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Inside the dojo of digital media: What marginalized student perspectives reveal about multiliteracy center practices.

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INSIDE THE DOJO OF DIGITAL MEDIA: WHAT MARGINALIZED STUDENT PERSPECTIVES REVEAL ABOUT MULTILITERACY CENTER PRACTICES

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DEDICATION

for Mémère Claire,
who showed me I could go anywhere

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I believe the illustrious Snoop Dogg said it best when he received his star at the Hollywood Walk of Fame:

I want to thank me for believing in me, I want to thank me for doing all this hard work. I wanna thank me for having no days off. I wanna thank me for never quitting. I wanna thank me for always being a giver and trying to give more than I receive. I wanna thank me for trying to do more right than wrong. I wanna thank me for being me at all times.

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ABSTRACT

INSIDE THE DOJO OF DIGITAL MEDIA:
WHAT MARGINALIZED STUDENT PERSPECTIVES REVEAL ABOUT
MULTILITERACY CENTER PRACTICES

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Multiliteracy centers serve as vital hubs for supporting students' digital media composing needs, especially those pertaining to digital literacy. This qualitative interview case study evaluates the efficacy of standard practices established by multiliteracy center scholarship, focusing on spatial design, tutor preparedness, and student engagement at the University of Louisville's Digital Media Suite (DMS). Recognizing the significance of multiliteracy centers as sites of social and material access for marginalized students, this project gathers the experiences of first-generation and post-traditional student participants to inform recommendations for expanding practices to better accommodate diverse student demographics on university campuses.

Informed by Black feminist research methodologies emphasizing the value of recognizing unheard voices and lived experience (Collins, 1990; hooks, 1994), this study employs feminist institutional ethnography methods of interview and participant observation (LaFrance, 2019). The findings highlight both strengths and limitations of current standard practices. While spatial design fosters flexibility and collaboration, its focus solely on space limits consideration of collaborative opportunities, while an

infrastructural approach encompasses material and social elements of access. Tutor preparedness primarily prioritizes technological skills, overlooking the pedagogical complexities of student support, warranting a realignment of training hierarchy. Furthermore, although students exhibit deep engagement demonstrated by critical competence with resources, there's potential for expanding engagement to include transfer, thus facilitating long-term success. Another critical insight gleaned from this research lies in the imperative of enhancing resource awareness and uptake of the support service ecology among students.

Multiliteracy centers possess the potential to bridge the gap between students and available support services, particularly for those from non-dominant communities. By fostering a culture of accessible resources, multiliteracy centers can significantly contribute to students' academic success and overall well-being. This dissertation advocates for reimagining multiliteracy center practices to create inclusive and supportive environments, prioritizing infrastructural design, balanced tutor preparedness, and broadened student engagement, notably through enhanced resource awareness and uptake. Ultimately, this study underscores the pivotal role of multiliteracy centers in fostering equitable access and support for all students in higher education.

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CHAPTER 1

INTRODUCTION — WELCOME TO THE SANDBOX: NAVIGATING MULTILITERACY CENTER PRACTICES FOR INCLUSIVE STUDENT SUPPORT

> "There's a level of creativity associated with [multimodal composing] that is sparking something that for most people, we don't do academically…And so the DMS is bringing an awareness that if you ask a student to do a video project about their work in engineering or in chemistry or in English, where they have to show and talk about with their voice and their face, and images and sound, it triggers more of their mind than just words on a page…if you give somebody the opportunity to express, as well as analyze, critique, and push their brain academically, technologically, and then add creativity onto it, it just is more of them and more of their personality."
>
> —Jason Zahrndt, director of the DMS

Vignette

In 2014, I took my freshly minted MFA up to New York City and began a job as a professional writer reporting on footwear and children's fashion. When I asked my new boss what had tipped the scales in my favor during the interview process, he responded, "I've spoken with at least a dozen good writers—and you're certainly one of those—but, at the end of the day, your ability to use InDesign was what put you ahead of the other candidates. If my design guy gets sick, we can still make it to print on time because you can jump in on layout. No one else could offer me that security." He then asked me how I had learned Adobe, and I explained that I had taken on a semester of tutoring in a multiliteracy center during grad school to acquire proficiency in various software programs, anticipating a high likelihood of needing digital writing skills for a job after graduation. He complimented my initiative and asked if I could run the magazines' blogs, too. I left that conversation with equal senses of pride and doubt.

I began to wonder if I would have landed the job without the InDesign experience. Suddenly that decision to give up a course to tutor in Florida State's Digital Studio weighed a lot more—and called to mind many questions. Sure, I had pursued that position because I knew that I was somewhat technologically "behind"—that had been made clear in undergrad at LSU's Honors College, where my peers discussed what being in yearbook had entailed at magnet schools with graduating classes larger than the entire population of my rural k-12 high school, which wasn't even big enough for a football team or advanced enough to host AP classes. I knew I hadn't had access to the software that had become de rigueur in the world of digital media, and I had had a tall glass of the multimodal Kool-Aid in FSU's pedagogy "boot camp," a six-week summer course designed to prepare new graduate teaching assistants led by the rhetoric and composition program. Once I saw what multimodal pedagogy could do—the creativity, level of engagement, and feeling of excitement it brought to the classroom—I knew that I needed to learn more. Luckily for me, FSU was prepared to support me in those endeavors. But what if I hadn't gone to a university with a digital studio? What professional opportunities might I have missed out on? What opportunities might others on campuses be missing because they fall outside the bounds of the mythic "traditional" moniker for whatever reason? These questions about access and equity, and about how those issues might impact students' literate lives and professional prospects, took root in my head. I suspected that they might be the kinds of questions that could drive a dissertation project. Just a few years later, here I am.

Introduction

While my questions initially arose from neoliberal concerns about professionalization, they soon turned towards more academic-oriented questions of access and equity, particularly as these intersect with digital literacies and marginalized student populations. I begin this project, then by asking: Who else has been left out of learning digital media skills due to underfunding, lack of equipment and software, or even lack of information? What is at stake when we begin to consider how access to technology and critical digital literacy impact people's abilities to achieve their professional ambitions, as well as the ways it could improve people's ability to communicate? And how can universities attend to these issues? After all, I hadn't known what I didn't know about technology and digital composing until I heard others discussing it as if it were ubiquitous. Sure, technology is everywhere, even rural schools have computers, but not all means of access are equal. In exploring these questions, it becomes evident that equitable access to digital literacy is not merely a matter of convenience, but a fundamental determinant of social and professional mobility, underscoring the imperative for universities to address the systemic inequities inherent in our digital landscape.

In fact, I realize now that I hadn't been paying enough attention while working in the Digital Studio to consider the important intersections of digital literacy, issues of equity and access, and the role multiliteracy centers might play in addressing these concerns. Multiliteracy centers are support spaces on university campuses dedicated to providing tutoring services in multimodal and digital media composing. I should have been asking what such a place was truly capable of providing students and how researching it could be useful, particularly to students like me who had not had prior

access to these technologies. Cynthia Selfe (1999) argues that awareness of "the complex linkage between technology and literacy" is "an integral part of educators' larger professional responsibility… [and it is] our ethical responsibility to understand how literacy and literacy instruction directly and continually affects the lived experiences of individuals" (p. xix). I might have made the mistake of not paying attention before, but I certainly am doing so now. Because I agree with Selfe (1999)—technology cannot be cleanly separated from literacies of all forms, including but not limited to digital literacy, and access to technology remains "distributed differentially along the relaxed axes of race and socioeconomic status, and this distribution contributes to ongoing patterns of racism and to the continuation of poverty" (p. 135). Furthermore, access alone is insufficient; without critical awareness guiding its use, technology cannot be considered as being used literately. These issues disproportionately impact students of marginalized identities, such as rural, low-income, first-generation, Bipoc, or post-generational students. And as enrollment in non-traditional demographics continues to increase—24% of undergraduates enrolled in academic year 2015-2016 had parents with no postsecondary education, for example (RTI International, 2019)—universities must work to mitigate disparities through targeted interventions and equitable resource allocation amidst the pervasive influence of neoliberal ideology on higher education.

Exigencies: The Demographic Cliff & the Multiliteracy Center Studies Plateau

Neoliberalism, a pervasive force in American society, prioritizes capitalism and individualism, promoting a meritocracy while exacerbating inequality everywhere from the classroom to the workforce. This ideology leaves marginalized populations at risk, as it undermines civic duty and dehumanizes individuals as mere capital, impeding

collective action and exacerbating class disparities (Metcalf, 2017; Sassower, 2019). The neoliberal university has been transformed into a market-driven enterprise, prioritizing professionalization over holistic learning and perpetuating the student debt crisis (Mintz, 2021; Saltmarsh, 2011). This shift of favoring business interests over academic principles leads to the prioritization of attracting students as customers and diverting resources from academic pursuits to amenities and marketing (Di Leo, 2016), in turn distorting the purpose of education so it becomes viewed primarily as a means to prepare students for the workforce, aligning curriculum with market demands and prioritizing vocational training. However, although traditional academic thought might malign this shift towards professionalization, such concerns are often linked to issues of equity for students from non-dominant communities. Marginalized students bear disproportionate debt burdens as they enter into what Winslow (2015) calls the "fallacy of fairness" cycle, which aligns with the bootstraps myth to promise that if you work hard and put in enough effort, there is an eventual socioeconomic reward. It is understandable, then, that these students—who take on debt for education as a means to economic advancement—prioritize courses, majors, and learning that are more likely to facilitate success on the post-college job market. This is particularly essential to keep in mind as the United States approaches the demographic cliff, triggered by declining birth rates, which presents a looming crisis for colleges and universities to grapple with declining enrollments and potential budget cuts (Boeckenstedt, 2022). As the neoliberal push for enrollment collides with population decline, more students from marginalized populations continue to increasingly enter college campuses. In fact, 2023 saw a 15% increase of what the Common App considers

"underrepresented minorities." Thus, universities must develop more tailored initiatives to meet the challenges these students face.

To address the specific needs of marginalized college students, universities must routinely reassess and adapt existing support services, ensuring equitable access to resources. Research from student affairs and education on marginalized students reveals an array of challenges they face in navigating higher education institutions, including issues with academic preparedness, financial constraints, and a lack of social and cultural capital (Davis, 2010; Startz, 2022; Tinto & Engle, 2008). But who, exactly, are these students? This project gathers the perspectives of first-generation and post-traditional college students as a lens through which to understand the needs of marginalized students more broadly, and thus will focus on these two identity markers. First-generation refers to college students whose parents did not attain a bachelor's degree, whether or not they had some college experience (RTI International, 2019). The moniker post-traditional is applied to students who are typically ages 25 and older, care for dependents, and work full time while enrolled. They are often students who previously left the university without finishing a degree, and thus return while balancing life, work, and their education (American Council on Education, 2024). As Bollig (2019) suggests, researchers should view these identities as intersectional and contextual, acknowledging how they intersect with local and institutional conditions. First-generation and post-traditional students come from diverse backgrounds, including lower-income families, racial minority groups, and immigrant families, but they share common challenges and support networks by identifying with this status. Their transition to college can be particularly daunting, as they may lack the networks and resources necessary to navigate campus life effectively

(Bollig, 2019). Despite universities offering support services, many first-generation or post-traditional students may not utilize them due to unfamiliarity with the college environment, underdeveloped study skills, and overall lower engagement on campus (Davis, 2010; Tinto & Engle, 2008). But strategies such as targeting non-traditional demographics and leveraging analytics to understand and support students' needs offer avenues for growth and inclusivity (Hannah, 2022; Mielke, 2021). To effectively support first-generation and post-traditional students in higher education, institutions must address professionalization, including fostering digital communication skills crucial for success in today's technologically driven world. The need for digital media composing and technological literacies have not subsided, meaning additional support beyond the classroom continues to grow in significance. This emphasis on technological literacy can be facilitated through resources such as the multiliteracy center, providing students with the tools and support needed to navigate digital platforms and enhance their academic and professional pursuits.

Multiliteracy centers have emerged as indispensable support systems in meeting these exigencies, addressing the need to equip students with the essential instruction and resources for effective multimodal and digital composing—a demand not entirely met within the confines of traditional classrooms. The rise of multimodal pedagogy promised transformative benefits for student learning, yet classrooms and educators often struggle to fully integrate these practices due to time constraints and lack of expertise (DePalma & Alexander, 2015; Khadka and Lee, 2019a; Lutkewitte, 2014; Takayoshi & Selfe, 2007). In response to this challenge, multiliteracy centers were created, either arising from writing centers or as standalone units. This soon led to a proliferation of multiliteracy

center studies, with the work of David M. Sheridan arising as central to this subfield. It is from his and James A. Inman's edited collection, *Multiliteracy Centers: Writing Center Work, New Media, and Multimodal Rhetoric* (2010), that three standard practices guiding multiliteracy centers are developed. They are:

1. that centers are spatially designed to support flexibility to meet student needs and promote collaboration (Inman, 2001 & 2010; Gresham, 2010);
2. that tutoring consultants must be prepared with some kind of technological proficiency, a deep understanding of the affordances and constraints of available resources, as well as the ability to facilitate the processes of composing within those resources, and pedagogical literacy (Sheridan, 2010a; Sheridan, 2010b); and
3. that multiliteracy centers must facilitate deep engagement as evidenced by students' competent and critically reflective use of resources (Cooper, 2010; Sheridan, 2010a).

However, despite initial enthusiasm, the field has plateaued in recent years, leaving scholarship in multiliteracy center studies stalled predominantly on administrative concerns, such as establishment and operational logistics (Inman, 2010; Gresham, 2010; Lauren, 2016; Sheridan, 2010a). Unfortunately, this leaves the necessary next steps in the development of the field, which include investigating the success of and fine-tuning standard practices through students' perspectives, as yet unrealized. My research is a step in that direction.

This project is an interview case study interrogating the efficacy of the three center multiliteracy center standard practices outlined above through the lens of first-

generation and post-traditional students' experiences. Furthermore, the findings inform recommendations for expansions of standard practices to more inclusively accommodate the needs of marginalized students. The current emphasis on faculty perspectives in scholarship has resulted in a significant oversight: a lack of meaningful incorporation of student voices. This oversight hinders our ability to fully understand and leverage the potential of multiliteracy centers as equitable resources for marginalized students, particularly in the face of the neoliberal moment and the demographic cliff. A case study approach to research enables "a close-up view of an important phenomenon (the "case"), examine a phenomenon from different perspectives, appreciate the importance of the contextual conditions surrounding the case…or try to derive broader generalizations going beyond your single…case" (Yin, 2005, p. xviii). While theoretically considered in decision-making processes within multiliteracy center studies, students lack a genuine voice in the scholarship, remaining largely relegated to the role of objects rather than active participants. And even when students are considered, it is typically the "traditional" students who have historically been the default in scholarship—what about those students who fall outside the bounds of this identifier? How can the experiences of first-generation and post-traditional students, in particular, help inform scholars about facilitating the additional support that those in "at-risk" demographics might need overall? This is not to allege that marginalized students have been intentionally excluded from multiliteracy center studies, rather to simply acknowledge that research has not progressed enough yet to consider anything other than foundational practices. These starting points provide valuable groundwork, but it has become increasingly clear that they are insufficient for fully understanding the effectiveness and impact of these centers,

especially for marginalized students. The student perspectives gathered in this study reveal two key inquiries: first, do the standard practice claims withstand the test of time given the gap in scholarship? And second, while these claims may be necessary, are they sufficient, especially in light of shifting demographics? As the student population evolves, the adequacy of these claims needs reevaluation. Leveraging the experiences of first-generation and post-traditional student participants, this project aims to shed light on the varied challenges faced by marginalized student populations, providing insights that can enrich our understanding of multiliteracy centers and inform efforts to enhance their effectiveness, ultimately benefiting all students.

Research Questions

In this project, I aim to accomplish an examination of multiliteracy centers in a broader sense through conducting a deep dive into one center in particular, with a focus on their effectiveness in supporting marginalized student populations. By delving into the experiences and perspectives of those who engage with the University of Louisville (UofL)'s Digital Media Suite (DMS)—students, faculty, administrators, and undergraduate peer tutoring consultants— through interviews, I seek to uncover insights that contribute to a deeper understanding of how these centers function and how they can be optimized to better serve a diversity of student needs. While interviews with these various participants inform my overall understanding of what shapes student encounters in the DMS and how they engage with the space, the project predominantly features student voices, as these are the perspectives that have been absent from scholarship thus far. This investigation addresses a gap in the existing scholarship regarding the experiences of marginalized students within multiliteracy centers, ultimately shedding

light on additional needs and potential benefits that have not yet been considered by research in the general landscape of rhetoric and composition studies. Through interviews centered around testing the efficacy of standard practices, first-generation and post-traditional students offer scholars a better understanding of their unique challenges to help inform our field about how to more effectively support them as they navigate the support service ecology. By advancing knowledge in these areas, this project seeks to promote equity and inclusion within higher education institutions while also providing valuable insights and recommendations for enhancing the digital composing support provided by multiliteracy centers. The questions addressed in this project are:

1. Do first-generation and post-traditional students' experiences affirm the effectiveness of standard practices identified as contributing to an "idealized" multiliteracy center in scholarship?
    a) Do students find that the spatial design of the DMS supports flexibility and promotes collaboration (Inman, 2001 & 2010; Gresham, 2010; Sheppard, 2014)?
    b) Do students perceive tutoring consultants as prepared to effectively meet their needs within the multiliteracy center? In particular, did students identify preparedness as identified in standard practices, which include:
        i. technological specialty
        ii. a deep understanding of the affordances and constraints of the resources available and the ability to facilitate processes with said resources
        iii. pedagogical literacy (Balestar, 2012; Sheridan, 2010a and 2010b)?

c) Through working at the DMS, have student composers come to view themselves as both competent and critically reflective users of the resources available to them (Sheridan, 2010a)?

2. What connections can be made between the MLC and transfer?

3. What recommendations for expanding practices to account for marginalized students can be made based upon these findings?

These research questions probe the efficacy of standard practices in multiliteracy centers to uncover crucial insights into the dynamics of student experiences and the effectiveness of existing support structures. Outcomes include an understanding of how spatial design influences collaboration and flexibility within centers, the extent to which tutoring consultants support composing needs, and the depth of student engagement and critical competency fostered by these environments. While the successful application of the three standard practices delineated in multiliteracy center scholarship is evident at UofL, these practices remain insufficient for the distinctive needs of marginalized students.

My research examines multiliteracy centers, focusing on their effectiveness in supporting marginalized student populations. By conducting interviews at the local site of UofL's DMS, I contribute to broad understandings of multiliteracy centers in general, which helps enhance our understanding of these centers' operations and opportunities for optimization. Scholarship on marginalized college students underscores the need to adapt and expand university support services for diverse student populations; therefore, the challenges faced by first-generation and post-traditional students at the DMS guide my recommendations for enhancing this support structure, and thereby others like it. In light

of the gaps and challenges identified through research, I propose a series of standard practice expansions to maximize the impact of multiliteracy centers as equitable support resources. This entails a shift towards a more comprehensive infrastructural approach to design, addressing both material and social access issues that disproportionately affect marginalized students. Additionally, the current emphasis on technological training for tutoring consultants needs to shift towards a more balanced integration with pedagogical instruction, recognizing the importance of addressing the needs of students who are reluctant to seek help. Finally, broadening student engagement to include fostering transfer is proposed, highlighting its importance for long-term success, with multiliteracy centers playing a pivotal role in reducing social barriers and promoting resource awareness through collaboration and community-building efforts. These proposed expansions are crucial to effectively meeting the needs of marginalized students and ensuring that multiliteracy centers serve as inclusive and supportive spaces for all.

The scope of benefits from understanding the processes facilitated in multiliteracy centers extends far beyond the confines of multiliteracy center studies, offering insights to disciplines such as writing studies, multimodal pedagogy, and institutional critique. From a pedagogical standpoint, this examination allows faculty to identify necessary adjustments to ensure that multimodal projects address the learning needs of students, especially those from marginalized backgrounds. Moreover, through close collaboration between researchers and multiliteracy center administrators, institutional reflexivity can be facilitated, informing programming and consultant training that are responsive to research findings. Through this study, I uplift marginalized student voices to illustrate the complex role that multiliteracy centers play in accessing digital literacies and digital

media composing skills on university campuses by testing the efficacy of standard practice claims, contributing enhancements to these claims to meet unaccounted-for student needs, and promoting the benefits of collaborations across the campus support ecology. But before delving into the in-depth exploration of multiliteracy center practices, it is essential to contextualize my inquiry within the existing scholarly landscape. In doing so, I aim to not only address my research questions but also to critically engage with relevant literature to inform and enrich my understanding of spatial design, tutor preparedness, and student engagement within these educational spaces.

Literature Review

The evolution of the concept of multiliteracies, originating with the New London Group (1996) and expanded upon by John Trimbur (2000) to encompass "multiliteracy centers," underscores the potential synergy between writing centers and the broader realm of composition studies, highlighting their shared focus on addressing the growing demand for digital literacies. Multiliteracy centers arose directly from writing centers, emerging from within writing center studies to offer valuable insights for scholars interested in incorporating multimodal feedback into tutoring consultations. While some multiliteracy centers are indeed housed within writing centers, others operate independently, focusing on providing support for multimodal and technology-based composing endeavors. This support can take the form of intellectual resources like tutoring consultations or infrastructural resources such as computers, software, and networks (DeVoss, Cushman, & Grabill, 2005). For example, director of the DMS, Jason Zahrndt, shares that the suite was created in 2008 as a collaboration between the Delphi Center for Teaching and Learning, the library, and the Resources for Academic

Achievement (REACH) center. The DMS was originally funded by the Delphi Center and directed by their videographer, whose initial conceptions for the space focused on providing instruction for video work. It was staffed by one graduate student and undergraduate tutors coming from REACH, with space and additional funding provided by the Ekstrom library. In 2016, it was turned over solely to the Delphi Center for funding and staffing, and Zahrndt stepped in as director, beginning the transitioning to the broader multimodal composing it supports today. This is meant to illustrate the complexity of producing a precise definition of multiliteracy centers, as the moniker remains somewhat fluid and can be applied to a variety of spaces. But for the purposes of this project, multiliteracy centers are identified as institutional spaces aimed at supporting composition across various media and modalities with an emphasis on digital media composing. No matter the institutional origins, this project identifies the multiliteracy center as a place where students have the opportunity to work on composing that incorporates modalities beyond only text-based written communication.

Multimodal Pedagogy & Multiliteracies

Multimodal composition pedagogy demonstrates a progression of the theory and practice that acts as an exigence for the establishment of multiliteracy centers. The relationship between multimodal composing and multiliteracy centers is an intricately woven one, enmeshed in a chicken or egg situation—multimodal pedagogy arose from a pedagogy of multiliteracies. That said, the institutional establishment of multimodal composing sparked the exigency for developing a resource beyond the classroom to support both faculty developing multimodal assignments and students composing multimodally, that is to say multiliteracy centers. Centers were designed for this very

reason, as multimodal pedagogy has been ambitious and optimistic, while frequently overlooking the complexities of practical application, from its very inception.

The study of multimodal composition pedagogy initially emerged as the study of multiliteracies in response to globalizing classrooms and advancing communication technologies. The New London Group (1996) advocated for a pedagogy of multiliteracies, emphasizing the need to move beyond traditional literacy education towards broader modes of representation to encompass "the multiplicity of communication channels and increasing cultural and linguistic diversity in the world [and schools] today" (p. 60). Viewing literacy as key for students to participate fully in the modern world—as workers, community members, and engaged citizens—the New London Group points out the ways that traditional literacy education has become outdated with pedagogy focused on "formalized, monolingual, monocultural, and rule-governed forms of language" that are unable to respond to the contemporary, globalized world (p. 61). Instead of focusing solely on language, they recommend broader modes of representation, proposing:

> To be relevant, learning processes need to recruit, rather than attempt to ignore and erase, the different subjectivities—interests, intentions, commitments, and purposes—students bring to learning. Curriculum now needs to mesh with different subjectivities, and with their attendant languages, discourses, and registers, and use these as a resource for learning. This is the necessary basis for a pedagogy that opens possibilities for greater access. (p. 72)

By embracing difference towards fostering inclusivity, a multiliteracies approach to pedagogy opened up new avenues of composing to accommodate expanding demographics and technologies.

Composition scholars embraced the promises of multiliteracies, shifting focus to the impact of technologies in classrooms. Hawisher and Selfe (1999) stressed the necessity of addressing rapidly evolving technologies for communication and intellectual exchange. Yancey (2004) advocated for a curriculum emphasizing technological literacy to prepare students for diverse roles in society, arguing that technological literacy can no longer be relegated to add-ons in a composition classroom if what's taught in those classrooms is meant to adequately prepare students for contemporary communication. Other scholars expressed caution by addressing the capacity for problems that accompanied technology into the classroom. Selfe and Selfe (1994) investigate equity in electronic contact zones and point out the fallacy of technological neutrality, as technologies can function as sites for systems of oppression for students. Banks (2005) addresses issues in the digital divide, noting that access and critical engagement are not synonymous, leading to prevailing impact on marginalized populations. Work such as this attends to the difference between hopeful projections versus lived realities, but meaningful engagement with the benefits and drawbacks of incorporating technology into curriculum make clear that despite potential disadvantages, the field could no longer overlook its importance in the classroom.

Composition scholars embrace multimodal pedagogy in response to technological demands, leading to its institutionalization in writing classrooms. The NCTE's "Position Statement on Multimodal Literacies" (2005) recognizes the expansion of information

acquisition and conceptual understanding through multimodal literacies. The statement points out that incorporating multimodal projects into the classroom leads to "high levels of collaboration and teamwork," acknowledges students as "very sophisticated readers and producers of multimodal work," promotes "self-originated, self-sponsored activity," and allows students to "to exercise creativity, work for social justice, and pursue personal passions." Soon after, trusted names in the field like Takayoshi and Selfe (2007) assert that instructors' "responsibility is to teach students effective, rhetorically based strategies for taking advantage of all available means of communicating effectively and productively as literate citizens" (p. 137). This alignment of scholars and organizations with the principles of the New London Group underscores the recognition of contemporary communication needs, facilitating widespread adoption of multimodal pedagogy.

Multimodal pedagogy has gained prominence in education, reflecting a shift towards inclusive and diverse modes of expression beyond traditional text-based communication. Early work focusing on what individual modes brought to composing, such as visual (George, 2002) or aural (Shipka, 2006), gave way to larger conversations about how multimodality fosters representation in the classroom. Scholars emphasize its capacity to accommodate wider student demographics, cultural expressions, and learning styles (Lutkewitte, 2014). This expansion enables the inclusion of marginalized voices and fosters pluralism, promoting success through personal expression, economic advancement, and civic engagement (Whitney, 2016). Additionally, multimodal scholarship recognizes the significance of various forms of literacy, such as heritage literacies represented by artifacts like wampum belts and quilts (Haas, 2007; Rumsey,

2009), as well as literacies emerging from students' diverse backgrounds, including multilingualism (Fraiberg, 2010). It challenges deficit orientations at the intersections of race, gender, and ability (Whitney, 2016). Rooted in the principles of the New London Group, multimodal pedagogy emphasizes access and empowerment for a range of student populations (Alexander & Rhodes, 2014). Multimodal pedagogy research continues to return to the democratizing principles of the New London Group, emphasizing access and empowerment for a plurality of student populations and inclusion of a multitude of "texts" relevant for research.

However, alongside its benefits, scholars acknowledge the challenges associated with implementing multimodal pedagogy in the classroom. Teachers and students alike struggle with multimodal composing, facing barriers such as technological proficiency and pedagogical translation. Faculty express concerns about assigning projects involving modalities they haven't mastered (Khadka & Lee, 2019a), while students may encounter difficulties with new technologies and doubt the transferability of multimodal skills to academic learning (Adsanatham et al., 2013). To address these challenges, scholars propose various strategies, including collaborative writing groups and additional support resources beyond individual classrooms, such as workshops and computer labs (DePalma & Alexander, 2015; Khadka & Lee, 2019b). Such efforts center the needs of both students and faculty, supporting informed conversations within the realm of multimodal composition pedagogy.

If composition instruction is to keep up with evolving composing technologies generally, there is a high likelihood that instructors and students both will require the additional support of spaces such as multiliteracy centers. Though collections like

Khadka and Lee's offer resources and assistance for enacting multimodal classroom pedagogy, real world individual problems will inevitably arise during students' composing processes and these issues demand individualized responses, which many faculty may not have time for or be adequately prepared to provide. In order for the pedagogical promises of multimodal composition to be fulfilled, the challenges identified here must be addressed. Multimodal composition pedagogy has progressed to reveal these exigencies, and multiliteracy centers—and multiliteracy center studies, by extension—offer responses.

Origins of Multiliteracy Center Studies

Multiliteracy center studies originated as writing center scholarship that sought to adapt theory and practice to meet 21st century literacy needs. Trimbur (2000) was the first scholar to acknowledge:

> the new digital literacies will increasingly be incorporated into writing centers not just as sources of information or delivery systems for tutoring but as productive arts in their own right, and writing center work will, if anything, become more rhetorical in paying attention to the practices and effects of design in written and visual communication. (p. 30)

Like multimodal pedagogy scholarship, writing center studies scholars saw the impact of technology on composing, though "the shift to multimodality has not instilled in writing centers the kind of we-have-to-respond-quickly urgency expressed by Cynthia Selfe on behalf of composition studies" (Sheridan, 2010a). Much early research focused on the ways technology might be taken up to provide online tutoring (Inman and Sewell, 2000; Anderson, 2002) and the attendant disadvantages this might provoke (Pemberton, 2004).

Other work began to consider how to navigate the complex incorporating of technology and digital literacy more integrally into writing centers (DeVoss, Cushman, and Grabill, 2005; Selber, 2005; Sheridan, 2006; Griffin, 2007; Grutsch McKinney, 2009). Indeed, writing center scholarship offers much that proves useful to this project, such as tutoring consultant training practices, and its literature will appear in more depth within the following chapters. For now, however, what is most important to note is that writing center studies formed the foundations for what would become multiliteracy center studies—scholarship dedicated to transitioning existing writing centers into multiliteracy centers or creating new sites built with multiliteracies support in mind.

Multiliteracy center studies itself represents a once-burgeoning subfield within rhetoric and composition, thus far primarily concerned with the establishment and operation of multiliteracy centers. This scholarship tends to be forward-thinking, exploring the possibilities of these centers in aiding 21st-century composing practices by contemplating "what spaces are possible to imagine" (Sheridan, 2010a). The foundational works in this area are found in key publications such as Sheridan and Inman's 2010 edited collection, *Praxis*'s 2012 themed issue, and the 2016 special issue of *Computers & Composition* edited by Russell Carpenter and Sohui Lee. Despite occasional contributions outside these sources, the subfield has somewhat plateaued, as attention in writing center and composition pedagogy scholarship has turned towards information literacy and identity concerns spurred by Donald Trump's presidency, antiracism in the wake of racial justice protests, and pandemic education practices. Though multiliteracy centers might overlap with some of these areas, attention to these spaces has somewhat fallen away from the field's attention to its detriment. There is still much room for growth

in multiliteracy center research, as this project argues. However, the existing literature still offers valuable insights into the early endeavors of multiliteracy centers in adapting to the dynamic landscape of technological, cultural, and rhetorical practices driving contemporary composing.

In its nascent stage, multiliteracy center studies has constructed a disciplinary narrative outlining the operational framework of multiliteracy centers. Scholars have identified the imperative for these centers, delineated their spatial design, discussed tutor preparedness, and outlined facilitation of engagement. While conversations about integrating technology and responding to multimodal text in writing centers laid the foundations for what Trimbur (2000) terms multiliteracy centers, Sheridan (2006) points out that "the emergent technologies of the twenty-first century [also] increasingly ask us to be composers of multimodal texts" (p. 340), thus providing a rationale for the creation of centers dedicated to digital media and multimodal composing. Four years later, his and Inman's (2010) foundational edited collection *Multiliteracy Centers: Writing Center Work, New Media and Multimodal Rhetoric* delves into the potential transformative impact of multimodal rhetoric on writing centers and the necessary changes associated with this shift to multimodality. The chapters cover the various modifications writing centers must make on their way to becoming multiliteracy centers. These centers must be designed both to flexibly accommodate the wide variety of needs composing across modalities entails and to promote collaboration between users (Inman, 2001; Inman, 2010). The tutoring consultants working within multiliteracy centers are responsible for shifting user expectations from technological to rhetorical support (Fishman, 2010), as well as possessing specialized knowledge of and ability to teach users how to use the

technologies available (Sheridan, 2010b). If the design and consultant support are effectively in place, centers then become sites of deep engagement for students, evidenced by their critical awareness of and competence with available resources (Cooper, 2010; Sheridan, 2010a). Collectively, these shifts in spatial design, tutor training, and facilitation of deep engagement make up the three central standard practices Sheridan (2010) deems necessary to creating an idealized multiliteracy center.

Following Sheridan and Inman's (2010) edited collection, subsequent special issues have continued to explore the evolution of writing centers into multiliteracy centers, and the specific demands posed to scholars. While the special issue of *Praxis* on "Multiliteracy and the Writing Center" examines challenges and benefits in integrating multimodal compositions and discusses strategies like renaming centers (Balestar et al., 2012), enhancing tutor training for inclusivity to meet ESL student needs (Bailey, 2012; Nowacki, 2012; White-Farnham et al., 2012), and ensuring accessibility for students with disabilities (Hitt, 2012), it remains firmly centered within writing center studies, focusing on transition rather than established multiliteracy centers. Conversely, the *Computers & Composition* special issue "Envisioning Future Pedagogies of Multiliteracy Centers" focuses on the future of multiliteracy centers, exploring new pedagogical approaches, challenges, and opportunities in the field, emphasizing topics such as collaborative writing spaces (Berry & Dieterle, 2016), adaptive remediation in consultations (Sheridan, 2016), digital literacy education (Bancroft, 2016), and rethinking center administration (Lauren, 2016). It highlights the need for continued research and development to better support students in adapting their literacies across different modes and media, although

student voices are notably absent and the efficacy of multiliteracy center practices remains largely unaddressed.

The critical next phase of scholarly exploration involves assessing the actual utilization and effectiveness of these centers. This dissertation's research delves into how students—in particular, from first-generation and post-traditional positions—engage with multiliteracy centers, examining the extent to which the scholarly standard practice claims align with the realities experienced by users. Additionally, this project picks up the calls to action from scholars such as Hitt (2012) and Bancroft (2016), who call for more research into how multiliteracy centers can support marginalized students, by offering suggestions for expansions or realignment of focus for each standard practice to better accommodate first-generation and post-traditional students, who act as a bellwether in this project to provide insight into the needs of students from non-dominant backgrounds more broadly. What's good for students from "at-risk" demographics does not harm traditional students and when universities prioritize supporting students who exist on the margins, the benefits reach all students including those in the center. In doing so, this dissertation aims to contribute to a more inclusive and effective framework for multiliteracy centers, ensuring that they serve as equitable resources for all students, regardless of background or status.

Objectives & Purpose

This research project is driven by a set of objectives aimed at comprehensively examining multiliteracy centers, particularly focusing on the University of Louisville's Digital Media Suite (DMS) and understanding their efficacy in supporting marginalized student populations. Through a combination of qualitative interviews and thorough

analysis of student participant data, the study seeks to shed light on the functioning of standard practices within multiliteracy centers and propose recommendations for enhancing their support structures within higher education institutions.

Evaluation & Expansion of Standard Practices

A key aspect of my research is to assess the alignment between student experiences within the DMS and the standard practices identified in multiliteracy center scholarship. I evaluate the efficacy of standard practices identified in multiliteracy center scholarship, while simultaneously proposing expansions to these practices to better accommodate marginalized student populations. As the research delved into claims testing, I use a synthesis of public affairs scholarship on non-dominant student populations and student interview data to underscore areas where standard practices, such as spatial design, tutor preparedness, and student engagement, fell short in adequately attending to the needs of marginalized students. In response, I propose expansions of these practices to address gaps in access, pedagogical support, and broader-reaching benefits affecting marginalized student experiences. My expansions advocate for a shift from spatial to infrastructural design within multiliteracy centers, a transition from technological to pedagogical preparedness for tutoring consultants, and a broadening of student engagement to include transfer, emphasizing its significance for long-term student success. Through a comprehensive evaluation of both the testing and proposed expansions of standard practices, I aim to provide insights into how multiliteracy centers can better serve marginalized student populations while maintaining inclusivity and effectiveness for all students.

Assessing the Multiliteracy Center's Influence on Resource Awareness and Uptake

Additionally, this research explores how the multiliteracy center functions as a catalyst for resource awareness and uptake among students, particularly focusing on marginalized populations. My study investigates whether students who work in the DMS recognize the value of support services more broadly, serving as a gateway for further engagement with resources across the campus learning ecology. The welcoming, low-stakes environment of the multiliteracy center is examined as a potentially more accessible point of entry for marginalized students to become engaged with other support services. Furthermore, I consider the impact of heightened resource awareness on student engagement and academic success. By analyzing student data collected within the DMS, I assess how exposure to support services, facilitated by multiliteracy centers, influences students' engagement with available resources and contributes to their academic success. This investigation provides valuable insights into how multiliteracy centers can effectively foster resource awareness and engagement among students, particularly those from marginalized backgrounds, within higher education institutions.

Recommendations for Enhancement

Based on the examination of multiliteracy centers, the evaluation and expansion of standard practices, and an assessment of multiliteracy centers and their influence on resource awareness and uptake, the next phase of this research involves proposing recommendations for enhancing the support structures of these centers within higher education institutions. Drawing from the findings of qualitative interviews, analysis of student interview data, and the synthesis of standard practices and proposed expansions, I propose actionable recommendations that address the identified gaps and shortcomings while leveraging the strengths of multiliteracy centers. These recommendations are

tailored to promote inclusivity, accessibility, and effectiveness in supporting marginalized student populations, ultimately contributing to the creation of more equitable and supportive learning environments. By providing concrete suggestions for improvement, my research seeks to empower institutions to enhance the impact and reach of their multiliteracy centers, ensuring that they remain responsive to the diverse needs of all students and continue to play a vital role in fostering academic success and engagement.

Building upon the objectives outlined above, the subsequent section will detail the methodology I employ in this research, including the selection of participants, data collection procedures, and data analysis techniques. Through the rigorous application of qualitative research methods, I generate insights that contribute to a deeper understanding of multiliteracy centers and their role in supporting marginalized student populations within higher education contexts.

Methods

Methodological Overview & Positionality

Methodological orientation and methods work closely together in this project. As scholars Kirsch and Sullivan (1992) write in their text *Methods and Methodology in Composition Research*, methodology includes how we imagine our research objectives in projects and methods are the literal steps we take to gather information or how we perform research studies around texts. Since a researcher's positionality is never truly neutral and my own intersectional assumptions based on race, class, culture, and gender act as a lens that impacts how and what I see (Sullivan, 1992), I must situate myself within this project in an effort to make legible the factors that have shaped my research

(Kirsch, 1999). Black feminist thought has shaped how I situate myself within the academy and thus informs my methodological stance, particularly my understanding of marginalization. Seminal work by bell hooks, especially *Teaching to Transgress*, resonates deeply with my personal and professional journey. hooks' narrative of resistance through writing mirrors my own quest for scholarly engagement amidst feelings of exclusion and cultural marginalization as a white Cajun woman from the rural South. This intersectional identity has shaped my feminist outlook and propelled my commitment to equity-focused research. I identify as a feminist scholar and a Black feminist methodology undergirds this dissertation.

This project emphasizes the marginalization experienced by first-generation and post-traditional students, acknowledging the influence of Black feminist ideas without overtly practicing Black feminism as its central approach due to the fact that race isn't a focal point of inquiry. Black feminism centers the overlooked experiences of Black women and their ways of knowing while taking into consideration the impact of intersectional positions in relation to racism, sexism, sexuality, and classicism (Patterson et. al, 2016). Patricia Hill Collins's *Black Feminist Thought* (1990) advocates for a more inclusive, intersectional, and polyvocal approach to research through a framework of four dimensions—lived experience, dialogue, ethics of caring, and personal accountability. This tradition emphasizes experiential knowledge, shared sense-making, and egalitarian citational practices that refute the silencing of Black women's voices—all of which this project enacts, as guided by these traditions, except applied to first-generation and post-traditional students', rather than Black women's, voices. It also challenges the "matrix of domination" created by intersecting oppressions and refutes the "controlling images" that

have historically shaped cultural depictions of Black women in a negative light. Though this project is not focusing centrally on race, these principles are still present in the project's challenge to standard practices that have the potential to oppress students and hinder their access to support services. Additionally, the study confronts "controlling images" of first-generation and post-traditional students that depict them as more likely to fail, less engaged, and less committed to their work than their traditional student counterparts. A Black feminist orientation guides the project's commitment to maintaining participants' voices and preserving original language in data analysis. Through dialogue with students, the project explores their experiences with multiliteracy center studies and centers an ethic of care by honoring their agency and experiences. Collectively, my disposition towards research has been and continues to be shaped by Black feminist thought. It forms the foundation for my work.

What is more apparent in this project is a feminist institutional ethnography methodological approach, which notably employs the practices of interviewing and participant observation. Institutional ethnography stems from the work of Dorothy Smith (1987) in sociology and investigates the ways documents coordinate how people interact within institutions, focusing on "textually-mediated social organization" (Smith 1990). Furthermore, according to Michelle LaFrance (2019), institutional ethnography provides a multitude of distinct methods to collect data, including interviews, case studies, participant observation, textual analysis, etc., and the methods of interviews and participant observation play a key role in enacting the methodological goals for my project. In this case study, the focus is on standard practices developed within multiliteracy center scholarship that guide how centers are organized and operate.

Ethnographic inquiry guides me as I seek to locate and examine these influences within the institutional context of the DMS that impact students' lived experiences. Normally, institutional examinations are marked by long-term, in-depth projects, thus the limited timeline and scope of this project impedes my ability to perform "true" institutional ethnography. Therefore, I will be conducting ethnographic observations with an eye for what Sheridan (2012) distinguishes as ethnography's distinctive feature—an "orientation to understanding the rich visible and seemingly invisible networks influenced by the participants in the study" (p. 73). Recognizing and investigating those "seemingly invisible" components that shape how students engage with and develop digital literacies, as well as identifying gaps in these networks where particularly marginalized student needs have not yet been considered. An ethnographically informed methodology offers in-depth strategies of research that are flexible and responsive to the unforeseen avenues that data may present, such as the unforeseen avenues of discussion regarding social and material access initiated by a student's comments on collaborative work in the DMS and the benefits of expanded resource awareness and uptake uncovered in the interview data. Thus, the institutional ethnographically informed approach proves useful for ethical, reflexive research.

My ethnographic findings also feed into institutional critique, which offers my project additional approaches to working towards improving support systems for students. Porter et al. (2000) argue that, while institutions appear as unchangeable "monoliths," they are comprised of people engaging in rhetoric and are, therefore, changeable (p. 611). No system is above improvement, and this holds true for multiliteracy centers, which are relatively new campus institutions. Institutional critique

"looks for gaps or fissures, places where resistance and change are possible" (Porter et al., 2000, p. 631). In the case of this project, the gap of student perspectives yields informed suggestions for changes to standard practices that improve the efficacy of the DMS, particularly in addressing marginalized students' needs. Importantly, Porter et al. (2000) emphasize that "to qualify as institutional critique, a research project has to actually enact the practice(s) it hopes for by demonstrating how the process of…engaging in the research enacted some form of institutional change (Sullivan and Porter, Opening Spaces)" (p. 628). While this project is unable to fully accomplish the "true" institutional critique meant to investigate macro-level institutional structures through local, micro-level activity due to the constraints noted above, the goal of implementing change is within this project's grasp, at least partially, due to the director Zahrndt's—and thus the institution's—willingness to review and implement recommendations based on my findings.

In sum, with this feminist institutional ethnographic framing, which is informed by Black feminist thought and institutional critique, I seek to make visible the ways that multiliteracy center scholarships' standard practice claims have been institutionalized at the local site of the DMS. I investigate how these practices coordinate students' experiences and engagement with digital literacy, in order to identify whether or not they accommodate the needs of marginalized students from first-generation and post-traditional backgrounds. Furthermore, building from the knowledges shared through student perspectives, this project makes recommendations for enhancing standard practices to better meet under-theorized needs and promote additional unconsidered benefits.

Methods: Overview

This study was conducted using interviews and participant observation, two major qualitative methods within the core tenets of feminist-informed institutional ethnography. First, to gain an understanding of what shapes student experiences composing in the DMS, I conducted interviews with administrators, faculty, peer tutoring consultants, and students. I pursued interviews via email, sending out a call for participants to all faculty who had either brought their classes to the DMS or had a DMS representative visit their classrooms. I asked faculty to share my call with their students, as well as invited them to participate in faculty interviews. I asked Zahrndt and the tutoring consultants if they were interested in participating directly, and both he and all four tutors employed at the time of data gathering agreed. In addition to interviews, I conducted around 52 total hours of participant observation from a variety of vantage points in the multiliteracy center. These observations shaped my own understanding of what occurs during composing sessions with the DMS, which I put into conversation with students' perspectives shared through interviews. I conducted interviews and observations concurrently.

Semi-structured Interviewing: Opening Space

Interviews are the central component of this project, emphasizing how my feminist methodology honors the stories people tell to make sense of an institution, in this case the DMS, and their place within it. To begin, I invited faculty who had previously partnered their classes with the DMS both to interview with me and to forward my email request for interview participants to their students. Zahrndt shared the contact information for these faculty from his records. As noted above, I also personally solicited interviews from Zahrndt and peer tutoring consultants. This method of snowball sampling

recruitment technique allowed research participants to identify other potential subjects to join the project (Hesse-Biber, 2014), and laid the groundwork for increasing trust among participants because the request for interviews was disseminated by faculty, which may have the benefit of encouraging participants to believe in the value of the research project and share more information (Browne, 2005). I interviewed 16 participants total, including one administrator, three faculty members, four tutoring consultants, and eight students. Zahrdnt, director of the DMS, has a master's degree in English from UofL and spent time working in the writing center during graduate school. All three faculty interviewed are situated in places of precarity within the university—Kate was a graduate teaching assistant, Leigh a part-time lecturer, and Beth a non-tenure track faculty member at the time of these interviews. All four tutoring consultants were undergraduate students situated within their last year at the university (Dahlia, Velma, Daphne, and Amaya). I interviewed seven undergraduate students and one international graduate student; four participants identified as female and four male; and four students were white, one Middle Eastern, one Asian, one African American, and one Latinx. More importantly for the purposes of this study, two students (Chad and Raven) identified as returning post-traditional first-generation students, one student (Young-Sook) identified as a post-traditional international graduate student, and five as first-generation undergrads of "traditional" age (Diego, Pat, Sally, Ronan, and Velma). Velma spoke to me for two interviews—once from the vantage point of her role as a student visiting the DMS before being hired, and once from the perspective of a peer tutoring consultant. All identifying information was anonymized, and participants were invited to choose their own pseudonym for the study. Below is a chart explaining student participant identities:

Student Participant Information							
Name	**First-Gen**	**Post-Trad**	**Undergrad Student**	**Grad Student**	**Tutor**	**Class Visit to DMS**	**DMS Presentation in Class**
Chad	X	X	X				X
Diego	X		X			X	
Pat	X		X			X	
Raven	X	X	X				X
Ronan	X		X				
Sally	X		X			X	
Velma			X		X		
Young-Sook		X		X			

To conduct the interviews, I employed the feminist qualitative method of semi-structured interview, meaning they consisted of open-ended questions that promote further discussion, flexible ordering of questions, and space for relevant probing prompts. Additionally, I leave space for probing—what Guest et al. (2013) define as "inductive, unscripted question[s] asked by an interviewer based on a participant's previous response…[which] cannot be anticipated or written ahead of time" (p. 148) —, which allows participants to lead the flow of the interview and share what they wish on the subjects addressed. Semi-structured interviews also assist me in performing relevant robust inquiry strategies defined by Royster and Kirsch (2012) such as dialogic inquiry to balance multiple interpretations, reflective strategies to make sense of "internal and external effects," and reflexive strategies to consciously unsettle observations and conclusions to resist coming to conclusions too quickly (p. 134).

For this project, these methods involved asking in-depth questions about participants' experiences navigating the use of the DMS. Some questions, specifically for student participants, included: can you briefly walk me through your composing process

and explain what you did for this multimodal project? How did you feel about the space of the DMS? Did you work with a tutoring consultant, and can you describe how that session went? Was the tutor able to meet all of your needs and can you describe? Did you feel more engaged working on a multimodal project than a traditional textual essay? Did you build skills here that you think will be applicable elsewhere? (See Appendix for complete list of interview questions). Interviewing Zahrndt, faculty, and tutoring consultants was critical to informing my understanding of how student experiences within the DMS are shaped, though the emphasis of this project is on student voices and thus I limit my use of data from these participants. Because the tutoring consultants are undergraduate peer tutors, I incorporate some of their data in Chapter 2 when discussing tutor preparedness, as well as quotes from Zahrndt to further unpack DMS tutor training, other than this and Zahrndt's quote in the epigraph of this introduction, interview data from non-student participants will not be quoted in this study. The questions I asked student participants were intended to unpack their experiences composing in the DMS broadly, with special attention to their perceptions of the standard practices—did the spatial design incorporate flexibility and promote collaboration, were tutors prepared for their needs, and did they gain critical awareness and competencies through deep engagement—as well as seeking gaps in the practices. This approach is informed by Black feminism because, as Patricia Hill Collins (1990) asserts, Black feminist thought "calls into question the content of what currently passes as truth and simultaneously challenges the process of arriving at that truth" (p. 271). My project works towards enacting these values by acknowledging that standard practices developed without input from students are flawed and prioritizing the perspectives of marginalized first-generation

and post-traditional students to inform recommendations for adjusting those practices for inclusivity.

Participant Observation: Fostering Deep Connections

As the second method for this project, participant observation functions to exemplify feminist practices of creating knowledge alongside participants and producing knowledge that will work for those participants' interests. Guest et al. (2013) define participant observation as "discovering through immersion and participation the hows and whys of human behavior in a particular context" (p. 75). Because this study seeks to represent overlooked voices by offering first-generation and post-traditional students the chance to reflect on their experiences in the multiliteracy center, I recursively consider and navigate my role as researcher with ethical representation and accountability at the forefront of my mind. Furthermore, Black feminist theory as critical methodology guides this project in its privileging of knowledges that emerges through experiences to make multiple truths visible (Patterson et. al, 2016). Engaging as a participant observer fostered deep connections to my site and participants, laying the foundation for understanding what occurs in the DMS through experience. I conducted participant observation across three roles-–as faculty member, student, and future administrator. In the faculty role, I consulted with Zahrndt to incorporate digital media design instruction into my Spring 2022 English 306 Business Writing course. I engaged in the student role through scheduled tutoring consultations to gain experience in InDesign in the DMS to work on my own portfolio documents. Finally, I spent around 52 hours total in the suite observing from the positionality of an administrator as consultants worked with other students, as well. These meetings offered insight into the operations of the DMS from the view of a

typical user, which adds depth to my understanding of the data I gathered through student interviews. My participation at the site has informed how I interact with data, offered a glimpse into the environment, enabled me to get a feel for the questions I asked, provided a more intimate understanding of how the DMS works, and foregrounded the problems or challenges of data collection, all of which are benefits to participant observation as a method (Guest et al., 2013). Working in the DMS and becoming something of a "regular" there forged relationships and trust, yielding invaluable insight. These interactions deepened my understanding of what's occurring at the site and helped build relationships with the people in the DMS—whether staff or students—to foster reciprocity.

Putting Interview & Observation Together: Making Sense of the Data

In the next phase of the study, I mapped out and analyzed how students experienced the DMS's enactment of the three central standard practice claims defined in multiliteracy center scholarship. To do this, I coded for keywords exemplifying standard practices, such as "flexibility" and "collaboration" in the spatial design practice, or areas in participants' responses that pointed to other elements that might be connected to standard practices, but were not, such as "social access" for spatial design. This coding revealed larger thematic trends or patterns pointing to the efficacy of institutionalized standard practices within the site of the DMS, as well as areas where these practices might be expanded according to the needs and benefits elucidated by first-generation and/or post-traditional student participants. In addition to seeing what patterns came out of this data related to standard practices, I coded for students' emotional reactions (or affective responses) and plans for future engagement regarding the DMS. This information contributed to my understanding of other potential benefits of the suite, in

particular how it might function as a launchpad for transfer, resource awareness, and continued uptake of campus support resources more broadly. What follows are the specificities of my coding process and how the findings are assembled in each chapter.

Analytical Processing: Refining Insight from Data

I coded these interviews by utilizing ATLAS.ti software to compile the data, and I employed analytical techniques from Johnny Saldaña's (2013) *Coding Manual*, including memo writing to keep track of my coding choices and processes, including "how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts" in the data (p. 41). According to Saldaña, "[c]oding is not a precise science; it is primarily an interpretive act" (p. 4). As such, I initially looked for specific themes, shifting my focus as certain patterns appeared in the data, particularly as initial codes in the first cycle (exploratory method) of coding led to "subcodes" in the subsequent cycles of coding, and so on across six cycles of coding in total. I began first with broad exploratory descriptive coding to familiarize myself with my data, followed by a round of structural coding in an attempt to "gather topics lists or indexes of major categories or themes" (Saldana, 98), which led to building several categories: 1) NEW INFORMATION (applied 0 times); 2) CLAIMS (applied 54 times); 3) RECOMMENDATIONS (16); 4) TRANSFER (15); and 5) RESOURCES (48). These categories shaped how I approached and revised my research questions, with a note from my process memo on the second-round coding illustrating how the project began to develop: "The tension is (I think) particularly between recommendations/transfer/resources. Why?" From here, I began to develop specific codes for the categories I identified in structural coding.

In my third round of coding, I began reorganizing the above-stated categories. Because there were no codes in the NEW INFORMATION category, I deleted it. The CLAIMS category was broken down further into three organizing categories mirroring standard practices: spatial design, tutor interaction, and engagement. I also adjusted the RESOURCES category to SUPPORT RESOURCES to more accurately narrow the scope of resources central to analysis. In the subsequent two rounds of coding, I further refined my codes. Additionally, in the fifth round I used in vivo coding to sort through participant interviews to locate illustrative quotations while maintaining students' language directly and get a better sense of which data I might want to cite in the dissertation chapters, and coded along lines of gender to analyze whether or not there might be significant information at play in that area, though these only informed final analysis.

The sixth and final round of coding is where I coalesced what I had learned in the previous rounds, as well as two additional forays into coding the non-student participant interviews with Zahrndt and faculty, to inform the data analysis present in the following chapters. I used the following five code categories and subcodes: to track patterns within interview data under the SPATIAL DESIGN category, I used four codes—"flexible space" (applied 27 times), "longer sessions" (used 22 times), collaboration (applied 21 times), and "access" (used 19 times). For investigating the TUTOR PREPAREDNESS category, I used codes "tech support" (applied 20 times), "rhetorical feedback" (used 8 times), and "tutor expertise" (employed 29 times) to account for realigning expectations and the code "tutor expertise" (applied 29 times) to measure students' perceptions of tutors' capabilities. In the ENGAGEMENT category, there are two subcodes:

"long/deep" (used 30 times) to account for the amount and quality of time spent working and critical competency, which I initially coded separately then circled back to combine. Additionally, I coded another category, TRANSFER, and to catalog how participants conceived of transfer, I used codes "personal growth" (used 19 times) and "professionalization" (applied 12 times). Finally, in the category SUPPORT RESOURCES, I used the codes "awareness" (appearing 38 times) and "increased uptake" (used 25) to track how students spoke about campus support resources. This round of coding clarified tracking the efficacy of standard practices and began to reveal the potentials for identifying other challenges and benefits previously absent in literature, such as attention to the potentials for transfer and further engagement with support resources. This overview of coding introduces the categories and keywords discussed in each chapter, which I will define and unpack in more depth within the chapters themselves. In the following paragraphs, I outline how this study's codes informed each chapter's argument(s).

Overview of Chapters

In chapter two, I investigate the first standard practice claim about spatial design to test its efficacy to meet the needs of first-generation and post-traditional students composing in the DMS. I begin by unpacking scholarship addressing spatial design of multiliteracy centers, which promotes flexibility to meet the variety of composing needs that arise within centers and collaboration among diverse users within the space including students, consultants, small groups, faculty, and multiliteracy specialists (Inman, 2010). From this scholarship, I distilled the codes of "flexibility" and "collaboration" under the spatial design category. Collectively, I tracked students' experiences of spatial design

through their descriptions of how the DMS facilitated flexibly in accommodating the variety of their composing needs, collaboration amongst users, and the access the site provided students to both technologies and support services more broadly. Ultimately, the analysis led to my determination that an infrastructural, rather than merely spatial, design approach might more effectively encompass the variety of student needs multiliteracy centers must attend to, as it maintains an emphasis on flexibility while also expanding conceptions of collaboration across the support service ecology.

Chapter three considers the standard practice regarding tutor preparedness within the multiliteracy center. Multiliteracy center scholarship places technological proficiency (Sheridan, 2010a) at the top of tutoring consultant's training hierarchy, followed by the ability to fully comprehend the affordances and constraints of available technology resources coupled with an ability to facilitate use of these resources, and finally pedagogical literacy (Sheridan, 2010a). The emphasis within scholarship directed the development of the codes "tutor preparedness," "tech support," and "rhetorical feedback." To further inform how the DMS facilitates tutor training, I also included data from interviews with tutoring consultant participants and Zahrndt. I examined tutor training, students' perceptions of tutoring consultations, and my own pedagogically informed conceptions of the successes and shortcomings within both student and tutor participants' descriptions of consultations. The final conclusion based on analysis determined that the DMS's current training structures, as well as the prioritization of technological skill over pedagogical development within standard practice, are leaving tutoring consultants pedagogically underprepared to meet student needs in the multiliteracy center. Thus, a realignment to equally emphasize the significance of both

technological and pedagogical in preparing tutoring consultants for their roles within centers.

In Chapter four, I turn my attention to the claim that multiliteracy centers should foment deep engagement, as evidenced by students' ability to critically reflect upon and competently use the resources available to them (Cooper, 2010; Sheridan, 2010a). I argue that enhanced engagement is, in fact, a process that results in students attaining competence and critical awareness, which then builds towards transfer. The codes ultimately used in this chapter are "critical competency" and "transfer," with subcodes "personal" and "professionalization" under transfer. Analysis pointed to the fact that, while critical competence builds digital literacies, it is in fact the ability to transfer critical competencies that most impacts marginalized students' success, and therefore I argue that transfer should arise as a central feature emphasized in the standard practice concerning deep engagement.

In the conclusion chapter of this dissertation, I conduct a final round of data analysis regarding the support resources category mentioned above. I coded for both "resource awareness" and "resource uptake" to track whether or not students actually experienced these benefits, as identified in their interviews. The data speaks in the affirmative. Building upon the findings regarding the efficacy of standard practices, I assert that emphasizing awareness and uptake of resources is paramount. The expanded practices outlined here not only address access and support within the physical and pedagogical dimensions of multiliteracy centers but also emphasize the importance of facilitating students' engagement with available support services. By broadening the scope of resource awareness and uptake, multiliteracy centers can further facilitate the

success of marginalized students, providing them with the tools and support needed to navigate complex academic tasks and thrive in their educational endeavors. The correlation between broadened practices and heightened resource awareness highlights the intricate relationship between structural design, pedagogical assistance, and resource utilization in nurturing an inclusive and supportive learning atmosphere.

In sum, these methods allowed me to gain a more nuanced understanding of how first-generation and post-traditional college students experienced the enactment of standard practices developed within multiliteracy center studies. By putting this scholarship into conversation with research on marginalized students from student affairs and education, I was further able to determine suggested expansions of these practices to more adequately address the needs of marginalized students. These additions remain rooted in the original goals of the standard practice claims and are intended to appear as logical, achievable next steps in the evolution of multiliteracy center theory and practice. In considering how each practice might incrementally expand to more adequately address the needs of students on university campuses, I gained additional insight into other overarching benefits that multiliteracy centers might facilitate—that of bridging barriers for increased resource awareness and uptake across campus support ecologies. This connection underscores the significance of integrating these elements cohesively to ensure an environment where all learners feel valued and empowered to succeed. These discoveries collectively emphasize the critical need to rethink practices within multiliteracy centers, aiming for equal access, pedagogical excellence, and authentic involvement for every student. This research has implications for future studies within multiliteracy center studies, steering towards the goal of establishing environments that

promote inclusivity and academic achievement for every individual, irrespective of their backgrounds or identities.

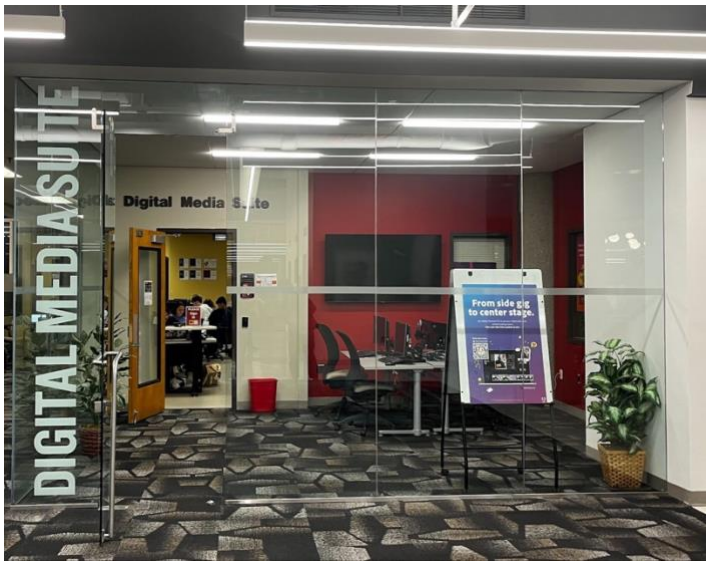
CHAPTER 2

DESIGNING THE DOJO: SHIFTING FROM SPACE TO INFRASTRUCTURE TO BETTER SUPPORT STUDENTS

"I find that it's easier for me to focus in a place where the…space is built for that task. It's easier for me to really focus on versus just sitting in my apartment."
—Chad, interview participant

Vignette

It's finals week in the Spring 2022 semester at the University of Louisville. I walk through the library common area bustling with students preparing for exams. To the left across the lobby, I see a crowded writing center with pairs of students seated at every table. To the right, I see the Digital Media Suite, UofL's multiliteracy center, and the view reflects quiet and calm.



When you first walk up to the DMS, you're faced with what students lovingly refer to as a "giant glass coffin." The outer room has two floor-to-ceiling glass walls, one housing the large, heavy door of the suite, which may or may not be open, depending on the day. This antechamber is small—around 8x6 feet–and of its two remaining walls, the right serves as entrance to

director Jason Zahrndt's office, while the rear wall abuts the audio recording room inside the suite itself. A half-circle table in this outer room is equipped with two Mac desktop computers, placed back-to-back to offer two distinct workspaces, each with a be-headphoned student working diligently, eyes glued to the monitor.

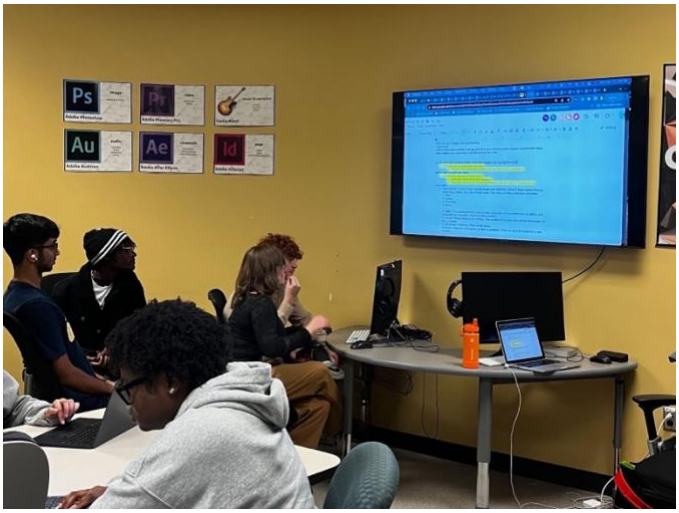
I move through this room to enter the second door —this one the standard university campus wooden door with a small glass window—which is located to the left of the computer station and propped open. The welcome desk awaits me upon entry, and I greet tutoring consultant Ashley as I scan the room. The interior suite is a long, narrow room. The left side wall has a line of large windows looking out into the REACH tutoring space housed beside the DMS in the library learning commons. The right side of the room houses two small closet-like rooms that were once copy rooms but have now been repurposed into audio and video record booths, respectively. The audio booth is closer to the door and has large windows, as well, but they're mostly covered with sound muting blankets to help keep the audio inside the booth; inside, there is a large desk housing a desktop computer and professional grade microphones. The video recording booth is a bit larger than the audio and houses a moveable table, several stools, and a backdrop stand with green, white, and black screens.

Within the room itself are 6 computer workstations —three of which are on half-circular tables with two computers back-to-back, as in the outer room. The other three workstations are single computers with double monitors. Each workstation has a set of professional-grade headphones plugged into jacks that support up to 8 sets of headphones for collaborative work. Two of them house Mac desktops, while the other four are PCs. In the center of the room is a large conference table with 8 chairs around it. The chairs—12 total in all—are nice, modern rolling office chairs with thick cushions and solid back support. Three large flatscreen TVs are mounted on the walls throughout the room and are screencast accessible through Solstice software, which is also used in UofL's newer tech-savvy classroom buildings. The walls are painted a bright yellow-gold that is somewhat intense under the glow of fluorescent lighting and adorned with large squares of sound insulating foam and posters advertising Adobe programs available for use.

This is perhaps the most crowded I've ever seen the DMS, which makes sense since most English faculty choose to assign multimodal projects at the end of the semester. Zahrndt reports that the majority of students coming into the DMS visit for support in composition courses. The room crackles with that slightly panicked, but exhilarated finals-crunch energy. There are students at 4 of the 6 computers working. Tutoring consultant Amaya rolls back and forth between the stations in her desk chair as needed, also answering questions across the room as they come up. There's a bustle and

rumble of conversation, but everyone keeps their voices down, as folks are recording in both booths.

Three students sit at the conference table on laptops—one of them is awaiting her turn in the video recording booth to work on her ASL final video, a transition which happens soon after I sit at the conference table. Velma goes into the video room, offers to help the student in there save her video, and then helps the waiting student set up to record her video. The other two students, who are sitting across from me and looking at a laptop together, are discussing how to manipulate an image. I ask what they're working on, and they show me the Photoshop image on the screen. One of the new tutors, Julia, walks up and starts asking them about how they used fading on the image—it turns out they're friends of hers, self-described "computer nerds" just hanging out until her shift is over. I ask if they learned how to use Photoshop in the DMS and if they're here often. "Nah, I learned all this stuff on my own. We're just here til class," he says.



One of the students working at a desktop station overhears us and asks which tool they were using. The student at the conference table gets up and shows him on the desktop. "What are you working on?" I ask him after he gets his mini lesson. "A video project for English class," he replies. He waves Amaya over and asks her what she thinks of his edited image. She zooms in close to reveal some areas he's missed with the fading tool, and he shouts out, laughing and working to clean up the image more neatly. "Would

you be interested in doing an interview with me about your experience working in here?" I ask him. "Yeah! I'd love to talk about this place—it's awesome. I'm Chad," he replies.

Introduction

The vignette and images above are meant to help readers develop a detailed image of the DMS that overtly distinguishes it from a writing center. As noted in the introduction, and throughout this dissertation more broadly, multiliteracy centers have developed out of writing centers, but are distinctly different entities. When Trimbur (2000) guessed that "writing centers will more and more define themselves as multiliteracy centers" capable of "working on everything from essays and project reports to PowerPoint™ presentations to web page and poster design" (p. 89), he didn't fully account for the infrastructural resources necessary to make that work happen. Infrastructure is defined by the *Oxford English Dictionary* (*OED*) as "a collective term for the subordinate parts of an undertaking; substructure, foundation." In terms of infrastructural resources in the multiliteracy center, this refers to nuts and bolts that make the aforementioned work possible—the computers, microphones, printers, video cameras etc. But infrastructure, in terms of media theory, can also be more broadly defined as "'large, force-amplifying systems that connect people and institutions across large scales of space and time'" (Edwards, 2002, p. 221; Edwards et al., 2009, p. 365, cited in Peters, 2015, p. 40). This references the *systems* in place that make spaces function—the fiber-optic cables, internet service, networks, software…the list can even transcend to take into consideration the social practices and culture that shape how people approach (or are allowed to approach) these systems. DeVoss, Cushman, and Grabill (2005) apply an infrastructural framework based on media theory "to support teaching students to compose with new media" in order to:

> account for any number ‘breakdowns’ (cognitive, rhetorical, procedural, technical, and so on), to establish the importance of communities of practice, and perhaps most important of all, to focus our attention on the presence and operations of standards and classifications, which lean heavily on all writing practices—and on new media practices in particular (p. 17).

A multiliteracy center's distinctive infrastructure extends beyond traditional writing centers, incorporating a multitude of tools, connectivity concerns, and diverse compositional modes, among other complex needs. As this chapter navigates the infrastructural intricacies, I reveal that the evolution into multiliteracy centers demands a holistic grasp of both tangible resources and the broader socio-cultural and systemic elements shaping these dynamic educational spaces.

Though infrastructure may be invisible to some students visiting a multiliteracy center to use technology—more on the ways these resources operate to support students facing issues of access later in the chapter—, it is central to the administrator directing the space. For them, infrastructure is as integral to operating a digital media center as the technologies, furniture, and tutoring consultants housed within it, especially since these are all elements making up the center’s infrastructure. Despite its vital importance, it usually goes unrecognized. However, as DeVoss, Cushman, and Grabill (2005) note, “these often invisible structures make possible and limit, shape and constrain, influence and penetrate all acts of composing new media” (p. 16). In fact, infrastructural design and its attendant elements are what shape students’ experiences and make up some of the most pressing concerns of establishing and maintaining a multiliteracy center. These places must be planned meticulously, from spatial blueprinting to mapping the flow of composing activities. Resources must be built for flexibility to meet diverse composing

needs and spaces must be set up to promote collaboration among both users and staff. Forging relationships across support services is also important to strengthening the resources available to students. All of these issues must be considered from the earliest planning stages. Multiliteracy center studies addresses these elements to varying degrees under the umbrella term "spatial design," which overtly focuses on the arranging of literal space within centers, but also takes into account the other elements noted above. I believe that infrastructural design is a more accurate term and will thus use it when making suggestions in this project, but I will use spatial design when referring to already-existing literature.

Spatial design arose as a central issue in early multiliteracy center scholarship because whether multiliteracy centers are developing from a writing center or are newly created as standalone digital media support sites, the needs of these spaces—technological, pedagogical, material, and functional—are quite disparate from those of writing centers. While writing center scholars had developed ideas about writing center design (Bishop, 1995; Carino, 2001; Ede, 1996; Elmborg, 2006; Harris, 2000; Lerner, 2003; McKinney, 2005), a design methodology for spaces dedicated to digital media and multimodal composing, such as multiliteracy centers, had yet to be created, according to Inman (2010). "The move to multiliteracy centers reflects not just a shift in focus and mission," he (2010) notes, "but also an opportunity to articulate center design strategies" to meet an assortment of contemporary composing and communication needs (p. 20). Without advanced plans at-the-ready, administrators could risk unpreparedness when opportunities, such as funding lines, become available. Designing multiliteracy centers is a complex undertaking because these spaces must attend to the variety of affordances available via infrastructural resources offering multiple modes of meaning-making, rather

than the more centralized mission of offering textual feedback, as writing centers do. This is no small task, but scholars have put forth valuable insights about multiliteracy center design that this chapter will test and expand upon.

In this chapter, I am testing **the first claim characterizing a "fully realized" multiliteracy center, which asserts that spatial design must support flexibility and promote collaboration** (Inman, 2001 & 2010; Gresham, 2010; Sheppard, 2014). While I will unpack the multiliteracy center scholarship from which I developed this claim in more detail in the literature review below, I must first address two of the key terms found within the claim: flexibility and collaboration. Flexibility is broadly defined as the "capability of being bent; pliancy" and "susceptibility of modification or alteration; capacity for ready adaptation to various purposes or conditions" (*OED*, 2023). In the case of multiliteracy center design, flexibility operates as an umbrella term covering everything from material resources to the soundproofing of audio booths to comfortable, moveable furniture. This means that spaces are made capable of adapting to the various needs of composers—from the material infrastructural needs of students without access to technologies, but also to the less tangible benefits such sites can offer, such as promoting play, encouraging trial and error, supporting long composing sessions, encouraging collaborative sharing of knowledge, etc. These ineffable elements tend to arise more readily from digital media and multimodal composing than they do from traditional text-based writing, and they contribute to a less formal, more welcoming environment, particularly for students reluctant to engage with support services.

The other key term located within this claim is collaboration, which is broadly defined as "united labor; co-operation," or as the action of two or more people working together to create something (*OED*, 2023). Though all scholars taking up spatial design

refer to collaboration in some context, I focus on Inman's (2010) more capacious use of the term, which includes: 1) cooperation between two people working within the center, whether that be two or more students working together on one project, peer tutors providing support to students working on projects, or even unplanned assistance and sharing of knowledge and/or resources between unfamiliar students who happen to be working in the center at any given time, and 2) collaboration via "relationships that exist and may be forged outside of a center…collaborative bridges with these talented neighbors [which] may lead to enhanced services in the center" (p. 26). While some may view the first version of Inman's collaboration as mere supportive interaction in many cases, I align with identifying any shared knowledge or work between two or more individuals within the multiliteracy center as collaborative. Additionally, like Inman, I recognize relationship-building across institutional sites—of support, such as libraries, writing centers, and tutoring services like UofL's Resources for Academic Achievement (REACH); or of academic disciplines, such as English, History, or Humanities departments—as collaboration. My embrace of what might be deemed a loose adaptation of the term stems from a willingness to interpret the interpersonal sharing of knowledge as potentially beneficial, even when it occurs unplanned or when advantages are not immediately apparent. Collaboration may happen when least expected, fleetingly, or unbidden, and its benefits may take time to reveal themselves; nevertheless, it can offer valuable learning experiences. Sites must be designed with these wide-ranging needs in mind from their very conception and administrators must recursively assess and modify to ensure centers are effectively meeting the demands of composers.

As noted in the introduction, this dissertation engages in the feminist practice of centering previously overlooked student perspectives to test the efficacy of the

established practices defined by multiliteracy center scholarship. Furthermore, this project's interview participants share experiences from their positions of marginalization as first-generation and/or post-traditional students, which illuminates issues—such as access, in the case of this chapter—that have not been formerly taken into consideration within multiliteracy center studies. Student voices entering into this conversation will inform theory and practice in multiliteracy center scholarship, which directly impacts the effectiveness of teaching and learning within these spaces. Their contributions ensure that the recommendations built from their vantage points are working towards support for *all* students.

While the emphasis on flexibility and collaboration in spatial design plays a crucial role in shaping various aspects of student experience within multiliteracy centers, **I contend that the current claim regarding spatial design falls short in addressing the diverse needs of the University of Louisville student population. A more comprehensive claim about the significance of design in multiliteracy centers would posit that infrastructural design must facilitate flexibility to cater to a range of composing needs and encourage collaboration, thereby ensuring access to institutional resources that contribute to student success.** Reframing the discussion from spatial to infrastructural design embraces a more capacious view of design, expanding conversations focused on space and tools to additionally include the planning, facilitation, and maintenance of relationships across the campus learning ecology of student support resources—which I will unpack further in the conclusion of this chapter. Additionally, by centering concerns about how centers might promote access, both to the material needs of digital media composing and the social needs of crossing the threshold to engage with support services, multiliteracy center studies can join larger conversations

about supporting non-dominant student populations and campus resource ecologies more broadly.

To explore these issues from the students' perspectives, during interviews I asked students about their responses to the DMS's spatial design, about how they felt in the space, whether or not they felt comfortable, whether or not they felt supported or encouraged to work with others collaboratively, and if the DMS had been able to meet all of their composing needs. What I did not expect were answers revealing anxiety about who possessed what resources or the ways the DMS made students aware of other support sites on campus. I followed these leads through probing and added relevant questions to my interview plans in order to investigate if the answers might be consistent across student participants—and they were, though I must acknowledge that my pool of eight students is a small one. Providing infrastructural resources as access to material and social needs for composing overcomes barriers to participation for students who may not be able to meet such needs on their own, especially to students from low-income backgrounds. Promoting resource awareness across campus support services is also vital for students. The multiliteracy center can fill this function, as they may be a lower stakes point of entry for students intimidated by such services—you only have to cross the threshold seeking help for the first time once, and other sites tend to be less daunting after you've done it already.

Upon further reflection, it tracks that students from non-dominant populations would offer perspectives on aspects of multiliteracy centers that were not addressed by existing scholarship, as multiliteracy center studies has relied upon the mythic figure of the "traditional" college student thus far when referencing students. But designing campus resources—whether spatial, pedagogical, curricular, or otherwise—with the

furthest reaches of marginalization in mind is ultimately good for *everyone*, as marginal positioning offers insight to both the margins and the center, while the privileged may not be attuned to oppressions and issues that do not exist outside of their centralized position (paraphrased in Walton, Moore, & Jones, 2019, pp. 83-84). As bell hooks (1984) points out, those with privilege control from the center, while those with less privilege observe from the perimeter—the marginalized exist as "part of the whole but outside the main body" (p. ix). There are important lessons to be learned from decentralized positions, such as those of the first-generation and post-traditional college students interviewed for this case study. Additionally, as noted in the introduction, with the demographic cliff breathing down institutions' necks and more non-dominant student populations arriving on campuses, retention and matriculation rates for at-risk students will need to rise and remain stable for universities to qualify as "successful." All to say that academics and institutions need to foreground the needs of these student populations more now than they ever have before, and my addition to this claim attends to those needs in part. As Rhetoric & Composition scholars seek to join in this vitally important conversation, one path forward lies in investigating how our field can contribute to promoting student success through already-present student support services within our purview, such as multiliteracy centers. Although it may be something of a coincidence that the DMS is run by an administrator with a master's degree in English, many multiliteracy centers across the country operate under English departments and scholars from our field are well-situated to manage these spaces. And according to the scholarship on multiliteracy centers, it all begins with the intent behind and implementation of successful infrastructural design.

Unpacking Spatial Design

Some of the most essential work within multiliteracy center studies coalesces around how these support spaces for multimodal composing might differentiate themselves from writing centers, and perhaps the most conspicuous way to do so is through what scholars refer to as spatial design. Because "both intuitively and intentionally, we know that spaces shape what happens in [them]," as Gresham (2010, p. 39) notes in her writing about Clemson's online Class of 1941 Studio for Student Communication, scholarship about spatial design focuses on more than just the organization of physical space within multiliteracy centers—it extends to encompass the ways that built environment impacts composing more broadly. Design influences everything from affective response to infrastructural capabilities to the kinds of interactions that are supported within the center, all of which shape the texts composed there. These considerations reveal a key difference between writing centers and multiliteracy centers, articulated by Gresham (2010): "No longer to be a space of tutoring (i.e., of changing, fixing, doctoring, and revising), Clemson's conception of the [multiliteracy] Studio was to be composing (active, doing, etc.)" (p. 49). This shift, she notes, will necessitate "a complex process of redefinition," (p. 49), where users must reconceive of the multiliteracy center from a place one visits to receive feedback, such as a writing center, to a space where work actively gets done. The needs of users also change with such a repositioning, expanding exponentially to include wide selections of tools and the facilities to support them, among many other things, but two key necessities arise that permeate multiliteracy center scholarship about design—flexibility and collaboration.

Only one year after Trimbur's (2000) prognosticating about the shift from writing to multiliteracy centers, Inman (2001) asked how writing centers could evolve to better

meet 21st century composing needs by promoting "engaged learning" through design that fosters "non-directive, collaborative pedagogy." The key markers of flexibility and collaboration are implicit here. Though Inman does not specifically call Furman University's Center for Collaborative Learning and Communication (CCLC) as a multiliteracy center, he does distinguish it from a writing center by referring to it as a site "specifically charged with promoting writing, communication, and technology excellence." This marks a pivot away from writing center scholarship towards providing guiding principles for designing technology-rich interdisciplinary spaces dedicated to engaged learning across the curriculum. Inman (2001) asserts that the responsibilities of teacher-scholars extend beyond designing pedagogies to include designing educational environments that support the learning process more broadly. Furthermore, he emphasizes interdisciplinarity in these endeavors by encouraging input from a wide pool of stakeholders—"as I use the term 'stakeholders,' I mean it in the broadest possible sense, including students, faculty, staff, colleagues from industry, and more" (p. 8)—in the design process and the building of partnerships with other campus support services—"engaged learning initiatives…must find collaborative relationships with neighbors in the institution and in the community. In this statement, I mean 'neighbor' to be both literal, as in nearby or proximate, and figurative, referencing those entities that share similar missions" (p. 9). By locating the multiliteracy center as part of an interconnected ecology of support services within the university, Inman seeks to capitalize on the diverse input and expertise of his "talented neighbors" and perhaps expand the center's reach, as well. This early call to move toward an engaged learning model in multiliteracy centers marks the complexity inherent in multimodal composing and is early evidence of Gresham's (2010) shift commented upon above.

Unlike the predominantly textually-oriented writing center, the multiliteracy center supports composing across all five modes of communication—linguistic, auditory, visual, gestural, and spatial—and must be equipped with flexibility to do so. This means that more than the basics of tables, chairs, and computers are provided, though they too are necessary. Not only must there be cameras and microphones, but they need to be housed within sound-proofed audio and video booths, and situated in a way that prevents noise overflow; multiple computers must be set up to provide access to the software that may be financially out of reach for students; printers of various sizes and capabilities (such as 3D printers) have to be set up in accessible but unobtrusive locations; and the furniture should be comfortable yet moveable so tutoring consultants and student can move about the space as needed. In response to these challenges, Inman (2010) presents a "zoning approach" to build a variety of dedicated spaces that users can move through within centers, which "will reflect the uses appropriate for the proposed center, as well as how those uses prove best enacted in the space available" (p. 28). However, the space overall must remain adaptable to a variety of users and needs within it, as well; users must be able to jump from space to space prepared to accommodate the various elements of composing. If these demands are not met, centers will not function optimally, and affordances will be limited. The sheer variety of options within multiliteracy centers are, in large part, what make them such versatile, accommodating resources for learning, but the breadth of options also makes them challenging to operate.

Woven into the zoning approach is also the essential requirement of supporting collaboration within the multiliteracy center. Sites where students can sit with tutoring consultants to learn new tools or receive feedback on their texts must be part of the dedicated spaces built into centers and must be given serious consideration. Research

from Berry and Diertele (2016) reveals that the shape of the tables—rounded instead of rectangle—impacts student perceptions of the multiliteracy center space as designed for collaboration, as it makes it easier for users (both consultants and students) to move around and view each other's work. Citing the work of Nowacek and del Sol (2004), they add that creating a dedicated space can help break down barriers to student engagement because once "participants became more comfortable with the space and truly understood its functionality…it could foster collaboration because they were no longer distracted by the material characteristics of the space" (Berry & Dieterle, 2016, p. 20). They advocate for using physical space to encourage students taking "agency over their own learning as well as opportunities to explore/express learning through non-traditional methods (i.e., breaking away from print literacy)" (20). The emphasis here is placed on a space that is easily adjustable to accommodate cooperation between composers, and support longer, less structured visits than those of typical writing center sessions. And while issues such as the shape of tables has also been covered in writing center scholarship (Berry & Dieterle, 2016; Inman, 2010), because multiliteracy centers must contend with a wider variety of composing modalities and tools, it is especially important that pedagogy is built into the architecture to fully allow the affordances of multimodal and digital media composing to be unlocked.

Flexibility and collaboration that are supported through spatial design also work together to lower stakes and barriers to engagement in multiliteracy centers. Because users are frequently moving about the space, interacting with different technologies and people, and testing out new technologies, multiliteracy centers tend to have a more relaxed atmosphere than many other support spaces on campuses. Although tutoring consultants are experts at some technologies, they rarely know *all* of the software that

centers support, and thus frequently must learn alongside students, destigmatizing the concept of an expert as a fount of knowledge and reframing the learning of new tools as something everyone in the center must do. This acclimates students to taking risks and using trial and error to solve problems because, as Sheppard (2014) points out, learning to use digital media tools cannot take place "in an isolated, artificial context. Instead, the extent of purposeful, hands-on activity and collaboration with others of varying levels of expertise holds important implications for the degree to which learners become competent in the literacies" they are learning (p. 260). Though all learning is best supported by such engagement, multimodal composing especially benefits from experimentation and trial and error. Sheridan (2016) emphasizes the importance of spaces that encourage play, collaborations arising from chance encounters, and long, even unscheduled and thus less formal, visits. These "unpredictable, contingent, chaotic" interactions between what he identifies as multiple networks within a larger learning ecology distribute the emergence of truly multimodal compositions—put together by the primary composer but influenced by many different people and other heterogeneous elements across time and place—and he points out that these spatially-supported elements should be integrated into multiliteracy centers' missions (Sheridan, 2016, p. 21). Furthermore, Gresham (2010) points out that her research "recognized that as students used the physical spaces for production and composition, they would change the processes and products with which they worked" (p. 42). In the end, these scholars articulate some of the specialized concerns of multimodal and digital media composing that set it apart from textual composing. Their work acknowledges the ways design impacts a space's use—from what tools are available to the kinds of interactions it

supports to the connections forged across resources within it—and asserts that spaces must be specially designed to support these uses.

Still other scholars note the ways that flexible design can foster or inhibit access/ibility for different users. The slash in access/ibility here indicates that I am referring both to access and accessibility, as design impacts both. Let's begin with access as the ability to enter or use a space, and accessibility, in the same vein, as making information, activities, and/or environments sensible, meaningful, and usable for as many people as possible, including those with disabilities (Hubrig, 2021). Inman (2010) ends his chapter with a nod to "a final, but vital, consideration [in designing within spaces] should be the accessibility of any zoned space for individuals with disabilities" (p. 27). Hitt (2012) takes his thoughts several steps further, pointing to the ways design—both spatial and pedagogical—can foster accessibility to "students' different physical abilities, modes of learning, types of knowledge, and literacies." Multiliteracy centers, she advocates, should be conceived to function as especially beneficial to students with diverse learning needs, as they offer a wider variety of modalities with which to communicate than more traditional textual compositions. Multimodal and digital media offer flexibility in composing, allowing for various communication styles to be taken up as seen fit by composers; the spaces supporting this type of composing must have a corresponding variety of tools available and these resources must be adaptable to meet needs as they arise. For these scholars—and indeed for accessibility scholars in general—, design should center accessibility from the start, as more than simply pursuing ADA compliance within physical space (Hubrig, 2021). Considerations of how disabled students might optimally access all resources, both physical and pedagogical, ought to be a top priority in center design, but they have often historically been relegated to the final,

lowest position on the hierarchy of importance, a problem which, unfortunately, is beyond the scope of this project to fully address.

What *is* within the purview of this project are issues of material and social access to resources, which have not been overtly addressed much in scholarship, but also emphasize the importance of flexibility within centers to engage often difficult to reach student populations. As noted in this chapter's introduction, for students from low-income backgrounds, multiliteracy centers may offer the main site of access, both social and material, to technology—from supplying a lower stakes entry point to support resources to basic computer access to providing more specialized technological equipment like cameras and/or advanced software. While some might dismiss lack of access to technology with a lightly uttered, "everyone has smartphones," Louisville Public Media reported in 2020 that research conducted by advocacy group Common Sense Media found that 27% of K-12 students in the state lacked access to devices such as laptops or tablets and 36% of the state did not have reliable access to internet connections. Nationwide, the study found 30% of students lacked internet access at home (Clark, 2020). Libraries on university campuses provide ample computer stations and many campuses provide low-income students in need with laptops, but basic technological instruction in how to use these tools is frequently not available on campuses. Bancroft (2016) argues that "the multiliteracy center is uniquely situated to facilitate digital literacy support as a safe space for all students to learn and access resources in a non-judgmental environment, which enables students to become more empowered communicators" (p. 47). She views basic digital literacy skills as simply another service in the diverse spectrum of resources multiliteracy centers provide and points to the relaxed atmosphere mentioned above as a key to unlocking participation

from student populations who might otherwise be intimidated by or embarrassed to reveal their shortcomings elsewhere. Much like Inman, she also encourages collaboration with "other student success services to track student technology requests" (p. 53), which would ideally reveal a clearer picture of students' technological needs across campus services. However, as Sheppard (2014) warns, "technological access alone does not automatically lead to development of purposeful, competent literacy practices" (257). Students must be taught the deeper implications of using technology, again realigning expectations within multiliteracy centers, this time from sites of mere tech support to sites of rhetorical engagement, which Chapter 2 will take up in more depth.

Multiliteracy centers must be prepared to accommodate a wide assortment of student populations who bring various learning styles, levels of experience, and cultural backgrounds along with them. To address these multiple demands, Sheppard (2014) applies a communities of practice theory to multiliteracy center design, emphasizing learning as a situated, social, and interactive practice occurring among participants of varying levels of expertise (Lave & Wenger, 1991; Pare, 2002; Wenger, 1999). This can be particularly helpful for supporting students from non-dominant populations because:

> communities of practice allow newcomers to develop competency in a given practice by engaging with more experienced members in increasingly central parts of a community's activities. Importantly much of the learning occurs not through formal instruction but through informal interaction where newcomers get necessary information in the context of activity as they need it. It is precisely this unstructured interaction among co-participants that allows learners to gradually join in the actual practices of a given field or activity, thus helping them master those ways of doing over time. (Sheppard, 2014, p. 260)

Such an approach makes entry socially more accessible for students with self-perceived low cultural capital, strips away some of the intimidation factors in seeking help by decentering expertise and adapts instruction to each individual's needs. Once the barrier for entry is lowered affectively, meaning they feel as if it has been lowered, and students feel comfortable crossing the threshold to access material needs, they are also more likely to access tutoring services because they've already overcome the initial intimidation factor. Sheppard (2014) asserts:

> An engaged community of practice is not just about the activities undertaken, but also about the social participation of the individuals involved...the concept of communities of practice is especially well suited to the development of environments devoted to new media literacies because it highlights the value of immersive activity done in collaboration with others of various backgrounds and experience levels. (p. 261)

All of the elements within a center impact engagement, from the (un)comfortable environment to the level of congeniality between people working within the space to the availability of equipment. Collaboration is viewed as a positive aspect of composing in centers, but these spaces must be flexibly designed to encourage and support the multiple possible collaborative formations, as well as functioning to sustain a suitable workplace for those who prefer to work alone. The data below will illustrate how these elements play out in real time at one particular site.

The Impact of Design

Because multiliteracy center studies' conversations surrounding spatial design have more or less overlooked student involvement within these spaces in general and neglected to take into account design accommodations for non-dominant students

specifically, this analysis seeks to make their perspectives legible. In order to recognize and honor the value of these students' perspectives, I employ a feminist approach of attending to representation and inclusion. My goal is to produce research that is *for* my participants, rather than simply *about* them. This shift away from research "subjects" towards research "participants" who make knowledge with the researcher is an oft-repeated cornerstone of feminist practice (Selfe & Hawisher, 2004; Reinharz et al., 1992), which reasserts the value of these students' lived experiences. My approach is also heavily informed by Black feminist scholarship. Patricia Hill Collins (1990) asserts that Black feminist epistemology centers four dimensions—lived experience as a criterion of meaning, the use of dialogue in assessing knowledge claims, an ethics of caring, and an ethic of personal accountability. By engaging in dialogue with these students to better understand their conceptions of the efficacy of best practices forwarded by scholarship and valuing their reflections, I center myself within a Black feminist epistemological stance. Extending the multiliteracy center conversation to include these underrepresented student voices is my attempt to enact an ethic of care and my recursive attention to my methodological standpoint, the well-being of my participants, and the capacity to reach additional "at-risk" students also reflects my commitment to personal accountability in this project.

As bell hooks (1984) points out, those with privilege control from the center, while those with less privilege observe from the margins—the marginalized exist as "part of the whole but outside the main body" (pg. ix). This marginal position offers insight to both the margins *and* the center because the privileged may not be attuned to oppressions and issues that do not exist outside of their centralized position (paraphrased in Walton,

Moore, & Jones, 2019, pgs. 83-84). The data analyzed below offers input from marginalized voices to this end.

Furthermore, first-generation and post-traditional college students offer a useful frame for uncovering additional student needs not yet accounted for by multiliteracy center scholarship. For example, Edelman (2023) notes that first-generation college students are more likely to feel out of place and unable to identify the "hidden curriculum" of implicit campus norms and knowledge needed to navigate campus life. In response, she advocates for creating "spaces of belonging" on campuses, or places designed specifically for first-generation students where they can find a sense of community and begin to accrue the cultural capital, they often perceive themselves as lacking. Dumais and Ward (2010) explain that the use of the term "cultural capital" in qualitative studies arises from Bordieu's (1972) theory but tweaks his definition from "participation in appreciation of high culture" to focus on "individuals' strategic interactions with important gatekeepers, such as teachers or school administrators" (p. 246). In this use, cultural capital can simultaneously function as a hindrance to institutional access (when it is lacking) and a potential vehicle for upward mobility (when it is achieved). While multiliteracy centers cannot respond directly to Edelman's (2023) call for spaces of belonging, conversations about spatial design often include attention to fostering welcoming atmospheres, which can offer an entry point for accessing cultural capital. This suggests that scholarship discussing design is often about more than just physical and digital space, begging the question—what if design can track to the social, as well? Rhetoric and composition scholars come to this conversation via the study of ambient rhetorics, where Rickert (2013) asserts that environments, particularly those that are technologically enhanced, can "transform who we are in relation to them" (p. 70). Put

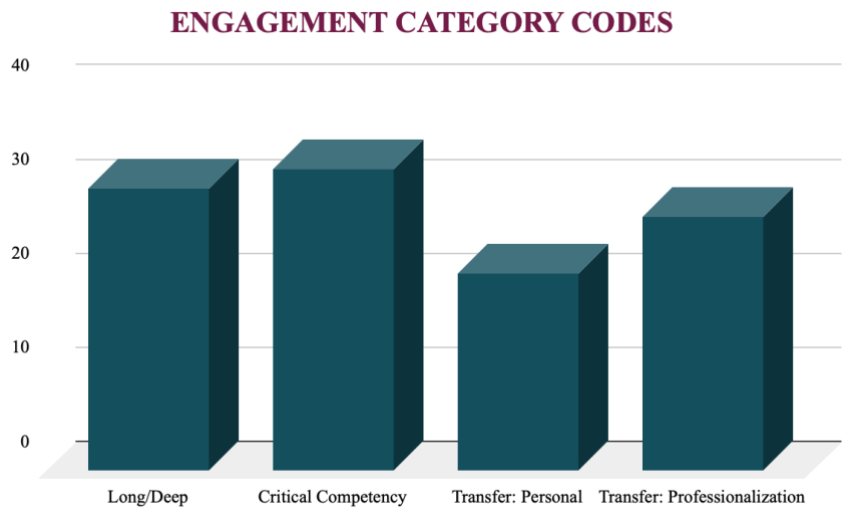
simply, this acknowledges that settings influence the ideas, approaches, and methods under consideration within them, especially when it comes to creative processes. This is more than simply space—it refers to an atmosphere exuding inspiration, or how being in a particular setting can make you *want* to create (Rickert, 2013). These are sites where students feel comfortable learning. Universities seeking strategies to engage students in the social action of learning must provide them with the spaces for conducting these actions.

To investigate student perceptions of how spatial design impacted their experiences in the DMS, I interviewed participants about a variety of design elements, their responses to them, and how these responses influenced their use of services. The questions asked covered whether their affective responses were positive or negative; if the elements within and the physical space itself promoted or hindered collaboration; whether or not they perceived the center as flexible and capable of meeting their needs; and whether the previously noted aspects of design affected their level of engagement and the amount of time they spent in the space. Additionally, I questioned students about their use of the DMS's website, as I considered this digital space another intentionally designed aspect of the center.

Interview Participant Information							
Name	**First-Gen**	**Post-Trad**	**Undergrad Student**	**Grad Student**	**Tutor**	**Class Visit to DMS**	**DMS Presentation in Class**
Chad	X	X	X				X
Diego	X		X			X	
Pat	X		X			X	
Raven	X	X	X				X
Ronan	X		X				

Sally	X		X			X	
Velma			X		X		
Young-Sook		X		X			

I will be highlighting data from interviews with eight student participants, who self-identified in the following ways: one student is a post-traditional Korean international graduate student earning an MFA in painting after working for several years as a professional artist (Young-Sook); two students are post-traditional first-generation undergraduate students in their 30s returning to finish degrees (Raven and Chad); one student previously utilized DMS services before becoming a tutoring consultant (Velma); and the four remaining students are first-generation undergraduate students (Pat, Diego, Sally, and Ronan). All besides Young-Sook and Velma were introduced to the DMS through courses that either recommended the services (Ronan), visited the space as a class (Pat, Diego, and Sally) or had Zahrndt visit their classroom for a presentation (Raven and Chad). This diverse group of participants represents the variety of backgrounds that can be found across UofL's campus and thus offers an array of perspectives. While all students identified as outside of the mythic "traditional" student demographic, they showcase the heterogeneity of non-dominant student populations. One thing that did unite this group was acknowledgment that the DMS offered access to resources—whether material or human—that these students lacked in their lives outside of the UofL campus.



I coded the "SPATIAL DESIGN" category 74 times in student interviews. There are five subcodes in that category: "affect: positive" assigned 33 times; "affect: negative" assigned 17 times; "collaboration" assigned 21 times; "flexible space" assigned 27 times; and "longer sessions" assigned 22 times. I will unpack these in more detail below. None of the undergraduate student participants engaged with the website or used the online tutorial provided there, which led me to drop the interview questions about the digital space of the site and thus no codes were assigned for that area.

While I intended to delve into the digital space of the DMS's online resources, the data gathered here about web use was not a rich site for exploration, despite Zahrndt reporting an increase in the site's traffic in the 2021-22 academic year. However, in this study, 6 out of 8 student participants did not visit the website or access online tutorials and one of the 2 two who did view them only as supplemental to their in-person visits to the suite. This yields a sort of conundrum—if site traffic is increasing, doesn't that indicate that more students are using online tutorials? Shouldn't that increase be reflected in the interview data? Perhaps the fact that 6 of the 8 participants in this study first learned about or visited the DMS through class has predisposed these students towards

in-person meetings. It is difficult to say without additional data, but one thing is clear—these students opted for in-person services in the midst of a population slump on campus. Zahrndt pointed out that the university experienced a decreased number of students on campus across the board in 2021-22, referencing the lack of students using the Student Activities Center, the Belknap Academic Building, and even the library. And though it was initially disappointing that my participants did not have much to say about the DMS as a digital space—and time constraints prohibited me from seeking online DMS user participants—, Zahrndt's immediate connection to other campus resources has led to an exciting and unexpected side street along the avenue of scholarship on spatial design's connection to collaboration: the interdisciplinary collaborative relationships with the "talented neighbors [that] may lead to enhanced services in the center" (Inman, 2010). This unforeseen route opened up new conceptions of design for me, which I will unpack in depth within the conclusion of this chapter, but first I must attend to examining whether or not students perceive flexibility and collaboration as beneficial elements of spatial design.

Flexibility

While discussions of spatial design might focus on design across the institution, design within the confines of the MLC space itself, or spatial design as it supports pedagogy, all aspects return to one key element: flexibility. As noted above, flexibility here refers to a site's ability to meet the needs of composers—this can mean accommodating a variety of individual learning preferences, attending to the tangible requirements of composing (such as hosting the headphones, microphones, and proper software for editing a podcast, for example), or even maintaining hours that are convenient for students enrolled full-time, among others. The capability for modification,

indeed the expectation that students will move things around and make themselves comfortable within the center, make it a welcoming site on campus ready to accommodate differences. As Hitt (2012) notes, adjustable elements such as "mobile furniture, technologies, houseplants, windows, and wall decor work to create an environment that is accessible, encouraging students to learn and compose in the ways that most benefit them." Her use of "encouraging" here is especially significant, particularly as it references Rickert's (2013) ambient rhetorical work that explains that "before symbolic communication, there is affect, which is essential in the modulation of responses among people" (p. 58). Part of what the multiliteracy center's flexibility does is contribute to a welcoming atmosphere of lower stakes—if you're facing a challenge with composing, this space has the resources to address it, and you are welcome to simply show up and take as long as you need to work on it. It is not unusual to make oneself comfortable in a multiliteracy center, whether that means gathering a variety of tech tools necessary for achieving a creative vision or preparing to hunker down for a marathon editing session. The variety of composing options dictate the multifaceted ways the space can be used. To track patterns of flexibility within interview data under the SPATIAL DESIGN category, I used two codes—flexible space (27) and longer sessions (22)—to get at both physical and temporal flexibility.

The code "flexible space" was assigned when student participants indicated they felt the DMS accommodated their own personal, specific learning needs as composers. For Raven, that meant a place offering "peace and quiet" where she could get work done and have access to the individual attention not available in the classroom. "It's calm, you don't have no distractions…it was comfortable because at the time, it was just me and [the tutoring consultant] there…You definitely get that one-on-one time that you need to

concentrate on whatever you focused on." Chad also appreciated a space "where that space is built for that task," noting that it helps keep him focused on his work. He explains:

> I do martial arts—I'm into Brazilian Jiu Jitsu training, and you're just not going to push the same if you're training in your living room. When you're in a dojo, this is what it's here for, we're here to do this thing, and this is what these places do…this's like a dojo, right, of digital media. And I come in…I'm like, this is a dojo for that. And so when I come into a place, I'm used to being in that mindset of, I'm here, I put everything else down at the door, and I'm here. I'm here to do this one thing.

While Chad appreciates the space designed "to do this one thing," he's really referring to composing digital media and thus is simplifying the wide variety of ways to "do the thing." But again, the diversity of options available is its own draw, as described by Ronan. "For this one [project in History]," he explains,

> I did a more creative thing. It was like 20 minutes long, I had a lot of skits and such…I brought in people from outside of the class [to] play characters…I used the green screen and… more editing, as opposed to a single camera… [it was] a more rigorous, multiple months long, scripted process.

Ronan took advantage of a wide array of tools—cameras, mics, screens, editing software—provided by the DMS. While the library itself offers plenty of quiet study spaces, these students point to the resources located specifically within the DMS as additional draws—from tutoring consultants to the variety of technology tools to a more focused environment. Particularly important here is to note that these students expressed

quite disparate requirements, but the versatility of the DMS allowed for accommodating them all.

Another important element of design that promotes flexibility can be found in the intentional curation of furniture within the multiliteracy center. The comfort, moveability, and function of furniture is examined in depth by scholars (Inman, 2001 & 2010; Sheridan, 2010 & 2016; Berry & Dieterle, 2016), and students at the DMS acknowledge that it did, in fact, contribute to their experiences. “Even like the chairs—there were no hard chairs that were like, ‘Oh, I'm ready to go.’ It made you want to sit and get what you need done,” Raven notes. Chad agrees that “the chairs are nice,” and adds:

> and like the layout is sort of circular. So, you have this table in the middle…so you can kind of hang out or if you need to focus, you can be against the wall…there's all the computers against the wall so, you know, you're in your little pod and you can just focus on your project.

These students intuitively understood the intent behind the elements within the space. The computer banks, conference table, and comfortable chairs were all chosen specifically to support composing sessions that include both group and solo work. The chairs in the DMS all have wheels to make it easy to navigate between independent and collaborative workstations. Even the size of the half-circle computer pods have been considered—they are large enough to accommodate more than one person so that even individual composers still have enough space at their stations to have a tutor drop in beside them for a consultation. Furniture choices do a lot of work in promoting collaboration, which overlaps here with flexibility and will be analyzed next in this chapter. But first, let’s take time to consider how design shapes temporal flexibility.

Temporal flexibility was coded as “longer sessions" to track and account for any instances where students referred to design elements impacting the length of their stay. Because time is less structured in multiliteracy centers than it is in other support services, such as writing centers, students have more freedom to come and go, as well as remain for longer composing periods. Students are less bound to scheduling their time in the multiliteracy center, and most students prefer dropping in to making an appointment. Consultations do not conclude in as formal a manner as in a writing center because students frequently remain at a workstation composing or editing after working with a tutor. In fact, because the center is used less as a place to bring products for feedback and more as a site for active composing and editing work, visits are less formal in terms of reserving time/space, checking in/out, and the frequency of visits—many students report dropping in to work for several consecutive days, or even multiple times for quick sessions within one day.

Ronan reported spending 2-3 hours a day on his project over the course of a few weeks, working both alone or with collaborators at different times, and this length of time appeared in other interviews, as well. Pat and Diego noted that it took about three hours total for their collaborative podcasting project, with an hour of script writing done beforehand, two visits to the audio booth for recording, and about half an hour of editing at the computer station in the DMS. This adaptability to accommodate the time required to move through the many stages of multimodal composing promotes the kind of active learning, trial-and-error composing, and play that scholars note is critical for a deep understanding of multimodal communication (Sheridan, 2016). In fact, Chad referred to this specifically in his interview, referring to himself as “a hands-on dude” in terms of learning style and explaining that “let[ting students] try to use [software] a little bit in the

beginning, before we start [working on assignments], to just play around with it first…if I get to play around with something first, then I get a demo [on how to use it], I'm more likely to get it." This style of learning is beneficial for Korean graduate student Young-Sook, as well. The only student who used the DMS's online tutorials, she explains her learning process thusly: "Every Adobe program has a tutorial and then I just watch it at home and just first watch the video. And then I go to the DMS and then I just want to practice with someone in person." For her, learning the basics on her own via tutorial and then coming in consistently a few times a week for practical feedback as she composes playful images to develop her skills is the most helpful process. The DMS accommodates her needs by supporting recurring appointments, allowing her to drop in between classes without scheduling to keep practicing whenever she has time, and providing her with large desktop monitors to better view her work. By maintaining a welcoming environment, the space gives students the freedom to come and go as suits them, lowers stakes in the composing process so that students are less intimidated by failure as they try new technologies, and makes space for them to engage in ways that best support their learning styles. All of these elements are also vitally interwoven with the other target of support via spatial design: collaboration.

Collaboration

The other core tenant of spatial design, as defined by multiliteracy center scholarship, is for spaces to be built with the intent of accommodating collaboration. Again, this conception of collaboration encompasses work done between two or more people, whether that means tutoring consultants and students working together, or peer-to-peer support amongst friends or strangers, or group projects where co-composing takes place. As Sheridan (2016) puts it:

> One great hope for [multiliteracy] spaces is that they will engender social interaction, including conversation, collaboration, and chance encounters (see Crook and Mitchell 2012; Hall 2010; JISC 2006; Oblinger 2006; Thomas 2010) ... If learning is or should be a collaborative activity, for instance, we need spaces that can accommodate collaboration…If we design and build collaborative spaces, students will engage in more collaborative learning activities. (pg. 11)

While previous administrators had little oversight over the physical design of the space—the DMS is located in what was once a copy and print room in the library, after all—the design *within* the space strives to support collaboration. Under the SPATIAL DESIGN category, I assigned the code "collaboration" 21 times and at least once for every student participant interviewed. All students acknowledge collaboration as a positive element in their learning to some extent, and seven of the eight participants interviewed pointed to the DMS as specifically facilitating collaboration.

The first level of collaboration centers promote is between tutoring consultants and students seeking support. This interaction is at the forefront of what centers are designed to do and Berry and Diertele (2016) found in their research that what might seem like minor choices, for example the shape of the tables—rounded instead of rectangle—, impacted perceptions of spaces as designed for collaboration by making it easier for users (both consultants and students) to move around and view each other's work. All three student participants who worked closely with consultants spoke with confidence and a heightened sense of critical awareness about their time spent in the DMS, reflecting on how the space encouraged their consultations. Young-Sook explains how she uses the space both collaboratively with tutoring consultants and to work alone: "For me, I was trying to learn [Photoshop] and that's why Dahlia was teaching me one-

on-one. And then I was like, 'I wish to have a room' and then I can do more focused [work] and then [get] better." Her preferred learning style for creating digital art in Photoshop moves from solo work to collaborative problem-solving and back to solo learning, all of which the DMS is able to accommodate. For Raven, the DMS consultant she worked with helped shift her outlook on her project from negative to positive, a feat that might not have occurred outside of a space prepared to level the playing field by having students sit beside consultants:

> She (the tutoring consultant) was very knowledgeable because when I first sat down, like, I mean, I was clueless on how to work Adobe. I was like, 'What my teacher said is: design a web page,' but…like, I don't even know what she's talking about…So once I sat down, she said, 'Well, don't be frustrated…And she walked me through, step by step…I was excited.

Raven walks us through a transition in her attitude from one of frustration and resistance to excitement and pride in her work. The fact that this interaction could so alter her outlook clearly highlights the good work of the consultant, which will be investigated in more depth in Chapter 2 but make no mistake—this space was planned to facilitate these types of exchanges, with rolling chairs and half-circle tables to allow consultants to move easily between and alongside students. Both of these instances exhibit flexible design elements that enable easier access to collaboration with tutoring consultants.

The other arm of collaboration that multiliteracy centers are designed for is that between peers—and in the case of this project, that can mean via group projects (assigned or voluntary) or between random visitors. This second type of interaction, where strangers meet in the multiliteracy center and voluntarily begin sharing information and seeking feedback, is a bit of a unicorn for educators—it's what we hope for, but rarely

expect to see. However, multiliteracy centers are distinctly situated to promote this type of interaction due to all of the spatial design elements explored here and this form of collaboration *does* happen, if a bit more rarely than most of us would like. Of the eight student participants interviewed, only Chad connected with other random student visitors in the DMS, but he found that connection invigorating. When asked if he had collaborated with anyone else in the DMS, he replied:

> Yeah, well, I haven't, other than with Amaya and a couple of the students in there…you can kind of, if you're against a wall, and the chairs roll, so you can roll over and ask, 'Hey, man,' like I did. 'Like, how did you do that? Did you cut that?' And, you know, bug somebody, roll back…. So, I mean, yeah.

Here we see Chad essentially talking himself into understanding that he *did* collaborate in the DMS—he rolled over to an unknown peer (who was not a participant in this study) after seeing him show the tutoring consultant Amaya some interesting editing trick, asked him how to do it, got a brief verbal lesson, and took that knowledge back to implement into his own project. Even his asking for instruction on how to do something offers an amount of feedback to the other student—it is confirmation that the editing trick *is* in fact interesting, is worthy of showing Amaya, and is a strong addition to his composition. While I acknowledge that perceiving this interaction as collaboration is a generous notion of collaborative effort, these students did cooperate and work alongside one another, sharing information that informed and shaped their composing.

Peer collaboration on group projects is a bit more of a straightforward account of the term and it is through these reflections on spatial support that interview data began to surprise me. This form of co-labor with partners often has the ability to excite students and foment deeper engagement on course projects. As Ronan puts it,

> Creative freedom…I guess, it depends on your major and your courses you take, but history felt a little bit limiting in that regard. That's just the trope of…[the] 'you read a lot, and you write a lot' major. So, it felt nice. I mean, creative freedom to be like, you know, [to work with] some peers. It's like, let's work on this and just make something interesting with these resources we have.

He composed multiple projects for history courses over the years; some individual undertakings, and others of a larger scale previously described in this chapter. The DMS hosted him and his collaborators for writing, recording, and editing sessions, providing him with the tools to make his "interesting" approaches to history a reality. Similarly, reflecting on his work with podcast partner Diego, interview participant Pat notes that he viewed the DMS as

> a welcoming space for anyone to come in, and work on that kind of stuff. Which is really nice, especially when you're doing collaborative projects like this, because it gives you a good space for both people to meet together and be equal on participating in stuff like this.

Again, we see students referencing the laid-back environment as welcoming and here the beginning of surprising data begins to come to the surface. None of the scholarship in multiliteracy center studies spends time considering the site as a space for students to meet on equal ground, but scholars have only considered students along the lines of "traditional" demographics, which read socioeconomic privilege.

Why Aren't Flexibility and Collaboration Enough?

Scholarship in multiliteracy center studies pays little heed to student markers of difference when considering spatial design, but for the marginalized—whether socioeconomically, racially, gendered, disability, or otherwise—it can be a central issue

of concern, especially as it intersects with access. To clarify, this use of access refers to "the power, opportunity, permission, or right to come near or into contact with someone or something" (*OED*, 2023). Note here that the use of "power" and "right" in this definition indicates that access is imbricated in hierarchies of power differentials, which reflect marginalized students' placement at the bottom of campus hierarchies—those with the least amount of power also often possess the least amount of access. As Kursav et al. (2022) remind us,

> it is important to note here that race, social class, and other identity characteristics are not abstract structural determinants. Rather, each student occupies a certain position within multiple overlapping social systems (e.g., the system of social class and the system of racism), and it is by virtue of being situated within these systems that students are structurally impacted by these factors. (p. 43)

By focusing concerns of spatial design on the needs of the generic idea of "traditional" students, scholars have failed to take into consideration what those students possess that non-traditional students are more likely to lack—the material and social components necessary for collaboration. Students from low-income or under-resourced backgrounds may not have had access not only to technology, but also to tutoring support. They may have negative views about seeking help or admitting weakness because they are in a setting alongside more privileged students who they feel might judge them (Bassett, 2021). There are many reasons that folks have not found material and/or social access to support and it would be impossible to attempt to foresee all of them, but some attention is warranted, particularly as student populations continue to diversify. So while this absence of attention within scholarship is perhaps due to a hierarchy of concerns addressed in the literature—scholars can only address so much and multiliteracy center studies is a

somewhat recent undertaking—it also stems from resting on an assumption that the preponderance of students on campus are from the mythic "traditional" demographic, which reports show is actually on the decline (Neitzel, 2022).

In fact, concerns of access, class, and computers—often discussed as the "digital divide"—have preoccupied Rhetoric & Composition scholars since at least the 1990s. Grabill asserted in 2003 that "taken together, income and education form the foundation for a profile of those who fall into subordinate class positions with respect to access to computer technologies and institutions that require access (e.g., 'good' schools and jobs)" (p. 459-460). While it may no longer popularly be referred to as the "digital divide," lack of access to technology is still a vitally important issue, especially for those from marginalized communities such as people of color or those from rural areas. In fact, the National Skills Coalition (2023) reports that 92% of jobs require "digital skills," while one-third of workers don't possess them, with lack of access "disproportionately impact[ing] workers of color, low-income individuals, and rural residents, due to historic underinvestment and structural inequities." Why, then, are these issues largely overlooked by multiliteracy center studies? The knowledge that I needed digital literacy skills was certainly part of my inspiration for wandering into a multiliteracy center as a master's student from a rural farming community who had never had the opportunity to engage with such advanced technologies. This question of access, both material and social, was also a central driver in the line of questioning that led me to a PhD program and this project in the first place. But somewhere along the journey, as I became immersed in academic scholarship, I lost my way and access transitioned from guiding core questions to simply becoming a feature of my research participants. My inattention

to such an important aspect of technological engagement and experience would not stand for long, however.

Access is Both Material and Social

The wonderful thing about my interview participants is that they reminded me of who I was at the outset of my educational journey, reasserted the importance of taking questions of access seriously, and pushed me to reiterate material and social access as principal elements of infrastructural design. Though I did not initially code for concerns of access, I did ask participants whether or not they had already been familiar with the technology and software available in the DMS. Because I identified a distinct pattern of unfamiliarity due to a dearth of available technology in their responses during data analysis, I went back and assigned codes for "access" under the SPATIAL DESIGN category, identifying references to access 19 times.

The intertwining of material and social access issues in multiliteracy centers, often overlooked by scholarship, reveals the complex connections between physical resources and social dynamics, shaping the overall accessibility of these educational spaces. Pat is the participant who initially piqued my interest in this area because the second half of his comment about working collaboratively cited above continues thusly:

> I think part of it is like, specifically here, it's an opening because…in another scenario where we had different partners, one person might have actual good recording software and stuff for that, like good mics and stuff, [and] the other person might not. And then you'd be put in a situation where either your project would be all off because one person would sound worse than the other, or you'd have to, like, do something like go over to that person's house, which is kind of weird and uncomfortable. But here, it's like a neutral space, sort of.

Pat acknowledges the importance of access to materials such as microphones and recording software, making reference to potential discomfort that could arise when access inequality becomes evident. But it isn't only access to tools—Pat also expresses social anxiety about the concerns of people visiting one another's homes. This tracks with research on low income first-gen students (LIFG), as reported by Bassett (2021), who writes, "LIFG students arrive at college with a more independent and isolationist habitus" (p. 33). While Pat did not self-identify as a low-income student, he did identify as first-generation, and his response reveals the thought processes behind one example of an "independent and isolationist habitus." Independence may carry positive associations, but how can we know whether it is confidence or fear that guides a student's decision to work independently? Isolationism is the negative impact of going it alone, but is it fair to level this term at students whose motivations we do not know? The material and social are tightly interwoven in Pat's reflections, though his response does make clear the importance of emotional affect in students' decision-making processes. Scholars would do well to consider the underlying intricate interplay between physical resources and social dynamics, which significantly influences the overall accessibility of these educational spaces.

A vital contributor to marginalized student success is the development of social access, which may ultimately facilitate their engagement with campus support services. Marginalized students feel their differences on campus; they intuit the disadvantages they face, whether or not they can perceive them directly. For many students, this negative affect ripples out to impact their desire to join communities, their willingness to engage with others, and their inclination to seek help, preventing them from participating in the kinds of social activities that are linked to student success (Engle & Tinto, 2008). Basset

(2021) explains that there are "cultural and structural forces that make asking for help a high-stakes and emotionally laden process for LIFG [low income first-generation] students" (p. 32). Yet another challenge arises simply from a lack of awareness of available support. For those from under-funded, under-resourced educational backgrounds, the concept of free services such as library research assistance or tutoring consultations may be unfamiliar. These points of tension are enough to discourage students from crossing the threshold of campus resource centers, and "in an era of widening income and achievement inequality, that the group of students for whom higher education holds the greatest promise of economic and social mobility are the least likely to graduate is a serious concern" (Bassett, 2021, p. 19). With the demographic cliff looming, when marginalized students will make up larger percentages of enrollments, a lack of attention to what these groups need for retention and matriculation simply will not fly—universities *must* find ways to reach these students. Multiliteracy centers are equipped to aid in this mandate by creating opportunities to gain social access to support services because they offer low barriers for entry.

Because they are designed to foster welcoming, laid-back environments, multiliteracy centers offer a low-stakes point of entry for students who might otherwise be reluctant to engage with support services. This reticence around seeking help can often arise, according to Bassett (2021), because:

> for students who entered college with negative mentalities about seeking help, asking for help involved a double exposure: admitting weakness and revealing a potentially stigmatizing academic or life situation. In order to gain the intended benefits of the programs they joined, they had to first build trusting relationships with program staff. (p. 33)

An example of this negative outlook surfaced in my interview with Raven, who reflected that "at first, I was like, 'Man, I'm not going to this, like people gonna think I'm dumb if I go get a tutor.'" However, after crossing the threshold, her opinion shifted: "It was very welcoming…I mean, once I started using it, I was like, 'Okay, it's not that I'm dumb. This person is basically walking me through, step by step.'" Here, Raven makes a 180-degree pivot from a negative attitude about seeking help to a positive one, which ideally will lead to her continued use of tutoring services. Her experience reflects how important environment and interaction are to students' perspectives—once she arrived and felt welcome, space was opened up for her to realize that tutoring support did not actually carry the stigma she initially thought it would, and her attitude to taking advantage of the service shifted. Engle and Tinto (2008) note that accessing "the academic and social experiences…such as studying in groups, interacting with faculty and other students, participating in extracurricular activities, and using support services' (3)" foster success in college—this change in attitude has the potential to affect the rest of her college experience. The relaxed atmosphere lowers the bar for students, which might be a tipping point between accessing services or choosing not to.

Still other students acknowledge the impact of accessing the multiliteracy center beyond the scope of their coursework, offering prognostications of future use and evidence that material/social access has wide-reaching implications. In his interview, Ronan explicitly refers back to lack of access in his previous education, stating:

> Basically, because my high school had nothing like this, like, we didn't really have any digital classes or anything. So, when I came to college, and learned I could do this, and I was like, 'Oh, this is really cool. Like, this is freely available.' Yeah, it was a cool feeling.

Working with these technologies ultimately ended up altering Ronan's professional course, as well. He described his goals as shifting from the "read a lot / write a lot" history major to a skilled digital composer who hopes to challenge "traditional academic ways of portraying history" to make it more "accessible in a non-academic jargony context." Chad also foresees larger benefits, for both him and the community of his band, in continuing to visit the DMS, noting:

> So, it's funny. Yeah. I was already telling Pearson, you know, my best friend [and the] musician I was talking about. I was like, 'I've learned how to do some of this. Now, this is going to really help with when we go to make our music videos, if not even our music videos, it's going to help us get our demo stuff together. And different things we may need to do for our music projects and things, even if it's like a trailer or something that we put together. I've got a little experience in this now.' And I was sharing it with him. So, we're both going to kind of learn, continue to learn.

He reflected that he had never really considered digital media composing as useful for a musician, but working in the DMS for an English class led him to think of all the things he could create to promote his band and their work. Having access to technologies and the support system to learn how to use them altered these students' paths at UofL and beyond, potentially in their future professional directions, as well.

Moving away from assumptions that all students have laptops or even access to the internet, or that students will easily identify and take advantage of support are necessary as campus demographics widen. Providing these resources to students who need them—whether because they've never used a tutoring center, or their technology is old, or they don't have internet in their homes, or simply because they cannot afford an

advanced digital camera or microphone—must be a vital priority for multiliteracy centers. When the barriers to resources, both material and social, are addressed and access is made readily available for students who lack it, they have the opportunity to join communities of practice that can be foundational to their success.

From Spaces to Systems

When scholars deeply consider the design of multiliteracy centers, they reckon with more than just material concerns such as technological hardware, furniture, decor, and layout; they must also assess the facilitation of *relationships*—between tutors and students, of course, but also between students and their affective response to technology, between faculty and their goals for their students using the space, even between the center's relationship to other support services. Such a broad charge can be incredibly difficult to conceptualize, but it is essential to ensuring the efficacy of a center. Support services operate most effectively when they are not siloed off from other resources in a vacuum—a community of support reaches more students and works together to ensure longevity and effectiveness. Why then should we consider multiliteracy design as merely spatial? Particularly when scholars such as Sheppard (2014) note that "creating a new media learning center is not about implementing a discrete set of activities, but rather about developing a context in which students can explore new media literacies in ways appropriate to the unique situation, purpose, and audience of a given project" (p. 268). Infrastructural design is a more capacious term that encompasses far more that multiliteracy administrators must consider when developing a site, from the vital promotion of user collaboration to the flexible responsivity that digital media composing demands, from providing the access that marginalized populations have been missing to building lasting relationships with other services that make students aware of the

resources available to them. There is room to strengthen student support in multiliteracy centers and one avenue for doing so is to pivot from discussing spatial design to broadening our focus to infrastructural design.

Rather than referring to support resources as an ecology or a network, an infrastructural approach broadens terminology to encompass both the material and social elements necessary in design. DeVoss, Cushman, and Grabill (2005) base their understanding off of media theory scholars Star and Ruhleder's (1996) "relational view" of infrastructures, which places emphasis on the relation between technologies and organizational practices. From this, DeVoss, Cushman, and Grabill (2005) conceive of infrastructure as encompassing the obvious elements such as computers, software, network and serve systems, but also adds:

> the policies and standards that regulate the uses of the room[, the] systems of support for the work that takes place in the room[, and] the budget and funding (and related decisions) for the material objects in the room[, as well as] the tasks and practices that occur within the room—how the material objects are used, to what end, and for what audiences (pp. 19-20).

Their work shows that taking up infrastructuralism is not new to the field, much as Inman's (2001, 2010) call to factor cross-service relationship building into design is not new, but in the clatter of academic chatter, these ideas got lost somewhere along the way. I call for multiliteracy center studies to revisit these valuable concepts, to integrate them into the ways we pursue multiliteracy center design in the future…a future where centers' important contributions to promoting student success, retention, and matriculation are made available to *all* students on campuses, even (and especially) those students from non-dominant populations.

Marshall McLuhan's "the medium is the message" has become de rigueur in digital media studies, but to relegate this idiom to simply its material product is to miss…well, the message. As McLuhan himself explains, '"the medium is the message" […] really means a hidden environment of services created by an innovation, and the hidden environment of services is the thing that changes people. It is the environment that changes people, not the technology' (McLuhan 2005 [1974], p. 242)" (p. 9). Multiliteracy center scholars would do well to keep this in mind as we plan or assess our spaces—it is more than mere technology; it is environment, and environments shape and are shaped by relationships. This is what Gresham (2010) refers to when she acknowledges that spaces shape students' texts. And spaces shape much more than just texts—they shape experiences, and those experiences shape what students do next. Educators must strive to facilitate educational environments that can support a variety of students across diverse needs.

Leaving behind the limited term *spatial*, we can now acknowledge that infrastructural design plays an important role in shaping how students experience support services. Because such a wide variety of students use support resources, they must be prepared to support a corresponding assortment of needs—some material, others social. This makes flexibility essential to spaces like multiliteracy centers. In order to meet all of the diverse needs swirling around multiliteracies—different learning styles, cultures, positionalities, and backgrounds; the multimodal and digital media composing requirements of facilitating play, trial and error, and the extended space/time needed to complete projects—spaces supporting such composing must be equipped to handle difference. Additionally, because multimodal and digital media composing incorporates so many elements, collaboration—across individuals within spaces, but also across

technologies, spaces, and services—is a central element in composing that also must be facilitated. Both flexibility and collaboration can lead to student empowerment, which promotes awareness of the cultural capital so many students from marginalized populations feel they are lacking. This offers access to incredible social benefits to such students, alongside the material access of tools, support, and a place to use them. The empowerment this space engenders can operate as a launchpad for increasing resource awareness across campus services. Multiliteracy center studies can facilitate wide-reaching advantages when an infrastructural approach is taken to design.

CHAPTER 3

GAINING CONFIDENCE IN THE DIGITAL SPACE: PEDAGOGICAL SKILL AS FACILITATOR OF TECHNOLOGICAL PROFICIENCY

> "We help people gain confidence in the digital space and improve faculty and students' digital literacy. So, I would say the main thing is just like getting that confidence, because I know a lot of people when they come in here, they're overwhelmed, and they just don't know where to start. And I think that's what we mostly help with."
> —Amaya, tutoring consultant interview participant

Vignette

It's noon on Tuesday, November 8th, 2022. I walk through the Ekstrom library lobby, dropping off a stack of books as I pass the front desk. I'm headed to the Digital Media Suite to see if I can get a drop-in tutoring session. As I approach the glass walls of the small front room, I see that the DMS appears empty. I pull open the massive glass door, move through the outer workroom, and enter the larger back room that makes up the heart of the DMS space. Sitting at the front desk near the entrance is a young, female student who greets me warmly. I scan the six or so computer workspaces and the large conference table taking up the middle of the room. The suite is empty, save for the two consultants working—the one at the front desk and another sitting at a side table working on her laptop.

"I'm here to learn how to build a template on InDesign," I say to the girl at the desk. Her smile slides from her face, a nervous frown replacing it.

"Oh. I don't know InDesign," she replies. She turns to the other consultant. "Do you know how to work InDesign?"

"No, but Amaya will be here after class and she can help," the other consultant replies without looking up.

"Amaya can help you," the girl at the desk says. "She'll be here in about half an hour."

"Okay, that's fine," I say. "Are there any tutorials or anything you could recommend that I can use to get the basics going until she gets here?" I ask as I approach one of the Mac workstations in the rear of the room. I know that the DMS website houses a large selection of tutorials from a variety of sources.

"Oh, yeah!" She brightens up, smiling again. "The LinkedIn Learning ones are really good. And we have some of our own, too. It's all on our website." I pause for a beat to see if she will cross the room to show me, but she turns back to her laptop at the front desk. I take a seat.

When I open Adobe Creative Cloud and select InDesign, the program immediately begins updating. It takes several minutes to load. In the meantime, I open the web browser, which automatically brings me to the DMS website. On the home page, I select the "Student" button, then "Tutorials, Examples, and More" on the left-hand menu. I'm prompted to choose what I want to make: video, audio, graphic design or image, presentation, or something else. I select graphic design, but the only InDesign tutorial offered on the page is for creating a brochure. I click it anyway and it takes me to an Adobe help page about InDesign with several tutorial videos available on a left-hand menu. I watch the "Getting Started with InDesign" video and begin drafting a document.

About an hour later both consultants have gone to their classes and Amaya has arrived. She sits at the front desk working on her laptop with headphones on. I can't figure out how to make an inserted vertical line in one text box align perfectly with another one in a separate text box. I feel hesitant to interrupt her work, but I walk across the room to Amaya, and she removes her headphones as soon as she sees me. She smiles and doesn't hesitate when I ask my question, following me back to my table and taking a seat beside me. Her demeanor is relaxed, warm, and confident—she shows me a few different techniques for how I can tackle my issues with the program. Once she sees me use her advice, she goes back to her work, telling me to let her know if I have any other questions at all. I thank her and save my work—I have a meeting to get to and have to wrap up my session.

A week or so later, on November 16th, I return to the DMS for a scheduled tutoring session. A different young female consultant at the front desk introduces herself as Julia and welcomes me to my appointment—she has already checked the schedule and is expecting me. She asks what exactly I'd like to work on, as the appointment reservation dropdown menu only allowed for a "graphic design/drawing/photography" selection instead of referring to specific software. When I reply that I am building a template in InDesign, she smiles.

"I don't have expertise in that software, but we have a lot of tutorials to help you and I can come over and help you find what you need whenever," she calmly replies. I ask if she would be comfortable giving me feedback on how the document looks as it progresses, and she says sure with enthusiasm.

I return to the same station where I had saved my previous week's work and begin composing my document. Amaya arrives soon after and comes by to check in with me after attending to another student first. She maintains the previous session's warm, friendly manner and sits with me for about half an hour, giving feedback on issues such as font sizing and border colors, as well as showing me online resources for downloading new accessible fonts. She explains what makes fonts accessible and why it's important to use them. An hour or so later, I thank her for her help and log off.

Introduction

The vignette above chronicles my experience seeking tutoring in the Digital Media Suite. Tutoring consultants, according to multiliteracy center scholarship, engage productively with composers' emerging needs and provide personalized support in an informal environment outside of the classroom to help students succeed in their 21st-century communication tasks (Bancroft, 2016). These consultants offer guidance, access to resources, and training in multimodal composing practices to assist students in navigating the complexities of composing in diverse modes (Carpenter & Lee, 2016). While I would deem my collective experience with tutoring consultations an overall success—Amaya did help me create my syllabus template in InDesign, after all—I must also acknowledge the many shortcomings I faced in these interactions, as I recognize the obstacles that might deter some students from utilizing the space.

The lack of preparedness among consultants regarding advanced programs, coupled with the quality of their responsiveness for assistance, has the potential to prevent students from engaging with the DMS, particularly those from non-dominant populations on campus. One of the most evident obstacles I encountered was the lack of

preparedness among the consultants regarding InDesign, the software I sought to use. Out of five consultants, only one was equipped to assist me with it at all. While this was a minor inconvenience, the more significant challenge stemmed from the responses of those tutors unfamiliar with InDesign—their reactions to my requests conveyed a sense of intimidation, which was quite contagious. Despite my prior experience with the software, their hesitation to help made me doubt my ability to navigate InDesign effectively. Ultimately, I was able to overcome this trepidation, but I couldn't help but consider how other students, especially those entering the space for the first time, might not be as fortunate. This unsettling reception could be particularly amplified for students from non-dominant populations, who already struggle with feelings of marginalization and unwelcomeness on campus.

To be fair, there are several elements that might contribute to making my experience engaging with tutors in the DMS different from that of random walk-in students. First off, I am acquainted with the tutoring consultants working in the space, as I have logged over 50 hours of observation there. Perhaps our familiarity contributed to their hands-off approach, operating under the assumption I would be comfortable asking for help and didn't need it offered. They also know that I'm a PhD student, and it is possible the power dynamic between undergraduate and graduate students is intimidating or they assume I know more than I do. I make these caveats because I want to give the benefit of the doubt here, but in the end, the outcome is the same—my attempts to engage in an in-depth tutoring consultation were not what I would classify as easy. And if tutoring consultants are, in fact, meant to "devise approaches that keep their clients…engaged [such as] ask[ing] questions, request[ing] alternate presentations of

ideas, and provid[ing] opportunities for clients to write" (p. 197), as Sheridan (2010c) claims "effective" consultants must, I remain unsure whether or not the tutors at UofL's DMS have been adequately prepared to do so. Although Amaya was able to guide my use of InDesign and engage in conversations about the goals for my syllabus and how best to meet those through design, I do not believe the other tutors were ready to facilitate such advanced levels of dialogue based on the limited interactions in my visits to the suite. As this chapter investigates what it takes to facilitate preparedness in multiliteracy center tutoring consultants, I maintain that an emphasis on pedagogical training is imperative for tutors to meet the variety of support needs required by the diverse student populations on campuses today.

In many regards, tutoring consultants are pivotal to multiliteracy centers because they are responsible for coordinating the labor in the space and facilitating sessions with students and faculty alike. To navigate the multifaceted landscape of resources within multiliteracy centers, tutoring consultants must possess a comprehensive blend of technological and communication skills. Sheridan (2010a) emphasizes the need for consultants to have technical, rhetorical, and pedagogical capacities to support the diverse semiotic options available to composers utilizing the center. While writing center studies address rhetorical and pedagogical support in tutor training (Grimm, 1991; Harris, 1995; Lunsford, 1991; North 1984; Trimbur, 2000), the technical expertise required in multiliteracy centers poses a significant challenge, especially for centers staffed by undergraduate peer tutors. To be clear, when I say "technical" capacities, I refer to the broad skills, knowledge, and abilities related to composing within the multiliteracy center broadly, while "technological" capacity encompasses an understanding of how to

leverage technology in various contexts. Thus, the term "tech support," which will appear throughout the chapter, refers to practical support in composing, which is often technological in nature; in contrast, "rhetorical support" refers to assistance provided in understanding and improving communication skills, particularly in terms of crafting effective messages, arguments, or presentations. The complexity of rhetorical and pedagogical challenges escalates when technologies and multiple semiotic modes are incorporated into composing. Furthermore, as the data in this chapter will show, when different levels of expertise and capabilities arise across tutoring consultant staff, tutors deemed "experts" often carry the bulk of the labor burden, leaving other consultants unengaged and without motivation to continue to gain proficiencies. Such an imbalance in staffing skills leads to the kind of experience I shared above—clients must wait for the one "expert" tutor and then fight for their time and attention, while the center is potentially filled with consultants unprepared to engage with visitors due to lack of practice. Working with the variety of visitors to the multiliteracy center, which supports both students and faculty at UofL, requires confidence not only in technological know-how, but also in interpersonal communication skills. Such skills are not innate, especially when working across power differentials, and it requires intensive training to develop them, which administrators must be prepared to facilitate as part of the standard practice regarding tutor training.

The **second standard practice claim tested in this chapter states that tutoring consultants must be prepared with the following fundamental skills in order to perform their roles effectively: some kind of technological specialty, frequently developed prior to becoming a tutor; a deep understanding of the affordances and**

constraints of available institutional resources and an ability to facilitate the processes of composing within those resources; and pedagogical literacy (Sheridan, 2010a; Sheridan, 2010b). Though this claim includes three elements, closer inspection reveals that there are actually two key areas here: technological and pedagogical skill. The middle segment of the claim can be split in two and attached to either side—"a deep understanding of the affordances and constraints of available institutional resources" refers to tutors' competence with available technological resources and "an ability to facilitate the processes of composing within those resources" refers to the ability to teach others how to use the tools available. While it's true that not all items can be first in any list, scholarship on tutoring consultants within multiliteracy centers consistently prioritizes technological proficiency and navigating multimodal composing challenges. Relegating pedagogical literacy to a secondary role has implications for the services provided by tutors in multiliteracy centers, disproportionately impacting marginalized students who rely on institutional support systems such as tutoring assistance. For tutoring consultants, this presents challenges in accommodating students who may be unfamiliar with tutoring services and whose expectations need reshaping.

Despite the prominence of technological challenges, the lack of attention to pedagogical training in scholarship is problematic, especially considering its significance in facilitating deep engagement and equitable access to support services, particularly for marginalized students. Scholars acknowledge the challenges tutoring consultants in the multiliteracy center face in realigning user expectations and in providing rhetorical support across the various modalities and technologies supported in centers (Bancroft, 2016). Navigating these requires complex pedagogical skills, especially with students

resistant to receiving support. **To more adequately address the variety of pedagogical needs diverse student populations bring to multiliteracy centers, I argue that multiliteracy center studies should realign the hierarchy within the standard practice claim regarding tutor preparedness for a more balanced, and therefore inclusive, version of the claim. Multiliteracy center tutoring consultants require deep technological literacies in the affordances and constraints of available institutional resources and dexterous pedagogical literacies to facilitate the engagement and processes of composing with those resources. Such a restructuring will emphasize that consultants must be as pedagogically prepared as they are technologically prepared to meet composers' needs.** Tutoring consultants require adequate pedagogical training to engage with *all* visitors to the center, from drop-in students without appointments to faculty composers to reluctant students who prefer to work individually. Tutoring consultants' jobs entail realigning composer expectations and facilitating meaningful consultations focused on developing effective communication practices as much as they do introducing new program tools to composers; however, multiliteracy center studies scholarship and interviews with both student and tutor participants show a prioritization of the technological aspects of the job over the pedagogical ones. Multiliteracy center scholarship needs a recalibration to prioritize pedagogical training as equivalent to technological proficiency in tutor training.

To investigate the preparedness tutoring consultants in the DMS, I conducted interviews with student participants, tutoring consultants, and the suite's director, Jason Zahrndt, to focus on training and interactions in the center. Participants were asked to reflect on their experiences working together, including the nature of the assignments

discussed and the composing processes employed during consultations. Additionally, I inquired about the effectiveness of tutor guidance and support provided during student sessions and the DMS's mission and training for both tutoring consultants and Zahrndt. I tailored questions to ascertain the tutors' ability to assist students effectively, such as their approach to addressing students' questions and concerns, their familiarity with various software tools, and their strategies for facilitating student learning and confidence-building. Interview questions are included in Appendix A for further reference. I aimed to gain a comprehensive understanding of the dynamics within DMS consultations and assess the level of tutor preparedness in supporting student needs effectively. To understand how these interactions were shaped, it is important to delve into the methodologies behind tutor training, which arise from writing centers and are then adjusted to attend to the specific needs within multiliteracy centers.

The Evolution of Tutor Training

Writing Centers: The Foundations of Tutoring Consultations

Of course, the above stated claim refers specifically to multimodal tutoring concerns based within a multiliteracy center, but the core tenets of tutoring consultant training arise from writing center studies. Writing center scholars have been recursively assessing the work they perform since the writing lab arose in the 1970s, partially in response to open admissions' ushering in of new "remedial" student demographics and literacy pedagogies. Self-assessment has yielded scholarship on a variety of writing center concerns, from what it is that centers actually do to how to meet the needs of different populations using tutoring services to "keeping up with" evolving technologies.

Writing center theory, exemplified by North's seminal work and early tutor training manuals, envisions writing centers as transformative spaces to promote student growth, academic literacy, and campus culture (North, 1984; Kail, 2003). North (1984) solidified writing center lore in establishing that "in a writing center the object is to make sure that writers, and not necessarily their texts, are what get changed by instruction…our job is to produce better writers, not better writing" (p. 438). The early visions emphasized the humanizing potential of one-to-one conferencing, its ability to demystify the writing process and enculturate students to academic discourse communities, and the role of centers in campus literacy and culture (Harris, 1982; Bruffee, 1984; Clark, 1988). Lunsford (1991) extolled the benefits of collaborative work, noting that it aids in problem identification and solving, learning abstract concepts, promoting transfer and critical thinking, and advances higher levels of achievement, amongst other benefits. The key, according to Lunsford (1991), lies within the environment, which is partially fostered by tutor training—successful centers would operate based on collaborative negotiation to self-identify problems, confront issues of control and power directly, and value dissensus and diversity, which would all be facilitated by consultants within tutoring sessions (p. 97). Emphasizing collaborative learning environments and prioritizing student agency in tutoring sessions can additionally play a crucial role in lowering barriers to entry and fostering social access, particularly for first-generation and post-traditional students who may face additional challenges in accessing academic support. Despite the fact that tutoring consultants were expected to maintain a dynamic of student tutees as central drivers of sessions, a new round of challenges soon arose as fears of plagiarism began to spread across faculty and institutions.

To prioritize a student-centered approach to tutoring, scholars weigh the opposing directive and non-directive approaches, ultimately ascertaining that consultations require individual responsive mixed methods to best meet student needs. In the non-directive camp, Newkirk (1989) suggests allowing students to set their own agenda and identify major concerns, while Brooks (1991) proposes "Minimalist Tutoring," emphasizing the student as owner of the text. Yet, such tactics may put excessive responsibility on students and fail to address their needs comprehensively. What about students who do not understand what concerns to address in their work? Or those who are unsure of how to meet assignment requirements? While identifying students as the primary agents of their own work is essential in tutoring consultations, placing the onus of deciding what's covered in a session entirely on students—especially those "remedial" students that centers are expected to "catch up" because classroom instructors don't have the time to address their needs—may not always serve them best. To address these concerns, North (1994) revisited his earlier ideas, acknowledging the limitations of a one-size-fits-all approach in writing center work. Grimm (1999) questions the ethics of non-directive approaches, suggesting they may withhold essential knowledge from students, especially those from marginalized backgrounds—the tutor must still guide students in the appropriate direction of directive or non-directive feedback during consultations. Rather than pursuing a dogmatic adherence to non-directive methods, Clark and Healy (1996) advocate for flexibility to meet diverse student needs, particularly as Harris (1995) notes that many students lack the metaknowledge to address writing challenges independently, underscoring the importance of tutors assisting in understanding assignments and concepts. A combination of directive and non-directive approaches has since become

common practice, embracing ambiguity and improvisation (Sherwood, 2007), instructional flexibility (Corbett, 2008), and student-led negotiations of authority (Carino, 2003). These strategies align with the student-centered goal of empowering writers. This is especially significant for those more prone to struggling with feelings of outsider status and low social capital, like post-traditional or first-generation students.

Contemporary writing center scholarship remains ethics-oriented, though attention shifts now to examinations of how diverse identities impact engagement across all stakeholders. For example, Nordstrom's (2021) work explores writing centers as pedagogical sites that support research through discussions of indigenous collaboration practices and supporting translingual literacy practices to promote academic discourse. Identity-based theory such as critical race (Condon, Green, and Faison), queer (Hobza and Denny), feminist (Miley), and disability (Bukowski and Bruggemann) theories dominate the theoretical half of Mackiewicz & Babcock's collection (2019) *Theories and Methods of Writing Center Studies*. In fact, five of the fourteen articles from the 2021 special double issue of *The Writing Center Journal* "explore[] practitioner and institutional identities and intersectionalities, including race, sexual orientation, faith, and professional status" (Bromley, Northway, and Schonberg, p. 14). This identity-driven scholarship seeks to rectify the longstanding tradition of a white, heterosexual, native English-speaking, US-based field by uncovering overlooked voices, types of institutions, and labor. However, though recognition of these marginalized viewpoints shows the field's reflection, there is still a dearth of work focused specifically on first-generation and non-traditional students (Towle, 2023). This could have negative impacts for how administrators prepare tutors to meet their needs, as studies of the intake and post-session

forms filled out by students and tutors have found that the self- reported needs of first-generation college students do not necessarily match up with the help they receive from tutors (Bond, 2019). Towle (2023) explains,

> FGS typically find it difficult to identify and use campus resources (Engle & Tinto, 2008) and they struggle to understand assignment expectations (Collier & Morgan, 2008). FGS also struggle with perceiving their own self- efficacy (Ramos- Sanchez & Nichols, 2007), which can have detrimental effects on their motivation and help- seeking behaviors.

Ideally, the focus of how identity shapes engagement in the writing center will soon turn to the intersectional identities of first-generation, post-traditional, low-income, etc. students. In the meantime, scholars must pair research on marginalized students from disciplines such as student affairs with standard practices from writing center studies to inform their support of these populations. Let's turn now to the texts that establish standard practices.

Writing center resource guides, intended for an audience of administrators instead of student tutors, offer a glimpse into the principles guiding writing center operations. For example, *The Writing Center Director's Resource Book* (2006), which is predominantly a theoretical text, is populated by articles unpacking historical representations of writing center directors (Lerner), mapping the establish of writing center ethos (Ferruci & DeRosa), and examining centers as historic spaces for professional development (Wallace & Wallace). Although not intended for use as a training manual, the text addresses tutoring consultants through issues like understanding what tutors want from directors (Haviland & Trianosky) and developing peer tutoring programs (Gillespie &

Kail). Pivoting into the realm of the multimodal, *The Routledge Reader on Writing Centers & New Media* (2014) is intended to "help [writing center practitioners] improve their understanding of new media writing and launch new media tutoring initiatives at their centers" (p. xv). It collects foundational scholarship in new media, multimodal, and multiliteracy instruction, featuring articles that identify new media forms (Lanham; Manovich; New London Group; Trimbur), examine their elements (Kress & van Leeuwen; LaGrandeur; Selber; Lunsford & Ede; Selfe; DeVoss, Cushman, & Grabill), and discuss how writing centers might support composing in these mediums (Carpenter; McKinney; Sheppard; Sheridan), or not (Pemberton). Half of the chapters about implementing new media composing in writing centers either focus only on attempts to tutor writing in virtual spaces (Carpenter, 2014), or advocate for facilitating a context for composing, rather than "a discrete set of activities," through a communities of practice approach as cited in the previous chapter (Sheppard, 2014). Sheridan's chapter comes from his own edited collection and will be unpacked in the multiliteracy center review below, and I will examine McKinney's chapter, as the only other one besides Sheridan's in the collection to directly address tutor training, in more depth in the multimodal tutor training paragraph below. What's consistent across these resource guides is that they are less consultation-oriented and more conceptual explorations of the writing center theory, which makes sense for an audience of administrators rather than tutors.

As far as training manuals go, *The Oxford Guide for Writing Tutors* (2016) edited by Fitzgerald and Ianetta is a common text assigned to instill standard practices for consultations from a respected series within the field. The book's tutoring handbook section, comprising five chapters, covers 15 strategies for tutoring that emphasize

flexibly moving between reading, listening, questioning, and instruction based on students' leads and requirements. Chapter 3 offers an overview of common tutoring sessions, chapter 4 a breakdown of process theory, chapter 5 unpacks tutor and student identities, chapter 6 covers writing across the disciplines, and finally, chapter 7 examines new media and online tutoring. Each chapter outlines strategies for managing these concerns, with chapter 7 applying a rhetorical approach to multimodal projects and presentations before shifting into a discussion weighing the benefits and challenges of online tutoring. Contemporary guides such as this one provide evidence that writing center lore, especially as it pertains to student-focus and power dynamics in tutoring sessions, still drives praxis, but now adds concerns of identity, context, and technology to the repertoire. Rather than question whether a non-directive or directive approach is appropriate, current models have shifted the conversation to advocate for a flexible combination of reading, deep listening, questioning, instruction, and reflection that form the contemporary fundamentals of writing center practice.

Such methods are central to UofL's writing center, as well, which is staffed by master's level graduate students who take a course in writing center theory and pedagogy alongside structured mentorship. As former director Bronwyn Williams notes, writing center work starts with conversations. Tutors must possess empathetic listening strategies to comprehend both students' texts and needs. From there, hospitality plays an important role because in a "writing center that works through principles of hospitality, there is an ongoing exchange of ideas in which both sides make themselves open to learning and change" (Williams, 2023, p. 94). This exchange makes students feel seen and heard, garnering investment in the consultation from both parties. Tutors ask questions to guide

sessions, but they are trained to understand why they ask the questions they do and are prepared to reorient sessions based on students' responses. The goal is teaching tutors how to be informed, interested readers who are prepared to ask appropriate questions to get the conversation started and guide it in the proper direction to help students meet their goals. Furthermore, Williams points to the importance of reflective practice in training. Reflection must be built into training so tutors understand what they've learned, and they must be taught how to usher students through the same practices so that students understand what they've learned in consultations, as well. These pedagogical principles are not simple and therefore necessitate formal training.

While writing center studies forms the backbone of multiliteracy tutor training, multimodal composing and its attendant exigencies remain inadequately accounted for in writing center training guides. One central issue lies in the consistent pairing of new media with online tutoring in consultant handbooks. Weighing the advantages and challenges of tutoring online, considering the differences between asynchronous and synchronous sessions, and strategizing for best practices in online tutoring software are necessary issues for consultants training to tutor online (Breuch, 2005; Denton, 2017; Inman & Sewell, 2000; Worm, 2020). Guides such as Beth Hewett's *The Online Writing Conference: A Guide for Teachers and Tutors* (2010) provide examples of instructor-student interaction, targeted lessons, and action plans that help hone pedagogical practice for an online setting. However, these issues are tenuously linked with multimodal composing and thus this scholarship does little in terms of actually preparing tutors to respond to multimodal projects in consultations. Similarly, scholarship on multimodal tutoring does little more than gloss over providing rhetorical response to non-textual

compositions. In fact, articles titled “Developing a Multimodal Toolkit for Greater Writing Center Accessibility,” “Multimodality and The Writing Center’s Role in Restoring Justice for ‘Bad Writers,’” and “Finding Even Ground: Tutoring Multimodal Texts in the Writing Center,” none of the content actually lays out practical approaches for how tutors should engage with multimodal texts, instead focusing on broad descriptions of multimodal composing and its attendant benefits (Cecil-Lemkin & Marvel Johnson, 2021; McGinnis & Gray, 2020; Schulze, 2014). Perhaps it is enough to introduce consultants to the five modes of communication, to educate them on foundational concepts such as the fact that writing has always involved technology and been inherently multimodal (Palmeri, 2012), and to review a rhetorical approach to tutoring when students bearing multimodal projects only sporadically walk through the doors of the writing center. But this does not sufficiently foster the kind of technological competency and preparation for consultants who work with predominantly media-based projects like those brought to a multiliteracy center.

Multiliteracy center studies must build on the work of writing center tutor training to fill the gap in specialized knowledge that consultants need for successful multimodal tutoring sessions. Balester et al. (2012) point to writing centers as powerful models for multiliteracy centers “because of how richly they conceive of tutors and tutor preparation.” This is particularly important, as scholars identify the most challenging aspect of transitioning from writing centers to multiliteracy centers is the changing role of tutoring consultants (Murphy & Hawkes, 2010). Scholarship doing this work has focused on “theorizing what multiliteracy centers might look like, how they might best operate, and which consulting approaches might allow multiliteracy center consultants to engage

productively with writers' emerging needs" (Alexander et al., 2016, p. 32). These questions loomed in the early days of multiliteracy centers and are still central to the formation of new spaces. But the familiarity of the writing center, which has become an established campus resource, can simultaneously operate as both boon and hindrance. While offering guidelines for how consultants might be trained, said guidelines must also be shifted to meet the differing needs of the multiliteracy center.

Multiliteracy Center Consultations: Balancing Technological & Pedagogical Skills

Multiliteracy center scholarship has outlined the unique skills necessary for consultants to meet these alternate needs, though tactical alternative approaches still require further development. In many regards, tutoring consultants serve as one of the most important elements within multiliteracy centers, as they are responsible for coordinating the labor in the space and facilitating sessions with students and faculty alike; however, the dearth of scholarship addressing the practical concerns of training within multiliteracy center studies is a bit startling. For example, only 3 of 10 articles in Inman and Sheridan's (2010) collection are dedicated to operation and practice—and student tutoring consultants' place within it—and only 1 of 6 in Carpenter and Lee's (2016) special issue of *Computers & Composition* is dedicated specifically to consultations. Within these four texts, only one provides any materials for tutor training (Sheridan, 2010b). Similarly, while the special issue of *Praxis* (2012) focusing on multiliteracies is predominantly about tutoring, with 4 of the 6 articles about issues concerning consultations, their taking up of multiliteracies is more global Englishes-oriented than the technological aspect of multiliteracies instruction. Collectively, the available scholarship on tutoring consultants within multiliteracy centers prioritizes

technological development over pedagogical development. It is true that multiliteracy center consultants face more technological challenges than their writing center counterparts, but the lack of attention to pedagogical training is problematic. Pedagogical skills must be specifically addressed in dedicated training, rather than relegated to an aside in scholarship.

To navigate the varied resources within the multiliteracy center, tutoring consultants must be prepared to support both pedagogical and technical dimensions of the composing process. While writing center studies addresses rhetorical and pedagogical assistance in tutor training, the element of technical know-how for a multiliteracy center is a big ask, particularly for centers staffed by undergraduate peer tutors. Additionally, the rhetorical and pedagogical challenges become more complex when technologies and multiple semiotic modes are added to the mix. Sheridan (2006) makes the case for writing centers as multiliteracy centers, arguing that consultants aid students in developing an understanding of "the interrelationship of technical and rhetorical concerns," which is a necessary endeavor because "separating technical and rhetorical dimensions of multimodal communication artificially segments the composing process" (p. 342). He then outlines recruitment and training for multiliteracy center tutors, asserting tutors need to have "sophisticated understandings of peer consulting pedagogy, multimodal rhetoric, and composing technologies" (p. 345). Sheridan's (2006) model starts by putting what he calls "digital writing consultants (DWCs)" through the general writing center tutoring consultant training to learn the pedagogical approaches to consultations, followed by supplemental training, the specifics of which are guided by tutors' needs and backgrounds, but invariably include "some combination of specialized

reading, additional observation of experienced DWCs, and opportunities to engage in multimodal projects" (p. 344). From there, he places emphasis on creating a culture of community, where tutors continue to work on and workshop their own multimodal texts because "experiences as composers inform [] consulting practices" (p. 344). Few other articles offer the specificity and direction Sheridan does here, but it is instead Sheridan's later multiliteracy center work that has gained traction to become central to multiliteracy center studies.

Sheridan's scholarship published in 2010 and later marks some subtle but impactful shifts in the hierarchy of ideas about multiliteracy center tutoring consultant preparedness, and it is these ideas that become the basis of the second standard practice. In the chapter aptly titled "All Things to All People," Sheridan (2010b) addresses a section on "Multiliteracy Consulting and Expertise" in which he unpacks the "three fundamental literacies" consultants need:

> (a) ML consultants need to understand the particular material forms that rhetorical compositions can take [with the resources available in the center], as well as…the affordances and constraints of these material forms…(b) ML consultants will need to understand the materials processes of production and distribution, which means (in part) helping clients negotiate the technical processes demanded by the specific material forms within which they are working…[and] (c) ML consultants will need pedagogical literacies. This means knowing when to offer an interpretation…when to invite clients to articulate for themselves…when to ask a question…and when to provide direction…It means knowing when to impose a

> firm structure on a session and when to invite the client to play freely with the available technologies. (p. 83)

The order of the literacies identified above is significant, as is circling back to reiterate technologies in the pedagogical literacy of part (c). Here, Sheridan has flipped the hierarchy from his 2006 article. He now begins with technological literacy in the "material forms that rhetorical compositions can take," then moves into assisting others navigate the processes of the technologies or "material forms," and finally addresses pedagogy directly. This text is central to multiliteracy center studies, and thus the order matters because it suggests a hierarchy that becomes broadly taken up in considerations of tutoring preparedness.

Relegating pedagogical literacy to third place in a list of the three competencies required for tutor preparation has a significant impact on what services tutoring consultants are trained to provide in the multiliteracy center. References to tutor training rooted in writing center studies include specifically referring to the decision-making of tutors on how much directive versus non-directive feedback is appropriate, but this is more or less the extent of overt writing center pedagogy present. This is not to accuse Sheridan of being unconcerned with pedagogy, but rather to acknowledge that there is an emphasis placed on what were already the most clearly identifiable challenges unique to the multiliteracy center—namely, the wide variety of technologies available. Thus, an implication arises in other scholarship that learning to negotiate these complex obstacles *is* pedagogical training. When Sheridan (2010b) acknowledges that "recruitment strategies are an important piece of the puzzle" for administrators seeking tutoring consultants, this refers to both technical ability as well as a pedagogical disposition (p.

84). The section of the chapter that follows focuses on confronting the challenges inherent to multimodality, familiarization with a variety of multimodal texts, and the value of tutors working on their own multimodal texts to learn how to navigate the necessities of their own composing processes. While these can certainly be applied to pedagogical training, those connections are not made explicit. Sheridan (2010b) then shares other materials in the chapter, such as a heuristic to map materiality, examples of multimodal rhetoric, and samples cases for "thinking about ML consulting;" however, again, these training resources rely on the assumed ability of consultants to engage students in the first place during tutoring sessions.

Tutoring consultants within multiliteracy centers must be prepared to perform the crucial task of realigning visitors' expectations about the space and its use from that of basic technical support to more involved rhetorical support. A major challenge for centers, as identified by Fishman (2010), is that students frequently view these spaces through a solely technological lens, as an infrastructural resource where they can access new media technologies and a place where tutoring consultants will provide immediate answers to their problems. But solely technological support orients the technological resources as the telos of the activity occurring within the digital media support space. It focuses on problems that have technology-oriented solutions, which can be quickly identified and have right or wrong answers, but this type of support remains surface level, where tutoring consultants act as knowledge bearers in a quick fix-it shop (Murphy & Hawkes, 2010). That said, technological support *is* within the purview of multiliteracy center consultants because, as Sheridan (2010b) notes, "Our claim that tech work is within our mission rests on our belief that technology is inextricably linked to

communication" (p.76). Consultants must be prepared to perform the delicate balancing act between technological and rhetorical support. Rhetorical support, on the other hand, positions tutoring consultants as guides to help students identify issues, select appropriate technologies in response, and come to an understanding of when and why to employ specific media to remediate information for problem solving (Fishman, 2010, p. 65). It asks students to collaboratively propose possible solutions and weigh their options with consultants, rather than seek a right or wrong answer; it is often more complex and nuanced than technological support, ideally preparing students to independently address issues in their work in the future. The task of rerouting student expectations falls to the consultants and so they must be pedagogically trained in rhetorical support and be prepared to make the case for its value to students.

A lack of development in pedagogical skills impacts the populations who need pedagogical engagement most within the multiliteracy center—marginalized students. Bochert (2018) points to research on first-generation college students, noting that their larger academic needs are "often met by institutionalized support systems, such as out of class tutoring assistance" (p 156). Multiliteracy center consultants face challenges arising from student populations who might be unsure of what to expect in tutoring sessions and whose assumptions about the provided services are even more likely in need of reshaping. Consultants who have been trained to follow the agendas set by students may not be prepared to accommodate students who have had no experience interacting with a tutor. Consultants may find it more difficult to steer such sessions in the direction of rhetorical feedback, particularly since marginalized students may be less receptive to support. While it is important to address surface-level problems with texts or guide

students on the basics of how to use a program, consultations function at their most effective when they concentrate on facilitating the development of sound communication practices. This is not always an easy task to implement, as Fishman (2010) explains: "Coming to see the value in understanding when and why to employ a particular multimedia technology, as opposed to simply learning how to use it, requires a shift in perspective as well as priorities" (p. 65). However, shifting perspectives in this way is not solely up to the consultant—students must also get on board for deep engagement in consultations. The problem is that students unaccustomed to interacting with support services are more likely to want to be left alone in the multiliteracy center, which risks students from marginalized backgrounds missing out on the benefits that tutoring consultations offer. To attend to this issue, tutoring consultants need appropriate pedagogical training to engage reluctant students and realign their expectations, both about what multiliteracy centers do and the value of engaging with support services more broadly. Multiliteracy center scholarship needs a realignment to emphasize tutor training as the data analysis below will bear out.

Tracking Multiliteracy Center Tutoring

The standard practice concerning tutoring consultants recommends they possess proficiencies in at least one area of technological expertise, understand the capabilities and limitation of available resources and have the ability to facilitate students' use of these tools, and have undergone pedagogical training, particularly in order to realign user expectations from technological to rhetorical support. Facilitating such skills is no small task for multiliteracy center administrators, but the effectiveness of the center depends upon tutors' ability to engage students. The interactions between students and tutors offer

insight into the effectiveness of tutor preparedness, particularly for marginalized students, as explored through the lens of first-generation and post-traditional student perspectives in this project.

Accessing support services such as multiliteracy center tutoring poses a greater challenge for marginalized students compared to their traditional counterparts; however, leveraging these resources can substantially enhance their prospects for success. Research shows that out-of-class learning opportunities, especially in the first few semesters of college, contribute to student retention rates and facilitate relationships between students and campus representatives, which build opportunities for enhanced academic support and active learning (Griswold, 2003; Tinto, 1993). Furthermore, visiting support service sites like multiliteracy centers also provide students a chance to discuss college life more broadly with peers, once again benefiting students whose families might lack experience in this area (Simpson, 1991). Seeking feedback from tutors offers another benefit: familiarizing students with receiving critique in a peer-to-peer setting with reduced pressure. This exposure has the potential to transform their view of these services from vulnerable critique zones to dedicated academic support spaces (McBride, 2020). This approach is particularly relevant to multiliteracy centers, where ongoing composing occurs alongside tutor feedback, distinguishing them from traditional writing centers (Chapter 2). Positioned within a deliberately structured support framework, multiliteracy centers operate flexibly to address composers' needs and foster collaboration within the space and across support services. But to fully capitalize on the array of benefits these centers provide, students must actively engage with tutoring consultants and/or center staff to explore available resources.

Examining tutor preparedness within the DMS to test the efficacy of the standard practice about tutor training was a somewhat complicated task requiring a triangulation of student participants' perceptions, tutoring consultant participants' reflections on their work, and my own understanding of pedagogy, all alongside information shared from Director Jason Zahrndt regarding the suite's hiring and training procedures. To elicit data, I asked student participants about what they expected working to be like versus what it was like in reality; whether they found the tutors equipped to meet both their technological and teaching needs; and to describe their interactions with tutoring consultants. For tutoring consultant participants, who are also undergraduate students, I asked them to explain what a tutor in the DMS does, to walk me through their training, and to describe their expertise. I asked Zahrndt to walk me through his goals for the DMS, how he selected his consultants during hiring, and his methods for training consultants. For each participant group, I followed up with probing questions to further unpack answers and provide details. The students who worked with a tutoring consultant are highlighted in the participant chart below. I will cite data from Chad and Raven regarding their experiences working with Amaya; from Young-Sook, who spoke about sessions with consultant Dahlia, before she graduated, and now with Amaya; and from Velma, who received assistance directly from Zahrndt when she spent time in the DMS prior to becoming a tutoring consultant there. Additionally, I will bring in data from interviews with tutoring consultants Dahlia, Velma, Amaya, and Daphne.

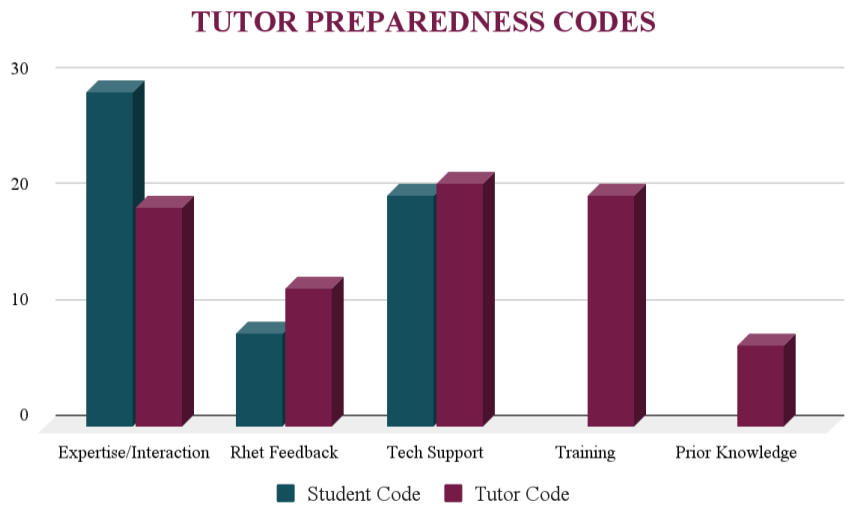
Interview Participant Information							
Name	**First-Gen**	**Post-Trad**	**Undergrad Student**	**Grad Student**	**Tutor**	**Class Visit**	**DMS Presentation in Class**

						to DMS	
Chad	X	X	X				X
Diego	X		X			X	
Pat	X		X			X	
Raven	X	X	X				X
Ronan	X		X				
Sally	X		X			X	
Velma			X		X		
Young-Sook		X		X			

Analysis in this chapter is provided in three sections: the first is dedicated to tutor hiring and training, the second is about how students and tutors reflect upon consultations, and the third delves into my close reading of the pedagogical methods described by students and tutors. To understand the intentions the DMS has for tutoring consultations, as delivered through training, I cite a combination of data from Zahrndt and from tutoring consultant participants, whose data I coded separately from student participants. I coded tutor data in three rounds: content coding, structural coding, and affective coding. The codes I'll use in the first section of analysis are from the structural coding session in categories: "PRIOR KNOWLEDGE," using codes "advanced" (2), "intermediate," (2), and "basic" (3), to unpack tutors' perceptions about their level of expertise before beginning work at the DMS; and "TRAINING," with codes "official training" applied 3 times, "mentorship" used 7 times, and "self-taught" appearing 10 times to account for the types of training tutors received in the DMS. Putting Zahrndt's thoughts into conversation with tutoring consultants' experiences is important because their interactions during training shape how the tutors will later interact with students during consultations.

To understand how consultations played out within the DMS, I turned to the experiences recounted by student participants, as well as tutoring consultants' descriptions. Student participants' perceptions of their interaction with tutors while composing in the DMS are tracked through the "TUTOR PREPAREDNESS" code category 37 times in 7 of 8 student interviews (Sally did not have any experience interacting with tutoring consultants). The subcode relevant in this section of analysis is "tutor expertise," which was assigned 29 times when students assigned expertise to tutors in some form. For tutoring consultant data, I used the category "CLAIMS," with code "tutor interaction" applied 19 times to track their descriptions of consultations, thereby illustrating their enactment of the second standard practice regarding tutor preparedness.

My own pedagogically informed analysis regarding tutoring consultations occurs through close examination of both student participant and tutoring consultant interviews. In student interviews, I track pedagogical methods through the codes "tech support" (used 20 times) and "rhetorical feedback" (used 8 times). For consultant interviews, the same codes were used, with "tech support" appearing 21 times and "rhetorical feedback" applied 12 times. Both students and tutors may lack the necessary pedagogical awareness and training to accurately assess whether tutoring consultations are proceeding in a pedagogically sound manner, as their understanding of pedagogy might not be sufficiently deep for them to make informed value assertions about the quality of consultations. Thus, my expertise in pedagogy is essential in interpreting the data accurately. By applying my pedagogical knowledge and perspective to analysis, I aim to bridge this gap and provide critical insights into the dynamics and effectiveness of these interactions in the DMS. Below is a chart tracking the use of codes in this chapter.



A few significant challenges arose when I began coding data that shaped how I perform analysis in this chapter. First, all student participants who worked with a tutor had worked with the same one—Amaya—save for one exception where a student worked with two tutors on separate occasions. Second, student participants' perceptions of pedagogy were all positive, however, their warm affective response to Amaya, combined with their limited understanding of pedagogy, does not provide a reliable basis for assessing Amaya's pedagogical effectiveness. And third, half of the student participants had not engaged in tutoring consultations during their visits to the DMS, as the Interview Participant Information chart above illustrates, with gray highlighted cells identifying which students did engage with a tutor. While most students who have worked with tutoring consultants in the DMS may perceive them as experts ready to meet their needs, the data—from students, tutors, and Zahrndt—signifies that there are significant gaps in pedagogical training at this site, despite the intentions of hiring and training practices. Furthermore, these findings reflect larger issues regarding the prioritization of technological skill development to the detriment of pedagogical training in multiliteracy

center scholarship, indicating that a shift in the hierarchy of the standard practice claim is necessary.

Tutor Training: The Intentions of Director & Consultants

To understand how tutoring consultations unfold in the DMS, the data from interviews with director Zahrndt and tutor participants provides insight. While this project prioritizes the voices of student participants, it is essential to put Zahrndt's perspectives on the DMS's mission and training procedures in conversation with those of the tutoring consultants to get a feel for the intentions that drive tutoring. My investigation of the hiring and training practices that support the development of both technological and pedagogical proficiencies reveals the structures currently in place to support tutor preparedness and areas for further development.

Zahrndt's delineation of the services offered by the DMS illuminates a tension from the outset—the DMS's primary focus on faculty development and student support as secondary imperative. Zahrndt is careful about acknowledging what services the DMS does and does not provide. "The consultation support that we provide…has to be very carefully tailored so that [visitors are] still the subject matter expert[s], while we're the consultation service. We are not an instructional academic unit," he explains. "We are part of the Teaching and Learning Center, and so we're already pretty far outside of our lane by having a student facing component." Zahrndt refers to the fact that DMS is funded by the Delphi Center, which specializes in faculty development—meaning that faculty are the first intended audience for the DMS. It is significant to note that this orientation does not fit neatly into the goals for multiliteracy centers as established by scholarship and that the faculty-focus of the DMS demotes student tutoring sessions from

the highest position on the institutional to-do list. Despite the site's faculty-facing mission, the bulk of the work that consultants in the DMS perform is with undergraduate students, and therefore, tutoring consultant training must be in place to meet students' and faculty needs.

As far as the secondary goal of supporting students in multimodal composing, Zahrndt reports that DMS services are intended to aid in filling the gap between what faculty assign and what they have the classroom time and skills to teach students. He identifies five core programs supported in the DMS: video and audio broadly, and then Adobe Photoshop, Illustrator, and InDesign. With these programs, he notes,

> The part that we've been doing, and I think we do well, is the introductory aspects. We get people started, we teach them what these are, and we show them that you can do video assignments, we show them how and support them through the process of doing video, audio, whatever, but it doesn't usually take the next step.

Zahrndt later describes this "next step" work as the type of in-depth critical and/or analytical feedback that he attributes to advanced students needing, such as those coming from video production or graphic design courses. This kind of work, which does not often occur in the DMS, is exactly what Sheridan (2010c) asserts is a consultant's job: to "facilitate conversations in which students explore the possibilities of rhetorical success that can be realized through a negotiation between themselves as rhetorical agents and the context in which they are" composing (p. 191). Interestingly, Zahrndt suggests that a graduate student tutoring consultant would be more appropriate for this level of work, as it requires an advanced theoretical lens, exceptional communication skills, and the

confidence to critique the work of upper-level undergraduates, graduate students, and faculty. What he describes here is what I might define as rhetorical feedback but linking it as appropriate to graduate level work indicates that Zahrndt does not see his undergraduate tutors, for the most part at least, as prepared to perform at this level. While he does note elsewhere in his interview that rhetorical feedback is part of what consultants provide in tutoring sessions, his lack of emphasis on it and the quote above imply the DMS is perhaps more technological-oriented in its focus than standard practices would suggest it should be. In fact, his description of the work the DMS *does* do well sounds suspiciously like the technological guidance and surface-level feedback that Fishman (2010) warns tutors must reorient visitors *away* from so that they begin to view the center as "more than the quick fix that most students are seeking when they come in for the first time" (p. 71). This sheds light on Zahrndt's divergence from the conceptions of goals and audiences outlined in multiliteracy center studies, consequently influencing the perceptions of consultants regarding their roles within the center.

Zahrndt describes the current tutor training process used in the DMS as an "on the fly job" to counter the unpredictability consultants face in the center, and he hires staff who seem dispositionally suited to such an environment. Though some multiliteracy center scholars indicate that the strongest tutors most often enter the position with technological expertise developed in a prior setting (Murphy & Hawkes, 2010; Sheridan, 2010b), Zahrndt hires consultants whether or not they have technological experience. Rather than emphasizing specialization in any program, Zahrndt chooses his new hires based on disposition. The right personalities can be trained for the job, but the demeanor and disposition necessary for the job cannot be easily taught, he notes. Tutoring

consultants in the DMS should be warm and welcoming, communicate clearly, work well on a team, and possess a flexible attitude that allows them to remain calm under stress. Implicit within this description is the way such attributes speak to pedagogical success, pointing to an intuitive prioritization of pedagogical strengths over technological ones for Zahrndt, at least when it comes to hiring, but that seems to be the extent that pedagogy is prioritized. Once the new tutors have been hired, they're introduced to the space, advised to choose technologies they want to pursue on their own, and paired up with other tutors for pedagogical mentorship. Though his instincts in the area of hiring seem to be sound, there simply is not enough follow through in training to meet the demands of the job.

Zahrndt reflects that initially, he built a tutor guidebook for training that was based closely on writing center training models, but that such a structured program did not suit the varied demands of the DMS well. Unlike the somewhat consistent assignments and needs that writing centers face, the DMS requires more flexibility. His tutoring consultants do not share a consistent background like most tutors working in writing centers, further complicating a unified approach. For him, prior experience in software is a plus, not a requirement, as long as consultants are interested and ready to learn at least one of the big five technologies. For example, Velma admits she "had minimal experience, but I was willing to learn…that's the one thing that [Zahrndt] told [Daphne and I] when we got hired…'It's okay if you don't know what's going on just as long as you figure it out with the student, then it'll be okay.'" Whether or not consultants gain specialized technological knowledge in the DMS remains largely up to them, as technological training is self-guided. However, much like the students composing in the space, if consultants are not guided to gain a meta-awareness of their multimodal

composing processes, does such an approach risk them fully understanding the scope of what they've learned? Without training tasks that test familiarity with the resources offered, how can Zahrndt be sure his consultants are fully competent users and, thereby, prepared to teach others?

New tutoring consultants in the DMS are trained in available technologies via a self-guided, compiled list of tutorials. For his current group of consultants, Zahrndt explains that he's implemented technological skill building through a curated list of core programs including LinkedIn Learning and his own online tutorials. The tutors explain that in their first meeting they select a program they'd like to focus on. Daphne describes that they "pick out a software or like our studio, something that we want to be, like if we're in the office, we can be the experts of that." From there, Velma adds that "Jason just had us go through all the tutorials possible" to develop skills, gaining as much expertise as they choose. "It's just a very hands-on thing you have practice," Daphne adds. In theory, this approach should prepare consultants with the necessary understanding of the tools available, as recommended in the standard practice, but Zahrndt admits that these skills are still difficult to come by. Where Sheridan (2010b) suggests providing a project-based approach to get consultants composing their own multimodal texts as deliverables within the center, Zahrndt allows his tutors to pursue their skill development at their own discretion. Unfortunately, this leads to the DMS being short staffed in the complex composing programs that require intensive training to gain proficiency in, which subsequently puts the labor burden of tutoring those programs on the only tutor who has mastered them. There do not currently appear to be any methods in place for testing the effectiveness of the LinkedIn lessons or DMS tutorials,

or indeed of this training method more broadly. Instead, Zahrndt trusts his consultants' self-motivation and peer support systems to accomplish technological preparation.

The bulk of the pedagogical training that occurs within the DMS is done through peer mentorship rather than formal training. While UofL's writing center consultants take a semester-long course in writing center theory and pedagogy in addition to structured peer mentorship sessions, Zahrndt uses "role modeling" for the first couple of weeks in the DMS by having new consultants sit in as he interacts with visitors on and off throughout the day. Then, they shadow more experienced staff to see "how they do what they do." When consultants feel ready, they engage with visitors and have follow-up conversations with Zahrndt. Amaya describes her experience with the mentorship method:

> The first few people that I worked with, like the first few times, I wasn't alone. And so I had that, like, I had this mentorship, I had Gianni, who used to work here, and she would be helping and also Elizabeth. And so I think they helped me in that aspect. And then after like, after a while, I kind of got the hang of it. And I think that helped me.

While the mentorship approach might allow consultants to learn the pedagogical process in real time, it lacks development of theoretical foundations to teach consultants *why* they do things the way they do. Without formalized training, tutors may not learn how to facilitate the appropriate structure for tutoring or to act as "informed, interested" listeners that get students engaged. Training is essential to teaching tutors the structure for consultations and building the reflective practice that helps them understand what they've learned. However, there is currently no text or guide dedicated specifically to pedagogical

training for multiliteracy centers, which requires administrators to create their own training methods. In the absence of this resource, Zahrndt has turned to mentorship for pedagogy, though it currently falls short.

The consultants themselves acknowledge some of the limitations of this mentorship approach to pedagogical training. Dahlia addresses one such problem arising from the lack of structured training directly, particularly highlighting a need for preparation to navigate the power dynamics of providing feedback to faculty:

> I think it would have helped, especially with the professors…when you get in a position, as a young person instructing somebody a lot older than you how to use the software, it can be intimidating. And a lot of people are not prepared to do that.

The mentorship consultants receive begins with Zahrndt, but the bulk of it is provided by peers, which leaves navigating the power dynamic largely on consultants' shoulders.

In fact, how pedagogy plays out generally in the center is largely in the hands of consultants due to a lack of official structures in place, and this too presents risks. Amaya acknowledges that her popularity with clients in the DMS is often challenging for her. She states: "I wish I could duplicate myself because it was way too much…I spent that whole day just like working with people [nonstop]." Shouldering the bulk of the labor burden within the center is demanding and overwhelming for her at times, illustrating the significant dedication and effort required to effectively support students in their academic and creative endeavors. This provides valuable insight into the emotional and professional aspects of tutoring, demonstrating the commitment and perseverance required to navigate the complexities of assisting composers. This burden is also unfair,

falling on Amaya due to the fact that she is quick in her responsiveness to student needs and is proficient in a variety of the technologies housed in the DMS. Because acquisition of technological skills is self-led, there are no structures in place to ensure an equal distribution of expertise and thus labor across tutoring consultants, leading to an inequitable distribution of labor. By allowing Amaya to engage with the bulk of visitors, fellow tutoring consultants miss the opportunity to continue building their skills while burning her out—no one wins in this scenario.

When administrators overlook quality assessment and rely on tutors to lead the day-to-day operations in the center, leaving all student engagement to one experienced tutor mirrors the tendency to prioritize technological rather than rhetorical feedback, as both represent the path of least resistance pedagogically. Daphne describes how she and Velma initially approached their jobs:

> In the beginning, I feel like [me and Velma] both would really, like walk people through like all 50 of their takes and sit down and watch the videos with them and be like, “Well, I kind of like this one, I guess.” But then that's when you like, get reviews, like, “Oh, I don't like the DMS because I didn't get a good grade on my video project. And they helped me with it.” But it's kind of like, at the end of the day, we just set things up. Like we're just setting it up.

Here, a misunderstanding of what “good feedback” looks like rears its head. Rhetorical feedback does not mean tutors must “walk people through like all 50 of their takes,” as Daphne and Velma believed. In fact, providing rhetorical feedback should not entail that much time and attention from tutoring consultants, and that is why structured training is so important. Because they overdid things in the beginning, Daphne and Velma then

shifted too far in the other direction, now believing their job is to simply "set things up," which is insufficient, as well. They became fixated with technical details, failing to achieve that "shift in perspective as well as priorities" that Fishman (2010) calls for from consultations (p. 65). In light of this, it is perhaps unsurprising that students prefer to work with Amaya, further contributing to labor issues among tutoring consultants.

If pedagogical training lacks focus on initiating engagement with students, there's a risk that many students may not seek help from tutors, especially within multiliteracy centers. The DMS, aligned with multiliteracy centers in general, prides itself as a space meant to support composing, which in turn means that composers spend long periods of time working unassisted. As Dahlia notes, "A lot of what a DMS is, is a kind of individual space where [clients] don't have to work with tutors. But our goal is to help coach ideas on the projects." She acknowledges the multiliteracy center's ethos of independent client work, but immediately underscores the crucial function of tutors in coaching project ideas, illustrating the complicated nature of striking the appropriate balance. Tutors cannot choose how visitors will prefer to work, but their purpose is to coach—and hopefully clients will use that service. But relying on a "hopefully" is not enough. Dahlia ought to be prepared with strategies to engage composers in this coaching without intruding, but this preparation is facilitated through training. Though she recognizes the value of both the center's hands-off approach and tutor input, she risks failing to engage student visitors who might be unaware of the value of engaging with a tutor for coaching. It isn't only Dahlia—the "set things up" approach outlined by Daphne and Velma also impacts the likelihood of engagement with students, and it is evident in Amaya's description of consultations, though she displays awareness of the risks. Amaya

explains that she begins by asking clients whether or not they need help when they enter, as some people "don't need help…[and] just go straight to their computer," following up with those who do want assistance by asking them to explain what they're working on and taking a seat next to them to "just walk through everything" together. This demonstrates her ability to tailor her assistance to meet the unique needs of each student and project; it also relies on the students themselves to seek her out, which means some students who are too insecure to ask for help are missing out on engaging with a tutor at all. The independent work element of the multiliteracy center presents a fine line for tutoring consultants to walk—they must offer support without badgering composers. Without pedagogical training in this area, it is perhaps easier to remain unengaged with those who say they want to work individually.

Collectively, these tutors' insights highlight the repercussions of insufficient pedagogical training within Zahrndt's approach, revealing a discrepancy between the objectives of the multiliteracy center and the strategies employed by tutors to engage students effectively. The challenges highlighted here reveal shortcomings in implementing standard practices and a lack of adequate training and support for tutoring consultants. This imbalance calls for a reevaluation of training and support structures to ensure a more equitable and sustainable environment for tutoring consultants.

Tutoring Consultations: The Impact Experienced by Student Participants

This section of analysis integrates data from interviews with undergraduate student participants and tutoring consultants from the multiliteracy center, alongside my own pedagogical insights, to examine the dynamics of tutoring consultations. While administrator goals guide tutor training, the interactions between tutors and students

ultimately determine whether or not they consider consultations successful. Given this project's emphasis on representing the experiences of students often overlooked in multiliteracy center scholarship, my analysis first prioritizes students' overall perceptions of consultations and the expertise of tutors identified there, represented by the code "tutor expertise," which appeared 29 times in student participants' interviews. This intentionally broad code tracks students' acknowledgment tutor support in various forms throughout interviews. Overall, student participants found tutoring consultants as generally prepared to meet their needs, though it's important to address that three of the five students who assigned expertise did so referring specifically to one tutor: Amaya. The student responses underscore how perceptions of tutor expertise shape students' views of the multiliteracy center, as well as how access to expertise enables them to prioritize and manage the composing concerns prompting their visit.

The testimonies of Ronan and Velma signal the pivotal role consultants play in shaping students' perceptions of the multiliteracy center, even if students do not work closely with tutors. Ronan shares, "I felt pretty welcomed by the people there, honestly. They were always willing to lend a hand when needed. They were. They were just very easy to talk to. I felt like, did they know their stuff? They seem to." Ronan indicates the importance of tutors in creating an approachable affective space that welcomes students. Because they conveyed competence to Ronan, he trusts them as a resource to handle the questions he might have "when needed." These elements are important because they contribute to a lower-stakes environment that invites students to engage with the resources available, providing the opportunity to lower the intimidation of accessing support services. Creating a space where students can develop the skill of "being okay to

ask questions, instead of just sitting there trying to figure it out for yourself" is a vital aspect of the DMS, according to Velma. She explains:

> At first, I was very intimidated to ask questions…But, I mean, I just learned, like, you know, we all—nobody knows everything. And it never hurts to ask questions. Because if you don't ask questions, then it could be wrong, and you don't want to mess anything up. So just as embarrassing as it can be, asking questions is the right thing to do…I think it's just something people have to realize—that everybody's at a different place with everything. And technology's just very intimidating.

In Velma's perspective, the DMS serves as a space for students to cultivate the confidence to ask questions rather than struggling alone to figure things out. Initially intimidated by the prospect of seeking clarification, Velma has come to recognize the value of questioning, acknowledging that nobody possesses all knowledge and that errors can arise from not seeking clarification. She emphasizes the importance of overcoming the potential embarrassment associated with asking questions, asserting that it is the correct course of action. By creating a space where students feel comfortable asking questions without fear of judgment, the DMS fosters a culture of collaboration, growth, and learning. Overall, Ronan and Velma's testimonies emphasize the DMS's role in fostering a supportive environment where students feel empowered to seek assistance and overcome technological intimidation through active engagement.

In the multiliteracy center, access to tutors' expertise efficiently resolves technical challenges, enabling students to allocate more time and attention to hierarchize and manage design and compositional concerns in their projects. Chad reflects on his

experience and acknowledges the value of seeking assistance rather than attempting to navigate unfamiliar software alone:

> Well, this guy [Zahrndt] is really good, I should probably not try to do all of this on my own. At the end, when I was trying to hurry up and finish my project, I was like, I'm just gonna go there and [compose] it there…instead of me trying to do this big learning curve, it's faster.

Chad's reflection indicates that he recognizes the limitations of attempting to navigate unfamiliar software alone. He acknowledges the efficiency gained by seeking help from Zahrndt, suggesting that leveraging the expertise of tutors can expedite the learning process and alleviate time constraints. This highlights the practical benefits of accessing tutors' knowledge and experience in addressing technical challenges, but it also reveals how transactional students' expectations about technical support can be when they enter the multiliteracy center. Similarly, Raven highlights the accelerated learning pace facilitated by Amaya's comprehensive knowledge, which enables her to quickly grasp editing techniques to accomplish tasks efficiently. She describes Amaya as "very knowledgeable," explaining that "she was showing me exactly what to do. I picked up on it very fast paced, on how to edit things around, how to move things, get things done. So that itself, I mean, her knowledge was where I can say she's expertise level." Raven emphasizes the role of tutors in facilitating accelerated learning, underscoring the importance of tutors' comprehensive knowledge in helping students quickly grasp essential skills and complete tasks effectively.

Young-Sook's experience in the DMS illustrates another valuable role of tutoring consultants, that of providing personalized guidance to help students overcome technical

obstacles and advance their skills in specific software applications. Young-Sook explains how one tutor helped get her “caught up” with her classmates on Photoshop:

> Well, Dahlia was great…[I needed to know] how [to] us[e] Photoshop. I'm an MFA graduate student. That's why I needed [to learn it], you know. And also, I didn't learn it when I was an undergraduate, but I cannot take a course [dedicated to it now] because I [am] already [taking] full credit [hours], and then [another course] it's too much. So, I just walked in and needed help…because I'm a little more [at a] beginner level, I want to do like a one-on-one lesson [because] I like to [learn] in person.

Young-Sook's experience spotlights the unique challenges faced by graduate students like herself who require specialized skills but are unable to enroll in dedicated courses due to their already full schedules. Her decision to seek assistance in the DMS reveals the importance of personalized, one-on-one guidance in addressing her specific learning needs. By working closely with Dahlia, Young-Sook receives the necessary "nuts and bolts" assistance required to navigate Photoshop effectively, allowing her to progress at her own pace and focus on refining her artistic skills outside of formal classroom settings. This personalized approach not only empowers Young-Sook to explore and experiment with Photoshop in her own time but also ensures that she receives targeted support tailored to her individual learning preferences. Young-Sook's overall experience highlights the role of tutoring consultants in providing flexible and personalized assistance to students seeking to acquire new technical skills in the DMS.

This data makes clear the importance of tutoring consultants in shaping students’ perceptions of the multiliteracy center. Despite the fact that Ronan never sought

assistance from tutors aside from basic instruction in saving to an SD card, he still recognizes the affective value of their presence instilling the space with a welcoming, competent vibe. Through her work with Zahrndt and other students, Velma has destigmatized help seeking behavior to better understand learning as a continuous process. Chad, Raven, and Young-Sook all worked closely with consultants in more than one session, which taught them the value of seeking assistance from tutoring consultants in the multiliteracy center to overcome technical challenges and advance their skills. They recognized the practical benefits of tapping into tutors' expertise, including accelerated learning (Chad), efficient navigation of unfamiliar software (Raven), and personalized guidance tailored to their individual learning needs (Young-Sook). These experiences emphasize the role tutoring consultants can play in providing customized support, instilling confidence, and empowering students to navigate technical hurdles and advance their skills within the multiliteracy center.

Current Tutor Preparation Is Not Enough

Tutoring consultant preparedness—marked by technological specialization, comprehension of the affordances and constraints of available tools and facilitation of their use, and pedagogical literacy—is essential to operating and effective multiliteracy center, but scholars need to realign the hierarchy of skills built in consultant training. The focus on the technological concerns inherent in consultations has diverted too much attention from the significance of pedagogy, leaving tutoring consultants underprepared to meet the less overt pedagogical demands of the job. In issuing this critique, I do not intend to malign previous scholarship’s attention to the technological challenges of tutoring consultants—the most visible prospective trials and perhaps the steepest learning

curves facing tutors in the multiliteracy center coalesce around technological proficiencies and tutors' abilities to navigate the varied landscape of tools available, and so it is logical to prioritize training in technologies. However, without the pedagogical capabilities of teaching these technologies to others, facilitating their use effectively, and engaging students in the multiliteracy center, technological specialization does not really matter. There must be a balance between technological and pedagogical preparation for tutoring consultants, but achieving this balance is intricate—tutors need to develop proficiencies with the technological tools available, but they also must be adequately prepared to support students in a way that is responsive to student needs, including engaging students who might be reluctant to seek help and initially may prefer to work individually. Just as tutors require the pedagogical skills to give feedback without overwhelming students with excessive guidance, they must also know how to monitor students' composing processes within multiliteracy center tools in order to promote assistance and engagement in consultations. The data above reflects that students find tutoring consultants in the DMS prepared to meet their needs broadly, but the data below identifies significant differences between students who have participated in consultations with tutors and those who didn't to reveal a marked contrast in depth of engagement.

Marginalized students, such as first-generation and post-traditional students, are most likely to be impacted by pedagogical training that does not emphasize engaging students, as they are more prone to reluctance in participating in tutoring consultations in the multiliteracy center. As noted previously, first-generation college students often face significant challenges in both academic and social realms, stemming from factors like lack of social capital, underpreparedness for coursework, and outsider self-perceptions

(Postsecondary National Policy Institute, 2016; Redford, Mulvaney, & Ralph, 2017; Ward, Siegel, & Davenport, 2012, as cited in Bond, 2019, p. 162). These challenges can affect their composing processes because their identities may make them feel dismissed in academic institutional settings (Denny, 2010, p. 23). Navigating the college environment, especially for those without familial exposure to higher education, can be daunting; furthermore, support structures like writing or multiliteracy centers may seem unfamiliar to students from less resourced backgrounds, exacerbating their reluctance to seek help. Research indicates that first-generation students require additional support compared to mainstream students in tutoring consultations (Bond, 2019). Tutors in both writing and multiliteracy centers may often need to adopt a more directive approach, focusing on broader rhetorical concerns across stages of the composing process, but they require training to effectively do so. As institutions enroll more marginalized students, it becomes imperative to prioritize supplementary resources tailored to their needs (RTI Institute). Multiliteracy centers are situated to provide additional support for marginalized students, but the face of these spaces—tutoring consultants—have to be pedagogically prepared to engage them.

The data and analysis below delve into the specific pedagogical employment of technical support and rhetorical feedback in the descriptions of tutoring consultations in the DMS. Determining success is complex. Students may feel a warm affective response without fully grasping the depth of understanding they could achieve, while tutors may be satisfied with the success of the consultation though they were unable to foster the kind of intensive rhetorical awareness or depth of technological understanding that multiliteracy center scholarship states as goals for sessions (Fishman, 2010). This section

moves into the focused analysis of the codes "rhetorical feedback" and "tech support," which track pedagogical moves made within consultations from both tutor and student participant interviews. A notable pattern emerged during the coding process, where data initially coded as “tutor expertise” in student interviews and as “tutor interaction” in consultant interviews during first cycle content coding was consistently re-coded as either “tech support” or “rhetorical feedback” in the second cycle structural coding. This indicated that data could be read two ways—first, as tracking the general impressions of student and tutor participants, and second, as tracking two separate levels of pedagogical approach. I cataloged the general impressions in the section above, and I now turn my attention to examining the underlying pedagogical approaches to gain insights into how these practices may be falling short in meeting the needs of students, even if they do not recognize tutors as doing so. Failing to engage and reveal to students what they don’t know both count as pedagogical shortcomings, particularly as the likelihood of these risks and their resulting impacts are compounded for marginalized students. This pedagogical reading highlights gaps in tutor preparedness, informing recommendations for refining standard practice.

Pedagogy is Both Technological & Rhetorical

The data coded under "tech support" indicates how well tutors perform the foundational role of providing technical assistance to students navigating complex digital tools and platforms. To be clear, I acknowledge that technical support, often in the form of technological instruction, plays an important role within multiliteracy centers; however, when technological concerns are prioritized over pedagogy in training, tutors become prepared to meet surface level needs, but may remain unable to engage students

in more complex conversations about their texts. Such is the case for Pat and Diego, whose collaborative composing experience Pat describes as one of expedience:

> We've been here in like a session with our class before where [Zahrndt] told us about the [audio recording] room, like features and stuff and about like the podcast room. But when we were actually recording the last time we came in, when we did the first take, we didn't get any help at all basically, just kind of just had someone let us in. And it was just one of the student assistants, I think. They just basically just opened the program and turned it on.

Though Pat later notes that he appreciates this "hands off" approach, it actually reflects a negative tutoring consultation characterized by a lack of support, inadequate guidance, and missed learning opportunities. Their experience undermines the effectiveness of tutoring services, as they technically did not receive any real service beyond the opening of recording software. Because the tutor on duty at the time of their session failed to engage them, they missed the opportunity of getting practice in explaining their composing processes aloud to a tutor. In fact, both Pat and Diego struggled to describe their podcast project in any real depth and were not able to articulate a composing process beyond saying, "We pretty much came in with a script written beforehand. And with that it didn't take too long. We just went in there and were able to record it real quick. We didn't do much editing of the scripts" (Diego). This is evidence that students who do not engage with tutors may lack the opportunity to articulate their processes and describe their projects as comprehensively as those who received individualized support. Students might express gratitude for space to work on their own and brief exchanges of practical guidance, but reliance solely on tech support can hinder deeper exploration of

rhetorical strategies within students' projects. Research (Ishtani, 2006) has shown that marginalized students, such as the first-generation and post-traditional participants in this study, are less likely to feel comfortable engaging with tutors, making this particularly important in this project. They don't know what they don't know, and so they miss out on learning the value of the exchanges between students and tutors that occur within consultations.

The role of "tech support" plays out through assisting users with both basic and advanced tasks related to digital tools and software, which is clear in the tutoring consultant interviews. Daphne describes the bulk of her tutoring consultations unfolding in this manner:

> So [I begin by] just asking basic questions to get an understanding of, okay, so this is what you need to do. And then I set it up for them. And I just feel like that's the most, like, easiest way to just set it up for them. I'm like, "I'm here if you have any questions," and let them do what they need to do. Because a lot of students come in here, and it's just a very vague, "I need this done by tonight or tomorrow."

While Daphne's quote highlights the positive aspects of tech support in facilitating creativity and providing assistance, there are some potential dangers inherent in her description. First, there is the potential for students who are afraid to ask for help to remain unsupported when tutors present a "let them do what they need to do" attitude in the center. Students pick up on the affective dimension in the space quickly and often mirror the attitude of tutoring consultants, therefore it's important for tutors to convey the welcoming, knowledgeable vibe that Ronan pointed out earlier. Tutors should

communicate genuine interest in students' projects and check in consistently, even if students convey that they want to work independently. They must do so without bothering students—a fine line to walk, to be sure. The flip side of things must also be considered—students must strike their own balance between seeking assistance and developing their own skills and expertise. Encouraging students to take ownership of their projects, explore new possibilities, and engage critically with their work can help mitigate the potential dangers associated with over-reliance on tech support, but again, this must be done through engagement, rather than tutors leaving students alone to work individually. Herein lies the challenge for those without training in place to navigate such a complex balance.

Velma highlights another important issue with over reliance on the tech support approach: the expectation for instant solutions. She shares that "sometimes they get angry with us, because they're like, how do you like, how do you do this? Like, let's figure it out. And I'm like, this is not something you can rush." When students can't get immediate answers, frustration arises, and this pressure undermines the learning process and overlooks the need for patience and experimentation, emphasizing quick fixes over meaningful learning experiences. Because the emphasis remains on facilitating users' immediate needs and fostering a sense of digital literacy and comfort within the technological environment, this supports the notion of tech support lacking depth. While essential for users grappling with initial challenges and uncertainties, these interactions often fall short of offering the comprehensive feedback and critical analysis necessary for students to deeply understand and refine their design processes. Despite the valuable role of tech support in overcoming initial hurdles, its limitations in fostering deeper

engagement with design concepts and processes persist, reinforcing the argument for the distinct value of rhetorical feedback in enriching students' understanding and proficiency in digital media creation.

In contrast to the practical assistance offered through tech support, the data coded under "rhetorical feedback" in student interviews underscores the transformative impact of tutors in guiding students' rhetorical and artistic decisions. Let’s return to Chad, who describes his session with Amaya in detail:

> I went in and, you know, she really helped me…you know, yeah, helped me sort of artistically shape like, what am I going to put where, and this clip will just go here, and now I've got 20 seconds to talk over it…She really helped me because some of that I didn't know before. Is this too long on the gap of a black screen? I wanted a little bit of dramatic effect, but is that too much dramatic effect? That type of stuff that you don't know when you watch a Netflix documentary or something, how much artistic design that goes into everything, every single thing, every piece of a detail…You know, all of those details are such artistic discernment and every nook and cranny and pieces of things.

Here, Amaya is depicted not merely as a technical advisor but as a collaborator, providing insights into aesthetic choices, pacing, and overall rhetorical effectiveness, enhancing the depth and sophistication of their projects. Gone is the transactional tone, the pursuit of a quick fix. Instead, collaborative engagement that fosters critical thinking and creative expression is on display, empowering Chad to make informed decisions that elevate the rhetorical impact of his composition.

Rhetorical feedback provided to students can also profoundly impact their perception of their projects, as illustrated by Raven and Young-Sook's experiences. As noted in Chapter 1, Raven approached tutoring with a negative attitude. She worried about people judging her for getting tutored, and this negatively also initially impacted how she felt about her project. Engaging with Amaya realigned her attitude:

> Well, she was already giving me compliments on the photos and things I had. And I noticed one thing that she had pointed out, she's like, "Well you're doing the skate park, you might want to get some night photos, like go down at nighttime." So that was one of her suggestions. And then…I was like, "You know what, the light and everything." So, when I put the one today on the map, I mean, you can see how the light is shining down on him as he's doing his trick; his skateboard's off the ground. And that was like the perfect capture for me and my project.

Raven recognizes that Amaya's suggestion to capture night photos of the skate park not only improved the technical quality of her project but also instilled a sense of excitement and pride in her work. By incorporating the tutor's feedback and witnessing positive reactions from her teacher and peers, Raven transitioned from a potentially negative view of her project to one filled with enthusiasm and satisfaction. Similarly, Young-Sook's engagement with rhetorical feedback led to a transformative experience in her creative process. Through collaborative discussions with tutors Dahlia and Amaya, she was able to explore new ideas, refine her approach, and embrace fluidity in her artistic identity. She says:

> Both Amaya and Dahlia listen to my idea and they want to help [with] that idea. It didn't ever change the idea. Or they show me a different way and then I do more,

or maybe [they say] “that way is good too." And we share with each other and that was very good discussion[s with] each other. And then I maybe change it up…I don't want to do only my way to mak[e] my art…we always do, you know, sharing and discuss[ing], changing. I don't want to do like strictly my ideas only.

The shift from rigid adherence to a more open-minded and collaborative approach empowers Young-Sook to experiment with different techniques and perspectives, ultimately enhancing the quality and depth of her creations. The experiences of Raven and Young-Sook highlight not only their ability to describe intricate design decisions but also how their engagement with tutors informed and enriched those decisions, underscoring the profound impact of rhetorical feedback in fostering a deeper understanding of processes and design.

The reflections Young-Sook shared offer valuable insights into the diverse pedagogical approaches present within tutoring sessions and highlights the impact of consistent engagement with tutors on students' learning experiences. She states that Dahlia is “very good [at] teaching,” but she left after a few semesters of working with Young-Sook. Now, Young-Sook works with Amaya, who she notes is skilled at “using Photoshop. She's good, she has [good] technique, but…[her] teaching skill is where she needed more development [because]…she did it for me, but I didn't do [it] myself. She need[s] to teaching a little bit more development.” Young-Sook's account highlights the significance of engaging closely with tutors to discern different pedagogical styles and identify individual learning preferences. The departure of a tutor like Dahlia, whom Young-Sook esteemed highly for her teaching prowess, underscores the challenge of maintaining consistency and quality within tutoring services. Despite this setback,

Young-Sook's ability to articulate her preferences and recognize the strengths and limitations of various teaching approaches reflects her evolving understanding of both her learning needs and composing process. These capabilities stem from a deeper form of engagement than mere technological support can provide.

Regrettably, the data coded for "rhetorical feedback" in tutoring consultant interviews does not yield the hoped-for insights into consultations characterized by critical discussion and collaborative problem-solving. Instead, the code was applied more when tutors spoke in the abstract about the kind of work they performed, and their descriptions rarely went into significant description. For example, Velma reports that “if [students] come in here [and] we know they already know what they're doing, we more so are just helping them by saying, ‘This is not visually appealing right now. Fix it.’” This quote from Velma does focus on providing feedback related to the visual appeal of the project, indicating a consideration of rhetorical elements. Her feedback goes beyond technical assistance and delves into the realm of rhetorical awareness, encouraging students to consider how their design choices influence the audience's perception. It also indicates tutors who are ready to make assumptions about the level of assistance students will require—how do they know these students “already know what they’re doing”? Even if students have had tutoring on a program previously, there are always new elements to learn. Velma makes it sound as if she and Daphne are looking to do the bare minimum in consultations. Solely focusing on visual appeal neglects deeper rhetorical strategies and compositional choices, potentially limiting students' grasp of crucial communication elements like audience engagement and persuasive techniques.

Even for Amaya and Dahlia, the rhetorical tended to be less emphasized than the technological aspects of consultations. Amaya describes her purpose as a tutor:

> So, we work with students and faculty just like, helping them with the creative process. And so, it could be as simple as just opening up like a document and just getting started. Or it could be more advanced, helping them, like use tools in the software. And most of the time, I would say, like, we help people gain confidence in like, the digital like space and like, improve like, faculty and students' digital literacy. So, I would say the main thing is just like getting that confidence, because I know a lot of people when they come in here, they're just like, overwhelmed, and they just don't know where to start. And I think that's what we mostly help with.

Much like the multiliteracy center scholarship about tutor preparedness, there is a hierarchical prioritization of tech support in the form of opening documents and using tools; in fact, even when Amaya is attempting to illustrate the "more advanced" assistance she provides, she is still referring to technological tool use. That said, she does see some of the bigger rhetorical picture in her reference to the creative process, digital literacy, and confidence—these elements are bigger than technologies, though the use of technology does develop them. Amaya's answer is ultimately about fostering students' rhetorical awareness and critical thinking skills in composing, but she still gets a bit hung up on the tech support required to build those skills. Similarly, Dahlia explains:

> I would say the DMS can be your best friend simply because it offers so much access to, you know, there'll be products and different software to help…And I think it can be really beneficial to making an intimidating project a lot easier…I

think students underestimate how much freedom and you know, help they can get working in the DMS.

Again, we see access to technological products and softwares noted first and foremost, implying their highest position in rank, which may reinforce a narrow perception of the DMS primarily as a technical support center rather than a space for holistic and strategic composing practices. Dahlia does address other important elements of the multimodal composing process that are accessed through rhetorical feedback, such as the confidence to overcome intimidation, but she is not focused predominantly on promoting the value of rhetorical feedback. In fact, it's unclear what kind of help she refers to when Dahlia mentions the kind of "help they can get working in the DMS," as she has linked "products and different software to help" earlier in the quote. She may be referring to the support of a tutoring consultant or the help technological resources provide. Both Dahlia and Amaya prioritize technological support over rhetorical aspects of tutoring, despite recognizing the importance of elements like the creative process and digital literacy, which underscores a tendency towards a narrower perception of the center's role primarily as a technical support space rather than one for holistic composing practices.

Though this analysis is a very close reading of these tutors' descriptions of the work they perform in the multiliteracy center, it reflects the way training shapes tutors' perceptions about their jobs. If pedagogy had been a central focus, or perhaps getting students engaged in conversations about their decision-making and composing processes had been articulated as a goal for consultations, these interviews would presumably look quite different. These areas of tension, in conversation with Zahrndt's training methods, require me to make judgment calls about the efficacy of Amaya's pedagogy based on the

details revealed in the data, which differ from students' opinions. It requires me to consider how the disproportionate distribution of labor onto a single “expert” tutor, coupled with the fact that only half of the student visitors interviewed engaged with a tutor, highlights shortcomings under the realm of pedagogical training. This data suggests that a fundamental change in approaches to tutor training is necessary in the DMS.

From Technological Support to Rhetorical Guidance

The standard practice regarding tutor preparedness in multiliteracy centers must undergo a fundamental shift from prioritizing technological skill development to equivalently prioritizing both technological and pedagogical skills. The conventional approach to tutor preparedness in multiliteracy centers requires a significant shift, moving away from exclusively emphasizing technological skill development to giving equal prioritization to both technological and pedagogical competencies. While technological proficiency is crucial for tutoring consultants, the disproportionate emphasis on it neglects the significance of pedagogy, resulting in tutors who are underprepared to meet the diverse needs of students. The current training outlined by multiliteracy center scholarship might prepare tutors to address common technical and rhetorical challenges, but like the standard practices themselves, this preparation predominantly considers the needs of “traditional” students. What about unexpected problems, such as accessibility issues? Or students so unused to interacting with support systems that they dismiss them without engaging? Such challenges require pedagogical dexterity developed from a widely sourced theoretical foundation and experience navigating, or observing others navigate, of a variety of consultations with a diversity of composers.

The data presented in this chapter highlights the absence of structured training in the DMS, where administration does not directly provide instruction in either technological or pedagogical skill development. Furthermore, it also reveals that pedagogical deficiencies pose significant risks for students, as evidenced by the fact that half of the student participants in this study did not engage with consultants. Among those who did, there was a notable improvement in their ability to comprehend and articulate their composing processes, pointing to the value of engagement between students and tutors. Though the realities on the ground in the DMS do not speak directly to standard practices because of Zahrndt's unique approach to tutor training, the data still provides a clearer understanding of standard practice, even if it does so through a complex investigation of absences and disadvantages made clear through comparative analysis of the advantages of others. The current imbalance in standard practice when it comes to training priorities has the potential to not only impact the quality of support provided in general but could also perpetuate inequalities for marginalized students who may be averse to seeking help. By recalibrating the standard practice to prioritize pedagogical training alongside technological proficiency, multiliteracy centers can better serve their diverse student populations and ensure equitable access to academic support services.

Research indicates that marginalized students, including first-generation and post-traditional college students, rely heavily on institutionalized support systems such as tutoring assistance. However, the lack of development in pedagogical skills among consultants can pose challenges for effectively meeting the needs of these student populations. Consultants may struggle to accommodate students who are unfamiliar with

tutoring services or who are resistant to receiving support, potentially leading to students failing to take advantage of services at all, or to consultations focused solely on surface-level problems rather than the development of sound communication practices. Students from marginalized backgrounds may be unfamiliar with, and therefore dismissive of the value in, tutoring, or more hesitant to engage with support services in general. This was certainly the case for first-generation participants Sally, Diego, Pat, and Ronan in this study. To combat the risk of failure to participate in tutoring, multiliteracy centers can provide consultants with pedagogical training to better equip them to engage reluctant students, reshape their expectations, and facilitate meaningful consultations that address the diverse needs of all students, ultimately ensuring equitable access to academic support services.

CHAPTER 4

MAKING THE MOST OF YOUR BACKPACK: ENHANCED ENGAGEMENT AS A MEANS TO COMPETENCY, CRITICAL AWARENESS, AND TRANSFER

"I mean, it's like the backpack [that] Dora carr[ies] around. You know she has everything in her backpack to get her through her adventure. So, it's like, basically, these resources are tools in a backpack for college students. And…the more knowledge you have of what's available to you, that gives you more tools under your belt for you to use not only in school, but in public, at work."
—Raven, interview participant

Vignette

"Microsoft Word is the best program for creating your resume, period."

It is Tuesday, February 15, 2022, and Jason Zahrndt leads a class session of my upper-level undergraduate Business Writing course in the Digital Media Suite. Half of the students present sit around the conference table, eyes wide in surprise at his opening line. The other half peek over from the computer stations staged around the room, while the rest of class joins in via Microsoft Teams.

"Even if you're going into a graphic design field, where you do have the expectation of doing something more creative, the Microsoft Word resume and the PDF document that's generated out of it is going to be the one that you absolutely need every time. So, it's not as glamorous, it's not as flashy, but it's going to be the one that will actually help get you the job."

From here, Zahrndt begins opening sample resumes on the large screens mounted on the walls. He cites statistics—60-80% of resumes are kicked out before reaching the

hiring manager's desk due to computer formatting issues—that visibly perk students' attention. They listen, rapt, after this statement. They take notes as he explains how keywords flag within a hiring computer system, how the use of headings within resumes draw attention to specific sections, and how headers can improve accessibility through screen readers. "You never know who's reading these and making those hiring decisions," Zahrndt notes. Students nod in agreement.

The lesson moves along, and students ask questions about how to organize content and the best ways to present experience—are bullet points better than sentences? Zahrndt and I discuss the pros and cons with students, and we review some of the strategies for linking keywords between resumes and job ads that we had covered in the previous class session. Before students begin working independently on their resumes, Zahrndt introduces one more element to the lesson.

"Microsoft Word has added a very cool feature, but you'll need the updated version of the program," he states. He has already reminded the students that UofL provides full, free access to the Microsoft suite for them to download through the university. Students need only update their software through the website to access this new feature. "If you click on 'Review,' over on the right side of the screen you're going to see an option for a LinkedIn resume assistant." He clicks on it and a sidebar opens up with an empty search field. "This will let you search for jobs in whatever field you're looking for, and it will give you keywords." He types in "faculty development" and scrolls, showing the students how the software pulls up job ads, how it can be targeted to provide feedback on specific sections of the resume, and how it pulls samples from resumes posted on LinkedIn. Zahrndt explains that this tool can help generate keywords for different types of jobs, which is particularly helpful if ads fail to go into much detail.

"You can learn more about this tool and other courses offered by LinkedIn Learning through the Center for Digital Transformation," he adds as he walks around helping students find the "Review" button in Word. I see several of them type in the jobs they're interested in pursuing after graduation and begin using the assistant to edit their resumes.

At the end of the period, as students are walking out of the DMS, one pauses to tell me, "I don't think I've ever learned this much about Word in my life." She laughs on her way through the door, not knowing that in just a few weeks she would be emailing me to say that the resume and cover letter she had created in our class had landed her first job out of college.

Introduction

The vignette above illustrates some of the myriad potentials for expanding engagement that the multiliteracy center offers. Students in my Business Writing course were introduced to new tools and more advanced levels of composing within Microsoft Word, as well as services sponsored by the university like the LinkedIn Learning courses. Furthermore, students were tasked with conceptualizing the link between the materials they worked on in class and the real-world application of those materials, which I note as evidence of transfer (detailed further below). Students exhibited evidence of the deep engagement touted by multiliteracy center scholarship that is marked by critical awareness of and competence with available resources (Sheridan, 2010a), but in addition, those skills work together to contribute to students' ability to transfer them from one setting to another. These concepts—levels of engagement, critical awareness, competence, and transfer—are complex, and I will unpack them in depth within this chapter, but we must first return to the vignette for another moment.

My class's visit to the DMS was the culmination, in many ways, of the course, and our meeting focused on polishing the final assignment, a job materials portfolio. Of particular concern in this lesson was the formatting of students' resumes, which were included in the portfolios alongside analyses of job postings, cover letters, and professional emails. I had met with Zahrndt at the beginning of the semester to schedule the trip and collaborate on both the project prompt and lesson plan. In that meeting, Zahrndt steered the resume assignment away from using the flashy Adobe InDesign software, which I wanted students to use, to the industry-standard Microsoft Word. He explained that job applicant tracking systems more readily read Word than InDesign. My top goal for the project was that students generate documents transferrable to job applications, so his feedback realigned my expectations and guided me to the best version of the assignment for meeting this goal. My excitement at the prospect of teaching students to use an advanced design program had distracted me; I had been dazzled by the affordances within the multiliteracy center and lost sight of the objectives at the heart of the assignment, but partnering with the DMS ultimately brought me back to reality.

The visit not only instructed students on Word formatting but also empowered them to apply these skills in real world scenarios, emphasizing the center's role in developing both proficiency and practical multiliteracy use. During our class visit to the DMS, Zahrndt's guidance showcased the multiliteracy center's impact beyond teaching technological skills. By the time we arrived at the DMS, students were ready to work with Zahrndt to strengthen keyword recognition and format their resumes for peak searchability. Based on Zahrndt and my's early-semester conversation, I had laid the groundwork for the class visit by conducting lessons on resumes, helping students connect keywords from job ads with their work experience, and supporting them through

multiple drafts to establish their competence with the content. Surprisingly, many students lacked familiarity with Word formatting, highlighting the necessity of addressing assumed proficiencies in the classroom. The experience revealed new understandings of Word's tools, with students later sharing job success stories, achieving the goal of skills transfer. This glimpse into the class visit underscores the multiliteracy center's diverse support offerings, emphasizing collaborative faculty-center efforts for facilitating the competent and critically reflective use of technologies, but also for expanding conceptions of engagement to emphasize facilitation of transfer, as well.

While Chapter 2 traced the impact of design in the multiliteracy center and Chapter 3 unpacked tutoring consultant preparation, Chapter 4 examines the outcomes of student engagement in the multiliteracy center. There is a shift here from considering the actions of administrators—designing infrastructure and training tutoring consultants—to exploring the consequences of those undertakings through the experiences of students. While multiliteracy center administrators and faculty both work to facilitate student engagement—that engagement is measured by the skills resulting from that facilitation. Multimodal pedagogy scholarship defines engagement as the active participation, involvement, and interaction of students in the writing process characterized by students' interaction with the breadth of various modes of communication such as text, image, audio, and video, and their ability to contribute to and circulate texts within and beyond the classroom setting (Hawisher & Selfe, 1999; New London Group, 1996; Yancey, 2004). Furthermore, Takayoshi and Selfe (2007) assert that multimodal composing improves student engagement by providing a meaningful approach to I that aligns with their real-life experiences in digital spaces, as many students are already active consumers of multimodal compositions, building a foundation for transfer. The complex

processes of multimodal engagement simply require *more* from composers, from longer composing sessions to awareness of the variety of technological tools available, and multiliteracy centers are situated to support these efforts.

In fact, fostering the type of engagement outlined above is a central goal of the "idealized" multiliteracy center (Sheridan, 2010a). This idea undergirds **the third claim established by multiliteracy center scholarship, which states that multiliteracy centers must facilitate deep engagement as evidenced by students' competent and critically reflective use of resources** (Cooper, 2010; Sheridan, 2010a). I will unpack the scholarship from which this claim arises in more detail in the literature review below, but I must first address three of the key terms found within the claim—deep engagement, competency, and critically reflective use.

Multimodal composing, as noted above, deepens student engagement, which can lead to the development of critical thinking and composing skills, active learning, and digital literacy. The deep engagement referred to in the claim above goes beyond the basic conception of engagement, which is necessary for success in coursework but may not involve profound connections with material or advanced understandings of underlying concepts. Deep engagement, in comparison, comprises a more immersive level of intellectual involvement, interaction, and exploration, where students are not only using tools and composing texts but are also critically reflecting on their practices, applying complex concepts, and understanding the implications of their work within a broader cultural and technological framework (Yancey, 2004). Engaging in this way, with this depth, has the potential to prime students for the transfer of skills because they are already employing thinking beyond the scope of assignment parameters. This, as Heather Hill (2016) notes, is "metacognition, the idea of having an awareness and

understanding of one's own learning and thought processes," which "is often associated with the ability to transfer knowledge successfully" (p. 82). Depth, when used to qualify engagement, encompasses both time and quality. It simply takes more time to achieve deep engagement, though spending a lot of time in the multiliteracy center does not guarantee depth. Students might fixate for hours on the color scheme of a webpage they're building, but that does not ensure that they're critically debating visual design; they could merely be indecisive about what looks prettiest without regard for what different colors communicate. Thus, the other marker of depth—quality—is essential to account for in measuring engagement, despite the complexities inherent in measuring it. Quality, in terms of student engagement and multimodal composing, can be understood as the sophistication of students' interaction with and production of texts. Quality engagement involves students not just completing tasks but engaging in a thoughtful gathering, construction, or reconstruction of a literate act across various media, reflecting a nuanced understanding of composition as more than just writing words but also interfacing with technology and different modes of delivery (Yancey, 2004).

Ingrained within this definition of deep engagement is attention to the variety of decision-making required by different contexts, which nods to transfer without overtly acknowledging it. In fact, as Alexander et. Al (2016) note in one of the only articles directly linking transfer to the multiliteracy center, "Current scholarship has taken up the question of transfer in relation to multimodal I (Alexander, 2014; Alexander & Rhodes, 2014; Clark, 2014; DePalma, 2015; DePalma & Alexander, 2015; Moore, 2012; Yancey, 2004), though it is not specifically related to multiliteracy centers" (p. 33). Additionally, scholars within writing center studies are investigating how these spaces facilitate transfer (Bowen & Davis, 2020; Driscoll & Devet, 2020; Hastings, 2020; Hill, 2020;

Hughes et. Al, 2010), and much of this scholarship offers rich information for multiliteracy center contexts, but in Snead et. Al's (2022) WPA-CompPile Research Bibliography "Rethinking Transfer: The Rise of Writing Transfer Research Across Contexts" only one of eight entries in the "Transfer in and from Writing and Multiliteracy Centers" section directly references multiliteracy centers specifically. This is, simply put, inadequate to acknowledge the significance of transfer in the multiliteracy center. I argue that transfer should be a *central* element of the study of engagement within the multiliteracy center. Students must make informed decisions continually as they compose—about technologies, arrangement, audience, genre conventions, turning research into information—and these decisions are informed by environment, purpose, and audience each time. What works in one setting may not be appropriate in another, and adaptability is one of the most vital skills arising from engagement. Because multiliteracy center scholarship's use of "deep engagement" is limited in this way, I use the term "enhanced engagement" to differentiate from the limited disciplinary use of engagement and mark my encompassing of both the depth *and* potential for transfer that multimodal composing within the multiliteracy center provides, as I will argue further in the conclusion of this chapter. In the meantime, I will use "deep engagement" when referencing scholarship, but use "enhanced engagement" when making my own recommendations in the project. Enhanced engagement is marked by intrinsic motivation, willingness to share and receive new ideas, recursive exploration of various options in the composing process, and ultimately adaptive learning capabilities. It is a process of engagement that results in students' attaining competence and critical reflection.

According to multiliteracy center studies, students who work within the multiliteracy center experience deep engagement with their projects, and as a result,

should display the outcomes of competency and critical reflection. In the field of rhetoric and I, competence refers to the ability to effectively communicate and take part in rhetorical situations, including the capacity to understand and analyze different audiences, genres, and contexts, as well as the ability to craft and deliver messages that are appropriate and persuasive (Greenberg, 1982; Novick, 1962; Brannon & Knoblauch, 1982). Multimodal competency, as outlined by Grouling and Grutsch McKinney (2016), refers to the ability to understand and effectively use multiple modes of communication, such as visual, oral, and written modes, in composing texts or projects, as well as the ability to choose the appropriate medium and tools for a given task (p. 63). While competency can be difficult to pinpoint because it resists being bound and is somewhat subjective, I track it in student participants' interviews through the authority with which they speak and their ability to explain complex composing processes—they indicate competence when they can easily describe *how to do* something, like open Adobe Premier Rush, start a new project, and upload video footage. Similarly, tracking critically reflective use can be a bit difficult to articulate. Generally speaking, critically reflective use of resources entails an ability to understand and reflect on the implications, benefits, and drawbacks of the available tools to make informed decisions about their use. Applying the term to multiliteracy center use, critical reflection involves the continual assessment and consideration of tools and resources. When student participants spoke with authority about the options available to them and how and why they chose to use them, whether technological or service-oriented (such as the availability of tutoring consultants to step in and help solve problems), I marked that as evidence of critically reflective use—they indicate critical reflection when they can explain *why they did* something, like adding fading or voiceover between video scenes in Adobe Premier

Rush. Taken together, attaining competence and critical awareness pave the way for transfer because students begin to see the bigger picture beyond the assignment; they can begin to think about how and why they might employ these skills elsewhere in their lives. Competency and critically reflective use are, ultimately, intertwined, as one cannot become a critically reflective user without establishing competency, and competency is achieved through critically reflective use. Therefore, after the first few rounds of coding, I found it intuitive to combine the two terms into one code, "critical competency," which will be further explained in the data analysis section of this chapter.

Similar to the ways chapter 2 argues how multiliteracy centers are situated to increase awareness of infrastructural resources and chapter 3 points to the ways tutoring consultants can facilitate reluctant student engagement with support services, **I assert in this chapter that the third claim from multiliteracy center scholarship about deep engagement does not adequately embrace significant benefits that arise from student engagement, particularly those that are vital for marginalized student success. A more capacious version of the claim would contend that the enhanced engagement fostered within multiliteracy centers should facilitate competence and critical awareness, resulting in the ability to transfer these skills to other contexts.** When the conversation about engagement is focused solely on the benefits of what deep engagement brings—the zoomed-in, focused acquisition of competency and critical reflection—scholars miss an opportunity to examine the wider-reaching benefits of engagement. As this chapter will unpack more below, facilitating transfer can be a complex undertaking, but when students experience enhanced engagement to become critically competent users of the multiliteracy center, they are primed to connect the skills acquired there to other contexts beyond the center, and perhaps even beyond the

university. This offers multiliteracy center scholars another opportunity to recognize and publicize every positive element that centers provide to ensure that users—faculty, students, and staff—are fully aware and take full advantage of the space. This is particularly important as diversity on campuses continues to expand and students from a variety of backgrounds, cultures, and learning styles require support to achieve their goals.

To ascertain whether or not student participants working in the DMS perceived themselves as deeply engaged, critical users of the resources available to them, I asked participants to reflect on their experiences working in the center. I queried them about the assignments they worked on and the composing processes they used. I asked how much time they spent working on their assignments both within the DMS and outside of it, and whether or not they felt more excited by and committed to their multimodal projects than they typically felt about more traditional textual assignments. Finally, I prompted students to consider if they felt like the skills they developed in this process might be applicable elsewhere. These questions required participants to then turn their reflections outward to other parts of their lives.

Understanding Engagement Within Multiliteracies

From Multimodal Impetus…

The study of multimodal I pedagogy initially arose outside of the field of rhetoric and I under the moniker of a pedagogy of multiliteracies in response to globalizing classrooms and newly minted communication technologies. The New London Group (1996) argued that traditional literacy education, focused on formalized, monolingual, and rule-governed language, is outdated for a contemporary, globalized world, advocating instead for a pedagogy that embraces diverse subjectivities, modes of

representation, and multiple semiotic modes to foster greater access and inclusivity in learning. By embracing difference to foster inclusivity, a multiliteracies approach to pedagogy opened up new avenues of composing to accommodate globally expanding demographics and technologies. Additionally, recognizing the value of multiple semiotic modes—visual, aural, gestural, and spatial, as well as textual—acknowledges the diverse ways in which individuals express and interpret meaning. The New London Group (1996), and much of the multimodal and multiliteracies scholarship following it, argue that by valuing these various modes and teaching competent engagement with them, we can foster inclusive and effective communication, allowing individuals to express themselves fully and understand others more comprehensively despite differences in background, culture, or learning practices. This can be crucial for student learning and achievement, particularly for students from non-dominant backgrounds, as it promotes active participation, motivation, and a sense of belonging in the classroom—all of which are elements of engagement.

Beyond the active involvement in the composing process and interaction with multiple modes, engagement within multimodal pedagogy scholarship also refers to students' ability to navigate and integrate different forms of media and technology in their writing practices, reflecting a shift towards a more interconnected and digital approach to I (Hawisher & Selfe, 1999; Wardle & Adler-Kassner, 2015; Yancey, 2004). Multimodal composing enhances engagement because it aligns complex communication practices with incorporating multiple modes of communication (Yancey, 2004). The learning curve of unfamiliar technologies and modal decision-making require more trial and error, experimentation, and revision than standard writing (Adsanatham et al., 2013; DePalma & Alexander, 2015; Grutsch McKinny, 2016). Furthermore, multimodal

composing is not limited to traditional print mediums but includes writing for screens, visual elements, and the ability to move textual resources among spaces. It also involves the thoughtful gathering, construction, or reconstruction of a literate act in any given media, which encourages students to engage deeply with various materials and mediums (New London Group, 1996; Yancey, 2015). In essence, multimodal composing fosters a more dynamic and interactive form of engagement that is responsive to the evolving landscape of communication and technology.

…To Multiliterate Enhancement…

Multimodal pedagogical theory shaped the field's conceptions of multimodal engagement, leading multiliteracy center scholars to predict challenges to achieving these levels of engagement in the classroom alone, thus necessitating the existence of these centers. Common difficulties for faculty inexperienced with multimodal pedagogy include not knowing exactly how to develop these types of projects, lack of confidence in faculty's own technological skills, or lack of clarity in how to assess such projects. Fortunately, multiliteracy centers stand ready to confront such issues. As George Cooper (2010) writes about working with Sheridan: "My experience suggests that formally partnering with a MLC over a full semester, I and rhetoric teachers (as might many others) can engage in innovative teaching practices that might otherwise be impossible" (Cooper 2010, p. 148). Partnering with the multiliteracy center empowers faculty to step out of their comfort zones, utilizing expert support to develop courses that leverage elements beyond their expertise and enabling them to excel in multimodal instruction with innovative teaching and assignments.

Multiliteracy center specialists extend engagement to faculty and students throughout the semester, going beyond syllabus and assignment design. They can

alleviate the teaching burden of new technologies by facilitating class visits to the center or offering in-class instruction. Cooper (2010) emphasizes that integrating multiliteracy center support allows instructors to free themselves from the expectation of being experts in every aspect of technology-intensive composing (p. 149). Faculty proficiency in utilized technologies is not a prerequisite. Cooper's collaboration with a multiliteracy center is a lesson in how to enhance engagement to benefit students extensively. He writes:

> Because of the sustained partnership between this course and the MLC, the arc of learning was longer than it is traditionally when students' interaction with tutors is limited to a single session…During this process, my students and I were aware that we were learning together, and…the points where students tutor the teacher become moments of genuine empowerment. This course benefited from collaborative planning of syllabus and assignments with MLC faculty, from whole-class workshops given by faculty and MLC tutors, one-on-one instruction, and the real occasion of an instructor learning together with his students. (Cooper, 2010, p. 149)

This engaged partnership strengthens ties between students, faculty, and the center, empowering students to "tutor the teacher" and challenging classroom power dynamics. This approach particularly benefits students with limited cultural capital, such as first-generation students, promoting the social access discussed in Chapter 1. In essence, the collaborative engagement with multiliteracy centers not only enhances the learning experience for students but also transforms the dynamics between faculty and students, fostering confidence, shared learning, and a sense of empowerment that extends beyond the classroom.

Courses collaborating with multiliteracy centers establish an extended learning arc, acclimating students to broader conceptualizations of learning beyond traditional classrooms. In navigating challenges, students learn to seek assistance from diverse sources, challenging the conventional role of the classroom as the sole space of instruction. As technologies advance, classrooms alone cannot cover the evolving landscape, necessitating an expanded learning arc that includes infrastructural resources like multiliteracy centers. Fishman (2010) outlines the center's purposes, emphasizing exploration of multimedia literacy principles, non-evaluative support for communicative endeavors, and collaboration on multimodal projects (p. 65). Bancroft (2016) underscores multiliteracy centers as havens for personalized student support, fostering participation and awareness in alignment with multimodal pedagogy goals (p. 51). Multimodal projects, fostering deep or enhanced engagement, yield significant learning outcomes emphasized by multiliteracy center scholars. Sheridan (2010a) envisions a "fully realized" multiliteracy center as facilitating competent and critically reflective technology use, transcending basic skills to cultivate a profound understanding of available tools (p. 7). Teaching students to be sophisticated users involves conscious choices, comprehension of resource possibilities and limits, and deep engagement through exploration, trial and error, and time spent with resources (Grouling & Grutsch McKinney, 2010; Sheppard, 2014). Deep engagement is crucial for students to reach the competency and critical awareness envisioned by Sheridan, and once these are reached students have acquired the understanding necessary to begin reapplying their knowledge to versatile settings. Alexander et al. (2016) describe "adaptive remediation," a multidimensional approach to multimodal composing that develops composers' meta-awareness in reshaping prior knowledge to suit current semiotic resources, which is in

fact enactment of transfer. Within the multiliteracy center, adaptive remediation offers students opportunities to transfer previously acquired skills to current composing events, further contributing to their comprehensive learning experience; however, Alexander et al. (2016) focus primarily on prior knowledge reapplication, missing an opportunity to examine the significance of forward-looking transfer. While requiring substantial commitment, multiliteracy centers are intentionally designed and staffed to foster diligence, providing an environment conducive to such encounters.

…And Beyond: The Possibilities for Engagement Beyond the Classroom

Another significant benefit of enhancing student engagement within the multiliteracy center is that the sustained engagement that leads to competence and critical awareness sets students up for transfer. Teaching for transfer is its own area of specialty within I studies, often linked to writing about writing and threshold concepts. At its most basic, transfer is "the ability to take knowledge and practices learned…in one context and repurpose or reframe that knowledge and practice to help you in another context" (Taczak, 2021, p. 302). Shepherd (2018) adds, "instead of thinking of transfer as a literal 'transfer,' it is more useful to think of it as creating a…connection between one area of knowledge and another inside of the learner's mind" p. 108). Furthermore, as Wardle and Adler-Kassner (2015) note, a student's ability to apply and adapt knowledge and skills is evidence of a greater depth of understanding than mere memorization would provide, as it demonstrates a capacity to extend learning from one setting to different contexts. My use of the term accounts for the transfer of knowledge across courses and campus, but it also extends this understanding beyond the university to consider how what's learned in a college education can be applied in life and professional settings.

The ability to repurpose and reframe knowledge involves not only applying new knowledge to new contexts but also drawing from prior experiences and adapting to current challenges. According to Yancey, Robertson, and Taczak (2014), "prior knowledge—of various kinds—plays a decisive if not determining role in students' successful transfer of writing knowledge and practice" (p. 5). Transfer extends both forwards and backwards, as Shepherd (2018) explains: "Forward-reaching transfer is when a learner reflects on future contexts where new knowledge could be used, while backward-reaching transfer is when a learner thinks back on past learning when encountering a new learning challenge" (p. 109). Activating prior knowledge recognizes the value of students' lived experiences, empowering marginalized students and promoting their confidence for social capital and a sense of belonging on campus. Shepherd (2018) emphasizes that using lessons from transfer literature allows teachers to contextualize students' existing learning, bridging classroom practice and out-of-school literacies (p. 104). Yancey, Robertson, and Taczak (2014) found that students develop knowledge and practice in various writing sites, including digital media and the workplace, drawing on them "even when some of them are years, or even decades, old" (p. 23). This highlights the lasting impact of transfer in shaping communication across personal, professional, and civic domains.

Unsurprisingly, it was not long before writing center scholarship began making the connection between tutoring consultations and transfer. Scholars argued for writing centers as valuable sites for facilitating transfer (Farrell & Harcourt, 2015), stating that writing "centers already teach for transfer" because "transfer studies and writing centers are made for each other" (Devet, 2015, pp. 120, 138). The task of teaching for transfer within the writing center falls to tutors, and thus David Stock and Shannon Tuttle Liechty

(2022) argue that two areas of research arose around transfer. First, research considering how tutors themselves transfer knowledge and experience beyond the writing center (Driscoll, 2015; Driscoll & Harcourt, 2012; Weaver, 2018), and, second, how writing centers might prepare tutors to facilitate students' understandings of their own transfer (Bowen & Davis, 2020; Cardinal, 2018; Devet & Driscoll, 2020; Hahn & Starh, 2018; Hill, 2020). The tutor training conversations illuminate helpful findings relevant to multiliteracy center training for transfer.

Widespread uptake of transfer's significance in writing centers soon led to the development of training texts to aid writing center tutors in effectively incorporating transfer theory to enhance their consultations. Tutors must begin by engaging students in explicit transfer discussions, teaching key concepts like genre and discourse community, and helping students connect their ideas to contexts beyond the classroom (Hill, 2016). By focusing on teaching key writing concepts, engaging in reflective practices, and helping students develop a more accurate theory of writing, tutors can enhance students' writing-related knowledge transfer (Devet, 2015). Training to do so through staff education such as workshops (Cardinal, 2018) was considered before arguments for weaving transfer into initial tutor training methods won out (Bowen & Davis, 2020). Central to this training is the importance of reflection, metacognition, and genre theory in enabling transfer and transformation in writing (Hill, 2020; Johnson, 2020). Dana Lynn Driscoll and Bonnie Devet's (2020) edited collection Transfer of Learning in the Writing Center lays the groundwork for such training. Ultimately, transfer is most useful when applied as a tool for tutors to engage students, leading to benefits such as students experiencing clearer next steps for assignments, feeling better prepared for future tasks, having breakthroughs in their writing projects, and developing a stronger sense of

themselves as writers (Bromley et al., 2016). Transfer therefore becomes a driver for engagement while simultaneously acting as a significant benefit arising from engagement, contributing to student success.

Students receiving tutoring in writing centers experience emotional benefits due to their engagement such as increased confidence, reduced anxiety, and a sense of empowerment. These benefits are facilitated through empathy-based tutoring strategies that focus on listening, translating, advising, and motivating students. Additionally, writing center consultants play a crucial role in mediating writing anxiety through empathetic practices and positive affirmations, contributing to increased self-efficacy among students (Lunden et al., 2023). Empathy and encouragement can be integrated into writing center consultations by acknowledging personal writing struggles, sharing experiences of overcoming writing anxieties, and offering positive reinforcement to help students build confidence in their writing abilities. This approach can help students feel supported, less defensive, and more open to receiving feedback and guidance during the consultation (Bieri, 2015). This is significant because students' mindsets and sense of belonging influence their motivation to seek help in a writing center by shaping their beliefs about themselves and their willingness to seek support. Students with growth mindsets are more likely to seek help, and a strong sense of belonging can encourage students to visit campus support centers and benefit from their experiences (Freeman & Getty, 2023). The benefits identified here of writing centers' facilitation of engagement and transfer are significant and lay the groundwork for examining how multiliteracy centers might approach both engagement and transfer.

Scholars in multiliteracy centers may uncover a rich tapestry of connections between the insights gleaned from multimodal I pedagogy, writing centers, and the

dynamics of multiliteracy support. These insights, honed through the facilitation of engagement and transfer in writing centers, provide a promising foundation for understanding the role of engagement and transfer in multiliteracy centers. The relationship between multimodal I pedagogy and the establishment of multiliteracy centers further intertwines, emphasizing the importance of these centers in supporting faculty and students in implementing multimodal assignments and fostering deep learning outcomes. This underscores the significance of multiliteracy centers in enhancing student engagement and promoting critical competency in multimodal composing, which in turn facilitates transfer. As teacher scholars endeavor to understand students' experiences within these centers, they contribute to the refinement of practices and the strengthening of support services. Thus, exploring participants' perceptions about engagement with multimodal composing in multiliteracy centers not only informs current practices but also shapes the trajectory of future research, bridging insights from multimodal pedagogy and writing centers to enrich the landscape of multiliteracy support.

Tracking Engagement

As the literature review above illustrates, scholars in multiliteracy center studies aspire to foster student engagement in the multiliteracy center as one of the core objectives for the space. The central claim about engagement that this chapter investigates asserts that visiting the multiliteracy center will foster deeper engagement with assignments than that found in typical classroom settings alone. Facilitating such profound learning experiences is a collaborative effort between faculty and multiliteracy center administrators, who are ready to assist at any point in the process—from designing assignment prompts to scaffolding activities to guest lecturing or hosting the class in the center. Through the enhanced engagement of the multimodal composing process and time

spent working in the multiliteracy center, students gain critical awareness of and competency with the resources they've used. Furthermore, once students establish competence and critical awareness, they are primed to understand and practice transferring skills from one context to another, as the analysis section on transfer below will explain.

Testing students' experiences with the DMS in this study clarifies the center's efficacy and uncovers insights into engagement, especially for marginalized students. Addressing challenges faced by first-generation and marginalized populations, who may encounter difficulties navigating university complexities, poses a significant hurdle. Because these students are "more likely to encounter difficulties navigating the complexities of the university system and campus, and less likely to take advantage of student support services" (Borchert, 2018), managing to produce the levels of participation and commitment necessary to achieve the enhanced engagement detailed above presents a real challenge. Often, much of students' time and attention is diverted to mere survival on campuses—particularly as it exists alongside familial and financial burdens that "traditional" students are less likely to face (Bollig, 2019). Is it even ethical to expect such undertakings of our students? The short answer is yes because we risk them missing out on so much if they do not. But this puts the onus of developing educational elements—be they assignments, courses, or events such as digital media showcases—that remain cognizant of these material constraints on faculty and institutional administrators. So perhaps a better answer to the question of whether or not we ought to expect deep engagement from our students is that the expectation only exists ethically if facilitating this level of engagement is not only central to the goals for the course, but has also shaped the course design, with infrastructural and pedagogical

supports in place to provide this facilitation. There is never enough class time, but introducing students to support services during class periods becomes essential to granting those who do not have time outside of class to the support of the multiliteracy center. If they cannot make another visit, then at least they have had the one with their class—and they may have more time in another semester to return and take advantage of the services they are now familiar with. Means and Pyne (2017) affirm that learning centers contribute to students' sense of belonging, positively impacting achievement and retention, and Kursav et al. (2022) emphasize educators' role in fostering social cohesion for institutional resources to enhance student retention. In the end, the students themselves are the only ones who can say with any real certainty whether or not they experienced enhanced engagement that has led to the development of critical competency, thus reaffirming the importance of interview studies such as this one to inform scholars on the success of practical applications of theory.

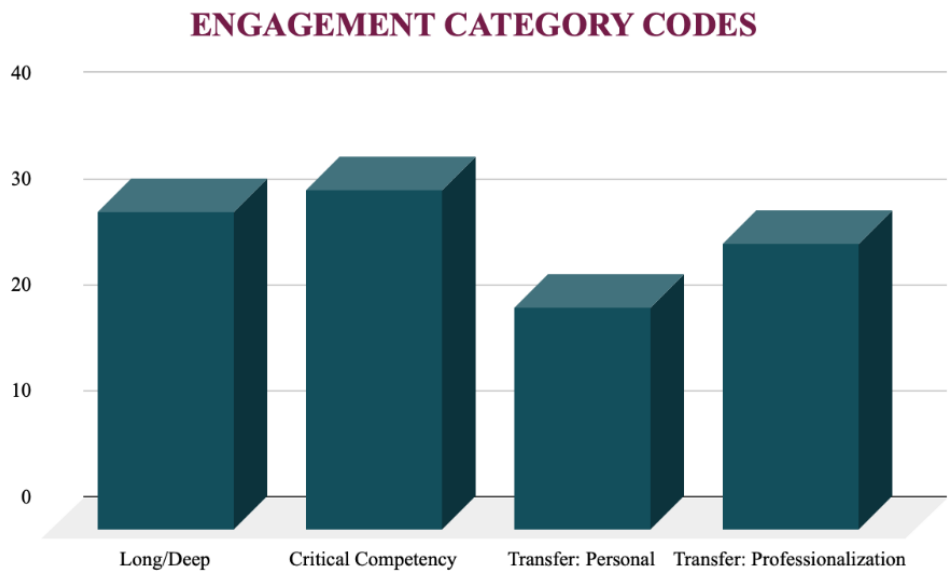
To refresh readers' memories, though all student participants in this project identified as outside of the mythic "traditional" student demographic, they showcase the heterogeneity of non-dominant student populations due to their demographic breakdown (charted below):

Interview Participant Information								
Name	**First-Gen**	**Post-Trad**	**Undergrad**	**Grad**	**Tutor**	**Course Intro**	**Faculty Rec**	**Class Visits DMS**
Chad	X	X	X			X		
Diego	X		X			X		X
Pat	X		X			X		X
Raven	X	X	X			X		
Ronan	X		X				X	
Sally	X		X			X		X
Velma			X		X			

Young-Sook		X		X			X	

one international graduate student (Young-Sook); two post-traditional students (Raven and Chad); one tutoring consultant with prior DMS experience as a student visiting the space for support (Velma); and four first-generation undergraduate students of various ages, races, and genders (Sally, Ronan, Pat, and Diego). The uniting feature of these students, aside from their spending time in the DMS, was their varied acknowledgments of a previous lack of access to these resources outside of UofL.

I coded the "ENGAGEMENT" category a total of 54 times in student interviews. All eight student participants contributed data coded under the category to varying degrees. There are two subcodes in the category: "long/deep," used 30 times to account for the amount and quality of time spent working; and "critical competency," assigned 32 times to track the outcome of students' work, which I will explain in more depth in analysis. Below is the chart breaking down codes:



Additionally, I coded from another category: "TRANSFER." To catalog how participants conceived of transfer, I used codes "personal" and "professionalization," which refers to the areas of application students foresee transferring their skills. Because this project focuses on student participants' experiences of the claims outlined by scholarship on what makes for a "fully realized multiliteracy center," I elected not to include faculty/multiliteracy center collaboration on assignments and courses, though I did conduct and code interview data from four faculty members whose students participated in my study. These interviews served to further develop my understanding of what shaped student participation in the DMS, though further investigation into them is best suited for a different project. Engagement in this chapter (as well as this project) remains student focused.

Though I have provided a definition of the term engagement above, it can be a somewhat nebulous thing to quantify. Engagement can be both a noun and a verb. It is similar to participation, but denotes something deeper—a connection, a level of excitement, traits that are emotionally tangible and thus difficult to track. Its reach extends beyond both the classroom and the multiliteracy center, making it complicated to analyze as strictly a multiliteracy center event. Despite these complexities, coding for students' perceptions about their engagement were essential to test the claim that multiliteracy centers foster deep engagement, and I initially did so via the "long/deep" code. However, as I developed my argument to replace "deep engagement" with "enhanced engagement" to better account for the myriad impacts of engaging with various resources in the multiliteracy center, I realigned the hierarchy of terms within this chapter. This led to the conclusion that enhanced engagement is, in fact, a process that results in students attaining competence and critical awareness, which leads to transfer.

While coding for "long/deep" illuminates students' practices of engagement and provides evidence of it, it is the outcomes of competency and critical awareness that render rich ground for analysis; therefore, I chose to focus analysis solely on "critical competency," not using the "long/deep" code in this chapter.

Generally speaking, the data gathered for this project shows that engagement with multimodal composing in the multiliteracy center, whether characterized as shallow or deep, yields tangible benefits to students. To open the conversation about engagement in interviews, I simply asked students, "Do you think that you were more engaged working on a multimodal project than you typically are when writing a traditional essay?" All of the students interviewed who had visited the DMS for a specific class assignment affirmed that they found composing multimodally to be more engaging than writing a textual essay. This indicates that the goal of achieving engagement through multimodal composing is being met. The answers students gave point to students who are aware of the ways multimodal composing facilitates deeper engagement. They have found benefits, whether that means the facilitation of time commitments, creativity and excitement, or focus and individual attention, that optimally lead to the development of meta-awareness and digital literacy—taken together, I call this "critical competency" in the code book.

Critical Competency

"Critical competency" is the second of the codes under the "ENGAGEMENT" category. It addresses scholars' claim that "multiliteracy centers can play an important role in helping student composers be both competent and critically reflective users of infrastructural resources" (Sheridan, 2010a, p. 7). This means that working in the multiliteracy center will enable students to reflect critically about the resources available

at their disposal and learn to become competent users of digital media technologies. Accounting for critical competency through the verbal reflections expressed in student participants' interviews is difficult, as these skills are somewhat amorphous and can be difficult to pinpoint through interview alone. In a future iteration of this study, perhaps viewing student texts or observing students as they compose might offer a more tangible glimpse into what critical competency *looks* like in action, but that is beyond the scope of this project.

I have defined three characteristics by which to identify critical competency and I applied the code when students expressed evidence of inhabiting any of the three characteristics, or if their description of activity might collectively qualify as one of the characteristics. The first characteristic evidencing critical competency is authority—when students spoke authoritatively about the choices they made, whether about selecting or employing tools, it reflects confidence in their ability to successfully evaluate, select, and employ the tools available to them. When someone speaks with authority on a subject, it implies that they may possess a deep understanding of the topic and can provide credible and reliable information based on their experience or expertise. Second, when students are able to articulate processes simply, in plain language, I count this as evidence of critical competency. The rationale behind this is that students would only be able to describe complex software or composing processes if they possessed a competent grasp of them. In particular, when students dismissed technologies as "simple" or "easy to use," or when students were able to unpack and clearly describe their decision-making and composing processes, I registered this as evidence of critical competence. Finally, the third criterion of critical competency is the ability to describe in detail the available options and explain their evaluative choices, marking sophisticated levels of

understanding about resources. What differentiates criterion two from three is that two is explanation of processes and three is articulation of decision-making choices. Thus, critical competency, as defined in this study, is marked by three key characteristics: authority, demonstrated through confident choices and effective tool utilization; simplicity in articulating processes, indicating a competent understanding of complexity; and the ability to detail options and explain evaluative choices, showcasing a sophisticated grasp of available resources. Collectively, these skills contribute to developing digital literacy because, as Sheppard (2014) reminds us, "Technological access alone does not automatically lead to development of purposeful, competent literacy practices" (p. 257). It is not enough to simply use the technological tools to complete the project—students must understand the affordances and constraints of those tools and make conscious decisions on how best to employ them.

Critical competency, or lack of it, is a central issue in scholarship examining access to technology for marginalized populations, often referred to as the "digital divide." As Banks (2006) explains it, "The Digital Divide…goes beyond the mere existence of hardware and software to the quality of that hardware and software and Internet connections, technological literacies, and critical understandings of technology that are needed to gain meaningful access to any technology" (p. 30). It is more than simply access—users need to *understand* the technology. Not just how to passively consume media or the basics of how to use tools, but also an ability to actively interrogate technology, such as the ability to identify strengths and weaknesses, how it upholds or challenges power dynamics, and how it complicates the relationships between people and machines. Banks (2006) refers to this as "critical access," or the transition beyond acquisition to meaningful use. This, in a way, parallels the conceptions of access

as both material and social discussed in Chapter 1—it is not enough to simply provide the technologies students need on campus; they must also feel welcome into the spaces where technology is being used and taught how to use it, as well. Relatedly, in this chapter I use critical competency to refer to the ability to reflectively and successfully employ tools—the level of engagement plays out in increased depth of understanding. This occurs when students have achieved the shift in perspective that Fishman (2010) refers to when she writes about students "coming to see the value in understanding when and why to employ a particular multimedia technology, as opposed to simply learning *how* to use it" (p. 65, emphasis in original). And for Fishman (2010), this is one of the largest goals of the multiliteracy center: "Rather than learning specific information, [students] practice technology problem solving so that, regardless of the situation, they are adept at identifying the problem's origin and locating the proper resources to address it" (p. 61). Again, it is about preparing students to problem solve and employ their technological skills on their own, beyond the classroom or support center—transferring their skills from one location to potential future applications.

Chad's reflections on his experience working within the DMS provide an example of a student speaking with authority about their multimodal composing. When asked about his engagement, he began by describing his return to the DMS after his class's visit, stating, "I just had a bunch of footage. And I went in…I was a little underprepared." Though he had gathered raw footage and generally organized what he wanted to say, Chad's unfamiliarity with how he would use his footage and build the video he envisioned left him feeling unprepared. However, once he began working and got support from a tutoring consultant, he was able to quickly get the gist of the editing program

(Adobe Premier Rush) and make progress on his project. Here is how he describes the process of learning the program:

> So, here's the thing…when you're scrolling, you need to scroll all the way to the end [to view your options]. [At first,] I had too much in there, so that was a little tricky…when you're trying to edit the clips, it was very like drag and drop. And it would have taken a minute, if I didn't have Amaya or Jason to be like, "Here's how you do this. Here's a few things. Oh, you click the top left, scroll down, go here." You know, that'kind of stuff? Like how do I put this fade in?...Amaya or Jason were like, "You just go right here." So that kind of stuff would have been tricky. But otherwise, it's very straightforward.

Here, Chad illustrate' his learning process with Premiere Rush, beginning with the challenge of uploading far too much footage, then moving through the drag and drop editing style of the program, pausing to note areas where he implemented advice from Zahrndt's class presentation or Amaya's tutoring consultation, and wrapping with a reflective, "Otherwise, it's very straightforward." Though his answer is not very straightforward, he speaks with evident authority about his ability to use the program, even being able to isolate moments where he remembered receiving support. He continued, describing his composing process, which he conducted with consistent feedback from Amaya (cited in Chapter 2), at length, explaining the critical design choices he made in detail, such as his decision to include 20 seconds of voiceover in one section of the video or how he opted to forego dramatic effects to allow music to be the emphasis during transitions. What's significant about these explanations is the competency and pride evident within them, signaling a shift from the "underprepared"

student who walked into the DMS that day to one who can produce "nearly professional level videos in a matter of minutes," as he described his newfound composing skills.

Raven also transitioned from intimidation to confident critical competence in her experience composing in the DMS. She begins with traces of negativity evident in her retelling, but soon moves from that to an authoritative grasp of the technology, ending with positive reflections of the experience overall. When asked about her project, she answered:

> It turned out great. At first, I was like, this is not making no sense, like, from the start of the project…[but] you know, [Amaya] sat me down. She got right to it…[I told her,] "I'm more of a hands-on learner. So, if you could tell me, you know how to do it." And I click on it. And she was showing me exactly what to do. I picked up on it very fast paced, on how to edit things around, how to move things, get things done…[and] what I came up with was amazing. So, I mean, I love that.

Similar to Chad, she moved from uncertainty about her preparedness to confidence through the process of working on this project, evincing feelings of competency. This transition does not occur without coming into an awareness of how to do something—in this case, create a video on Adobe Premier Rush. She speaks with authority, noting the different kinds of tasks required in editing the video, and the confidence is evident in her statement, "I picked up on it very fast." She understands the basic elements of the tool and how to employ them to capably achieve her design goals.

Furthermore, Raven's ability to identify and seek the feedback provided by tutoring consultants and faculty, evaluate the comments she received, and incorporate this advice into her project speaks to a sophisticated understanding of the resources available to her. She detailed the ways she included advice in her project, to great success:

> Well, [Amaya] was already giving me compliments on the photos and things I had. And I noticed one thing that she had pointed out, she's like, "Well you're doing the skate park, you might want to get some night photos, like go down at nighttime." So that was one of her suggestions. And then once I went to class [and was] showing the teacher a few things, the professor had said the same thing—like, night photos. I was like, "You know what, the light and everything…" So, when I put the image up today on the video, I mean, you can see how the light is shining down on him as he's doing his trick; his skateboard's off the ground. And that was like the perfect capture for me and my project.

Here she talks us through the comments of others and explains how she took them into consideration to make the choice to add night photos to the project. She illustrates critical competency by unpacking her critical creative decision-making process, evidence that she recognizes the affordances available and decides to employ them to add visual diversity to her video. And as a result, she takes pride in her choices. Raven no longer speaks negatively about the assignment, and, in fact, she points to the ways she is already planning to use what she learned for her own pursuits outside of school, as I will delve into in the following data analysis section on transfer below.

Velma also shows a keen awareness of both technological tools and composing processes from experience as a tutor. She reports that her experience working in the DMS has been very fruitful, stating, "I mean, I think just learning how to use Adobe and all this equipment. I mean, I know a lot." She explains further:

> I think I'm definitely a lot more confident with technology after working here. Like, definitely. I mean, even though I don't know everything, I know the basics of a lot of stuff. So, I mean, I know I can help myself and figure it out.

Aside from her direct assertion of confidence, her answer points to general technological proficiencies—"I know the basics"—across a variety of software—"of a lot of stuff"—and a sense of trust in her own problem-solving abilities—"I know I can help myself." Furthermore, Velma makes it clear that she has learned from the other students visiting the DMS, as well:

> Even just after seeing students come in here to record and stuff, I think it's easiest, when you have your own work, [if] you just have everything ready, up until the recording process. So, like your presentation is a final draft, your script—if you want to on the teleprompter—should be a final draft. And just like coming in knowing an idea of what you want to do, like how you want to film or how long it needs to be and all that. So, I think it just helped me break down the steps.

Through watching other students' experiences of trial and error, she has seen the various steps in the composing process and now understands what is necessary across various parts of said process. She sees the value of a structured approach, where efficiency in workflow is guided by informed decision-making from the start, which points to a critical understanding of process. This may contribute to consistency and reproducibility in her own work, as well as aid her in mitigating risk, as she will anticipate potential risks and devise contingency plans beforehand. In essence, knowing the steps of the digital media composing process empowers composers to work more efficiently, make informed decisions, address challenges effectively, and maintain a high standard of quality throughout their creative endeavors. It is an essential foundation for critical competency. From this vantage-point, Velma too has activated her knowledge to her personal benefit

and plans to continue to do so beyond the university, which I will delve into further below.

For Young-Sook, the journey to critical competency has been more complex due to the advanced nature of her creative work in the Master's of Fine Art program and the amount of support she requires to achieve it, but wrestling with these complexities yield a heightened level of critical competence. Master's students may struggle more with achieving critical competency in digital media composing than undergraduates due to higher expectations for their work, more complex projects, or time constraints, all of which Young-Sook faced. That said, the benefits of achieving advanced digital media competency are also elevated. "As an MFA graduate student, the high [level] program [has] a lot of potential," Young-Sook explains.

> For me, before, I was an artist and then [I] go to school now. But if [I have] some idea I really wanted to test, [like using…] different mediums, that's why I think that the digital is going to be helpful. Or I can see the preview, how it is going to come out, [or] go in the space or like dyeing [for] interior design…so, I think it's a really great tool.

Authority is evident in the way Young-Sook speaks—she has built a career as an artist, which gives her a firm foundational identity to approach all challenges as a professional, but she has also expanded her abilities in the DMS. Despite her initial, more traditional view of her art form as predominantly painting, her conception of art has broadened to include the digital. She sees the variety of resources available due to her professional experience and knows that the capacities of digital composing allow for her to quickly test ideas, experiment with new mediums, and even try her hand at unexplored areas of art and design. The learning curve can be steep and intimidating, but Young-Sook shows

great awareness of the importance of using digital composing and appears confident in her ability to learn to use the tools necessary for her success. Here she explains what initially compelled her to visit the multiliteracy center:

> Faculty keep recommend[ing], "Why don't you [try] something different [than] my [usual] way?" You know, they want to break my creative [habits] because they want to challenge me. And then they say, "Why don't you go do digital media? Why don't you go to make a film, go do something [like] installation work?"...[And I thought] maybe I can use it.

Young-Sook possesses enough authority as a painter to feel ready to challenge herself, as her professors recommend, with new mediums. Elsewhere in the interview she relates that a big challenge she initially faced in her pursuit of digital competency was that, while most of her classmates had taken courses in graphic design using advanced software, she had not had such an opportunity, as she was a post-traditional student whose undergraduate experience predated wider access to such specialized programs. In her previous educational experience, software such as Adobe was predominantly available to industry sectors and was too expensive for most students to access, but her current professors still expected her to be able to use and experiment with these programs. However, those professors did not have the time, either in class sessions or otherwise, to provide the detailed instruction required to gain competence in Adobe programs, and so they guided her to the DMS. She sought support at their suggestion, aware of the need for building these skills, and although she was initially intimidated, her engagement with tutors Dahlia and Amaya helped her gain authority. Here she delineates why using Adobe Photoshop is helpful for her painting projects:

> Because I am a graduate student in MFA, my art project was painting, but I can do it using the layer photograph [feature in Photoshop]. And then it was very clear, I don't need to [view the] painting [across] two separate day[s]—[instead], just very quick, I can see [in] the preview how it's gonna come out… And then I could use [it] too [to be] playful…And also, yeah, just [the] computer techn[ology is] very fast. And then I don't need to [spend a] really long time [on] my physical labor. So, I think [it] is really helpful for me to learn it.

In describing the different capabilities of the program and how it works, she articulates the processes of using the program and reveals an understanding of the affordances available to her—she can use layers to try out different techniques, she can play with effects that she might not otherwise attempt in reality, and experimenting with the program can ultimately save her time and labor. Here Young-Sook expands her considerations of the affordances of digital composing to include multiple levels of competency across different skills and the collaborative possibilities available. These concepts mark advanced thinking—she sees potential innovation, shows high levels of initiative, and foreshadows potential contributions in her field. Furthermore, due to the level of study she is pursuing, Young-Sook already had transfer at the forefront of her mind; for her, the critical competence she has sought was always attached to projected professional use beyond the confines of the academy.

Critical Awareness & Competency Are Not Enough

Scholarship in multiliteracy center studies touts the benefits of critically reflective and competent use of available resources, both technical and institutional, but cuts the conversation off before examining one of the most significant benefits that arises from building these skills: transfer. When students experience heightened engagement, they

gain awareness of available resources, learn to make informed decisions, and commit to proficiency with selected tools, setting the stage for intuitive transfer of these skills to other contexts—a transition that can be prompted and facilitated by the multiliteracy center. Multiliteracy center scholarship should promote transfer alongside critical awareness and competency as a benefit of enhanced engagement. I contend that transfer, the application of critical competence to new contexts, holds equal significance to critical awareness and competency as outcomes of heightened engagement, emphasizing the substantial value of applying skills developed in one setting to another. Facilitating enhanced engagement, then, means promoting critical awareness, competency, *and* transfer.

For marginalized students—whether socioeconomically, racially, gendered, disability, or otherwise—the act of engaging presents amplified challenges to be addressed, as well as amplified benefits. Hopkins et al. (2021) cite the research of Pike and Kuhn (2005), noting "[their] findings indicated that low levels of engagement were an indirect result of being first-generation but were directly associated with lower persistence rates for first-generation students" (p. 41). As has been noted throughout this study, first-generation college students are not a homogeneous group, but they are more likely to come from lower socio-economic backgrounds and marginalized communities, and these markers have reverberating effects on student success, retention, and matriculation. Means and Pyne (2017) explain it thusly:

> many students, regardless of their high school, reported feeling academically underprepared once they arrived to their campuses due to the social class divide…affected by the pervasive class privilege on college and university campuses that assumed all students should have a certain level of academic

> knowledge and did not always value the assets of low-income, first-generation college students. (p. 916-17)

Cultural capital, or lack thereof, rears its head yet again. And it stems not just from lack—these students *do* bring their own forms of capital and knowledge with them to the university—but, unfortunately, what they bring is simply less likely to be valued in campus environments. In response, Kursav et al. (2022) advocate for institutions—via faculty, administrators, and staff—to center student empowerment in programming to help students "understand how to use their many forms of social capital to navigate and succeed in higher education institutions" (Kursav et al., 2022, p. 43). As previously cited in this study, their findings emphasize the importance of interaction with administrators and faculty for first-generation students, and the programmatic elements they suggest that build social cohesion and capital include peer support groups led by an administrator or course content and interactions inside and outside the classroom built by faculty. Means and Pyne (2017) point specifically to campus support centers for tutoring and writing as well-situated to foster a sense of academic belonging through interactions with faculty, administrators, and peers. What's important is that those interacting with students in such spaces be prepared to support engagement and make skill-building and its uses legible to students.

Once marginalized students find the social and cultural capital needed to participate, they are set up to experience the enhanced engagement promoted by the multiliteracy center, which establishes the critical competence that paves the way for the far-reaching benefit of transfer. Kursav et al. (2022) encourage us to "think longitudinally; relevant determinants of student success begin accumulating long before students matriculate in college and continue after matriculation. Therefore, college-level

interventions must account for the varied backgrounds and (dis)advantages that different students bring with them" (p. 44), while the impact of such interventions must be considered in a forward-looking manner. Students' backgrounds inform our understanding of the challenges, needs, and assets they bring with them to the university; considerations of their future challenges, needs, and assets must also inform curricular and programmatic decision-making, as well. Transfer is situated within the two sides of this coin, as it is both forward and backward looking (Shepherd, 2018). As explained in the literature review of this chapter, transfer recognizes the value of students' experiences, acting as a palliative to the challenge of undervalued assets that Means and Pyne (2017) identify for marginalized students. This helps enable the kind of "connection with the university through their out-of-classroom engagement experiences" that Hopkins et al. (2021) found as key to first-generation student persistence (p. 46). Forging such a connection paves the way for marginalized students to engage in spaces, such as multiliteracy centers, where they can find material and social access to resources. And while they may not have the capability to develop and practice these technological skills at home, relying instead on campus facilities for access, they most likely will use these skills in their professional lives.

Transfer Leads to Both Personal and Professional Growth

As noted above, transfer is a specialized area of study within I that has specific bounds and conventions, such as ties to teaching threshold concepts. I reiterate this to acknowledge that the way I take up the term is a bit more loosely defined—the elements of transfer that are most significant to this project are students' abilities to identify the skills they've built as transferable to other contexts and how they foresee using those skills. I created "TRANSFER" as its own category and used the codes "personal" and

"professionalization." I applied "personal" when students spoke about experiencing a paradigm shift, or an alteration in how they approach digital media-related content, tools, or experiences, such as when Chad mentioned that the way he watches documentaries will never be the same due to his newfound appreciation for editing decision-making and choices. The code "professionalization" was applied when students pointed to professional application of the skills they learned, or noted where such skills might be useful in a professional context, like the way Young-Sook forecasts how it will benefit her career to be able to say "that I do both" painting and digital art. The location of where transferred skills will be applicable is actually less significant than students' ability to envision transfer because transfer is self-perpetuating—once students begin practicing it, they're likely to continue doing so and possibly even will begin expanding how and where they conceive of transfer possibilities. Yet it's important to note again, students who have attained critical competency are poised to transition these skills, but most often will need guidance to do so, whether that entail overt instruction or simple, informal dialogue.

To introduce the idea of transfer to participants, I asked if they thought that any of the skills they built working in the DMS might be useful elsewhere in their lives, either personally or professionally. Every student answered in the affirmative and, after considering it for a few moments, each one was able to provide at least one example of how they might use what they learned. Students spoke about personal uses, which they frequently connected to growth and newfound understanding, a total of 19 times. They linked transfer to professionalization 12 times. Let's begin with personal uses for transfer.

Students envision personal applications of transfer ranging quite drastically, from supporting hobbies to altering how they perceive themselves in their chosen professions.

Sally exemplifies the low stakes, general application of skills, with the non-specific answer, “anything I’m interested in, I guess, [I know I can] just watch random videos [and learn about],” while Velma describes using the DMS to meet the higher stakes, highly specific need to produce campaign photos for her race for the Vice Presidency of the School of Public Health. Sally’s answer arises from a non-specific awareness and understanding of resources based on her class’s visit to the DMS, where Zahrndt modeled the practice of tracking down video resources provided by the suite 191hroughh its website, which include LinkedIn Learning and other paywalled programming. Her engagement with the DMS has yielded confidence in her ability to access the training materials she needs to learn “anything I’m interested in” pursuing. Velma also displays an understanding of available resources, from the advanced cameras she used to take the photos to the backdrops housed in the studio to the software she used to edit the ones she chose to use. When asked what he might take away from his time in the DMS, Rowan reflected on a much larger impact, stating, “I feel like it taught me a very good lesson that history doesn’t have to be limited to the written word. It can be more novel displays of learning.” He continues:

> The whole digital media thing taught me, again, history doesn't have to be limited to academic papers, like in journal articles, that it could be more accessible displays. I get really into the idea of public history and history for the sake of educating people, rather than just being limited to academic journals and books.

These answers identify an internal shift in how Rowan sees a discipline, as well as the subject of history in general beyond a campus setting. The confidence and authority he built in learning how to create videos led to a transition in his self-perception, as well—he now envisions a way to make history accessible, though it redefines disciplinary

confines. This indicates thinking outside of the framework of completing a degree towards larger implications for his future career. His approach to explaining historic events through visual storytelling revealed a desire to make history more accessible to the public, which eventually transitions to his professional goals (more on that below).

Chad, like Rowan, also speaks from a place of authority to describe how his newly acquired competence and understanding of digital media has impacted him personally. He states:

> Well, now it's funny, because every time I'm like, watching something now, I'm looking and learning. It's like it activated a thing that I didn't have before that I have for music. When I'm listening to music, I'm evaluating what kind of like—right now, what kind of piano was that that we were hearing? Wait, did he do that electronically? Was what he did, it was an analog? Oh, who cares...So yeah, that discerning, like thinking, but I think of music that way, and I don't—I never thought—I just didn't look at film that way.

His answer marks the way that a student might intuit threshold concepts, and how once understood, these concepts are often irreversible and unlikely to be forgotten by the learner. Through the process of composing his own video, Chad has experienced a deep transformation in how media is processed in his mind. He learned the ways design choices shape texts, how the identities and choices of composers impact decision-making, and even the ways that composing is a process that involves a series of decisions on the part of the composer. His composing experience began with him arriving "underprepared," but he has progressed through the experience to come out of it an authority who is able to identify and acknowledge the choices made in how videos are created. Whether marking a significant shift in worldview or just opening up new areas to

explore fun hobbies, these students intuited the ways their learning in the DMS could transfer to other areas of their personal and/or civic (in Velma's case) lives.

When it comes to future application of skills acquired in the multiliteracy center in a professional setting, participants were able to envision practical uses for their learning, even when it was not directly linked to their projected careers. Each student answered in the affirmative when asked whether or not they thought their newly developed knowledge would be useful in their professional lives. The levels of specificity with which students were able to conceive of professional transfer varied across participants—some view digital media skills as essential, while others point to the more ephemeral value that the learning experience provides. As evidenced above, Young-Sook, who has the most real-world career experience and is pursuing an advanced degree in her area of specialty, inseparably links professional use with gaining critical competency. "These [artists] all nowadays, a lot of [them are] digital artists, too," she notes. Not only will her ability to use digital media help challenge her creatively, as the quotes in the critical competency section point out—it will also help her be competitive in her field. Chad echoes this sentiment, stating, "Look, it's necessary right now…Like, how much stuff now is—who just reads the paper? I mean, so much of it's mixed." Here, Chad articulates the ubiquity of multimodality in the contemporary world, but he also is pointing to how fundamental multimodal composing has been in his university experience and the need he sees for it in future professional settings.

Other participants pointed to broader benefits of the potential transfer of digital media composing skills to their career paths. Velma comments on a constantly digitizing world by drawing links between her career path and digital media composing when she reflects, "Because I'm a public health major, we don't do much with technology. But I

mean, who knows? Cuz this world is now becoming [trails off]…Yeah, I think [it would be useful]. I mean, like, if I would ever need to make a graphic." Though she doesn't necessarily foresee directly needing digital media composing skills in the public health field, she also acknowledges that the world is continually more tech-driven. One area she might see her skills being put to use in the design of graphics, which shows her authority over this aspect of her knowledge. Pat also sees a somewhat general benefit in transferring his newfound capabilities, though he too first acknowledges limitations. He states, "Some salaryman isn't going to, like—somebody, like an accountant, isn't going to use an audio program, but he is going to use some other program like Excel or something. And a lot of the skills [in]...like production-type programs do have skills that sort of translate, even if not all of it does." Pat displays some meta-awareness in this answer, where he draws connections between an accountant and the ways learning production software might improve a person's ability to use spreadsheet software. This thinking provides evidence of Pat's critical awareness and understanding of how that might transfer, as he is able to evaluate how competences gained in one area can be synthesized and applied elsewhere.

Raven was able to envision multiple areas of application for her skills, both professionally and personally. She immediately links what she learned through her work composing a video for class to a variety of uses in her own life. Note the authority evident in her speech:

> Right now, I've started my own nonprofit mental health, Encouraging Minds. And I've been having my webpage up and running since August of 2020. So, the fact that I don't pay anybody to do everything, everything is my own creation. So yes, that will help me in my everyday life, designing a webpage or even taking a video

> that I really liked, maybe from a family event, and editing in a way to where [I can say], "Okay, now this is the way that I want. It's got this effect on it. It's got..." So yeah, I think it's definitely helpful in my everyday life.

Her answer telegraphs confidence in her ability to transition what she's learned about video composing to improve her already-existing website, as well as to more controlled editing of family videos. She is able to understand the composing process clearly enough that she can foresee using it again in a different context, and she has a clear understanding of the resources available to her. These uses extend to both personal and professional aspects of her life. She adds:

> I mean, it's like the backpack [that] Dora carr[ies] around. You know she has everything in her backpack to get her through her adventure. So, it's like, basically, these resources are tools in a backpack for college students…the more knowledge you have of what's available to you, that gives you more tools under your belt for you to use not only in school, but in public, at work.

Here, she illustrates how understandings of transfer can continue to grow and extend outwards to new contexts, whether that means new settings on campus or beyond to real world environments outside of campus. Collectively, these students' experiences underscore the self-perpetuating nature of transfer once practiced, which acts almost as a snowball effect where new applications arise continually.

From Deep Engagement to Enhanced Engagement

Facilitating deep engagement—the kind evidenced by critical awareness and competency—is a cornerstone goal of multiliteracy centers, but scholars must widen their conception about the scope of engagement to include transfer which I term enhanced engagement. Expanding the breadth of engagement to include transfer of resources will

more fully capitalize on its potential, but it must not sacrifice depth in order to do so. It is a fine line to walk, to be sure—multiliteracy centers cannot endanger student engagement by overloading students with lectures about transfer; students must be given the space and quiet necessary to dig into their projects and forge the connections necessary to gain critical competency. However, when students surface from their composing sessions, multiliteracy center staff ought to be ready and waiting to talk through sessions, guide students to reflection, and make visible the connections that lead to transfer. As the data above has shown, merely introducing students to these concepts is enough to get them thinking more globally, beyond both the classroom and the multiliteracy center. What might overt attention provide?

Instead of fixating only on the potentials of critical awareness and competency gained in the multiliteracy center, a more capacious understanding of enhanced engagement that emphasizes transfer provides an opportunity-oriented approach to support that will benefit *all* students, from the margin to the center. Scholarship in multiliteracy center studies often refers to engagement as a consequence of composing, rather than as an active series of learning events scaffolded to build towards the acquisition of a curated set of skills. This outlook has created a lack of clarity—or perhaps even an underestimation—about exactly which skills can be added to this curated set of skills and how to teach them to a variety of learners. And in this lies a risk of failing to support student needs, especially the marginalized students who have fallen outside the bounds of "traditional" student considerations. Moving from deep to enhanced engagement is a move towards teaching for transfer, where students are made aware of why their decision-making matters and how the knowledge developed at one site can be useful in another. Furthermore, transfer overtly attends to future use of skills

and professionalization, which are important neoliberal realities for low-income students who may be going into debt or intend to contribute to family income, as marginalized and first-generation students are more likely to do (DiLeo, 2016). Integrating transfer into conceptualizations of engagement alongside competence and critical reflection further facilitates support for marginalized students because it helps them envision how skills could be useful and applicable beyond the classroom and campus. These lines of thinking offer long-lasting, even life changing, potential when translated to the world outside of the university.

CHAPTER 5

CONCLUSION — FROM SANDBOX TO PLAYGROUND: THE MULTILITERACY CENTER AS ENTRYPOINT TO THE SUPPORT SERVICE ECOLOGY

"I feel like the people that came to the DMS were more likely to experiment and try other sources and resources that were provided by the university. So, I wouldn't be surprised if a lot of them had used the writing center… I would say the DMS can be your best friend simply because it offers so much access to products and different software to help [you]. Take a chance, walk in, ask questions, if you don't like it, you don't have to stay. It's this kind of, you know, if you see an opportunity, you should always take it."
—Dahlia, tutoring consultant interview participant

Vignette

I have a confession to make: I had never visited a writing center for feedback on my own work until my PhD program at the University of Louisville. I have worked for brief stints in my undergraduate center at LSU and as an overflow tutor during my MFA at Florida State when the writing center was so busy that the multiliteracy center needed to lend a hand. I have clocked many hours as an adjunct tutoring consultant in the writing center at LIM College in New York City. But it wasn't until writing my comprehensive exam essay that I sought support in the official capacity of the writing center at UofL. After that first visit, I signed up for the dissertation writing retreat the following summer and my course was officially altered. I now go in to meet with a tutor about my dissertation writing monthly, at minimum.

I have also met with someone from the Career Center to discuss my resume, participated in the online Digital Media Academy given by a partnership between the

DMS and the Graduate School, attended the Grad School's Mentorship workshop, and have rsvp'd to attend the Spring 2024 Cardinals Create digital showcase. Now, I'm not saying all of these things happened just because Tobias Lee gave me good notes on my exam essay draft in 2021—that visit was due, honestly, to anxiety and fear of failure. But the value I found in that session planted a seed. And spending dozens of hours in the DMS engaged in participant observation acclimated me to the comings and goings of Ekstrom Library, creating a level of comfort there that helped the seed grow. Then the familiar faces I had come to know beckoned me to join them for retreats and celebrations, and how could I say no to these kind, wonderful people? Especially knowing how much confidence I gained in that exam essay after the feedback. What happened across these occurrences is that I began to feel welcome in the library, like the services offered were meant for me—and guess what? They were. And they always have been, all along. What a shame I squandered those opportunities at LSU and Florida State. I'm sure glad I didn't make that mistake again at UofL.

Introduction

I don't believe that my experiences shared in the vignette above are unique. Whether it was because I was too intimidated or too foolish to take advantage of the support offered to me doesn't really matter. What's significant in my journey is that engaging with one support service did, in fact, get me engaged in an ecology of resources at UofL. Now granted, I'm an advanced level graduate student whose research demanded I spend copious amounts of time in the multiliteracy support center; however, there was nothing that demanded I join in professional development workshops or attend student showcases. Nevertheless, my history is marked evidence of just what it would take for

this first-generation graduate student from a rural upbringing to cross the threshold of a support service center on a university campus. My decision to visit the writing center might have been born out of a different necessity than a first-generation undergraduate student's, but it did not make the writing retreat requisite. I did all of these things because I crossed an internal threshold and became involved in the support network. The advertising and effectiveness of the writing center's targeted programming also played a significant part in my decision, as well, I'm sure. But, as I began to suspect while writing this dissertation, as became clearer to me with each chapter's findings, and as I argue now at the conclusion of this project, engaging with one support resource actually did promote others, both in terms of awareness and encouragement of further uptake. But before unpacking these implications, I must first return to the core of this project—efficacy testing of the standard practices claims within multiliteracy center studies—to examine how students perceived the lived experiences of the interplay between theory and practice in the DMS.

Attaining Objectives, Yet Falling Short: An Evaluation of Standard Practices

From its inception, the core objective of this dissertation has been to investigate the efficacy of three standard practice claims distilled from multiliteracy center studies scholarship as experienced by students. These three claims, used to characterize an "idealized multiliteracy center" by Sheridan (2010), are: first, that spatial design should support flexibility and promote collaboration; second, that tutoring consultants must be technologically prepared to meet the diverse needs of users; and third, that centers ought to facilitate deep levels of student engagement demonstrated by critical awareness of and competency with available resources. In this section, I'll unpack the analysis in my testing

of the original claims regarding spatial design, tutor preparedness, and student engagement.

Claim #1: Spatial design should support flexibility and promote collaboration.

Spatial design plays a fundamental role in differentiating multiliteracy centers from writing centers, with a central focus on optimizing support for multimodal composing. Gresham (2010) highlights that the design of multiliteracy centers goes beyond physical organization of space, significantly impacting the composing process. Gresham underscores a shift towards spaces dedicated to active composing rather than merely responsive environments. Inman's (2001) advocacy for non-directive, collaborative pedagogy aligns with the evolving multiliteracy center landscape, emphasizing flexibility and collaboration as essential elements. The discussion emphasizes the importance of adaptable spatial design to support multimodal composing in various modes. The zoning approach, proposed by Inman (2010), advocates for dedicated spaces tailored to specific uses within the center to accommodate diverse user needs. Collaboration is fostered through spaces that encourage interactions among diverse users, including students, consultants, small groups, faculty, and multiliteracy specialists, promoting the exchange of knowledge, tools, and feedback. Berry and Diertele (2016) emphasize the importance of design choices on student perceptions of collaborative spaces, stressing the need for nuanced considerations, including even the shape of tables. The complexity of this task underscores the necessity for flexibility to meet the various needs of multimodal composers and the promotion of collaboration to support students as they compose.

The student data presented in the sections on Flexibility and Collaboration in Chapter 1 demonstrates the effectiveness of the DMS's spatial design in flexibly accommodating diverse learning needs and promoting collaborative endeavors. The physically flexible design elements, such as adaptable spaces, diverse tools, and intentionally curated furniture, have a positive impact on students' experiences. The data illustrates that students appreciate the multiliteracy center's ability to meet their specific learning preferences, whether it's providing “peace and quiet” (Raven) for focused work or offering collaborative environments. Temporal flexibility reflects the less structured nature of time in multiliteracy centers, allowing students the freedom to drop in for extended periods, promoting active learning, trial-and-error composing, and play critical for multimodal communication understanding. Collaboration, the other core tenet of spatial design, is facilitated through interactions between tutoring consultants and students and peer-to-peer collaboration, fostering a positive exchange of knowledge and skills. The multiliteracy center's design facilitates peer collaboration in group projects by offering “a good space for both people to meet together and be equal on participating” (Pat), but also promotes spontaneous interactions among students, enhancing the overall learning atmosphere. The data, therefore, supports that the DMS's spatial design effectively aligns with the principles of flexibility and collaboration, contributing to a dynamic and supportive learning environment, as experienced by students.

Claim #2: Tutors must be prepared to realign expectations and meet technological challenges.

Tutoring consultants hold a crucial and diverse role in multiliteracy centers. They face a central challenge transitioning users’ expectations from basic technological support

to more complex rhetorical guidance, essential for understanding the centers' functions. Fishman (2010) identifies that students view centers primarily as technological support hubs, expecting instant solutions to their issues, which hampers deeper engagement. Consultants must navigate a contrast between technological support, which seeks quick superficial solutions, and rhetorical support, emphasizing the development of robust communication skills. Best practices also dictate that tutors possess technological literacy specialties, a nuanced understanding of tools, the ability to facilitate composing processes with those tools, and training in pedagogical literacies (Sheridan, 2010a). Lee (Balestar et al., 2012) suggests that consultants engage in "multimodal thinking" to grasp multiliteracies, enabling them to assume a more active role in knowledge-making, which entails understanding students as producers and consultants as more than just readers. A strong awareness of multimodal composition is crucial for consultants to promote remediation, transfer, and collaborative problem-solving (Alexander et al., 2016). The ability to maneuver within these complexities is what most distinguishes multiliteracy center consultants from writing center tutors, as they need additional pedagogical skills to manage expectations, foster multimodal engagement, and offer rhetorical guidance across modalities (Balestar et al., 2012). Despite their pivotal role, there's a notable lack of scholarship on training specifically for multiliteracy center consultants. The articles found in key collections focus more on operational practices, particularly addressing the unique demands of these consultations, rather than presenting concrete strategies for meeting these demands. In conclusion, while the scholarship on tutor preparedness in multiliteracy centers prioritizes technological proficiency over pedagogical skills, a more balanced approach is necessary to effectively meet the diverse needs of students.

The student data presented in Chapter 2 supports the success of the DMS in achieving tutor preparedness, focusing on two key areas: reshaping students' perceptions and assessing tutor competencies. The first analysis explores how tutors influence students' views of the center, shifting their perspective from seeing it as a technological support hub to recognizing its role in offering comprehensive rhetorical guidance. Close interaction with tutors enhances students' engagement and appreciation of rhetorical feedback, contrasting with students who worked independently and viewed the DMS merely as a lab resource. The second analysis addresses tutor preparedness, emphasizing three core competencies: specialized knowledge of available technologies, familiarity with institutional resources, and pedagogical literacy. Pedagogical training primarily occurs through peer mentorship, lacking theoretical depth, which poses challenges to the effectiveness of the support system. While new consultants undergo self-guided technology training, questions arise about its effectiveness, particularly regarding recognition of expertise and support quality. Students note a disparity in pedagogical expertise among tutors (Young-Sook), with technologically proficient consultants handling advanced tasks, leading to workload imbalances. Students working with technologically literate consultants display evidence of receiving more comprehensive support, leading to an enhanced understanding of available resources (Chad and Raven). Students express confidence in consultants' training, meaning they perceive tutoring consultants as prepared to meet their needs. Their reflections indicate a realignment of expectations that results in increased student engagement and awareness of available resources.

Claim #3: Deep student engagement is evidenced by Competence and Critical Reflection

Multimodal composition pedagogy has spurred the need for resources like multiliteracy centers to support faculty and students navigating complex assignments. By integrating diverse semiotic modes, multimodal composing fosters dynamic engagement but poses challenges for faculty in project development and assessment. Multiliteracy centers address these challenges by providing support and collaboration opportunities, enabling faculty to excel in multimodal instruction. This partnership not only benefits student learning but also transforms faculty-student dynamics, fostering student confidence and shared learning (Cooper, 2010). Courses that take advantage of multiliteracy center collaboration extend learning opportunities for more "collective engagement," marked by active, hands-on learning that attends to multiple literacies through connections, interactions, and play (Alexander et. al, 2016; Berry & Dieterle, 2016; Lauren, 2016, p. 70; Sheridan, 2016). These collective benefits of engagement work together to build students' competency and ability to critically reflect on the resources available to them. Competency involves the effective use of multiple communication modes and tools, while critical reflection entails the ability to assess and make informed decisions about the implications, benefits, and drawbacks of available resources. Multiliteracy center studies reveal that deep student engagement fosters critical competency, intertwining competencies and critical reflection.

The student data in Chapter 3 reveals that students working in the DMS do exhibit "critical competency," demonstrating authority over their composing practices, the capability to articulate their process in a straightforward manner, and an ability to detail

options and explain evaluative choices in their engagement with digital media technologies. Examples include students describing authoritative decisions in using editing software (Chad), simplifying complex processes (Young-Sook), and incorporating feedback to make sophisticated design choices (Raven). This critical competency, rooted in both technological proficiency and thoughtful decision-making, aligns with scholars' assertions about the role of multiliteracy centers in fostering both competence and critical reflection (Sheridan, 2010a). Additionally, the data highlights how critical competency contributes to digital literacy, preparing students to actively interrogate technology, make informed decisions, and apply their skills beyond academic settings. The findings underscore the significance of multiliteracy centers in promoting meaningful engagement with digital media, particularly in addressing the "digital divide" by emphasizing not just access but also understanding and critical use of technology. Students' experiences reflect that their engagement with the DMS was indeed "deep," yielding critical competencies.

The DMS effectively enacts standard practices related to spatial design, tutor preparedness, and student engagement, as evidenced by student experiences. However, while these practices contribute to a dynamic learning environment, they fall short in addressing the specific needs of marginalized students, rendering them inadequate. Though the effective spatial design of the DMS fosters flexibility and collaboration, creating a conducive environment for multimodal composing, it does not currently attend to the overall accessibility of educational spaces or address the diverse needs of a variety of student populations. Despite the DMS's success in reshaping students' perceptions and achieving tutor preparedness, there remains a notable gap in pedagogical expertise among tutors; while students working with technologically proficient tutors benefit from

comprehensive support, those working independently demonstrate less nuanced understanding and engagement. Similarly, though students exhibit critical competency in their engagement with digital media technologies, there's a need for deeper reflection on how these practices can better serve marginalized student populations. Thus, while the DMS embodies these standard practices, further efforts are required to ensure inclusivity and equity in supporting all students effectively.

Addressing the Limitations: Expanding Standard Practices for Inclusion

While the application of the three standard practices delineated in multiliteracy center scholarship is evident at UofL, these practices remain insufficient to adequately meet the distinctive needs of marginalized students. As my research in claims testing progressed, a combination of public affairs scholarship on first-generation and other non-dominant student populations and the data in student interviews highlighted areas of impact such as access, pedagogical support, and wider-reaching benefits that affect students outside of the "traditional" identity marker, in particular. The need for an expanded and more inclusive approach in the standard practices became evident, and the data provided findings to support initial efforts to remedying the short fallings within claims. With a focus on marginalized backgrounds among interview participants, this study delves deeper into the specific needs of first-generation, post-traditional, and international students, advocating for expanding conventional practices to accommodate marginalized students, particularly in areas of access and support. This entails a shift towards a more comprehensive infrastructural approach to design, addressing both material and social access issues that disproportionately affect marginalized students. It requires a re-balancing of consultant training to prioritize pedagogical skills alongside

technical proficiency, aiming to better serve students who may be reluctant to seek help. Additionally, broadening student engagement to include transfer is proposed, highlighting its importance for long-term success, with multiliteracy centers playing a pivotal role in reducing social barriers and promoting resource awareness through collaboration and community-building efforts. These proposed expansions of the standard practices are crucial to effectively meeting the diverse needs of marginalized students and ensuring that multiliteracy centers serve as inclusive and supportive spaces for all.

Expansion #1: From Spatial to Infrastructural Design

Spatial design discourse within multiliteracy center studies, initially centered around flexibility and collaboration, must extend beyond material considerations to embrace an infrastructural approach that encompasses both material and social elements of access. By reframing the discussion around infrastructural design—encompassing policies, standards, systems of support, and relational aspects—multiliteracy centers can better address the intricate connections between material and social access issues, which impact all students and marginalized populations, in particular. This means paying attention to the guidelines governing the use of the space for inclusivity, examining accessibility standards, strengthening the interpersonal dynamics and connections within the center, and ensuring support programs are working together effectively. Securing social access for marginalized student success involves creating an inclusive environment that goes beyond physical resources, addressing emotional and psychological factors that impact decision-making. Recognizing the unique challenges faced by these students, such as negative affect, feelings of difference, and potential social anxiety, is essential; mitigating these barriers is crucial for fostering a supportive atmosphere that promotes

the well-being and academic success of marginalized students. Furthermore, multiliteracy center studies should revisit valuable concepts, such as cross-service relationship building and infrastructuralism, to ensure that their contributions are available to all students, particularly those from non-dominant populations. The shift from spatial to infrastructural design is crucial for creating environments that not only accommodate diverse needs but also promote student awareness of and access to social and material resources. Multiliteracy centers, equipped with flexibility and collaboration, become spaces fostering resource awareness across campus services and facilitating wide-reaching advantages for all students.

Expansion #2: From Technological to Pedagogical Preparedness

The impact of standard practices regarding tutor preparedness is significant, but currently, tutoring consultants are underprepared to meet needs of students who are reluctant to seek help, which impacts marginalized students especially. Standard practices should pivot from a singular emphasis on technological training to a more balanced integration with pedagogical instruction. This shift is prompted by the recognition that consultants equipped with prior technological knowledge may have a smoother transition into facilitating consultations, which was a key focus within previous scholarship; however, student data shows that a comprehensive training approach should not solely prioritize technical proficiency. Instead, a more pedagogically oriented training regimen would work to ensure consultants possess the instructional skills necessary for effective engagement with students, particularly with students who are reluctant to engage with tutors, harboring feelings of intimidation or hesitancy in seeking assistance. This transition acknowledges the dual nature of successful consultations, emphasizing both

technological expertise and pedagogical finesse to create a more holistic and impactful support system within multiliteracy centers.

Expansion of #3: From Deep to Enhanced Engagement

The current standard practices in multiliteracy center scholarship regarding student engagement, which focus on critical awareness and competency, overlook a crucial aspect—transfer. I posit that the deep engagement, verified through students' wielding of critical competencies, falls short of encompassing transfer. Instead, we must broaden the scope of engagement to include transfer, especially because of its potential for marginalized students who face amplified challenges and benefits. For first-generation students, engagement is directly linked to persistence rates, underlining the importance of addressing their unique needs (Pike and Kuhn, 2005). By facilitating social and cultural capital, multiliteracy centers pave the way for enhanced engagement, critical competence, and transfer. Transfer, positioned as both forward and backward-looking, recognizes the value of students' experiences and fosters a connection with the university. This approach facilitates marginalized students' engagement in spaces like multiliteracy centers, providing material and social access to resources for future professional use. Expanding the conception of engagement to include transfer offers an opportunity-oriented approach that supports all students, particularly those outside the "traditional" considerations, fostering a bridge between academic and professional realms. The shift from deep to enhanced engagement aligns with teaching for transfer, offering marginalized students a clearer understanding of the applicability and usefulness of acquired skills beyond the campus, contributing to their long-term success.

Bridging Social Barriers for Resource Awareness & Uptake

Reducing social barriers to accessing support creates opportunities for students to explore a broader range of resources. Multiliteracy centers play a crucial role in introducing students to these services through collaborative partnerships, fostering a sense of community and identity within the digital media learning environment (Wenger, 1999, as cited in Sheppard, 2014). For marginalized students struggling to fit in on campus, the multiliteracy center offers a space where they can envision themselves as part of a supportive community. Lack of resource awareness among students, particularly those from marginalized populations, results from limited social capital and access. Kursav (2022) highlights the critical role of social capital in students' ability to leverage resources. First-generation and marginalized students often report low levels of cultural capital, emphasizing the need for student support services to create inclusive environments where students feel recognized and belong (Soria and Stebleton, 2012). Multiliteracy centers can optimize their role in supporting marginalized students by leveraging the sense of community and cultural capital established during engagement (Means and Pyne, 2017). To enhance students' integration, it is essential for the center's staff to establish, maintain, and promote the environment as a vital service within a larger ecology of resources (Sheridan, 2016). The goal is to encourage continued access to services and foster student involvement, contributing to overall student persistence.

Collaboration among university support centers is key to overcoming challenges in resource awareness and uptake. Inman (2001 & 2010) emphasizes the significance of such collaboration, leading to the establishment of learning commons and community-building programs across universities. While UofL does technically host a learning commons in Ekstrom library—which the DMS identifies as belonging to, alongside

REACH (Resources for Academic Achievement), library research assistance, and the writing center—none of the other programs acknowledge their place in the commons on their websites. These centers must prioritize their daily operations over collaborations, which may exceed their current operations capacities. Nonetheless, they maintain a focus on serving marginalized students, evident in partnerships with living learning communities, for instance. Marginalized students face challenges due to information overload and navigating university systems, particularly amplified by limited resources in their previous educational settings. Soria and Stebleton (2012) note that students at larger institutions often rely on peer networks for academic information due to large class sizes and limited faculty interaction. Well-intentioned interventions may fail if they do not address the social support needed for successful transitions (Kursav et al., 2022). It's a prevalent challenge for universities, grappling with numerous operational complexities amid struggles for sustainability common to support services in neoliberal institutions, often due to funding or staffing constraints, as full-time positions dedicated to fostering collaboration are rare in this context. All participants in this study discovered the DMS through personal recommendations from peers or faculty, rather than through institutional promotion efforts, highlighting a gap in awareness despite ongoing promotion. Perhaps part of the problem is that institutional promotion mainly targets faculty, who then relay the information to students, risking it getting lost in classroom communication. This isn't a failure of the learning commons or support services—rather, it is a result of their limited capacity. But it does call into question, what else might students be missing?

Teacher-scholars in Rhetoric and Composition can play a vital role in increasing awareness and engagement with multiliteracy centers. Administrators can plan

partnerships with first-year writing programs, while faculty can collaborate with the multiliteracy center to enhance students' experiences. Even minimal involvement, such as a single class visit, can provide students with valuable insights into available resources, contributing to their ongoing engagement with support services. Once social barriers are reduced and students engage with multiliteracy centers, they are poised to expand their understanding of available resources on campus. Let’s turn to the data for what students said about their awareness and potential further uptake of campus support services.

Chapter 2 discusses how infrastructural design can facilitate increased resource awareness in students, and, as a direct effect of this increased awareness, I contend that the enhanced engagement discussed in Chapter 4 further leads to an increase in student uptake of support resources. For the category SUPPORT RESOURCES, I used the codes “awareness” (applied 38 times) and “increased uptake” (used 25 times) to track how students spoke about campus support resources. I identify areas where students reference campus support services, whether that be the DMS itself or other resources more broadly. These can be material, such as access to scholarly journals for research through the library’s website, or they can be social/human, like access to a math tutor. For the most part, however, the resources I refer to under this category are more service-oriented, what Means and Pyne (2017) refer to as “institutional support structures,” which they define as “academic and social spaces, such as departments, programs, residence halls, classrooms, and student organizations designed to support student learning and success” (p. 907-8). Such structures help integrate students both academically and socially, helping them to find their footing in a new environment with often different teaching styles than they’re accustomed to and creating a sense of community that aids in building cultural capital.

The other sites in the Ekstrom learning commons such as the REACH tutoring center and the writing center qualify as institutional support structures, as well as other spaces on campus like the Math Resource Center (MRC) at the Speed School of Engineering. These are some of the sites of support resources I refer to under this category, though this list is not exhaustive of all of the institutional support that UofL offers.

Tracking Resource Awareness

Without an informed understanding of what's available, in an environment where you feel like you don't belong, it can be tough to find the help you need, and student participants' experiences prove this to be true at UofL. For example, Raven reveals that services which may appear standard to many students, such as "the online library research stuff. I mean, that's stuff that I didn't know about, but apparently has been around for years." If she had never had access to research support in the past, why would she know it is available to her now? "There's so much on campus that we don't even know about a lot of times," Chad echoes. "I had never used this before because I'm a returning student. And I've been out for a while. This is new software and it wasn't around." Both Raven and Chad's challenges are temporal—since their first attendance in college, new services have become common knowledge and widely available. Still, other student participants who do not identify as post-traditional pointed to issues with resource awareness, and they place the blame firmly on the institution itself. Sally, who had little to say about the resources within the DMS in her interview, had very strong opinions about promotion of support services:

> UofL has, like, a ton of resources. It's just nobody knows what those resources are. That's the problem…I mean, I just don't feel like they promote enough.

> Nobody knows about anything, I feel like, at UofL. So, finding [the DMS] is like trying to find a needle in a haystack, like you'd have to be actively searching for it to find it. So, not that it doesn't look good once you get there, but it's just kind of…[shrugs, trails off]

Velma expressed similar feelings:

> I mean, as a student, like let's say, if I didn't work here, I honestly would not have known about the DMS. I just really feel like the DMS just needs to do better at our advertising to students and to classes. Because this is a really great resource, and it kind of stinks that we just sit here…I just feel like the DMS just needs to be talked about more.

While the data indicates that students *do* continue to use the resource once they know about it, and even plan to take advantage of other campus resources (as I'll investigate below), the issue here is that these things will only happen because now they know how to look for them. This is yet another place where multiliteracy center design can play an important role: in promoting awareness of campus resources more broadly, as part of a collaborative student support service network.

When multiliteracy centers offer an accessible environment to students who have been deluged with support resources, this also offers an opportunity to educate them about other available resources in a more relaxed, palatable way. This is essential, according to Kursav et al. (2022), because "students need academic support resources and complementary supports for acquiring the knowledge and motivation needed to make use of available academic resources" (pp. 44-45). Faculty first alerted Raven to available support services:

> Like, I think the professors that I've had at UofL are amazing. I mean, even with trying to keep you up to date with everything they have available for you. And it's like the word of mouth that professors give you about the help, 'Hey, the digital media suite. Hey, the writing center. Oh, don't forget, if you have any trouble in my class, you got the tutoring, you have the PAL sessions.

But from there, she used those services to find out about and access even more, describing resource availability thusly:

> I mean, it's free to you, you pay for it, take advantage of it, don't feel like you have to feel less than what you deserve. As a student of UofL, take advantage of many opportunities. And that's one thing that I've been learning this go around because my first go around in college, I wouldn't have never went and got a tutor. I wouldn't never went to the library and studied. I probably wouldn't have never even asked anybody for help.

Similarly, Ronan credits his professor with introducing him to the DMS but adds that working there "taught me that there are things on campus to seek out…it taught me to at least seek out resources, like just look things up. Or if you just think about it, the University probably offers it in some regard." His experience is a strong example of awareness generating even deeper awareness, where he was able to take initiative and learn from being introduced to a new resource.

Ideally, some of this awareness will come from within the DMS itself, as Sally's did:

> I mean, nobody knows about the LinkedIn learning things. And that's kind of important. Some people don't even know you can get Microsoft for free, which is

> wild to me. I can't imagine spending money on that. It's expensive. It is. But I mean, that you would definitely figure that out here [in the DMS].

Part of the frustration expressed by Sally and Velma lies in their awareness of the valuable, yet underutilized, assets available in this place. They turn some of that back onto the DMS itself, suggesting the facility do more promotional work, but Velma herself works there and is not necessarily able to convince her classmates to come in for projects. "Because we work here, we're able to tell our friends and the people around us, 'This is an amazing resource. Just come in here and I can help you.' But I mean that can only go so far," she reflects. Indeed, the advertising and information distribution of one facility can only go so far, as well. This is why developing strong, lasting relationships between sites of support—creating a true ecology of support services, where collaborative workshops, information sessions, and cross-referencing occur consistently over years without being dropped—is essential to expanding resource awareness.

Increasing Resource Uptake

Once students have become aware of resources and have already crossed the threshold of one support site, they are more likely to engage with other services. To account for this, I will now turn my attention to the "increased uptake" code under the SUPPORT RESOURCES category, which I apply when student participants report either previously utilizing resources once they discovered them (increased from zero use), planning to use them in the future after accessing them for the first time (increased from initial use), or even signaling they would have used them if they had known about their availability (theoretically increased use). The idea behind "increased uptake" is that it is an agentive taking up of a service, meaning a student uses a service of their own volition

without prompting from someone higher in the power hierarchy, such as a faculty member or advisor. While most students spoke about continued future use of the DMS, some pointed to other support resources they plan to use—it is admittedly a shortcoming of my probing that I did not question students who signaled continued future use of the DMS about other campus services. Gathering such data would have expanded and strengthened this segment of the chapter and the project as a whole, but because I did not foresee these patterns and avenues for exploration at such an early point in the development of this study, I missed that opportunity, though it is certainly on the table for future projects. As is, I assigned the "increased uptake" code in all student participant interviews, a total of 25 times. But before I unpack that analysis, I must first attend to my use of the word "uptake," as it is a term with a long history in the field, especially in its connection with genre theory.

Uptake is a term most commonly linked to genre and circulation, and it is from these meanings that I plan to use it as a lens to examine increased use of support services. Ray (2013) traces the term uptake's use to make an argument for applying it to "new media composition," noting that it initially arose in speech act theory to refer to "the ways that illocutionary acts result in perlocutionary consequences," or the ways that the utterance of a statement such as "it's hot in here" may cause someone to act in response, such as turning on the air conditioning (p. 184). Applying uptake to rhetorical genre studies, Freadman (1994) used it to describe how "genres interact with one another—how one genre evokes or responds to another within overlapping fields" (Ray, 2013, p. 184). This use envisions genres in relation to one another, engaged in conversation that impacts one another in significant, material ways. Aligned with this understanding of uptake, I

link it to campus support resources to interrogate how engaging with one resource, such as a multiliteracy center, can impact students' perceptions of such resources more broadly, leading to more (or less) engagement with others within the learning ecology. In considering new media compositions, Ray (2013) writes "studying these works through the concept of uptake allows us to trace paths between dissimilar genres and provide students with a clear sense of how ideas can circulate across them within larger ecologies," (p. 191). In applying uptake to resources, I seek to trace how engaging with support services, even those that are dissimilar, might give students a sense of how support circulates within the ecology of learning services; say, for instance, how seeking digital media tutoring in the multiliteracy center might lead to engaging in a math lab in the school of engineering, perhaps. Though genres and circulation are significantly different from support services, the concept of uptake and the action/reaction process linked to it offer a useful lens through which to examine campus resources and students' use of them.

Increased uptake need not only arise only from deep engagement—students who have been introduced to the DMS through class visits, either to the site itself or hosting a DMS representative in the classroom, also continue to pursue composing within the space. Diego noted that without the class introduction, he wouldn't have found the resource, yet that initial session provided him with enough reassurance that he felt "like if there's nobody in there, I kind of like that. You know, [you can just go in and] just use it." This quote is significant because it shows how quickly students can be prepared to take advantage of the service, both in terms of utilizing a space and with technology—one previous visit was enough to prepare Diego to enter the space and work

independently with his partner Pat without seeking help from the tutoring consultant. How much information were they given on their visit to set them up with this level of agency? Pat details their introduction to the DMS:

> We had been—we've been here in like a session with our class before, where [Zahrndt] told us about the room, like [the] features and stuff and about the podcast room. But when we were actually recording the last time, we came in, when we did the first take, we didn't get any help at all basically, just kind of just had someone let us in.

A simple walk-through of the space, a brief introduction to the equipment and Adobe Audition software, and Diego and Pat felt prepared to walk in and record. Chad felt similarly prepared by his class's visit, but not to work independently—he felt prepared to find support: "The fact that I was in there, and it was like he knew exactly what he was doing when he's talking about like, oh, well, this is—instead of me trying to plod through this." Zahrndt's level of expertise was immediately apparent to Chad and relieved him of some of the anxiety attached to a learning curve. Furthermore, Chad is confident he will rely on this expertise again:

> Well, because especially now that I have access to it, I can work on, you know, some of my projects. I know I'm going to need it for other projects, even in school. But I think, you know, as I have questions, I'm going to use it on my own to do some of my own stuff. And then when I need something, I'm gonna stop by one day, ask Jason and, you know, pick his brain a little bit. Yeah, I know that I will do that before I graduate.

Once exposed to the resource, he plans on continuing to use it—working in a support service site promotes further use of the site.

Support resources may also step in to fill gaps left in learning that require more time than a class period allows. Young-Sook began working with tutoring consultants in the DMS after her faculty advisor recommended it and she kept returning for consultations because she realized that Dahlia and Amaya could compensate for instruction that her highly regimented coursework and timeline in the MFA program didn't allow:

> I thought of taking [my advisor's] course [in Graphic Design] too but it was conflict[ing with] my major clock. So, I c[ould] not. There was a little, you know, conflict [in the] schedule, but definitely I really want[ed] to learn [this material] and also, I think it's already great just to know it. But the[faculty] are busy, they're teaching the[ir] class[es] and I cannot ask them to teach me. That's why I went to DMS.

Young-Sook's visits to the DMS reveal her recognition of being behind her peers in digital media composing, prompting her to seek help from faculty. However, she soon discovered that she required more time and attention than could be offered during class periods. Additionally, constrained by her graduate study schedule and funding, she couldn't enroll in an undergraduate graphic design course to catch up. Despite her initial inclination to seek faculty support, she recognized that the DMS could bridge the gap and provide the necessary education. This signals a notable change in thinking, transitioning from seeking help primarily from faculty to recognizing the extensive support offered by the learning ecosystem. Young-Sook's experience at the DMS, where she learned about

Adobe software from tutoring consultants, has broadened her awareness of available support services. In future situations, she may turn to these services first instead of relying solely on faculty.

For some students, their experiences using the DMS led them to consider future possibilities for both the space they have just used and other sites that might offer similar advantages, both for other areas of study and more globally. Ronan notes that his time in the DMS

> at least taught me that there are things on campus to seek out because I didn't know about the digital media suite until Dr. Devlin mentioned it to me. That was like, 'Oh, this thing is just here, like for free, for everyone. That's really cool.'

Ronan's remarks reveal his strong confidence in his institution, having come from a background with limited access to resources. He admires UofL's abundance of resources, believing they fulfill nearly every conceivable need. While somewhat idealistic, this outlook underscores his newfound ability to seek out resources when he needs them.

For marginalized individuals, navigating access to resources may be unfamiliar territory, yet it's often taken for granted by the privileged. Means and Pyne (2017) highlight the misconception that opportunity gaps reflect lesser ability or potential among low-income marginalized students, neglecting the reality of unequal access to professional and academic opportunities. In this study, about half of the student participants reported increased awareness and ability to utilize available resources.

This is certainly the case for Raven, who is keenly aware of the larger learning ecology of support services at UofL and plans to use them at every available opportunity.

She starts by describing her first (mistaken) visit to the DMS and how it served to introduce her to the Ekstrom learning commons:

> I mean, like I said, I can't change nothing about this center. I mean, because it has been a help, like, even my very first time going in there—I was lost. I've never been to the library…And I ended up finding myself needing help with a paper. And I mean, it wasn't nothing like that needed to be recorded or anything, but it was just a regular paper. And, like, they walked me over to the other area [the writing center]. And [the tutoring consultant]'s like, "Yeah, and we do walk-ins." I mean, he asked me what I was told to do, and then he asked me to email him a copy of my paper. I mean, there's like—the help in that library alone. It's like, it's so welcoming to someone who wants to get their work done.

To clarify a bit, Raven initially seeks help at the library for her English paper but mistakenly visits the DMS because she has never visited the library before. A tutoring consultant walks her to the writing center where she receives immediate assistance with her paper, marking her introduction to the university's support resources. From there, she continues:

> These items are available to you. So, there's really no reason for you to fail your classes because you have free tutoring, you have the digital media suite, you have the writing center. And these are free items to you that can not only better your education, but better you as a person as far as your knowledge of what you're doing…I mean, it's something that's going to stay with me forever. The fact that I was able to use this, the digital media venter and the writing center, and tutoring

> sessions and PAL sessions is something that keeps me coming back every semester.

Raven's positive experience with the support service learning ecology, marked by welcoming and helpful tutoring consultants, shapes her favorable perception of these resources. She sees the DMS and writing center as interconnected parts of the Ekstrom learning commons, fostering a holistic view of support services. Her confidence in seeking support is bolstered by her experience, extending to a broader understanding of opportunities. And Raven sees potential beyond just the campus—she notes that these resources "not only better your education, but better you as a person." This speaks to an expanded understanding of opportunities more broadly, which will assuredly serve her in the future.

Similar to the way transfer potentially arises from the critical competency gained in digital media composing, students who have benefited from working in one support service site gain an appreciation for what such spaces provide and may begin considering future possibilities for other similar experiences. This awareness and ability to utilize support structures bridge gaps in awareness, particularly for underprivileged or marginalized students. Raven's journey illustrates the transformative power of accessible support services at UofL, where her initial encounter with the DMS led to a seamless integration into the broader network of resources. Her positive experience highlights the interconnectedness of these services and their potential to enhance both academic success and personal growth. By embracing the opportunities provided by these resources, Raven not only improves her education but also expands her horizons, setting a precedent for future exploration.

Advancing Marginalized Student Success by Means of the Support Service Ecology

In conclusion, this project has delved into the efficacy of three standard practice claims derived from multiliteracy center studies scholarship, as experienced by students, while also considering the specific needs of marginalized student populations. Through an examination of spatial design for flexibility and collaboration, tutor preparedness for technological challenges, and engagement evidenced by competence and critical reflection, this research has revealed both the strengths and limitations of these standard practices. The findings underscore the importance of expanding these practices to better address the diverse needs of marginalized students. Firstly, I call for a shift from spatial to infrastructural design, encompassing material and social elements of access to create inclusive environments that promote the well-being and academic success of marginalized students. Secondly, the focus should pivot from technological to pedagogical preparedness for tutoring consultants, ensuring a more holistic support system within multiliteracy centers that prioritizes instructional skills alongside technical proficiency. Lastly, there is a need to expand the conception of engagement from deep to enhanced engagement, incorporating transfer to facilitate marginalized students' long-term success by bridging academic and professional realms. By advocating for these expansions of standard practices, multiliteracy centers can better serve the diverse needs of all students, contributing to a more equitable and inclusive educational environment.

Building upon the findings regarding the efficacy of standard practices within multiliteracy centers and the necessity for their expansion to accommodate marginalized student populations, it becomes evident that enhancing awareness and uptake of resources is paramount. The expanded practices outlined here not only address access and support

within the physical and pedagogical dimensions of multiliteracy centers but also emphasize the importance of facilitating students' engagement with available support services. By broadening the scope of resource awareness and uptake, multiliteracy centers can further facilitate the success of marginalized students, providing them with the tools and support needed to navigate complex academic tasks and thrive in their educational endeavors. This bridge between expanded practices and resource awareness underscores the interconnectedness of structural design, pedagogical support, and resource utilization in fostering an inclusive and supportive learning environment.

The above data underscores the critical importance of resource awareness in student success at UofL, where a lack of information about available services can hinder access to and uptake of support. These students' experiences exemplify how exposure to support services, even though mistaken visits or faculty recommendations, can lead to a broader understanding of and engagement with the campus support ecosystem. For Raven, her initial encounter with the DMS led to an integration into the broader network of resources, while Young-Sook's experience highlights the pivotal role of support services in filling gaps left by traditional coursework constraints. Ronan's journey illustrates how a single introduction to a new resource can spark curiosity and initiative, leading to deeper exploration of available opportunities. Chad's confidence in seeking out resources after being introduced to them by faculty underscores the transformative potential of such interactions. This expanded awareness not only enhances academic success but also fosters personal growth, nurturing students' confidence and curiosity. Moreover, these students' experiences underscore how increased resource uptake, stemming from their initial engagement with support services, acclimates them towards

utilizing available resources and enhances their capacity to navigate the diverse support ecosystem on campus.

Collectively, these findings underscore the importance of reimagining multiliteracy center practices to ensure equitable access, pedagogical effectiveness, and meaningful engagement for all students. Ultimately, this study shows the direction multiliteracy center scholarship should be going in pursuit of its mission to create spaces that foster inclusivity and academic success for every student, regardless of their background or identity.

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APPENDIX

INTERVIEW QUESTIONS

Questions for **Students**:

1. Demographic info?
2. Can you talk a bit about what brought you to the DMS?
a. What motivated your engagement?
3. What did you work on there?
a. What was the exigence of this project? Your own work or a class assignment?
b. Which software did you use? Was it your first time using it, or do you have experience with it already?
c. Did you find it easy to use? Can you explain why?
4. Can you briefly walk me through your composing process and explain what you did in the DMS?
a. Did you work with a tutor or independently?
b. Did you use any of the recorded tutorials or other support materials?
c. Has any of the work you've done with / in the DMS helped you understand your composing process? If so, how?
5. How long did you spend in the studio space?
a. Was it comfortable?
b. Did being in the suite make you want to stay longer?
c. Did anything there make you want to leave?
6. Can you walk me through your tutoring consultation?
a. Did you schedule an appointment or walk in?
b. What did you expect it to be like?
c. How did your experience differ from your expectation?
d. Did the tutor help realign your expectations for the consultation in any way?
e. Were the tutors equipped with the experience (both technical and pedagogical) to help meet your needs?
7. Did you explicitly articulate any ties to rhetorical choices?
a. Have you had the opportunity to reflect on how you used the space?
b. Do you have a deeper understanding of the resources available to you as a student at UofL?
8. Did you build skills here that you think will be applicable elsewhere?
a. What were those skills?

b. Can you walk me through acquiring those skills?
c. Where will they be useful? In school? At work?
d. How do you see the skills being useful?
9. Did you get anything here that you don't think you could get from a classroom?
a. Can you explain why you feel that way?
b. Did your visit deepen your engagement in the project?
10. Do you think working on a multimodal project led you to deeper engagement than a more traditional written essay would have?
11. I'd like to ask about your affective (emotional) response–did you feel welcome at the DMS?
a. Can you explain what made you feel welcome / unwelcome?
b. How did you respond to the website and the process of coming in?
c. Are there any barriers of entry that you felt here?
d. How does your affective response here impact future engagement? Will you come back and why / why not?
12. Let's discuss the design of the space–did you find it comfortable?
a. Was the website easy to navigate?
b. If you used support materials, were they easy to understand? Were they instructive enough to give you confidence in composing?
c. Can you point to anything about the space itself as impacting your visit?
13. Can you articulate any unmet needs?
a. Is there anything about your experience, the tools, or the support that you wish were different?
b. Why?
14. Do you have any suggestions for how to make the space more accommodating to your needs?
a. For the administrator?
b. For the tutors?
c. For your professor?
d. For your peers?

Questions for **Zahrndt**:

1. Can you walk me through your history with the DMS?
a. When did you start?
b. How was the space different?
c. What modifications have you made and why?
2. What are the most important services the DMS provides overall?
a. For students?
b. Is this different for faculty?
c. What does it offer tutoring consultants?
3. How do you see spatial design impacting students?

a. Have you rearranged anything in the space? Why?
b. Do you see it facilitating collaborative work? How (or not)?
c. Has it promoted longer sessions or deeper engagement, in your experience?
4. Can you walk me through tutor training?
a. What do you wish was different about this process?
b. What would you do if you could do anything with training that you wished?
5. What do you think the DMS provides students in terms of their digital literacy practices?
a. Why is this important?
b. How could the site facilitate this more successfully?
6. What would you advise visitors about before their visit in general?
a. Specifically students?
b. Specifically faculty?
c. Those interested in becoming tutors?

Tutoring Consultant Questions:

1. Can you explain why you wanted this job?
2. What is it that a tutoring consultant does at the DMS?
a. What's your purpose?
3. Did the training prepare you?
a. How might it be improved?
b. Can you speak to interacting with students / pedagogical training, specifically?
4. What pedagogical tools do you use most often?
a. Where did you learn how to do this?
b. How do you see it impacting students?
5. How do you think the space and its design facilitate (or hinder) student learning?
a. Does it promote or discourage collaboration? How so?
b. How long do you see students work? And do you link this to the spatial design at all?
6. What are the biggest challenges you face as a tutor here?
a. How do you overcome them?
7. What would you like to tell visitors to the DMS in general?
a. Specifically students?
b. Specifically faculty?
c. And those hoping to become tutors?

Faculty Questions:

1. Can you give me a brief history of your teaching and the gist of your philosophy?
2. How does multi literacies play into this?
3. Why do you design multimodal assignments?
a. Rhetorical dexterity
b. Awareness of services
4. Have you worked with Jason to design assignments?

a. Can you walk me through that process?
b. What was the outcome?
5. Do you bring your classes into the suite? Why or why not?
6. Do you find that these assignments and/or going to the DMS facilitates deeper engagement?
a. How have you seen this play out? Describe an example or two, please.
7. Are there any thoughts or suggestions you'd like to share for the DMS staff?
8. What about other faculty, about working with/in the DMS?

CURRICULUM VITAE

Lauren Fusilier
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EDUCATION

Ph.D. English: Rhetoric & Composition | University of Louisville, 2024
Specialization: Digital Rhetoric; Multimodal Pedagogy; Multiliteracy Centers; Composition Pedagogy, Theory, and History; Feminist Rhetoric and Pedagogy
Dissertation: "Inside the Dojo of Digital Media: What Marginalized Student Perspectives Reveal About Multiliteracy Center Practices"
Committee: Mary P. Sheridan (director), Bronwyn Williams, David Sheridan, and Frank Kelderman
Secondary Literature Specialty: Native American Literature

M.F.A. Creative Writing | Florida State University, 2012
Graduate Certificate: Editing & Publishing

B.A. English | Louisiana State University, 2008

AWARDS, HONORS, & GRANTS

2023 **University Graduate Student Excellence in Teaching Award**, Graduate Student Professional Development & Welfare Committee, UofL (runner-up)

2023 **College of Arts & Science Graduate Student Excellence in Teaching Award**, Graduate Student Professional Development & Welfare Committee, UofL ($250)

2023 **Graduate Network of Arts & Sciences Grant**, Arts & Sciences, UofL ($250)

2022-23 **Doctoral Fellowship**, Arts & Sciences, UofL ($22,000 + 4 course releases)

2022 **Barbara Taustine Plattus Award for Excellence in Graduate Teaching**, English Department Composition Committee, UofL ($700)

2022 **K. Patricia Cross Future Leaders Award**, AAC&U Future Leaders Society (national finalist)

2022 **Graduate Network of Arts & Sciences Grant**, Arts & Sciences, UofL ($250)

2021 **Dr. M. Celeste Nichols Award**, Women's Center, UofL ($500) (awarded annually to fund research "with the goal of promoting an inclusive and equitable campus")

2021 **Ph.D. Student of the Year**, English Graduate Organization, UofL ($150)

2021 **Graduate Student Council Travel Grant**, Graduate School, UofL ($250)

2019-20 **Doctoral Fellowship**, Arts & Sciences, UofL ($22,000 + 4 course releases)

2011 **Graduate Teaching Assistant of the Year**, Department of English, Florida State University

PUBLICATIONS

Accepted

Review of *The New Work of Writing Across the Curriculum: Diversity and Inclusion, Collaborative Partnerships, and Faculty Development*, by Staci M. Perryman-Clark. *WPA: Writing Program Administration Journal, 47*.2 (Spring 2024), forthcoming.

"Reflection on a Year of Editing FEN Blog." Co-authored with Megan Von Bergen, *FEN Blog*, 2022, https://compstudiesjournal.com/2022/07/18/reflection-on-a-year-of-editing-fen-blog/.

"Exploring Commitments to Diversity, Equity, and Linguistic Justice as Professional Development," *Boots On the Ground: University of Louisville Office of Diversity and Equity Communique*, 2022.

Fusilier, Lauren (2022) "Multimedia Assignment Sheet," Cardinal Compositions: Vol. 6, Article 8. Available at: https://ir.library.louisville.edu/cardcomp/vol6/iss1/8.

In Preparation

"Dojos of Digital Media: Locating Multiliteracy Centers by Any Name." *Computers & Composition Online*, projected 2024, in preparation.

TEACHING EXPERIENCE

New York University, Masters in Professional Writing
2023-present
Instructor
PWRT1-GC1025: Principles of Information Architecture (Distance Education)
PWRT1-GC1000: Principles of Professional Writing (DE)

School of The New York Times Summer Academy (for High School Students).
2018-present
Instructor
Creative Writing
Explorations: Journalism, Law, and the UN
Explorations: Fashion, Photography, and Film

University of Louisville
2020-2022
Instructor of Record
English 306: Business Writing — Communication & Advocacy

English 303: Scientific & Technical Writing — Campus Sustainability (DE)
English 102: College Writing — Reviewing, Researching, & Representing the Communities Within & Around Us (Hybrid)
English 101: Introduction to College Writing — Writing About Commemoration (DE)

Baruch College, City University of New York
2017-2019
Instructor
ENG 2150: Writing II — Writing the Personal & Social Across Modalities
ENG 2100: Writing I — Writing Across Genres

Fordham University
2015-2019
Instructor
ENG 1100: Freshman Composition II — Reflections of the City

Stern College for Women at Yeshiva University
2016- 2019
Instructor
ENGL 1100: Freshman Composition and Rhetoric

LIM College
2017- 2018
Instructor
ENGL 1100: English Composition — Multiple Medias, Multiple Meanings

Manhattan College
2015 - 2016
Instructor
ENC 110: Freshman Composition — Writing Across Genres

Florida State University
2009-2012
Instructor of Record
ENC 1145: Writing About — Rhetorical Analysis of Film Adaptations
ENC 1101: Writing Across Genres
ENC 1102: Researching Multiple Medias

ADMINISTRATIVE & EDITORIAL EXPERIENCE

Research Assistant, Dean of the Graduate School, University of Louisville, 2023-present
Assistant Director of Composition, Department of English, University of Louisville, 2020-2022
Founding Co-Editor, *FEN Blog* for *Composition Studies Journal*, 2021-2022
Faculty & Curricular Liaison, School of the New York Times, 2019
Assistant Editor, 9Threads Publishing, New York, 2014-2015
Academic Programs Assistant, Florida State University College of Law, 2012-2014

Fiction Editor, *Southeast Review*, Florida State University, 2010-2012

WORKSHOPS & MINI-COURSES

Instructor

Introduction to Antiracist Composition Pedagogy. Mini-Course. Department of English, University of Louisville, 2021.

Ignite Innovative Composing: Building Multimodal Assignments with Adobe Spark. Workshop. Department of English, University of Louisville, 2020.

Sway Your Way to Creative Engagement: Incorporating Microsoft Sway into Assignments. Workshop. Department of English, University of Louisville, 2020.

Grading Tactics: Portfolios. Graduate Teaching Orientation Workshop. Department of English, Florida State University, 2011 & 2012.

Learn to Make Mozzarella! Mini-Course. Essex Street Market Educational Department, New York, 2017-2019.

Participant

Turning the Dissertation Into a Book. Rhetoric Society of America Summer Institute. Pennsylvania State University, State College, PA: 2023.

Digital Media Academy. Mini-Course. Delphi Center for Teaching & Learning, University of Louisville, 2022.

Incorporating News Literacy into the Composition Classroom. Workshop. Department of English, University of Louisville, 2022.

Introduction to Preparing a Themed Writing Course. Workshop. Department of English, University of Louisville, 2022.

Online Writing Instruction. Mini-Course. Department of English, University of Louisville, 2020.

PRESENTATIONS

Invited Talks

Discover Engagement: Composing with Video Across the Curriculum. Group panel presentation, Delphi Center for Teaching and Learning Adobe Day of Discovery. University of Louisville, 2022.

Jumpstart Your Teaching to Prepare Students for Now, Next, and Beyond. Group panel, New Faculty Professional Development Workshop. University of Louisville, 2021.

Sparking Creativity: Multimodal Assignments with Adobe Spark. Delphi Center for Teaching and Learning Adobe Day of Discovery. University of Louisville, 2021.

Preparing for Community Partnership. Group panel presentation, Engaged Scholarship Symposium. University of Louisville (online), 2020.

Conferences

Curriculuming for Hope: Modifications for the Future. Group panel, Conference on College Communication and Composition. Chicago, IL: 2023.

Modal Responsivity: Ethical Pivots to Meet Pandemic-Induced Distance Education Challenges. Group panel, Computers & Writing Conference. Greenville, NC (online): 2022.

Mapping Restorative Justice: Commemorating Non-Dominant Communities Through Multimodal Composing. Individual presentation, Conference on College Communication and Composition. Chicago, IL (online): 2022.

Teaching Writing with Digital Video. Group panel, University of Louisville's Celebration of Teaching and Learning Conference. Louisville, KY: 2022.

Responsive Pedagogy: Navigating the Exigencies of Spaces, Places, and People. Group panel, Conference on College Communication and Composition. Spokane, WA: 2021. (accepted, not presented due to Covid-19).

Navigating Reciprocity with Community Partners. Group panel, Corridors: The Blue Ridge Writing and Rhetoric Conference. Blacksburg, VA (online): 2020.

Radical Commemoration: Disrupting Hegemonic Public Memory in the First-Year Composition Classroom. Individual presentation, Assembly for Expanded Perspectives on Learning Conference. Estes Park, CO: 2020. (accepted, not presented due to Covdid-19).

Radicalizing Public Memory: A Multimodal Research Project on Commemoration. Digital poster presentation, Conference on College Communication and Composition. Milwaukee, WI: 2020. (accepted, not presented due to Covid-19).

SERVICE

RSA – UofL Chapter, President and Founding Member, 2023-present
UofL English Department Racial Justice Committee, Member, 2020-present
Arts & Sciences Ad Hoc Awards Committee, Member, 2023-2024
UofL GTA Orientation Graduate Teaching Assistant Q&A, Panelist, 2022
Graduate Network of Arts & Sciences, English Department Representative, UofL, 2021-2022
Peer Mentor Program English Department, Mentor UofL, 2020-2022
Adobe Creative Educator Faculty Learning Community, Fellow, UofL, 2021

English Graduate Organization, Vice-President, UofL, 2020-2021
English Department Technology, Website, and Social Media Committee, Student Representative, UofL, 2019-2020
Family Scholar House, Writing Consultant, UofL, 2019
Frazier History Museum, Community Engaged Partner/Oral History Collector, Louisville, KY, 2019
English Graduate Organization, Secretary, UofL, 2019-2020
The Southeast Review Literary Journal, Fiction Editor, Florida State University, 2010-2012
The FSU Warehouse Writer's Series, Host, Florida State University, 2011

AFFILIATIONS

Rhetoric Society of America
National Council of Teachers of English
Racial Justice Committee, University of Louisville
Technical & Professional Reading Group, University of Louisville
AAC&U