipline.

As noted by the literature review, every instructor's experience with remote courses has differed in the COVID-19 pandemic. Remote classrooms demonstrated the roles of digital technology and multimodal composition to supplement classrooms with conventions found in face-to-face courses. By utilizing digital technology and multimodality, instructors provided a flexible environment for students with varied preferred learning styles and disciplines with supplemental materials. The supplemental materials used in the COVID-19 pandemic accommodated for all students' respective needs, stimulated cognition through multisensory materials, and engaged with easy-to-access digital materials on a technological and monetary standpoint. While digital technology was utilized prior to the COVID-19 pandemic, multimodality's shared connection with rapidly expanding technology exemplified the flexibility and accessibility of engaging supplemental materials necessary for students in face-to-face and remote classrooms, even after students returned to in-person classrooms. The research section of this thesis gathers more insight into instructors' personal experiences with technology and multimodality in and prior to the COVID-19 pandemic, resulting in a proposed second-semester composition classroom featuring the main takeaways of multimodality and using digital technology in remote courses.

Methodology

Conducting Interviews

As noted by the literature review, multimodality's definition is constantly evolving based on the available technology to compose it. The remote classroom associated with the COVID-19 pandemic is shown to be an environment where discourse and pedagogy explored multimodal materials. Instructors and students have been predominantly familiar with multimodal concepts prior to the COVID-19 pandemic, but collaborative practices were used to maximize the effectiveness of remote learning. While these patterns were analyzed through researching published articles, there is a wide range of perspectives from instructors and their respective points of view in regard to remote classrooms and experiences with multimodal composition. A qualitative research approach to research was conducted, wherein qualitative research is defined as:

an umbrella term for a wide variety of approaches to and methods for the study of natural social science. The information or data collected and analyzed is primarily (but not exclusively) non-quantitative in character, consisting of textual materials such as interview transcripts, field notes, documents, and/or visual materials such as artifacts, photographs, video recordings, and Internet sites, that document human experiences about others and/or oneself in social action and reflexive states (Saldana & Omasta, p. 3)

To learn more about how undergraduate composition instructors implemented multimodal composition techniques into their respective classrooms, six instructors were interviewed and asked about their experiences in and prior to the COVID-19 pandemic.

According to Saldana & Omasta, (2017), "during an interview, a researcher asks participants directly about their personal experiences related to the study's topic; their values, attitudes and beliefs; their knowledge or understanding of various topics; or any other matters pertinent to the study" (p. 80). As a research method, the interviews were utilized to record information, documenting the instructors' respective narratives, and comparing themes and patterns across the collective whole of data. More specifically, semi-structured interviews were used to analyze the discourse between the interviewer and interviewe beyond a tightly bound script of questions. As noted by Kirsch, (2012), semi-structured interviews allow for the researcher to inquire more about a topic by allowing the interviewee to speak more freely and responding to the interviewee's answers with follow up questions to guide flowing thoughts (pp. 36-50). This would also allow for the perspectives of each interviewee to carry into follow-up questions, should the conversation lead itself towards that direction. The interviews consisted of a convenience sample of six instructors that have taught COMP-1500 courses at Nova Southeastern University (NSU) for five or more years.

Convenience sampling involves selecting participants to whom the researcher has easy access (Saldana & Omasta, p. 86). A convenience sample of six faculty members was selected as the culture of the composition department is intimately connected and allows for an environment where transparent communication can exist. The six instructors were selected because they all have a strong background in publishing composition research and/or teaching courses that encompass both multimodal composition and composition itself with the use of digital technology. All of the instructors have differing backgrounds on when they began their first instructional appointments, where they earned their respective degrees, and methods for teaching composition courses. All six of the instructors are employed at the same institution, which provides a basis for how there can be a multitude of perspectives even with the same course structure, further documenting how different educational backgrounds can provide for unique perspectives from learned experiences. The interviewees were selected by meeting the following criteria:

1. They have taught at least a COMP-1500 level course for at least five years.

2. They have taught remotely in the COVID-19 pandemic.

3. They have implemented multimodal composition assignments into their course design. The criteria of the interviewees teaching composition courses for at least five years would give a retrospective of how instructors saw gradual changes in pedagogy from their first academic appointment to the present day. The COVID-19 pandemic caused a disruption in the "natural" progression of academia, which is analyzed by the juxtaposition between the brevity of the COVID-19 pandemic versus the length of each interviewee's instructional career.

The interviewees were asked twelve open-ended questions encompassing a theme of multimodality's evolving definition inside of the higher education classroom (Appendix A). The questions were categorized into three main sections: how multimodal composition evolved in their respective classrooms, how the interviewees interact with multimodality, and rhetorical choices made when implementing multimodality into their classrooms. The interview questions documented how the COVID-19 pandemic affected interactions between instructors with digital technology and multimodality. The interview questions also inquired into the instructors' perspectives of how students used digital technology to compose multimodal compositions in remote classrooms. The answers to these questions provide insight into another stage in multimodality's evolving definition through the perspective of faculty and the influence of the remote setting associated with the COVID-19 pandemic.

The interviews were conducted and recorded remotely through Zoom.us and through inperson interviews with Apple Voice Memos. The interviews themselves lasted between 45-60 minutes during the Winter 2022 semester. Once the interviews were recorded, they were loosely transcribed through Zoom.us' self-contained transcription software, which were then copied to a text document and re-evaluated by replaying the audio files for accuracy. During the transcription phase, the responses of each instructor were grouped together based upon the questions that were prompted. The shared responses in the results section gave each participant an equal opportunity to share their ideas. The responses in the results section emphasized the most unique, yet straightforward responses to each question, verbatim to how they responded. For example, if the collection of responses for a prompted question showed a slight variation of the same rephrased idea across the six interviews, the response with the most effective word economy and originality were accounted for in the results section of this thesis. If there were responses that contrasted greatly with a proposed question, all perspectives were documented to show multiple angles to the questionnaire. Omitted responses included those that did not directly tie into the questions at hand or were summated by condensing down their ideas for the sake of word and page count.

According to Saldana & Omasta (2017), "discourse analysis focuses on the selected nuances of language, conversation, and images to assess how elements such as vocabulary, grammar, intonation, topics, and so on work together in intricate combination to impart meaning about human relationships and big-picture ideas such as culture, identity, politics, and power" (p. 58). With a discourse analysis approach, the composition course instructors' interviews were analyzed and coded to determine relationships between technology's advancements and its shared relationships with multimodal composition. The coded data was grouped together with recurring themes: multimodality's history ("history of multimodality"), multimodal composition in recent history ("multimodal learning"), and multimodality during the transition back to the physical classroom, reflecting on the remote courses in the COVID-19 pandemic ("the COVID-19 pandemic"). The data was grouped into these categories based upon the prompted questions relating to each section and the explicit usage of the phrases "history of multimodality," "multimodal learning," and "the COVID-19 pandemic"/"the pandemic." The data was organized with thematic coding and responses were placed together with restated questions. This organization compares the responses of the six instructors' side-by-side and was evaluated by relevance to the claims made in the literature review. All instructors were given pseudonyms to protect their identities and they will respectively be referred to as Instructor(s) 1-6.

Interview Results

Results

The History of Multimodality

Based on their own experiences, each instructor attributed their own historical accounts with multimodality by discussing the societal and technological advancements from their doctoral programs and/or their first instructional appointments. It's important to note that although all six of the instructors earned their doctoral degrees relatively around the same time, the difference of a few years between each graduation date accounts for a large difference in technological and multimodal experiences. An important example of such a drastic change includes the technological shift between the 2000s into the 2010s, as mobile technology started to emerge and change the possibilities of composition. Instructor 4 recounts that "my first instructional appointment was in (about) 2010 as a graduate student ... I did not have a smartphone just yet and neither did most of my students" and that "multimodality in the classroom at the time was not always emphasizing the digital ... I would bring in something like Play-Doh and have them craft something and write instructions" (Personal communication, January 11, 2022, 32:43). This reflection compares differently to Instructor 3, who graduated from their doctoral program in 2016. Due to a six-year difference in instructional appointments, the further development of digital technology available for composition courses was grounded and solidified in pedagogy after instructors implemented the newly developed digital technology in their courses.

Instructor 3 adds, "When I first started learning about multimodality, I really associated it with specific mediums or genres. There would be a multimodal text and a monomodal text, whereas now I see multimodality more incorporated with everything that we do. We can't look

(at texts) without recognizing that we're using multiple modes to make meaning happen" (Personal communication, January 13, 2022, 36:53). Based on the location and culture of where the instructors earned their respective degrees, the timeframe of the instructors' graduation times, and their personal experiences with multimodality, their personal definitions and experiences with multimodality are subjected to change. In the interview process, the instructors juxtaposed their previous understandings of multimodal composition with their current views of multimodality. Their updated definitions of multimodality added additional factors, such as interactions with other instructors/students, newer technologies that influenced pedagogy, and experimental techniques of demonstrating the possibilities with multimodal composition.

The modern definitions of multimodality are unique to each instructor but include overlapping ideas of how it's used in the present day. A common view on multimodality between all six instructors is that every composition incorporates the 5 modes of communication, and no singular text is limited to one singular mode. Instructor 2 notes that "it's certainly physical and digital ... it's kind of a material practice of using resources to invent, to compose, to distribute, utilizing all these various affordances built into this sign system that we use" (Personal communication, January 14, 2022, 5:02). The technological evolutions seen in pedagogy are noted in these responses, as was the case for Instructor 6, noting "As more and more means of persuasion become available, I think it's important that we—at the very least—acknowledge them in composition and probably should encourage more creativity with them in the composition classroom. Having students be not only critical consumers of multimedia, but also perhaps rhetorical producers of multimedia" (Personal communication, January 22, 2022, 2:51). Instructor 6 notes some of the expectations that a second-semester multimodal composition course should adhere to for a lesson plan by stating, "Visual rhetoric, the ability to think critically about something that somebody presents, the image that they present, and considering motivations' exigency context, I think that's pretty important and if they left a COMP 1500 and COMP 2000 course not knowing how to do that, I would be pretty disappointed" (Personal communication, January 22, 2022, 3:26). The expectations of instructors expanded with evolving digital technology and increased digital literacy from students and instructors throughout academic tenure. The ways that students present and demonstrate their knowledge of digital technology and sharing their knowledge with instructors and other students influence a modern understanding of multimodality. As multimodality itself reshapes its role in pedagogy, so does each instructor's viewpoint of multimodal composition and how it's situated in the classroom.

From a historical perspective, the instructors noted a change in relationships between both the students and instructors with evolving digital technology in pedagogy. Most of the instructors noted that although the Internet was accessible to them and that laptops and desktop computers were integrated into classrooms at the start of their instructional history, the gradual exposure to mobile technology demonstrated the possibilities for multimodal composition's future. Instructor 4 notes that "Students are engaging a lot with social media as one of those multimodal texts that holds their attention. As a result, I think it impacts the way that they come to the class and write. In my experience, they understand the value of multimodality. They come to understand images alongside texts make for interesting communications" (Personal communication, January 11, 2022, 37:59). The shared understanding of compositional conventions through mobile devices and social media are one of many examples where evolving technologies influence composition and usage of multimodal conventions. The exposure to social media and trendy forms of composition, such as internet memes, pose questions as to why conventions are made and why older conventions are challenged. Instructor 1 notes, "One thing that I like to do, especially when I teach students about rhetorical analysis in COMP 1500, is presenting them with like the internet's most popular memes ... and then I'll follow that up with 'how is the meaning shifted?' So really, it's just getting students to understand how we produce meaning and how we forward arguments" (Personal communication, January 10, 2022, 4:23). The remixing of pre-existing media and developing new meaning behind pop culture icons are ways of applying multimodal concepts with students. Instructors can also apply multimodality by noting the 5 modes are found on social media platforms and that students are composing texts during their leisure time via social media. Compared to blogs and forums of the 2000s, social media's influence on composition is largely expansive and instead of being dismissed as a recreational form of communication, opened avenues for how students interact with texts and implement their knowledge into the classroom (and vice versa).

Personal Experiences with Multimodality and Technology

Leading up to the present day, the instructors were asked a series of questions about the implementation of multimodal composition and modern technology in the classroom. These questions focused their attention prior to the COVID-19 lockdown in 2020 and the usage of multimodal concepts in both remote and face-to-face classrooms. All six of the instructors raised a point on how multimodality is found in any facet of composition, including using the 5 modes of multimodality to adhere to traditional writing conventions. For example, Instructor 5 states that when students write an essay using multimodal concepts,

"...of course they're gonna say the linguistic, because there's lots of words there, but then when you start to push them and get them to start thinking about other modes, they'll start to say that there's a visual mode because we organize the paragraphs in a certain way, it has a certain visual look to it right and then there's the spatial mode... We need those [modes] because otherwise it would be very hard to read this essay, so getting them to start thinking about familiar texts that they've already encountered in our lifetime but having to just think about them in different ways." (Personal communication, January 11, 2022, 24:10)

The collective six instructors noted that the 5 modes of multimodality are equally important to one another in the composition process. The means of showcasing the 5 modes shifted with the available technologies and the understanding of what can be achieved with the available digital technology. For example, Instructor 2 noted "...some of those decisions I think are based on just kind of the knowledge of the program—not just because they're important to me, or for the students—but they're important as part of an experience in (our master's program) ... But maybe also encouraging them to develop their multimodal repertoire by saying 'hey you've probably never done audio, let's do that,' more towards the middle or end of the course" (Personal communication, January 14, 2022, 31:21). By building on a foundation of what conventions are familiar to a student, such as writing a traditional essay and organizing it with a scholarly research structure, a student could identify patterns they are familiar with. A student can also apply their knowledge of traditional conventions and expand their ideas into different multimodal genres, drawing parallels to rhetorical choices used in their past assignments.

Drawing comparisons between traditional essays and multimodal texts is echoed by all six of the interviewed instructors. All six instructors echoed a sentiment that students should have the skills to compose a multimodal composition assignment as effectively as a traditional written essay. The nature of multimodal devices can prompt students to learn about circulation in composition and remix culture as a result of compositions found on social media and through digital platforms with similarly curated digital materials. In the words of Instructor 4,

I also think understanding ideas of ownership and remix, plagiarism, and remediation is useful to students, media and different modes get circulated in several ways and get changed. Students often draw these things to make new media, such as understanding how writing practices have been impacted by multimodality, but also the digital technologies we use." (Personal communication, January 11, 2022, 8:40)

With a progressively gradual increase of students familiar with digital literacy at younger ages, students will have more exposure and experience as a collective generation to digital literacy than previous generations. The available digital technology affects students' composing techniques as mobile devices, software, and websites offered from instructors become progressively more accessible. The accessibility of digital technology especially applies to mobility, user interface, and overall literacy that students have with these digital devices. Composing with digital technology in a classroom finds itself in a middle ground between the technology being advanced enough to run composition applications smoothly and the applications integrated in said technology designed with low strain on a digital device's processor. With said digital devices and applications made easily accessible for students, students can efficiently produce digital works. Instructor 2 recounts,

But you know a lot of my classes early on ... it was expected you had access to computers at all so (computers) just make it easier and just normalizes the idea of 'why write this in Word when I can write it here?' and 'that could be like not even changing it from text, but creating an essay in Evernote instead of creating in Microsoft Word using different tools, using like Google Docs collaboratively rather than Microsoft Word.' There's all sorts of potentials that aren't necessarily about changing what people might think of as the mode so much as part of the process, which is also changing the mode and the kind of existence, the materiality of attacks. (Personal communication, January 14, 2022, 42:27)

Composition and multimodality were greatly affected by the technological steppingstones made by instructors' and students' feedback on using the digital devices. Multimodality and digital technology should not be limited in scope to genres such as podcasts, video essays, infographics, comic books, and so on, but to include older conventions like traditional essays. Collaborative documents were made available through platforms, such as Google Docs and Microsoft OneDrive, allowing users to view, comment, and potentially edit a document remotely, synchronously or asynchronously. These collaborative documents allow users to produce texts from mobile devices and desktops, making the composing process a collaborative, digitally focused, and relatively accessible form of pedagogy. Older conventions were preserved and supplemented through these technologies as digital technology's interface adapts for mobile audiences and exemplifies multimodal genres of composition.

Multimodality, Technology, and the COVID-19 Pandemic

In the COVID-19 pandemic, multimodal composition itself was not viewed as a greatly different concept than it was prior to the initial lockdown, according to all six instructors. The means of utilizing multimodal composition strategies through remote digital technology varies from each instructor. For example, the usage of supplemental materials, such as utilizing auditory feedback via audio recordings or communicating asynchronously through discussion boards, have been used prior to the COVID-19 pandemic. The COVID-19 lockdown created a

mandatory application of multimodal materials in remote classrooms, whereas traditional faceto-face courses have a multitude of ways to engage students in discourse. The COVID-19 lockdown provided a newfound importance of how remote and digital technology could be used to supplement traditional classroom structures.

Instructor 4 notes, "I made sure that there were a lot of options for asynchronous participation. Students had a little more freedom with how and when they have you know responded to course content, I also felt like you know students were able to engage with the course" (Personal communication, January 11, 2022, 26:01). Instructor 2 elaborates on Instructor 4's ideas, stating that instructors' usage of auditory feedback and supplemental materials (such as video tutorials) were used prior to the COVID-19 pandemic. Although these concepts were used prior to the pandemic, there is a new rationale behind these multimodal techniques:

I've been a big advocate of audio feedback for a long time just in general, because I think it puts the responsibility more on the student to interpret it. But I think, with people at home and being used to having headphones, I think we were in a good time to be willing to listen to audio comments ... I think it's always been a strong kind of pedagogical choice, just changing the nature of teacher comments." (Personal communication, January 14, 2022, 17:45)

While the six instructors utilized digital technology and multimodal composition prior to the pandemic, there were discussions between the six instructors on how to best utilize digital technology and create engaging lesson plans in their institution. Instructor 2 said, "We had a good number of zoom workshops, you know when the pandemic started. Different tools, different approaches, how to use the chat function during an online class to kind of encourage participation" (Personal communication, January 14, 2022, 21:24).

Instructor 2 noted in their department, all six instructors regularly speak to one another and discuss pedagogical practices: "In the department, there were workshops held specifically for utilizing digital technology and multimodal devices emphasized in the initial lockdown of the COVID-19 pandemic" (Personal communication, January 14, 2022, 20:02). These workshops showed instructors effective practices for their classrooms and allowed instructors to provide innovative ideas with one another, such as how to utilize these practices in the transition to remote courses. The supplemental materials and effective practices found in remote courses are implemented after the return to physical classrooms, including some of the digital technology used to host remote classrooms in the initial lockdown of the pandemic.

An overarching challenge of the COVID-19 pandemic was the shift to hybrid courses, wherein some of the students would attend class remotely and the others would attend class in person. Based on the instructors that were more vocal about the hybrid classroom setting, the challenge of engagement primarily came from the in-person students, whereas the remote students attended class without showing their cameras in some instances, and therefore did not show their facial expressions and their body language. Instructor 6 notes,

(The in-person students) were constantly on Zoom, constantly getting feedback from the remote people through people taking notes, based on what they're doing, adding solutions and this and that. I really think that you would need to pair students up by modality or separate them by modality. (For example,) all the students in the classroom are doing this one thing, all the students on Zoom are doing this other thing and then have them develop those sub-communities within the classroom community. I do think that you could do that successfully, but would need to be designed that way. (Personal communication, January 22, 2022, 30:21)

Translating courses to the remote setting was a challenge for courses not initially designed to be remote or flexible enough to transition smoothly. Maintaining engagement with hybrid students through direct interactions with them, consistently communicating with them, and adapting pedagogy to suit multiple forms of multimodal composition made the transition to and from hybrid courses successful. As noted by Instructor 3, the usage of collaborative web-based documents (such as Google Docs and Microsoft OneDrive) was utilized to maintain engagement with students in the remote, hybrid, and in-person courses. Instructor 3 describes,

[For example,] having students in small groups answer something on a Google Doc so that there was something they had to do to show they were doing it is a strategy, I used in hybrid classes, that I use on in just a synchronous online, as well as in person classes at a try to make conversations kind of more structured and give students, an idea of: 'Okay here's where you should be going with this.' Even that, to me, is multimodal. Having (the students) talk together and then answer and kind of come up with a meaning." (Personal communication, January 13, 2022, 22:58)

The multipurpose usage of digital technology and determining lesser-known functions of digital programs and applications made a significant difference in how both pedagogy and composition are situated in both remote and in-person classrooms. The flexibility of these courses show how the wide range of accessible multimodal materials and easy-to-use digital technology provided a way for students to attend class remotely and engage with multimodal texts. The utilization of digital technology and compositional strategies with multimodality have continued even after students returned to in-person courses.

Conclusion of Results

The overall findings of the interview process noted that multimodality itself has not changed dramatically in recent years, even prior to the COVID-19 pandemic. The ongoing list of digital technologies implemented into modern classrooms shaped students' and instructors' interactions and understandings of multimodal devices in composition. During most of the six instructors' first instructional appointments, mobile devices were initially being introduced, severely affecting the way texts were composed. The mobility of smart devices is one of many features that refined the composition process in the past decade. With the inclusion of mobile devices, laptops, tablets, and smart devices in pedagogy, compositional milestones were achieved, such as asynchronous and synchronous progress of assignments, multimodal feedback (including auditory feedback, capturing photos, and uploading pictures of an assignment all in one smart device), accessibility to user-friendly (and in some cases, free-to-use) digital applications, and the integration of multimodal supplemental materials.

With increased digital literacy from instructors and students, multimodality became better understood in the sense that multimodal composition does not limit a text to a singular mode and can be produced through various multimedia devices. The proper assessment of multimodal compositions encourages students to attempt at adapting their assignments through multimodal genres. The flexibility that instructors implemented in the COVID-19 lockdown proved how engagement with students relies on demonstrating multiple modes of composition, user-friendly application interfaces, and easily accessible digital applications to suit the learning styles of a general student population. The lessons learned in the COVID-19 lockdown translated successfully back into the physical classroom, as instructors and students continue to utilize the digital technology associated with the COVID-19 lockdown to compose multimodal texts and integrate multimodal supplemental materials.

Classroom Recommendations

This thesis contributes to the constantly evolving conversation of multimodality's changing definition and its role in pedagogy. The changing view of multimodality's role in pedagogy corresponds to the evolution of digital technology assisting in the composing process (Palmeri, 2012). This thesis was constructed by focusing its attention on four-year private college students and their second-semester undergraduate composition courses, typically taken in their first year or two as a prerequisite for other courses. The recommendations for a multimodal composition course compare the background in the literature review with the interviewed experiences from instructors that teach composition courses, such as COMP 1000 ("A writing workshop emphasizing the writing process, reflection, and the production of proficient writing at the sentence, paragraph, and document level") (Coursicle, n.d.). COMP 1500 (A writing workshop emphasizing recursive writing and reflection within a variety of contexts, providing instruction in writing rhetorically, researching and documenting sources, and composing in multiple media) (Coursicle, n.d.). and COMP 2000 ("A writing workshop emphasizing inquirybased research in academic and professional settings, challenging students to engage in substantive projects drawing on multiple methods of research and asking students to document, present, and reflect on their findings)" (Coursicle, n.d.). The interviews with the six instructors compared the literature review's depiction of multimodality's evolving definition and its shared relationship to expanding digital technology. The proposed multimodal composition course advice implements the lessons learned from the interviewed and researched instructors' personal

experiences with multimodal composition. The course advice combines their feedback and research with an application of a modern definition of multimodal composition, its versatility, and an account for the available and expanding digital technology.

The discourse analysis approach to the research data interprets the language used in the composition instructors' interviews. This form of analysis is applied to study the instructors' experiences with digital technology and multimodal composition to determine appropriate recommendations for successful strategies in a technology-rich multimodal composition course (Saldana & Omasta, 2017). The discourse analysis notes the semantic and technical jargon used when referring to the evolution of both digital technology and multimodality since the start of the instructors' pedagogical careers and leading into the present day. The instructors' descriptions of mobile technology, applications of digital technology in the classroom, and views on multimodality's relationships with digital technology demonstrate the expanding scope of how multimodality and digital technology are situated in pedagogy. This shared relationship accounts for multimodality and digital technology's shared and ever-expanding relationships with instructors and students in history (Benson, 2014). In regard to the proposed COMP 2000 course advice, the recommendations account for the experiences students and instructors had with the digital technology in the remote classrooms of the COVID-19 pandemic, analyzing how these digital technologies are utilized in the segue back to in-person courses. As a result of increased digital literacy throughout the course of the COVID-19 pandemic's remote courses, students should have familiarized themselves with digital composition conventions and developed the skills to produce their own multimodal texts (Personal communication, January 22, 2022, 3:26).

In composition courses within the same institution as the interviewed instructors, instructors create composition assignment prompts for students, such as: "choose a debate topic, pick a side for the argument and justify your position." The literature review and research showed that the pandemic's remote classrooms provided feedback for pedagogy to progress forward (Pereira, Fernandes, & Flores, 2021). These takeaways include integration of accessible and easy-to-use technology for interactive and engaging multimodal composition projects in remote learning environments (Squire, 2021). Other key takeaways include how students and instructors communicate with one another through synchronous and asynchronous communication styles made possible through said multimodal composing platforms (Personal communication, January 13, 2022, 22:58). Flexible options to compose assignments, usage of multiple modes found in every form of composition assignment, and application of accessible digital programs assist the wide array of learning styles found in modern composition courses (Personal communication, January 11, 2022, 26:01). In the institution where the six instructors were interviewed, COMP 1000 and COMP 1500 courses are mandatorily implemented across all disciplines, excluding students who previously earned 6 composition course credits prior to entering the university. Because COMP 1500 (and potentially COMP 1000) are mandatory prerequisites to high level courses, composition courses set the foundation for students to become acquainted with multimodal conventions studying any discipline and connecting the university with its students at large.

COMP 1000 and COMP 1500 students gradually improve their understanding of composition conventions and composing through multimodal devices through digital technology. Traditionally, COMP 2000 builds upon the knowledge acquired from first-semester composition course students, broadening the ways that students compose scholarly texts. The COMP 2000 course recommendations exemplify the five modes of composition, contributing to the notion that all disciplines use the composition skills found in composition courses throughout the rest of their academic and professional careers (Ringer & Morey, 2021). While all composition assignments use the conventions of the five modes of composition, the recommended assignments for the proposed COMP 2000 course involve the usage of digital technology to compose multimodal texts. The usage of digital technology encourages students to think critically about the rhetorical decisions found in each respective multimodal genre (Personal communication, January 11, 2022, 24:10). In the posed COMP 2000 course recommendations, the central theme of each assignment focuses on a reflective topic, such as creating a manifesto solving a large-scale problem pertaining to their respective communities. The topic that the students choose to utilize the length of a 16-week course to situate their ideas into the conventions of five differing multimodal genres (Personal communication, January 14, 2022, 31:21). The students compose across the five modes of multimodality to accentuate each of the five modes per genre and the five rhetorical canons (invention, arrangement, memory, style, and delivery) for each assignment. The five assignments are as follows:

Traditional Essay (Invention) - **Linguistics.** Students note their semantics through a formal tone and use traditional essay conventions as a baseline for the other assignments and genres throughout the semester. Rhetorical choices made through the written texts are used primarily as the scholarly background and research phase for the semester. The written essay is approximately 5-8 pages in length, generating a sufficient length of research to expand upon for the assignments throughout the remainder of the semester.

Sonic Composition (Arrangement) - **Aural.** Students use free-to-use audio editing programs, such as Audacity, to pitch their upcoming ideas in the semester for an intended audience consisting of their instructor and peers in a podcast format. The students will ideally be paired between themselves and another student with similar ideas for a topic. The auditory genre

of communication serves to brainstorm and peer review, adapting their findings from the traditional essay conventions into a public speech. The podcasts will not exceed 30 minutes in length but are longer than 10 minutes. The allotted window of time prompts students to think critically about using a short window of time to present their ideas efficiently and asking their paired colleague effective questions to learn from one another.

Public Speech (Memory) - **Gestural.** Students will note their delivery when presenting their texts to an intended audience consisting of all their classmates. Students will focus on their voices, posture, movement, expression, and memorization habits to sharpen their public speaking skills and emphasize rhetorical decisions through a more "traditional" medium of composition. The public speaking assignment will not include visual modalities, focusing solely on posture, voice, enunciation, pace, tone, volume, memorization, and gestures.

Video Essay (Style) - **Visual.** Students will conduct a short-form presentation through the genre of video production, composed with simplistic editing of visuals and paired with the dialogue like the students' public speech. As opposed to the public speech, the video essay assignment is between 3 and 5 minutes in length. The video essay enriches the public speech's script with video recordings, pre-recorded audio, images, infographics, and texts. Students will decipher the differences of respective conventions of the five assignments' genres and the strengths and weaknesses of each modality.

Group Discussion (Delivery) - **Spatial.** Students will create a virtual gallery through a free-to-use website builder. Students will work in groups based on their chosen topics covered throughout the semester. Students will communicate and collaborate with one another, providing feedback to each other within the group. The students will be paired in groups of three to four, all of the students are responsible for providing their own contributions towards a group

presentation. The group presentation contains all the members' respective projects found on the website they created together. The website portfolio shares the students' multimodal compositions produced throughout the semester.

The five multimodal assignments prompt students to reflect on the five modes of communication according to the New London Group (1996) and the five canons of rhetoric. In contrast to students choosing composition genres that directly match their overarching topic, students will discover the advantages and disadvantages of the other composition genres (Personal communication, January 13, 2022, 36:53). The students of a well-organized COMP 2000 course follow four main learning outcomes. Students will identify the five modes of multimodality and compose multimodal texts. Students will make rhetorical choices favoring the strengths of each modality and understand the conventions of each mode and genre. Students will compose multimodal texts through free-to-use and user-friendly multimodal software. Students will identify their personal strengths and preferences to the composing and learning processes of pedagogy and step out of their comfort zones to experiment with multiple genres of composition. The recommended COMP 2000 course consists of a 16-week semester on a MWF schedule for 50 minutes per class. Students will use class time for all stages of the writing process, sharing their ideas in class, and experiment with the digital technologies made accessible to compose texts. An accessible and digital technology rich course encourages students to have a deeper understanding of the relationships between digital applications, the multiple modes of communication, and communicating in a collaborative and flexible environment for students to apply their interests into a holistic course structure (Personal communication, January 11, 2022, 37:59).

While multimodality itself did not change drastically in recent years according to the six interviewed instructors, pedagogy at large is constantly evolving with the available technologies that composers interact with (Personal communication, January 11, 2022, 32:43). With access to user-friendly digital software and first-semester composition courses as a prerequisite for general education, composition students studying any discipline will explore the five modes of communication. By sticking to a consistent topic through the semester and applying their topics through multiple genres related to the five modes of communication, students will understand the strengths of each mode, and familiarize themselves with the technologies that complement each genre (Personal communication, January 14, 2022, 5:02). The students of this course will experiment with older conventions and challenge the usage of digital technologies to compose and reframe a central topic. By challenging "traditional" conventions and making rhetorical choices for their assignments, students weigh their options for digital technology and the genres that best suit their composing process (Personal communication, January 22, 2022, 2:51).

Conclusion

The COVID-19 pandemic left long lasting effects on pedagogy, as noted by the documented personal experiences of the six interviewed instructors and feedback from their respective students in their remote (and hybrid) classrooms. While remote, online classrooms are not inherently new concepts, the forced migration to remote courses prompted instructors and institutions to rethink pedagogical practices in the mandated lockdown of the COVID-19 quarantine. During the migration to virtual classrooms, face-to-face education was replaced with synchronous and digital classrooms hosted through platforms like Zoom and Microsoft Teams. As the COVID-19 pandemic gradually reshaped itself, so did pedagogy by combining face-to-face and online classrooms into a hybrid or "BlendFlex" model. Remote courses brought pedagogical challenges of its own, especially for instructors who weren't as digitally literate as other instructors and those that did not maximize the potential advantages of utilizing remote technology, multimodal supplemental materials, and multimodal assignments. The ill-prepared instructors encountered the students' varied access to digital technology, varied emotional support, and varied engagement with the course materials.

In the COVID-19 pandemic, an opportunity was found to reconsider engagement with students, making materials more accessible, and redeveloping pedagogy through students' feedback. Through mobile technology and digital applications, students communicated with their instructors and fellow peers asynchronously. Other digital applications allowed students to create multimodal texts through user-friendly digital applications requiring low CPU usage, some of which were created or adapted for mobile devices. To compensate for a withdrawal from social interactions in face-to-face classrooms, multimodal assignments encouraged students to express their ideas through engaging forms of composition and collaborating with their classmates

through accessible technologies. The collaborative digital technology paired with multimodal assignments provided a voice for multiple forms of communication styles, such as live text chats, audio feedback on assignments, synchronous collaboration on documents, and sharing device screens with other classmates at the same time.

The redefining of multimodality and its relationship with digital technology was extended with the reconfigured usage of digital technologies implemented into modern composition courses. The integration of the internet and mobile devices paved a way for multimodal composition through a strong emphasis on multimodal genres to convey rhetorical messages, including podcasting related to the aural mode and comic strips related to the visual mode. While the familiar conventions of multimodal assignments serve as an integral part of progressing pedagogy into the future, multimodal composition consists of ever-expanding genres of composition. For example, computer coding, comic strips, sensory stimulation (such as smelling specific fragrances as part of a composing routine), exploration of kinesthetics, storytelling through video games, composition through music, and many more forms of media and interactions with the composing process expand the possibilities of our understanding of multimodal composition conventions in the classroom.

The interviews with the six instructors provided great insight into the influence of the COVID-19 pandemic on pedagogy and the future of composition courses. According to the interviewed instructors, multimodality itself has not changed much as a result of the COVID-19 pandemic. However, the methods of creating multimodal texts changed as a result of the introduction of newer and accessible digital technologies in modern classrooms, such as free alternatives (and in some cases, mobile variants) to professional digital multimodal composition programs. The ways that students interact with instructors and with one another are adapted with

newer technologies, creating multiple outlets for communication, providing feedback,

collaborating on assignments, and engaging with class material. Compared to the six instructors' first experiences with multimodality, modern pedagogy provides more opportunities for students to compose and experiment with multimodal assignments. Based on the respective experiences of the researched and interviewed composition instructors, the creation of a multimodal course would differ slightly between each instructor, especially with differing experiences and backgrounds with digital applications, digital literacy and interactions with multimodal genres.

Although the initial interview questions pertaining to multimodality's change in the COVID-19 pandemic did not show drastic changes according to the interviewed instructors, the digital technology used to implement multimodal composition in pedagogy helped change the presentation of multimodal composition and how students interact with it. Although the initial hypothesis of multimodality's change in the COVID-19 pandemic was not prevalent, pedagogy showed changes in how to interact with multimodal conventions. For instructors already familiar with digital technology, the pandemic created a reason for instructors to rethink applications of digital devices and multimodal conventions in the classroom. For students, the accessibility of live transcripts, multiple avenues of engaging with course material, live text chats in remote classrooms, and the ability to share a personal screen with the entire classroom through digital technology were strategic uses of the available digital technologies in the pandemic.

This thesis does not necessarily argue for the importance of multimodality, as every composition assignment is multimodal to some degree. Rather, this thesis discusses application of new digital technologies that became synonymous with digital literacy and remote education. Even months after the return to in-person classrooms, the technology used in the COVID-19 pandemic's lockdown are still being utilized by students, instructors, and faculty of higher

education. The flexibility and accessibility of these technologies encouraged an exploration of new methods of creating multimodal texts and reviving older conventions in a modern context. While multimodality itself did not drastically change, the introduction of new digital technology changed the composing process, the relationships between writers and audiences to the extent of encouraging prosumer cultures in academia, and the experience and ability to create digital texts through digital and mobile technology. In the sense of mobile technology strongly influencing the compositional field, the digital technology used in the COVID-19 pandemic left a great influence on composition conventions, rethinking about how to accommodate for students' needs, how to engage students with the materials in the classroom, and how to make materials accessible and strategically effective. A more fitting definition of multimodality that includes the lessons learned from the COVID-19 pandemic would be as follows: the application of multiple modes and literacies through user-friendly composing techniques, supplemented with digital technology.

If more time was allotted for research, I would have documented more instructors' experiences with multimodal composition. Conducting research with a slightly broader scope that includes adjunct instructors with potentially less experience with multimodality and/or digital technology than a full-time instructor could have provided insight as to how instructors differ in grading and responding to multimodal assignments. Further, I would have explored the interactions between instructors regarding how they plan for upcoming semesters as a collective and exchange information for refining their course outlines. I would have gained insight from interviewing students directly and inquiring their experiences with multimodal composition and/or remote and hybrid courses, which I would cross-examine with the experiences of the instructors and compare the data between the two research groups.

Future research could investigate remote and hybrid classrooms in the COVID-19 pandemic. During the publication of this thesis, the COVID-19 pandemic endured three variants and segued through hills and valleys in reports of those that had the COVID-19 virus. During this time, there was only one major lockdown and one major shift to remote courses. During the time of this publication, the COVID-19 pandemic could continue evolving in the future and create an extended opportunity to study remote and hybrid courses. A hypothetical return to remote courses can be used to analyze the utilization of digital technology, patterns of communication styles, and implementation of multimodal assignments. Future research can follow the creation of emerging digital technologies and exploration of multimodal assignments' changes, such as composing multimodal texts made for virtual reality headsets. Another avenue of research would include interviewing samples of younger generations of students with progressively more experience with digital literacy at younger ages in the upcoming years and comparing the results of the previously mentioned students with the students currently enrolled in higher education. Lastly, another area of interest would be redefining multimodality itself as digital technologies change and their dynamics between composers, audiences, messages, and other factors change the composing process.

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Appendix A

Interview Questions

- Prior to the COVID-19 pandemic, how did you implement multimodality in your courses?
 - How would you presently define multimodality within the composition classroom?
- In your opinion, what are the advantages of incorporating multimodality in your courses?
- What do you feel should be the central learning objective(s) within the multimodal composition course?
- What are some of the biggest lessons learned from the transition to the remote classroom during the COVID-19 pandemic, and how have you implemented these changes to your present-day course design/assignments?
- Have you made any changes to your courses based on your colleagues' experiences with multimodal learning in the remote classroom?
- How can instructors balance student engagement with lesson plans within a BlendFlex or mixed classroom setting, as was the case in the Winter 2021 semester?
- In your estimation, how did the implementation of multimodal assignments in the remote classroom affect the way that students engaged with the course?
- What modalities do you feel are important to emphasize in your course for students? Why did you choose specific modalities over others within your course?
 - Are there any modalities that you previously left off your syllabus because they didn't fit due to the scope and duration of the course?

- How has multimodality's definition changed from your first instructional appointment to now? How has the definition changed/grown across your research/publications?
- How has multimodality's relationship with students changed as a result of evolving technologies and technological environments?