

Electronic Theses and Dissertations, 2004-2019

2009

Political Spaces And Remediated Places: Rearticulating The Role Of Technology In The Writing Center

Russell Carpenter
University of Central Florida

 Part of the [Language and Literacy Education Commons](#)
Find similar works at: <https://stars.library.ucf.edu/etd>
University of Central Florida Libraries <http://library.ucf.edu>

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations, 2004-2019 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

Carpenter, Russell, "Political Spaces And Remediated Places: Rearticulating The Role Of Technology In The Writing Center" (2009). *Electronic Theses and Dissertations, 2004-2019*. 3894.
<https://stars.library.ucf.edu/etd/3894>

POLITICAL SPACES AND REMEDIATED PLACES:
REARTICULATING THE ROLE OF TECHNOLOGY IN THE
WRITING CENTER

by

RUSSELL GORDON CARPENTER
B.A. University of Central Florida, 2003
M.A. University of Central Florida, 2005

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of English
in the College of Arts and Humanities
at the University of Central Florida
Orlando, Florida

Summer Term
2009

Major Professor: Melody Bowdon

© 2009 Russell G. Carpenter

ABSTRACT

Writing center directors (WCDs) often situate their programs in physical and virtual spaces without fully studying the pedagogical and political implications of their decisions. Without intense study, writing centers risk building programs within spaces that undermine their missions and philosophies.

In *The Production of Space*, Henri Lefebvre argues that “From the analytic standpoint, the spatial practice of a society is revealed through the deciphering of its space” (38). The study of space also reveals important political and financial priorities within the institution. Furthermore, the positioning of buildings and the spatial layout of a campus display the institution’s priorities and attitudes toward writing center work. Theorizing the Online Writing Lab (OWL) through the lens of cultural and political geographies, it becomes apparent that the physical spaces of many writing centers are not as sustainable as WCDs might like, and in many ways, they are marginalized within the larger institution.

This dissertation prompts a rearticulation of place and space in the writing center. In this dissertation, I argue that in an attempt to rethink current practices, the virtual space of the writing center should perpetuate, extend, and improve the social practices employed in our physical spaces. I draw from mapping exercises to inform my critique in an attempt to advance our understanding of writing center physical and virtual spaces. The changing geographical and cultural landscape of the institution demands that writing centers pay close attention to spatial implications as they employ technology to create dynamic virtual resources and more sustainable spaces.

I rearticulate writing center spaces through cognitive and digital mapping, urban planning, and architectural theories. I make several contributions through this work: theoretical, to rearticulate the physical and virtual space of writing center work; political, to understand the constructions of the writing center's pedagogical spaces; and pedagogical, to understand best practices for creating virtual spaces that enhance learning, unlike those we have seen before or have had available in the writing center.

I have many people to thank for the opportunity to undertake a project of this size and scope. This dissertation is dedicated to the memory of my mother, Tina Carpenter, who thought I would be a good teacher, and to my father, Dale Carpenter, for all of his support throughout many years of college. I thank my wife, Barbie Carpenter, for doing her best to keep me sane and for reading many drafts. I also thank my extended family and the Barontinis for taking an interest in my work.

ACKNOWLEDGMENTS

My professors and mentors at UCF deserve much of the credit for my career choices. Without them, this dissertation would not have been possible. I offer thanks to my committee members: Melody Bowdon, Karla Kitalong, Craig Saper, and Beth Young. I could not have asked for a smarter or more congenial group.

It would be impossible to find a more supportive advisor than Melody Bowdon. The advice you provided throughout my dissertation writing process was invaluable. Thank you for reading countless drafts and for all of the encouragement along the way.

I owe much of my career path to Beth Young for giving me the opportunity to coordinate the UWC. You served as a wonderful mentor as I developed my interest in writing centers, and I am truly grateful for all of your advice. I was always excited by writing centers, but I had no idea that they would play such an important part of my graduate school experience. The UWC at UCF is a special place, and I will look back at my time there with the fondest of memories.

Craig Saper's Online Scholarship class changed the way I think about Texts & Technology. Your advice challenged me to think in new ways about my writing and research. My interest in experimental forms of technology and new media developed from the Online Scholarship course. You taught me to be a more creative thinker and scholar.

Karla Kitalong was an incredible professional mentor and advisor throughout the development of this dissertation topic. I can remember many talks around the candy dish. Thank you for sending good ideas my way and for always keeping me positive, energized, and in good spirits.

TABLE OF CONTENTS

CHAPTER ONE: A HISTORY OF TECHNOLOGY IN THE WRITING CENTER	1
Introduction.....	1
Blogs as Central Public Spaces.....	5
The Web and the Development of Friendly Virtual Spaces	9
Defining Technology and its Role in the Writing Center.....	10
Technological Milestones in the Writing Center.....	19
The Integration of Technology	26
Hypertext and OWLs	28
New Media.....	31
Chapter Overview	34
Chapter Two Overview.....	34
Chapter Three Overview.....	34
Chapter Four Overview.....	35
Chapter Five Overview	36
CHAPTER TWO: GEOGRAPHIES OF PHYSICAL AND VIRTUAL WRITING CENTER SPACES	38
Introduction.....	38
My Perspective.....	41
KnightOWL: A Spatial Consideration.....	42
Overview of Writing Center Spaces	43
Deciphering Physical and Virtual Space.....	45
Temporary Urban Space	46
Cyberspace and the Electronic Agora.....	49
Cyber-Utopia and the Virtual Community	54
Spatial Research in the Writing Center.....	56
CHAPTER THREE: THE PRODUCTION OF WRITING CENTER SPACES	59
Introduction.....	59
Mapping Urban Campus Space	65
Mapping the Writing Center	73
Mapping the OWL	79
Mapping the Writing Center: An Overview	99
Mapping Current Physical Space.....	100
Mapping Ideal Physical Space	100
Mapping Current Virtual Space	100
Mapping Ideal Virtual Space	101
Mapping the Writing Center: Directors' Perspectives.....	101
Discussion of Mapped Spaces	132
CHAPTER FOUR: INSTRUMENTALISM AND SPATIAL IMPLICATIONS	141
Introduction.....	141
Space and Instrumentalism	145

Enhancing Ethos through Virtual Spaces	153
Implications for the Writing Center Field.....	158
CHAPTER FIVE: REMEDIATING THE WRITING CENTER SPACE	161
Introduction.....	161
Remediation and the Physical Space of the Writing Center	165
Visual OWLs and the Remediation of Physical Space	172
New Methods for New Media.....	173
Remediation and the Virtual Space of the Writing Center	174
Augmented Space	176
The Great Good Place in an Immersive Space	179
Challenges and Future Research.....	189
APPENDIX A: RECRUITMENT E-MAIL	191
APPENDIX B: INFORMED CONSENT.....	193
APPENDIX C: APPROVAL FROM UCF IRB	196
APPENDIX D: MAPPING EXERCISE.....	198
APPENDIX E: SURVEY RESPONSE 1	200
APPENDIX F: SURVEY RESPONSE 2	202
APPENDIX G: SURVEY RESPONSES 3	204
APPENDIX H: SURVEY RESPONSES 4	206
APPENDIX I: SURVEY RESPONSES 5	208
LIST OF REFERENCES.....	210

LIST OF FIGURES

Figure 1: UCF UWC Blog	6
Figure 2: Writer's Connection Blog	7
Figure 3: Writing is Power Blog	8
Figure 4: KnightOWL Pre-Chat Interface	14
Figure 5: UWC Group on Facebook	51
Figure 6: Consultant Depiction of Peripheral Location in Physical Space	63
Figure 7: UWC on Google Map	67
Figure 8: UWC Live Search Map	68
Figure 9: Digitally Enhanced Parking Garage over UWC 1	70
Figure 10: Digitally Enhanced Parking Garage over UWC 2	71
Figure 11: Digitally Enhanced Parking Garage over UWC 3	72
Figure 12: Digitally Enhanced Parking Garage over UWC 4	73
Figure 13: Surfing	85
Figure 14: Avatars	86
Figure 15: Tables and Rooms	88
Figure 16: Central OWL	89
Figure 17: Picnic	90
Figure 18: Blank and Populated Screens	91
Figure 19: OWL as Cyborg	92
Figure 20: Traversing Physical Space	94
Figure 21: Tree	95
Figure 22: Original Map of SLUWC	98
Figure 23: Current Physical Space 2, Dispersed Locations	102
Figure 24: Current Physical Space 3, Peripheral Technological Spaces	104
Figure 25: Current Physical Space 4, Dedicated and Segregated Space	106
Figure 26: Current Physical Space 5, Open Space	108
Figure 27: Ideal Physical Space 1, Space for Collaboration	109
Figure 28: Ideal Physical Space 2, Central Technology	111
Figure 29: Ideal Physical Space 3, Central Computers	112
Figure 30: Ideal Physical Space 4, Integrated Learning Space	114
Figure 31: Ideal Physical Space 5, Tranquil Spaces with Mobile Technology	115
Figure 32: Current Virtual Space 1A, Interference	117
Figure 33: Current Virtual Space 1B, One-Way Transfer	118
Figure 34: Current Virtual Space 2, Exhibit and Gallery	119
Figure 35: Current Virtual Space 3, College-Controlled	121
Figure 36: Current Virtual Space 4, Linearity	122
Figure 37: Current Virtual Space 5, Pages	123
Figure 38: Ideal Virtual Space 1, Even Exchange	124
Figure 39: Ideal Virtual Space 2, Multimodal Space	125
Figure 40: Ideal Virtual Space 3, Video	126
Figure 41: Ideal Virtual Space 4, Synchronicity	128
Figure 42: Ideal Virtual Space 5, Galleries	130
Figure 43: Dashboard for Tracking Virtual Traffic	134

Figure 44: New Building Methods in Virtual Space	179
Figure 45: The New Great Good Place Presentation	181
Figure 46: Example of the Electronic Agora	182
Figure 47: New Digital Forms of Composition	183
Figure 48: Attending Virtual Presentation	185
Figure 49: "Grief" in Virtual Spaces	187

LIST OF TABLES

Table 1: Snapshot of Spaces Mapped	133
Table 2: Remediating Writing Center Work.....	166
Table 3: Remediating the Writing Center Space	167

CHAPTER ONE: A HISTORY OF TECHNOLOGY IN THE WRITING CENTER

More and more writing center directors and staff are now expected to add computer expertise to their bag of tricks.

- Ray Wallace, "Random Memories of the Wired Writing Center" (164)

Research into technology use in the writing center is needed now more than ever.

- Donna Sewell and James Inman, "Mentoring in Electronic Spaces" (xxx)

Introduction

In *The Language of New Media*, Lev Manovich asks, "What kind of space is virtual space?" (254). This seemingly simple question will pose a number of challenges for writing centers as they develop services that transcend physical space. As the writing center directors (WCDs) integrate new media and technology into their daily operations, they must continue to invent and articulate theory that informs the development of virtual spaces. The goal of this dissertation is to provide scholars with a method for inventing and deciphering physical and virtual geographies. In the chapters that follow, I will draw on the term "remediation," coined by Jay David Bolter and Richard Grusin. This concept is significant to my work and the continued development of writing center spaces.

Fundamental to developing more complex theories of virtual writing centers is Bolter and Grusin's argument that "new media are doing exactly what their predecessors have done: presenting themselves as refashioned and improved versions of other media" (14-15).

Following their lead, my dissertation offers a new scholarly practice for deciphering writing center spaces, a literacy that extends beyond print-based technologies to consider the positioning of new media, hypertext, and intersections of writing center work with theories and practices from outside of the traditionally defined rhetoric and composition field. I articulate a heuristics—a method for rearticulating literacy in our digital culture—for inventing ideal spaces. In *Heuristics*, Gregory Ulmer poses a critical question: “What will research be like in an electronic apparatus?” (32). The increasingly prominent positioning of new media and technology in the academy should prompt a rearticulation of theory, a move to visual methods. Through the spatial analysis offered in this dissertation, I also offer a new method for deciphering writing center spaces, one that is also appropriate for electronic environments.

Ulmer explains that the notion of spatiality has changed since the development and widespread adoption of the computer (*Heuristics* 36). Indeed, it has, and the cultural and political landscape of the university has changed as well—technology and virtual spaces are at the heart of the institution. The culture of an academic environment should inform how WCDs develop practices for virtual space. “Put differently,” Manovich writes, “to develop a new aesthetics of new media, we should pay as much attention to cultural history as to the computer’s unique new possibilities to generate, organize, manipulate, and distribute data” (*The Language of New Media* 314). Therefore, a heuristics for virtual space should take into account the “learning culture,” as Anne Ellen Geller et al. describe it (53), of writing centers. The culture of the writing center is one where students and consultants discuss writing-related issues as peers, one on one. Thus,

a heuristics for deciphering virtual spaces might have at its center the social, learning-based culture of the writing center.

Historically, writing centers have provided social spaces for intellectual discussion. Elizabeth Boquet, in *Noise from the Writing Center*, conveys the “joyful noise” that emanates from her writing center (1). In the prologue to the book, Boquet finds herself explaining to “Dr. PC,” a professor whose office happens to be located near the writing center, that the loud disturbance that he heard coming from the writing center was not a “party” but an academic meeting where productive intellectual work was taking place. On any given day, you can walk into a writing center and notice that they are often bustling places where “noise,” as Boquet says, fills the air. A productive writing center is a “noisy” writing center.

Writing centers have also served as home to technological innovations of many kinds. Technologies, as Andrew Feenberg argues, are forms of power (7). WCDs practically and creatively integrate technology into their writing centers that will allow them to perform tasks that were previously impractical. For many reasons, the relationship between writing centers and technology has been a productive one, at times met with great enthusiasm. The International Writing Center Association’s 2008 conference theme, for example, invited participants to consider where writing centers have been and where they are going or “new directions” in writing center work. It should not be a surprise that many presenters focused on the innovative use of technology in their writing centers. Several sessions even proposed further exploration in immersive environments like Second Life (SL), “a 3D online digital world imagined, created, and owned by its residents,” Michael Rymaszewski et al. explain (4). These presentations

proposed concepts and possibilities for doing writing center work in SL, but they stopped short of developing theory for consulting, building, and training the next generation of consultants to construct these virtual spaces. The conference theme asked participants to consider new directions for writing center work; however, most proposals were inspiring in their passion for the technology but lacking in substantial theoretical development, focusing on the tools of SL as opposed to a scholarly rationale for using or understanding it.

Mike Palmquist echoes that “writing center scholars were among the earliest adopters of technology” (396). However, there is a need for theories that extend these practices. Existing scholarship lacks theory and development beyond simply the possibility of doing meaningful work in virtual spaces. Building theories for virtual work will help solidify the writing center’s future home in online environments. Without theoretical developments, though, we cannot create a full awareness of the potential for writing center studies in electronic spaces, and we are likely bound to rehash tools-based debates without much progress. To move forward, we should begin by articulating a historical perspective of technology in the writing center.

Recently, many writing centers have reinvested time, energy, and resources into creating aesthetically pleasing and comprehensive virtual spaces, which often serve as electronic storefronts for the work that takes place in the physical space of the writing center. At the University of Central Florida (UCF), for example, it is not uncommon for the coordinator to spend several hours per week maintaining virtual spaces. The Purdue University Online Writing Lab (OWL) requires two administrative positions for maintaining virtual space: a dedicated webmaster and coordinator. WCDs spend

countless hours structuring and redesigning existing virtual spaces with more user-friendly layouts and designs with the goal of enhancing the user's experience. They demand maintenance and care, much like physical spaces. To make these improvements, WCDs have had to refine and develop their technical skills. Helping to propel interest in virtuality, however, technologies like blogs and wikis have made it easier to create customized virtual spaces without the need for complicated coding. Much like a “noisy” physical space, blog technologies also allow visitors to contribute to conversations, moving the individual from a passive reader or listener to an engaged contributor.

Blogs as Central Public Spaces

The UCF University Writing Center (UWC) features three blogs—one that provides students with updates on writing center events, another that connects students to freelance editing and writing services, and the third that provides a reflective look at current community-based writing projects. These blogs serve to connect the UWC with the university and central Florida community. Consultants and WCDs have access to and update these virtual spaces as necessary, which is much different from the exclusive access necessary to contribute to the website. Figure 1 offers a glimpse of the “UCF | UWC” blog, which is currently used to update students, faculty, and staff on events taking place at the UWC. Information is posted to the blog instead of the UWC's home page.

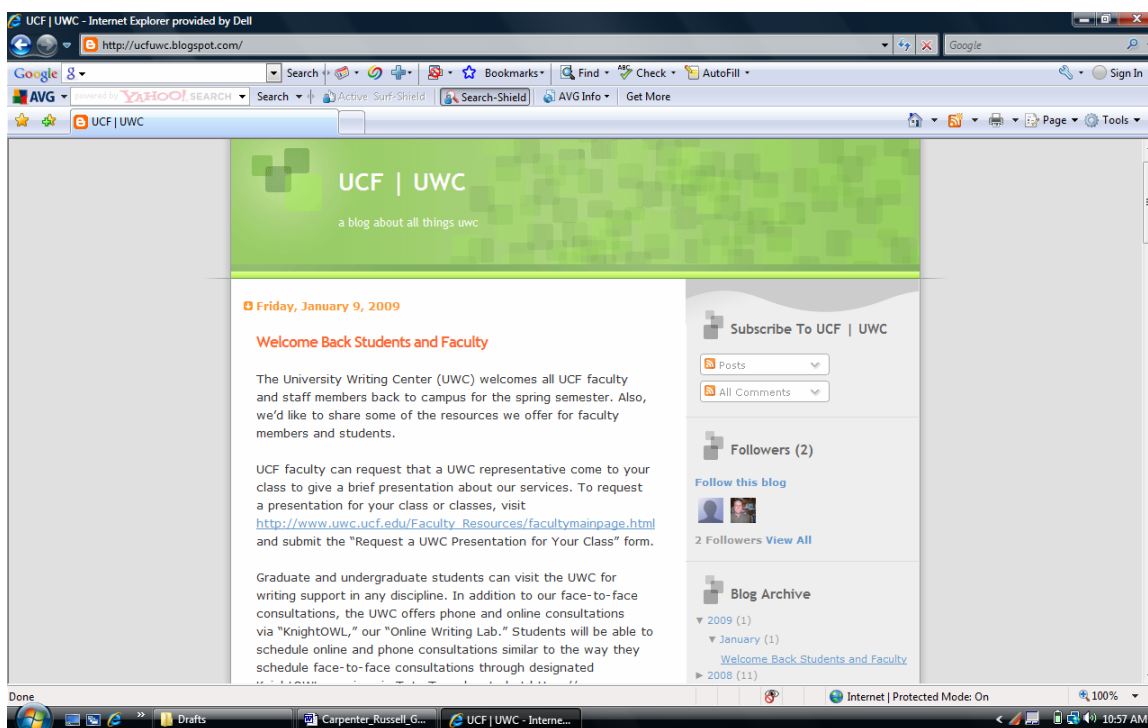


Figure 1: UCF | UWC Blog

Blog technologies have made it easier for WCDs to publish and distribute information. Furthermore, writing centers add to blogs without worrying about the material constraints of physical space.

Blog technologies have had a positive impact on writing centers. Writing centers across the country continue to build these technologies into the work they do on a daily basis. Further, academics continue to develop practical uses for blogs in their own work—in writing centers, research, and academic programs.

“The Writer’s Connection” blog in Figure 2 links the UWC to the central Florida community. Here, students contribute information about freelance services of interest to the community, and interested parties can offer writing-related job information. The public nature of “The Writer’s Connection” makes it appealing to editors as a way to

offer services to the UCF community as well. The blog automatically archives entries by year and month of submission. The virtual space offered by blog technologies establishes a valuable and productive connection between the UWC and campus community. These virtual connections are important, as the UWC does not have a prominent physical presence. “The Writer’s Connection” serves to bridge the spatial gap between the UWC and interested parties. The bridge, however, is virtual, since physical connections require expensive space and resources.

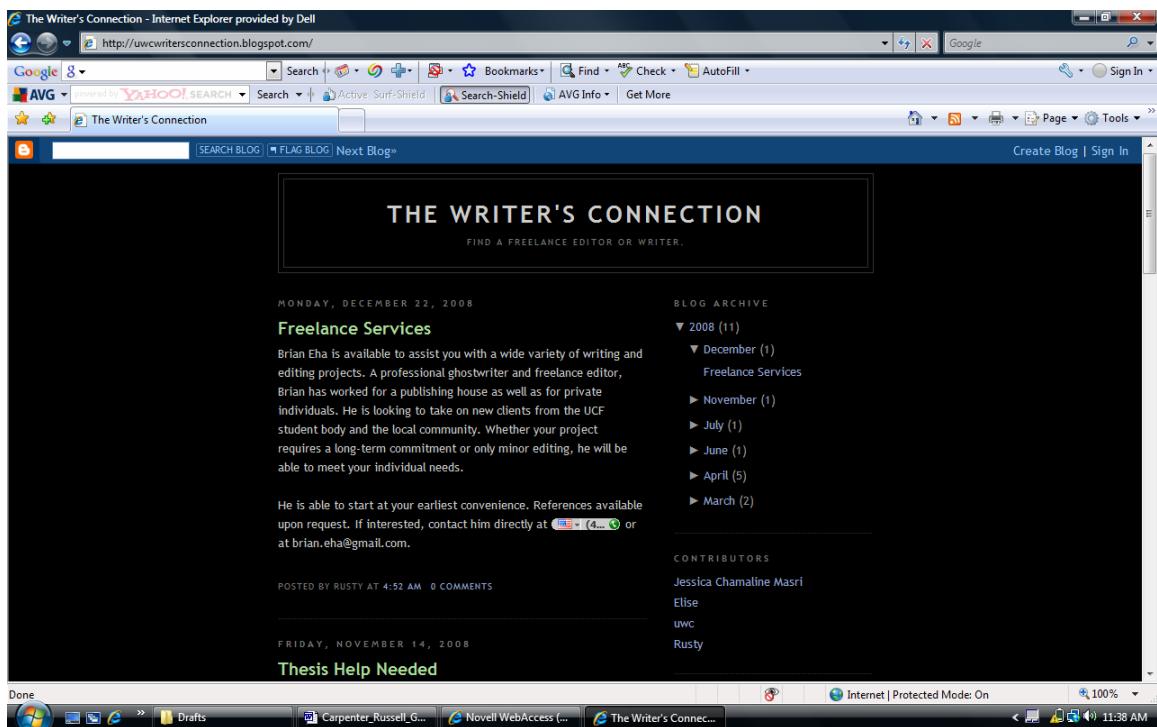


Figure 2: Writer's Connection Blog

During the spring 2009 semester, the UWC established a “Writing is Power Center” at Colonial High School in Orlando. Since the university and high school were separated by several miles and budget would not permit regular travel for faculty and participants, the student assistant decided to post updates, facts, and experiences online.

Figure 3 offers a look at the “CHS Writing is Power” blog in its early development. The student intern eventually documented her experiences working with students at Colonial High School in this blog. The centrality of this virtual space allowed members of the project separated by physical distance to observe the progress taking place with the “Writers on the Move” project through this student’s blog. Project participants came from the UWC, the Creative Writing program, Colonial High School, and Orange County Public Schools. The blog, a seemingly simple technology, served the profound role of centralizing the group’s efforts and offered the student a creative outlet for periodic posts, thoughts, and updates to the physically dispersed group.

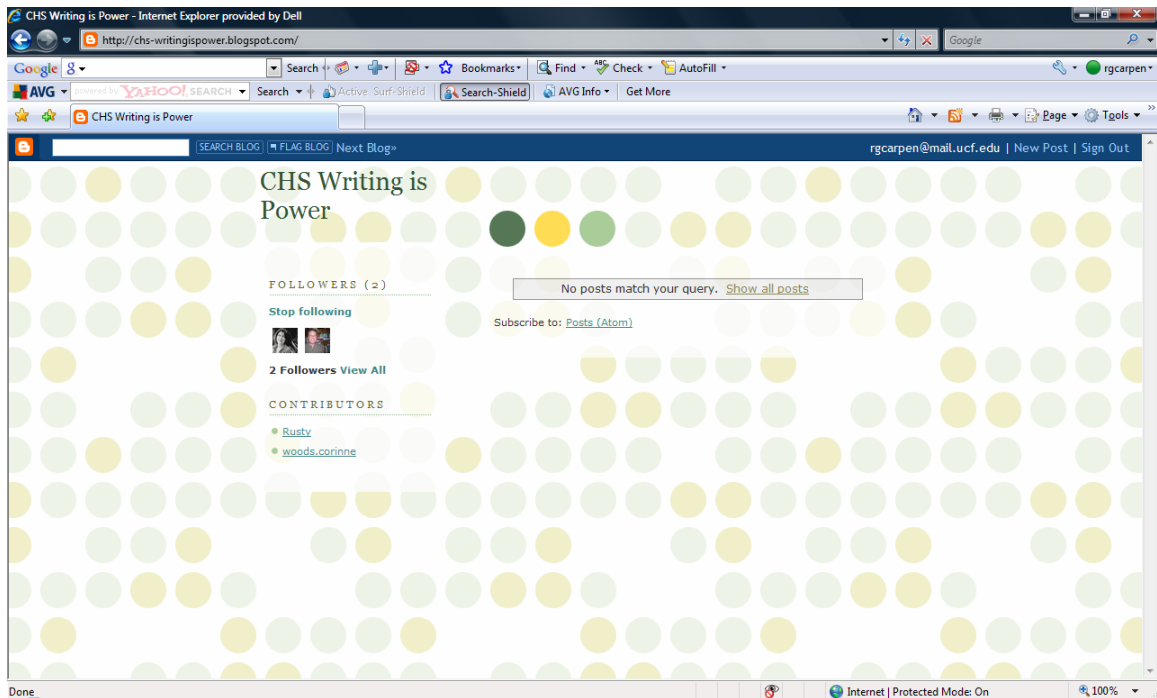


Figure 3: Writing is Power Blog

The Web and the Development of Friendly Virtual Spaces

Many writing centers have developed incredibly detailed and aesthetically pleasing virtual spaces, seemingly supporting David Gelernter's position that beauty is the driving force behind technology. Gelernter supports this claim by arguing, "Great technology is beautiful technology. If we care about great technology excellence, we are foolish not to train our young scientists and engineers in aesthetics, elegance, and beauty" (129). In 2008, for example, the International Writing Center Association website, a hub for writing center activity, underwent a redesign, which enhanced its aesthetic appeal but more importantly added practical features including discussion forums and blogs. An overhaul of the International Writing Center Association site suggests the importance of technology in the work of writing centers; moreover, it is an indicator of the organization's commitment to technology.

Carolyn Marvin, in *When Old Technologies Were New*, highlights changing technological practices. "New practices do not so much flow directly from technologies that inspire them as they are improvised out of old practices that no longer work in new settings," Marvin claims (5). Writing centers are located throughout the world. In recent years, the International Writing Center Association added new regions in Europe, Africa, and the Middle East, making it even more challenging to centralize the organization's resources and publicize events. Old practices that once worked for American writing centers would no longer support the organization's geographically dispersed international institutions. Technologies traverse space and time, allowing for new international connections that were once impossible. Marvin reminds us that our vision for new media was always ambitious. It addresses expanding audiences, across time and space,

seemingly “treading the path of the future” (194). Writing centers have employed a variety of technologies throughout history. Like Marvin, Lisa Gitelman and Geoffrey B. Pingree, in *New Media, 1740 – 1915*, focus on “moments of crisis” in the history of new media (xiii). I attempt to align the early parts of this dissertation with their important historical landmarks. At times, the technological past may shed new light on where the field might progress in the not-too-distant future. As these important media scholars show, we can learn more about our present situation and future through our history.

Defining Technology and its Role in the Writing Center

Technology can be defined as an electronic or digital system that allows users (writing center staff members and students) to organize, disseminate, archive, and construct information in physical and virtual space. Electronic technologies have played a significant role in the ways in which writing centers operate. While writing center scholars have influenced the development of these technologies, these same technologies have also helped shape the writing center workspace, especially virtually. However, technologies have also impacted the services that writing centers offer and the ways they are administered.

The role of technology in the writing center is to advance practices that were previously difficult (or impossible) to perform. Simply put, technology should enhance writing center work. That is, technologies should allow writing centers to perform their functions better and more accurately, while allowing staff members to efficiently track records and offer services without the constraints and physical boundaries of the writing center’s four walls.

Realizing the need to make writing-related information accessible to an increasingly diverse audience, Rebecca Rickly sees the OWL as an “extension” of her writing center’s peer tutoring practices in physical spaces (46). There is a significant need for accessible information within the university community. Current technology allows WCDs to provide information, including resources like handouts, writing samples, and consultations, online. The process of integrating technology into the writing center also brings with it distinct and pedagogically significant challenges that need to be considered.

Based on the relevant literature, I have identified three key challenges writing centers face when integrating technology, especially related to OWLs:

- Knowing what we want and need the technology to do
- Selecting technology appropriate to the activity
- Making use of the available cues within current textual writing space

As we move forward with research on technology and OWLs, these three issues will warrant careful consideration. The significance of these issues (and the challenges they present) is echoed throughout the writing center literature.

Lee-Ann Kastman Breuch’s research on virtual peer review, defined as “the activity of using computer technology to exchange and respond to one another’s writing for the purpose of improving writing” (10), illuminates the significant challenge of “selecting technology appropriate to the activity” (93). While developing KnightOWL, UCF’s version of an OWL, administrators put a great deal of effort into selecting technology that would suit staff members and students’ needs and expectations. Based on extensive experience in developing a new and growing OWL, I cannot overstate the

importance of selecting technology that is best suited for the activities taking place in the writing center. For example, early KnightOWL planning meetings illuminated the importance of using synchronous technology for online consultations. Based on research and current writing center practices, administrators felt that asynchronous technologies would not support the UWC's mission of providing a non-remedial, peer-to-peer service based on intellectual conversation about the paper. Furthermore, administrators wanted online consultations to emulate the look and feel of face-to-face consultations that take place within the UWC's physical space—real-time interaction that promotes student involvement—with the goal of producing better writers. Administrators wanted students to receive feedback in online sessions that would be similar in quality to the feedback they would receive in face-to-face sessions, as the OWL would follow the same policies and philosophies and serve as a viable extension of the services offered in the physical space of the writing center. Synchronous technologies would more likely promote responsibility and ownership in the student than an asynchronous process where students would submit a paper and the consultant would make in-text comments and send the paper back to the student. Further, the goal in developing KnightOWL was to build it seamlessly into the UWC's existing framework, to treat it as a substantial component of the existing face-to-face services.

In selecting a technology appropriate for the activity, as Breuch says, we knew it would be a challenge to find a synchronous platform that would allow the UWC to smoothly integrate face-to-face and online consultations concurrently in any given hour. Conceivably, it should be possible to have a consultant work face-to-face for one hour and then make a smooth transition to online consulting the next, showing that online

consultations follow established UWC policies (e.g., the consultant could take a face-to-face walk-in if the online student did not show up within the five-minute window). The technology would need to support these goals. KnightOWL needed what Breuch calls “collaborative technologies” that facilitate interaction (93). Given an understanding of the philosophical needs for synchronous technology in the UCF UWC, administrators would also need to consider practical and cultural expectations.

Administrators wanted staff members and students to take ownership in KnightOWL, which meant that they should be able to schedule these consultations just as they would face-to-face sessions without relying on an administrator. It also meant that administrators would need to identify technologies that not only worked independently but would also complement and interface with one another. Speaking to Breuch’s “factors for selecting appropriate technologies for virtual peer review” (96), administrators decided on LivePerson, a corporate Instant Messaging (IM) technology that would allow the UWC to accomplish several of its needs and goals:

- Offer a secure synchronous virtual chat space
- Collect student demographic and personal data
- Offer a split-screen interface where the consultants view student information and the chat space at the same time

Figure 4 shows the KnightOWL interface where students enter basic information about the paper before beginning the consultation. A practical aspect of the virtual space, this pre-chat survey allows the UWC to collect valuable demographic information before the consultation begins and gives the consultant access to helpful data similar to the data gathered in face-to-face sessions. Furthermore, the chat portal allows a student to leave a

message, which is automatically delivered to the administrator’s inbox, if KnightOWL is closed. The interface, as shown in Figure 4, allows consultants to manage the virtual space of the UWC, drawing a parallel to the waiting area in the physical space.

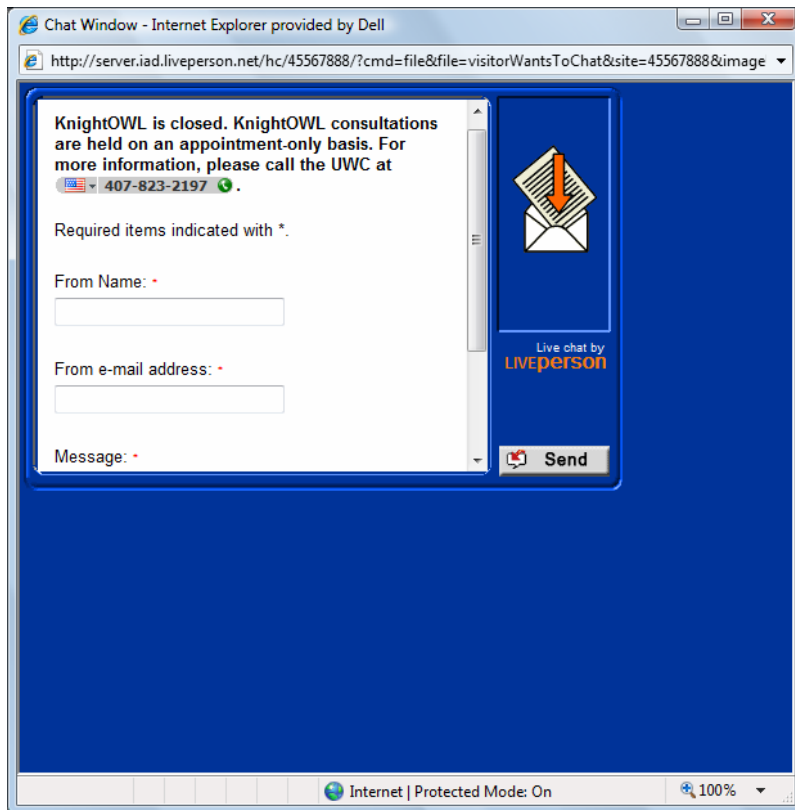


Figure 4: KnightOWL Pre-Chat Interface

Stuart Blythe identifies another challenge writing centers will face when integrating technology into their operations—encouraging consultants to make use of the available cues within current textual writing spaces (as in an online chat). While textual writing spaces offer writing centers the opportunity for synchronous communication, the shift to this virtual space is not necessarily natural. Blythe writes:

Human beings have developed a great range of visual and extra-verbal cues—such as inflection, gesture, and pace—for use in a face-to-face encounter. The

availability of such cues has been promoted as one of the strengths of the tutorial. Though I would suggest that we lack a clear sense of what exactly is lost when a tutorial goes online . . . the computer medium does indeed change the set of available cues. (“Networked Computers + Writing Centers = ?” 100)

The lack of available interpersonal and nonverbal cues at the consultant’s disposal in online consultations is a major challenge that administrators face when integrating technology into the writing center. In face-to-face sessions, the consultant can sit side-by-side with the student, can nod his or her head in support of a point the writer is trying to make, and can show physical signs of engagement and interest. Online, though, these cues are not possible. The challenge that administrators will face (one that is worthy of additional research and development within the areas of OWLs and new media studies) is how consultants might express these cues within online spaces. For now, I will concentrate on the challenges of textual spaces, like the online chat, because they provide a rich history and perhaps the most compelling cases for additional research and development on technology and new media in the writing center. I begin with early research and development in Multi-User Domains Object-Oriented (MOOs), as these were the virtual spaces inhabited by pioneers of technology in the writing center.

With a limited degree of success, writing consultants working in MOOs used textual “objects” to make polite and inviting gestures to the student. Joel A. English explains that staff members at his writing center “sometimes began by offering writers a virtual drink or snack, by suggesting they sit and make themselves comfortable, or by explaining the features of the MOO” (177). In training consultants to develop cues for use with a particular technology, writing center administrators can learn a great deal from

the strategies employed in MOOs. Online, consultants can use any number of textual strategies to engage students with the goal of making them feel relaxed and keeping them engaged in the consultation, even though they are not physically present. As administrators might anticipate, they will need to train staff members to employ and explore the available options for textual cues.

In preparing consultants to face similar challenges in KnightOWL, administrators encourage strategies that build upon training methods established by UWC founder Beth Young. Extending training methods established for face-to-face consultations, administrators encourage consultants to establish rapport early in the consultation. The key to establishing rapport early might mean asking an ice-breaker question, discussing the student's main concern with the paper, or welcoming the student to KnightOWL. The pace of the online consultation is also important, especially since the consultant is limited to text. Thus, the consultant might want to give brief textual cues as in, "I'm going to start reading now . . ." or "Let's take a look at paragraph one . . ." to encourage student involvement throughout the process. However, Dan Melzer notes the potential frustrations in taking a long time to respond. "Some students took an extremely long time to post messages," Melzer writes, "and in most of these cases it was because they were editing each response and question" (13). In KnightOWL, administrators encourage consultants to weigh the importance of writing grammatically correct, full-length sentences and keeping the student waiting too long for a response. When working online, pacing can be critical to developing swift conversational-style interaction with the student that mimics the flow of a traditional face-to-face conversation.

Consultants are encouraged to write what normally would be apparent in the face-to-face consultation. For example, in a face-to-face session, the student can see that the consultant is reading the paper or looking at a certain paragraph. Online, however, consultants need to use the text to keep the student informed. Administrators will need to explore student engagement, online persona, and the potential value added when integrating technology into the writing center. As Melzer explains, “the chat room was not the cold, unfriendly place I expected it to be when I began tutoring online” (13). The virtual consulting spaces of the writing center do not have to be the sterile and uninviting environment that David A. Carlson and Eileen Apperson-Williams warn us about (285). The consultant, trained in the rhetorics of technology and prepared to meet the challenges of using textual cues online, can work to make virtual spaces inviting as well.

A third key issue that writing centers face when integrating technology is that “[w]e just don’t know what we want technology to do,” as David Coogan says (“Towards a Rhetoric of On-Line Tutoring” 559). When integrating technology into the writing center, especially for the purposes of constructing a public virtual space like an OWL, we must have a clear idea of what they want and need it to do. One of the biggest challenges the UCF UWC faced while developing the current OWL was implementing scheduling software (TutorTrac) that would account for the addition of synchronous online consultations.

With an expanding virtual presence, the UCF UWC needed technology that would accommodate multiple physical and virtual centers. The UWC required options that would allow students to book appointments for the physical center in Orlando and for KnightOWL. The original Online Scheduler was built to help consultants manage face-

to-face consultations at one writing center—in Orlando. A component of the OWL, the new scheduling technology would need to support a more dynamic writing center. In the design and planning stages for this transition, administrators had a clear vision for what they wanted and expected the technology to do. Students would need to know which center they wanted to visit and would need to be able to select it from the list of choices. Similarly, writing center scholars will need to have a clear vision for their OWL and the technology that will be employed to support its development.

Coogan’s statement about the importance of knowing what we want the technology to do extends far beyond the current expectations for OWLs and should prompt additional research and development, especially at the intersection of writing center, OWL, and new media research. Early in *Electronic Writing Centers*, Coogan argues that “rich, high-quality interactions between instructors and students can indeed take place, despite the distance in space and time that separates them” (ix-x). In the spirit of Coogan’s early work in electronic writing centers, scholars interested in OWLs should not be content with reshaping the existing textual online spaces used for consultations but should explore new media and technologies that promote increased interactivity in a truly public virtual space. Coogan challenges us to articulate just what we want technologies to do. Moving forward from here, we should seek technologies that allow us to improve on our existing virtual (and physical) writing center spaces. To meet this challenge and respond to Coogan’s comment, writing center scholars might consider more immersive technologies that promote interactivity and the establishment of interpersonal connections by examining the ways in which physical and virtual spaces are deciphered.

Writing centers have undergone cultural and spatial changes. Contemporary writing centers have morphed into linked, integrated, wired, virtual, and immersive spaces. The movement to electronic communication has been rapid, and technology will play a substantial role in the future of writing centers and composition instruction in the 21st century. Eric C. Hobson proclaims, “I have little doubt that computers—and other electronic communication technologies presently available or currently in planning, testing, or initial distribution phases—will continue to play a pronounced role in the work that literacy educators undertake” (xii). In the 21st century, often referred to as the digital culture or “technoculture,” as John Thornton Caldwell calls it (3), available technology will continue to influence the decisions that writing center practitioners make, such as developing a virtual presence, hosting writing-related materials online, offering appointment scheduling online, and even implementing virtual writing spaces through synchronous online chat rooms. Furthermore, scholars might explore the place of new media technologies in the writing center by examining milestones that have shaped the history of the field.

Technological Milestones in the Writing Center

The research presented here traces significant technological milestones throughout writing center history, taking as its foundation the notion that changes in the means of communication are linked in direct as well as indirect ways to changes in the patterns of human interaction, as Jack Goody puts it (3). The needs of society dictate communication patterns and in many ways influence the media employed by its members. The presence of technology in the writing center will also influence the culture

of this space. Thomas J. Misa articulates this idea when he writes, “The very presence of a certain technique or technology can alter the goals and aims of a society as well as the way people think in articulating their ideas” (265). Moving forward in a digital culture, this dissertation fills a void in writing center scholarship, taking into account the communications needs of academic societies over time and how these needs influenced the types of technologies employed in the writing center.

Writing center practitioners find themselves faced with a difficult but important decision: whether to embrace or ignore technological advances that are taking place around them. Dickie Selfe states that the wave of change is coming—about that there is no doubt. Between the alternatives of standing defiantly in front of the tidal wave of technological change or of harnessing its momentum to meet the needs of writing centers and their clients, Selfe opts for the latter for himself and likewise recommends that choice to the writing center community (Hobson xii). Hobson and Selfe have a clear idea about the remediated future of writing centers, but what course have they taken to this point? What does the history of technology in the writing center tell us about the future? What has led to the implementation of technology in the writing center?

In a 1988 National Council of Teachers of English (NCTE) statement, Muriel Harris described writing centers as existing in a variety of shapes, sizes, and settings. This variety, however, makes documenting a chronological history of writing centers particularly challenging. Tracking the history of technology in the writing center is even more challenging; an exhaustive account does not currently exist. In attempting such a task, it is first necessary to take a look at where centers originated.

This discussion will take the oral nature of early American colleges in the 18th century as a significant milestone in the writing center's technological history. As Susan Waller explains, the first hints of writing centers do not appear until the early years of the twentieth century, and centers were not professionalized until the 1970s (2). However, a look at the history of early American colleges illuminates places where peer tutoring and consulting (the basis of writing center work) took place even before the writing center as it is known today came into existence.

Frederick Rudolph describes early literary societies as student-run organizations, where members conducted debates, disputations, and literary exercises (138). These literary societies often thrived on intellectual debate and discussion, collaborative interaction among peers, similar to modern writing centers, which value peer-to-peer discussions that seek to “produce better writers, not necessarily—or immediately—better texts,” as Stephen North says (441). Literary societies, like writing centers, centered on academic discussions—conversations. Despite being situated in time many years after Johann Gutenberg and moveable type, which was developed in the mid-fifteenth century (Man 6), literary societies originated as primarily oral-based student groups. However, they were centered on peer-to-peer, student-centered discussions, born out of print and literary roots.

Early eighteenth century literary societies were largely based on oral foundations, an example of the strong relationship between print and orality. Walter J. Ong writes:

Since the shift from oral to written speech is essentially a shift from sound to visual space, here the effects of print on the use of visual space can be the central,

though not the only, focus of attention. This focus brings out not only the relationship between print and writing, but also the relationship of print to the orality still residual in writing and early print culture. (115)

Early literary societies offered a mix of oral and print culture, where aural and visual communications were complementary rather than conflicting. Similarly, writing centers thrive on the oral, spoken nature of academic discussions based on the written literary text. Whereas hearing rather than sight dominated the older poetic world, as Ong explains (117), both coexist in literary societies and in today's writing center. Much of what literary societies offered at early American colleges, though, helps us analyze contemporary writing centers.

Eric A. Havelock echoes the concept of "oral literature" (46), and this notion is quite fitting for a historical account of technology in early writing centers. They were peer-centered places where much communication took place orally. In eighteenth century literary societies, discussions and disputations grew out of printed texts. Writing centers have retained many of the oral (and aural) practices of literary societies.

As more writing centers began to open in the 1970s, technologies that aided oral communication, such as cassette players and headphones, became popular for training—mostly for recording consultations, as Waller explains (7), significantly impacting the culture of the writing center. "When technology extends one of our senses," Marshall McLuhan writes, "a new translation of culture occurs as swiftly as the new technology is interiorized" (*The Gutenberg Galaxy* 40). These technologies also contributed to the cultures of the writing center by making it more efficient to record discussions between consultant and student. Writing centers now employed devices for recording orally

transmitted messages. Technologies that aided record keeping, like recording devices, encouraged practitioners to explore other archival possibilities. Audio devices became popular among early writing centers, although print-based technologies, like the typewriter, also became integral in the 1970s.

The typewriter appeared in writing centers in the 1970s. In fact, Janice Neuleib and Maurice Scharton, writing center practitioners and technological pioneers in many ways in the mid-1970s, say they “felt lucky to have two electronic typewriters for the staff and secretary and a few manual typewriters on which tutors tapped out session notes and dashed out an occasional paper” (49). Technology greatly changed the resources offered in the physical writing center; in fact, some might claim that it changed the writing center’s writing “space,” which was refashioned when typewriters made texts reproducible. With typewriters, practitioners could develop written records in a standardized form. As typewriters entered writing centers in the 1970s, the space in which writing instruction (i.e., consulting) took place also changed. From orally based “societies” that were loosely affiliated with the academic institution to established and structured “writing centers,” the shift to more stable writing spaces also helped to establish the writing center’s physical presence.

Bolter argues that ancient and modern writing are technologies in the sense that they are methods for arranging verbal ideas in a visual space (15). Print serves as the dominant medium of communication for writing centers. Books grace writing center shelves, students bring printed texts for consultants to read, and consultants generate printed records for each session. Ronald J. Deibert makes an interesting note that with the introduction of printing, the benefits of authorship, in terms of both personal fame and

fortune, became more pronounced (99). Although college writers rarely become rich or famous because of their writing, the written word does offer the benefit of individual identity or authorship. Individual identity also allows students to bring their work into the writing center and distribute ideas across mass audiences as necessary. Consultants use the student's draft to provide feedback by grounding the comments in the printed artifact, using text-based references. Feedback is largely based on the writer's written ideas. The individual identity constructed within the fixed space of the printed page helps to ensure that writer and consultant can discuss the writer's own words, words that he or she created and assembled.

Through the 1980s, writing centers would continue to house print-based materials for student and consultant use. Ann Moseley discusses a "materials-based" program that relied on printed handouts, texts, and modules (35). Many writing centers create and distribute their own handouts for students, such as "Five Easy Comma Rules" and "MLA the Easy Way." These materials are quite helpful for students who visit the writing center in person; however, they offer very little for the student who is bound to a particular off-campus location. In many cases, these are non-traditional students, busy graduate students, or students with disabilities. Jeanne H. Simpson, in a 1985 position statement on professional concerns in writing centers, says that "[w]riting centers unquestionably will continue to change" (35). Simpson was right. Writing centers would witness a great deal of change. Foremost, they would undergo technological changes that promised to improve efficiency in record-keeping and distribution practices.

Although writing centers in the 20th century were still largely based on print, this form of media is not without its limitations. Writing center administrators voiced

concerns over records management and security even as far back as 1984. C. Michael Smith, a WCD at Winthrop College, discusses the administrative problem of “managing the paper flow” at his writing center (115), claiming that keeping track of printed records was increasingly challenging. Increased student enrollment and usage caused writing centers to generate a great deal of paperwork. Print media, although praised for its reliability and portability, began to pose unique challenges as writing centers became more prevalent in the mid 1980s. These challenges caused writing center practitioners to consider additional technologies that would aid the record-keeping process.

As writing centers look to the future, they will become sites where the written, visual, and oral converge. As he looks to the “social future” of writing centers, John Trimbur sees literacy as a “multimodal activity in which oral, written, and visual communication intertwine and interact” (29). These “multimodal” sites will inevitably involve technology. In fact, the college student and campus demand it. Bolter writes, “It is probably best to understand all technologies in this way: technologies do not determine the course of culture or society, because they are not separate agents that can act on culture from the outside” (19). Writing center practitioners have integrated technology into their daily operations as a way to reach out to place-bound students, to provide more reliable and widespread resources, and to encourage usage. As universities change, offering increasing numbers of degrees and services online, and students become more savvy with mobile communication and new media technologies, writing centers will continue to find it important to develop with the culture. Most notably from these historical technological developments, writing centers began to equip their spaces with networked computers, Internet connections, and in some cases, wireless access. There

was little doubt that the changing culture of the university also influenced writing center practices, especially with technology.

The Integration of Technology

Neil Postman claims that a new technology does not add or subtract something. It changes everything (18). While it would be controversial to say that technology alone has the power to change society, it does offer important changes to daily operations of writing centers. Postman's critical eye toward technology poses an important consideration. That is, he prompts us to stop and think about the necessity of technologies. WCDs continue to ask questions about the value added to their spaces through technology, and these questions have led to productive conversations. Even as recently as 2005, practitioners have questioned the role of technology in the writing center. Michele Eodice, WCD at the University of Oklahoma, poses questions like, "Does this technology address or improve access?" and "Should we integrate technology into the writing center 'just because we can?'" Although practitioners should think critically about technology and its usefulness in the writing center in relation to budget concerns, usability, and need, writing technologies have positively impacted the way that people work in the writing center as well as access to writing-related resources. Writing centers should not adopt technologies simply because they can. The technology should serve to improve practices.

Throughout the 1980s, technology continued to improve the ways in which practitioners kept records and provided instruction. "Logistical essays have appeared

regularly at least since the mid-1980s in *The Writing Center Journal* and *Writing Lab Newsletter*,” Blythe writes, “offering accounts of the uses of various computer technologies (both networked and non-networked) in particular writing centers” (91). Other writing center practitioners describe computer programs that also appeared in writing centers in the mid-1970s and early 1980s, most of which aided the writing process in some fashion. Multi-User Domain (MUD) and MOO technologies also allowed writing centers to begin exploring virtual spaces, again fostering interest in moving beyond the physical.

In a discussion of computer-aided instruction in writing centers, Palmquist notes that in the late 1970s and early 1980s, “Richard Mason, long-time director of the writing center at Michigan Technological University, found himself among a group of scholars who laid the foundation for the widespread use of information technology in writing classrooms and writing centers” (396). Further, Palmquist says that in the early 1980s, writing center practitioners also began to consider how the computer might help manage writing centers (398). Early management software was written in COmmon Business-Oriented Language (COBOL) and required punch cards to enter data. Some programs were used solely to track student hours and required input from an administrator. By the mid 1980s, an increased number of writing centers were using software, such as *Tutor Schedule* and *Tutor Mania*, to keep records. Members of the writing center community took notice of the potential of computerized technologies, especially with the rapid enrollment growth of American colleges.

Widespread use of management software led to technological growth in other areas as well. In the mid 1980s, style and grammar programs were being used on a

routine basis in writing centers, as Palmquist notes (399), and word-processing applications quickly followed as practitioners felt that these technologies increased their centers' visibility within the institution (Palmquist 400). Further, Fred Kemp discusses several computer programs, developed in the early 1980s, which were designed to aid invention and discovery: *LOGO* and *Topoi* (4). Early systems that were intended to aid writing instruction prompted the integration of more contemporary technologies that impacted writing centers as they entered the 1990s. These computer programs led to software like *Editor*. Developed in 1990 by Serenity Software, *Editor* provides grammar checking advice for students and quickly became the premier grammar checking software. Serenity continues to update the program today. Programs like *Editor* proved their worth in the writing center, which encouraged practitioners to pursue additional technologies for their physical and virtual spaces. Similarly, *Editor* offered students an option that focused on grammar at the sentence level at a time when many writing centers began to focus on higher-order concerns.

Hypertext and OWLs

In the mid 1990s, writing centers began to implement online components, establishing a virtual presence after many years of focusing on face-to-face resources, which relied on oral and print communication. WCDs rushed to add networked computer technologies, including e-mail, MUDs, MOOs, gophers, conferencing software, and websites, according to Blythe (89). In large part, hypertext remediated the writing spaces of many writing centers in the sense that a newer medium took the place of an older one,

borrowing and reorganizing the characteristics of writing in the older medium, as Bolter describes in *Writing Space* (23). In a process of remediation, new media borrow from and refashion the techniques, form, and social significance of earlier media, claiming that it offers a more real, social, interactive, immersive, convincing, and engaging experience than the previous media. Breuch builds on Bolter's concept of remediation, arguing that the "integration of technology into peer review has resulted in a remediation of the activity; changing the ways peers respond to one another about writing" (34). At each stage of the writing center's history, technology has refashioned the writing space in which practitioners work. To a large degree, writing centers' writing spaces were refashioned by the typewriter, which eventually led to computers.

Writing centers moved online in rapid fashion throughout the 1990s. Bruce Pegg claims that when the first version of the National Writing Center Association Web page appeared in 1996, "it included about five or six links to other writing center websites" (198). By 1998, he says that over 213 writing center sites were listed. Many virtual components took on the acronym "OWL." The growth rate for these online components steadily accelerated, according to Mark Shadle (4), as the concept of virtual space quickly took hold in varying degrees and forms. Today, it would be surprising to find a writing center without some form of an online component.

Writing centers were the birthplace of early OWLs, which included virtual writing spaces, synchronous online chat rooms, printable online handouts, links to other OWLs, and online schedulers. According to Palmquist, the first OWL, located at Purdue University, moved to the Web in 1994 (403). "OWL" has been an ambiguous acronym for writing centers that have varying degrees of online services. Some OWLs had a

stronger online presence than others, at times even offering virtual writing spaces. Dave Healy explains, “Online conferencing, including both synchronous and asynchronous exchanges, started in the composition classroom and moved to the writing center” (183). Students, in many cases, became familiar with writing technologies and spaces, such as WebCT’s chat rooms for synchronous exchanges, in the composition classroom. Healy writes:

As the online composition classroom has become more common on college and university campuses, student writers have become increasingly comfortable not only composing and revising but also sending, receiving, and responding to text electronically. . . . As writers have expanded their horizons and their repertoires, writing centers have looked for ways to meet the needs of a new kind of client—one no longer limited by the constraints of face-to-face conferencing. (183)

OWLs also became virtual spaces where asynchronous e-mail consultations took place.

David Coogan is considered one of the first writing center practitioners to seriously engage in “online tutoring.” His watershed work considers “face-work without faces,” as he says, when he “first began tutoring students he could not see” (31).

Offering a glimpse of new virtual spaces, Coogan piloted e-mail tutorials at SUNY-Albany (Albany, NY) between 1992 and 1995. OWLs, in the mid 1990s, were primarily developed to provide assistance to distance-learning students, according to Cathy Burnett (247). However, Shadle explains the difficulty in defining OWLs, claiming that they may include anything from a writing center page on the World Wide Web to asynchronous courses or e-mail links, MUDs, and synchronous chat spaces (4). As many writing centers developed their own OWLs, writing center virtual spaces became quite

diverse, expanding at rapid rates much like the Internet itself. The close connection between writing centers and technology led to more recent developments and interests in new media.

New Media

In more recent history, the late 1990s and into the 21st century, writing centers have endorsed multimedia for professional development, housing sessions online in digital files, training consultants to work with video technologies, and promoting services through social networking media. There are many notable advantages to housing training materials online, for example. Foremost, the Internet allows a degree of flexibility, for practitioners can access the files regardless of time or operating hours. Further, digital videos offer an increased sense of immediacy. Regardless of place, space, or time, practitioners can access digital videos immediately, on demand. The Internet allows practitioners to train at their own pace; it offers a degree of independence in terms of where and when people choose to access them.

More recently, technologies allow writing centers to offer synchronous (real-time) online consultations. As an alternative to face-to-face sessions, students and practitioners alike can access an interface that allows them to chat, exchange Web pages, and link to outside sources. Virtual holding areas allow students to sign on and wait for their appointment times. Online surveys interface with databases, which allow practitioners to collect accurate data. In the 21st century, digital technologies continue to offer advantages for writing centers, allowing students and practitioners access to synchronous

online chats and training videos, in addition to wikis, blogs, and interactive virtual spaces.

In this chapter, I offered a historical overview of technology in the writing center. Throughout this study, I work from the premise that, historically, writing centers have had a close connection to technology, and many writing centers have integrated technologies into their daily work. That is, virtual spaces are important extensions of physical writing center spaces that move services beyond walls and other constraints. “Visible boundaries, such as walls or enclosures in general, give rise to an appearance of separation between spaces where in fact what exists is an ambiguous continuity,” Henri Lefebvre explains (*The Production of Space* 87). Building on this foundation, I explore how virtual spaces might allow writing centers to transcend visible boundaries to reveal, as Lefebvre says, ambiguous continuity, which may become apparent through the mapping exercises offered in Chapter Three. I work from the standpoint that physical spaces are less than ideal. They often restrict writing center development, creativity, and expansion. In this dissertation, I will show how cognitive mapping methods can be used to envision new practices for physical and virtual writing center spaces. Mapping methods encourage us to rearticulate remediations of writing center spaces in ways that are inventive, creative, and thoughtful.

Thomas A. Horan, in *Digital Places*, draws a close connection between physical and virtual spaces. As a start, Horan explores the physical spaces of the University of Virginia, arguing that public institutions play a pivotal role in defining public spaces (61). Courtyards, the positioning of buildings, and the proximity of resources and departments can reveal a great deal about the university’s priorities. The challenge, though, is

building virtual spaces that serve social purposes. Therefore, this dissertation seeks to answer the following important questions:

- What might mapping reveal about the future of writing center work and the need for revised practices within the framework of the larger institution? Furthermore, how might mapping methods change our definition of “writing” in the remediated writing center?
- What are the theoretical and practical implications of expanding writing centers beyond physical space through technology? How might mapping be used to interrogate the ways in which virtual spaces might allow writing centers to expand services?
- How is space “deciphered,” as Lefebvre says (38), on the college campus? And how is the writing center’s space apparent here? How do existing spatial theories allow for an analysis and critique of the spatial positioning of physical and virtual writing centers? What are the ways in which a spatial analysis might reveal the university’s priorities and attitudes toward writing center work and the institution’s virtual presence?
- How can the concept of remediation help us critique existing OWLs and draw a clearer understanding of where virtual and physical spaces are headed?

Through this study, I hope to make several contributions: one theoretical, to rearticulate the space of writing center work; one political, to understand the constructions of our pedagogical spaces; and one pedagogical, to understand best practices for creating virtual spaces that enhance learning, unlike those we have seen before or have had available in the writing center.

Chapter Overview

In the chapters that follow, I explore the production of writing center spaces and then extend the study to the virtual and immersive in an attempt to develop new, sustainable, and substantial theories for developing technologically sophisticated and virtual writing centers.

Chapter Two Overview

Chapter Two offers an introduction to spatial studies in the writing center by exploring how these academic spaces are produced. I use the development of spatial theories for writing center work to situate cognitive mapping, exercises employed as a method for deciphering writing center space. This chapter argues for increased attention to space, accepting that it is inherently political and carries with it significant implications that deserve careful consideration, especially given the close connection between writing centers and technology.

Chapter Three Overview

Chapter Three begins with a critique of digital maps, which prompts us to reconsider the sustainability of physical spaces within the political campus. Building on the digital and political culture of the university, I offer consultants' maps of their ideal virtual space as an entry point into the discussion on writing center spaces. WCDs' cognitive maps allow for a more thorough examination of writing center spaces. Furthermore, this chapter discusses writing center spaces as revealed through the lens of

cultural and political geographies. Through this study, I attempt to foreground the space of the writing center through cognitive mapping, a method derived from Kevin Lynch in *The Image of the City* (2) and Fredric Jameson in *The Geopolitical Aesthetic* (xiv), which I use to study visuals of the writing center space held by its citizens.

In this chapter, I explore what mapping reveals about the future of writing center work and the need for revised practices within the framework of the larger institution. I apply mapping to interrogate the ways in which virtual spaces might allow writing centers to expand services, while keeping in mind that new technologies should serve practical and pedagogical purposes.

Chapter Four Overview

Chapter Four provides practical and theoretical implications for physical and virtual writing center spaces as shown through the results of the mapping exercises. This chapter discusses the implications of the spaces previously revealed through the mapping exercises and survey questions. However, this chapter also offers a critique and analysis of the theoretical and political decisions involved with the adoption of technologies in the writing center. For instance, administration often sees technology only in instrumentalist terms. Through this chapter, I will offer a critique of instrumentalism in an attempt to understand why it creates potential barriers in the writing center. Furthermore, this chapter confronts the question of whether administrators see technology as a means for encouraging learning and thinking or achieving goals, outcomes, and quantifiable results—the notion of technology as “tool” and writing center as “unit.” Seeing

technology in instrumentalist terms becomes even more problematic when we consider its importance in writing center work, research, and future development. This chapter considers the potential flaws of instrumentalist perspectives, especially overlooking the political and cultural foundations of technology. Instrumentalism tends to overlook bodies in space, reducing it to a set of numbers or results. Therefore, Chapter Four rearticulates the way we interpret space in the writing center in light of the mapping exercises and critique of instrumentalism.

Chapter Five Overview

Chapter Five prepares writing center scholars to explore virtual spaces by discussing existing theories of media and potential for remediated OWLs. This chapter also offers a reflective look at where the field is now and where writing centers could (and should) head in the near and distant future. Chapter Five also examines the process of building an experimental writing center in SL (the SLUWC) that may serve as a springboard for future studies of remediation in the writing center, helping us to further examine and critique the spaces that writing centers inhabit. Building on the valuable work of Sherry Turkle's *Life on Screen* and Annette Markham's *Life Online*, this chapter also provides a space for adequate analysis of several cases in the SLUWC: interaction with SL visitors from other campuses and experiences from the Virtual Worlds in Education Conference (and my paper presentation, "The New Great Good Place: Building Virtual Worlds for Education") held in SL on November 10, 2008 as "real" experience in "virtual" space.

Chapter Five also discusses limitations for this study and possibilities for future scholarship in this area, including my own plans, goals, and visions, in addition to research that extends the conclusions offered in this dissertation. Taking a reflexive position, Chapter Five also offers images of remediated and augmented writing center spaces based on the mapping study, which call for a visual praxis for composition in remediated spaces. Furthermore, I will discuss challenges that writing centers will inevitably face when revising spaces in addition to the ways in which these spaces both extend and challenge traditional face-to-face practices.

CHAPTER TWO: GEOGRAPHIES OF PHYSICAL AND VIRTUAL WRITING CENTER SPACES

In the same way that societies in ‘geographic’ space are organized through a series of power relations (e.g. political and legal structures; cultural ideologies such as gender and race), so too are social relations online.

- Martin Dodge and Rob Kitchin, *Mapping Cyberspace* (59)

The metropolis today is a classroom, the ads are its teachers. The traditional classroom is an obsolete detention home, a feudal dungeon.

- Marshall McLuhan, *The Book of Probes* (127)

Introduction

Many writing program administrators and composition researchers have given thought to the concept of “space” as it relates to writing centers and the larger institution. Quite often, though, spatial discussions end in frustration. Even in challenging circumstances, WCDs take pride in their daily work as do the student consultants staffing the centers. Carol Peterson Haviland, Carmen M. Fye, and Richard Colby aptly highlight the spatial challenges that many writing centers face:

Believing that what writing centers do is more important than where they are located or how reporting lines are drawn, it is easy for writing center directors simply to make the best of whatever space and administrative structures they are offered. And, to a certain degree, this priority is correct; neither style nor location is a good substitute for substance. However, although location is not everything,

it too is important, for material spaces have political edges that are costly if ignored. (85)

Unfortunately, many WCDs simply work within the confines of the spaces they are allotted and do not have the leverage or resources to make important spatial and geographical cases for more adequate locations. This chapter argues for increased attention to physical and virtual geographies, internalizing that space is inherently political and carries with it significant implications that deserve careful consideration, especially given the close connection between writing centers and technology.

Campuses are organized with great care and thought. Architects adhere to master plans, and an institution's space is always carefully scrutinized and deliberately implemented. The campus is often organized into spaces that serve as the "front door" of the institution, while others serve a more industrial purpose of providing resources like water or power to buildings. Institutions name buildings for influential or generous donors and even corporations. Thus, each physical space makes a statement about that particular college, department, or program as well as the university officials who made it all happen. Programs with a visible profile will inevitably find that their position allows them to display their accomplishments, while low-profile programs promote services through creative means. Institutions make political decisions in their choices for buildings and the priorities with which they are constructed, providing an important commentary on the geographies of institutional space.

While multimillion dollar buildings are nothing new to institutions around the country, it is rare for the writing center to find itself in one of these new spaces. Space, quite often, is at a premium. Many public places at the heart of the institution are likely

inhabited by high-profile programs. Physical location makes an important political comment on the priorities of the institution. Space, in other words, is power. “While location is not ‘everything,’” Carol Peterson Haviland and Edward M. White write, “it wields considerable power over the futures of writing centers . . .” (212), commenting on the importance of central public space if the writing center is to serve students from across the curriculum (220). Too often, though, their words go unnoticed by our larger institutions. While many writing centers are concerned with usage and assessment, they all too often overlook the potential barriers to success like location, accessibility, and perception of the programs that support their students.

While many scholars have found spatial discussions frustrating, some campuses have maximized their designs through innovative approaches. Eastern Kentucky University, for example, plans to open the Noel Studio for Academic Creativity in 2010. Different from traditional models that focus primarily on writing services, the Noel Studio will absorb current writing center services and integrate them with oral communication, research, and digital media production support. New models for academic services, like the Noel Studio, emphasize the importance of space in their considerations, giving credit to design and layout. Early discussions about the design of the Noel Studio call for an “open and airy” space that is “conducive to critical thinking,” as Kaylia Cornett reports in the *Eastern Progress Online*. Interestingly, the Noel Studio will offer students a “technologically sophisticated learning environment,” a space designed to recognize multiple learning styles (“Studio Home”). The positioning of the Noel Studio at the grand entrance of the library and investment by high-ranking university officials and donors make significant political statements about the importance

of well-designed learning and technologically innovative spaces. I offer this timely example to encourage scholars to give serious thought to the ways in which spaces are designed and to illuminate political geographies at work within the institution.

My Perspective

I began coordinating the University Writing Center (UWC) at the University of Central Florida (UCF) in fall 2005. During this time, I managed the daily operations of the UWC, which included hiring consultants, developing resources, and assessing programs. I also coordinated outreach efforts to the university community. Students regularly complained that the writing center is “difficult to find,” that “the writing center needs a new building,” and that “it takes too long to get to the writing center.” These comments are even more troubling if we consider that spatial practices are never neutral in social affairs. They always express some kind of class or other social context and are more often than not the focus of intense social struggle, David Harvey says. Space, as Harvey argues, “is always a reorganization of the framework through which social power is expressed” (255). Writing centers, like the one at UCF, thrive on student visits, which are reported as students consulted, from a variety of disciplines, departments, and colleges. In other words, writing centers sustain their existence by providing a service to students. The writing center’s presence on the college campus directly influences the number of students who pass through the doors. At UCF, I had the opportunity to contribute to an already strong writing center, while considering some of the practical spatial challenges that the university faced when offering services for all students.

KnightOWL: A Spatial Consideration

In 2005, one of the primary goals at the UCF UWC was to create a usable and sustainable OWL. We began by developing parameters for the new OWL, initially offering online consultations on a space-available basis to graduate thesis and dissertation writers. After the pilot year, we opened the services to all UCF students, and KnightOWL was born at UCF. To provide an idea of KnightOWL's growth during this period, we offered 81 consultations during 2005-2006. During 2006-2007, the UWC offered 1,141 consultations via KnightOWL. The growth and excitement about developing a new and successful OWL at UCF shed new light on the intersections and possibilities of integrating technology into the writing center, even as a way to expand services without expanding physical spaces. Primarily, though, we saw the development of a new virtual space as a necessary extension and expansion of our face-to-face practices. That is, the purpose of developing the OWL was not to replace the existing physical space but to offer quality online peer-centered support for all students, regardless of their physical location, augmenting current consultation offerings, which would allow students the flexibility to access writing-related support from anywhere in the world. It was not long before we began to accommodate visitors from far outside the central Florida area. We soon observed that research, professional development, and personal circumstances can take students far from campus. Students began to sign in to their KnightOWL consultations from many different cities and states, and we even consulted with a student in Afghanistan.

Through KnightOWL, we began to explore the university's increasingly "digital culture," seemingly speaking to Nicholas Negroponte's prediction that "[w]e will socialize in digital neighborhoods in which physical space will be irrelevant and time will play a different role" (7). Virtual spaces allowed us to transcend physical borders. As I have previously noted, "[t]echnological innovations have allowed us to build an inclusive writing center, one that encourages all students, regardless of place, space, or mobility, to access our services in one form or another. Our culture is increasingly a digital one" (Carpenter). Students need and expect virtual resources, which might include websites, online consultations, online scheduling, online social networking, blogs, wikis, digital videos, immersive technologies, and other forms of media, all of which support the development of sustainable virtual writing center spaces.

Overview of Writing Center Spaces

The changing geographical and cultural landscape of the academic institution should prompt writing centers to employ technology to create more dynamic resources and sustainable spaces. Theorizing OWLs and writing centers through the lens of cultural and political geographies, it becomes apparent that many physical spaces are not sustainable and, in many ways, are marginalized within the larger institution.

Commonly, the physical writing center space is on the periphery of campus or nestled away in a basement, as Kenny Harris writes in his story about the writing center at Eastern Kentucky University (B3), and not adequate for its current usage, while the virtual space is often viewed as tangential to writing center work. Harris explains that

students call the writing center a “hidden treasure” because Case Annex, the current physical location, is a maze (B3). Given the challenges that many traditional writing centers have faced, the OWL might be viewed among scholars as a more centralized component of writing center work in an attempt to break free of marginalized physical spaces. Furthermore, to meet the changing technological demands of many universities, writing centers will need to continue to embrace technologies. By so doing, they might explore ways to address common spatial concerns.

Through the innovative use of technology, writing centers can create more sustainable virtual spaces, regardless of physical constraints. Virtual spaces can be used to extend the reach of the writing center, even when physical spaces are limited and resources scarce. Emerging writing center technologies have the potential to fracture notions of physicality and space.

Furthermore, political mapping and cultural geographies problematize the writing center’s presence on the campus and status within the framework of the larger institution, providing a lens through which to critique the spaces that we design and inhabit. Political and cultural geographies make convincing arguments for establishing sophisticated virtual spaces. Increased concerns about physical geographies should prompt WCDs to rethink their notions of space and the position of the writing center within the institution, promoting a broader conception of development from the purely physical to the virtual and immersive.

Deciphering Physical and Virtual Space

In an attempt to develop a clearer understanding of writing center geographies, I will rethink the ways we decipher both physical and virtual spaces. In the pages that follow, I apply and expand geographical and cultural theories as presented by Henri Lefebvre, David Harvey, and Fredric Jameson in ways that encourage WCDs to decipher their own physical and virtual spaces.

Primarily, I will attempt to draw a distinction between two spaces: physical space, the spaces inhabited by the writing center on the campus, which are allocated by the institution's administration and archived visually on the campus map; and virtual, the spaces designed, developed, and implemented online through technology and new media.

Michel de Certeau helps to frame a broad conception of space:

A space exists when one takes into consideration vectors of direction, velocities, and time variables. Thus space is composed of intersections of mobile elements.

It is in a sense actuated by the ensemble of movements deployed within it. Space occurs as the effect produced by the operations that orient it, situate it, temporalize it, and make it function in a polyvalent unity of conflictual programs or contractual proximities. (117)

This concept of space serves to bind the writing center to the operations of the larger institution. Furthermore, writing center geographies are defined by decisions made from outside, many times without the input from a WCD.

Writing centers can be situated at the intersection of pedagogical and political space. While they offer rich academic pedagogical spaces where interesting and valuable discussions and interactions take place, their physical spaces can indicate sites of

struggle, frustration, marginalization, and, perhaps most visibly, political debate. The physical centrality that writing centers lack is represented through cultural and political geographies of conflict and question as well. In other words, the physical writing center is often located in liminal space, although it is never neutral in its politics, which prompts several related and pressing questions. If the writing center's budget is supported *by* the college or department, should administrators locate the writing center *in* the college or department? Is there an advantage or disadvantage to being located in a liminal space over a departmental space? While liminal spaces promote interdisciplinarity, they create a number of disadvantages as well. Foremost, liminal spaces might fluctuate more often than departmental or college-sanctioned spaces. They might also spark debate over budget, leadership, and hierarchy as well as interests served by this particular physical location over other possibilities.

Temporary Urban Space

At UCF, the UWC is currently located in a temporary physical space on the periphery of campus. While the ambivalence of this space allows the UWC to welcome students from across the disciplines, its peripheral location on the campus contributes to its marginalized status, making it more vulnerable to disrepair and even retraction. Temporary spaces rarely elicit positive connotations, and the simple fact that the writing center is located in a temporary physical space calls into question the institution's priorities and interests in the work taking place there. The transient nature of temporary

physical spaces makes it challenging, if not impossible, to solidify a presence on the university campus, yet the UCF UWC has shifted temporary locations for over a decade.

Rudolf Kohoutek and Christa Kamleithner argue that temporary spaces are most directly connected with wars, expulsions, and natural catastrophes (35). The broad perception of devalued status can adversely affect a writing center's goal and mission. For instance, if writing is central or valuable within the eyes of the institution, why is the physical hub for writing-related work and resources not more physically central within the institution? Furthermore, sub-par physical spaces can display publicly a troubled relationship between institution and the writing center. Peripheral physical location is especially problematic for writing center work when you consider the importance of student use and interest. Writing centers are social spaces built on discussions and interactions, which are often compromised by physical distance and isolation.

Physical spaces have social implications. Proximity or distance can display disagreements between administrators, departments, or colleges. Ellen Cushman recounts the relationship between the city of Troy, New York and Renselaer Polytechnic Institute (RPI). "Many universities sit in isolated relation to the communities in which they're located—isolated socially and sometimes physically as well," Cushman writes (8). "The Approach," a gift to RPI from Troy, is a symbol of the relationship between the city and the institution. It is a piece of land that ties the city to RPI, a physical symbol of the connection between the two entities and "a sign of the mutually rewarding relationship between the two" (9). However, as Cushman continues, the Approach fell into disrepair "as a result of disagreements between the city and university about who should have responsibility for maintenance" (9). The Approach, a physical space that

once connected the university and the city, is now overgrown and covered with graffiti, “symbolizing the tattered relationship between the city and RPI” (Cushman 9).

I apply Cushman’s research here to show how cultural and political geographies represent relationships, strong or troubled, within the institution or city. Space promotes or deters interaction, inscribing within it the politics that help construct and determine our positioning. It can clarify, mask, or complicate relationships that are geographical and cultural in nature, and they fluctuate with financial decisions, investments, and political debates. However, WCDs are too often excluded from these discussions. Cushman advocates for the rhetorician to act as an agent for change:

I am asking for a deeper consideration of our *positions* in the academy, of what we do with our knowledge, for whom, and by what means. I am asking for a shift in our critical focus away from our own navels, Madonna, and cereal boxes to the ways in which we can begin to locate ourselves within the democratic process of everyday teaching and learning in our neighborhoods. (12)

In an attempt to rethink current spatial practices, we might theorize writing center spaces through the lens of cultural and political geographies. Here, I attempt to set the tone for a revisioning of writing center geographies within the institution by providing methods for thinking creatively about the development of new scholarship and theories for deciphering physical and virtual space. Furthermore, this revisioning might provide WCDs with methods for constructing and designing innovative spaces for integrating multimodal forms of communication, a political move toward the virtual.

Political geographer and urban planner Edward Soja writes, “We must be insistently aware of how space can be made to hide consequences from us, how relations

of power and discipline are inscribed into the apparently innocent spatiality of social life, how human geographies become filled with politics and ideology” (6). Physical spaces may include the location of the writing center (library, basement, temporary module). It is within these spaces—four walls, tables, chairs, and partitions—that much writing center work takes place. However, virtual spaces hold great promise, especially in light of troubled physical spaces. This shift in itself is political in that it is an attempt to rearticulate and perhaps even reform the power relationships that often constrain writing center decisions. To rearticulate the role of technology in the writing center is also to anticipate that WCDs will need a new set of tools, perhaps in the form of research methods and theories, to follow through with this transition. Writing center scholars must recognize a political shift to an electronic or digital culture. The changing cultural and political geographies will require writing center scholars to rearticulate theories appropriate for research in electronic spaces with the idea that new forms of composition and instruction will emerge from this shift. The writing center scholar’s positioning within the institution allows for a unique perspective on the politics of physical and virtual spaces, thus initiating important cultural and political conversation. Furthermore, writing center scholars might become conversant in the development of virtual spaces, for an understanding of technology and media will also carry important political edges.

Cyberspace and the Electronic Agora

Martin Dodge and Rob Kitchin explain that perhaps the “most profound impact of cyberspace is not information processing but how it affects social relations” (53).

Interestingly, Dodge and Kitchen argue that cyberspace possesses a spatiality that needs to be examined, that the socio-spatial relations of cyberspace are produced, and that cyberspace is an embodied space (64). Given their central arguments, troubled physical geographies where students are distanced from conversation and information should prompt further analysis of social possibilities in virtual spaces. In 1980, Tim Berners-Lee envisioned the Internet as a “single, global information space” (4). Berners-Lee had very social goals for web technologies beyond simply storing and transferring information:

The Web is more a social creation than a technical one. I designed it for a social effect—to help people work together—and not as a technical toy. The ultimate goal of the Web is to support and improve our weblike existence in the world.

We clump into families, associations, and companies. We develop trust across the miles and distrust around the corner. What we believe, endorse, agree with, and depend on is representable and, increasingly, represented on the Web. (123)

Offering more support for Berners-Lee’s claim, virtual social networks like Facebook and LinkedIn are now popular for a variety of purposes—keeping up with friends and family, creating special interest and professional groups, fostering relationships, and viral marketing. Many writing centers have assumed an identity within virtual spaces like Facebook and use the virtual space for distributing information and updates. The virtual space serves social functions—to unite interested individuals and to form groups based on interests.

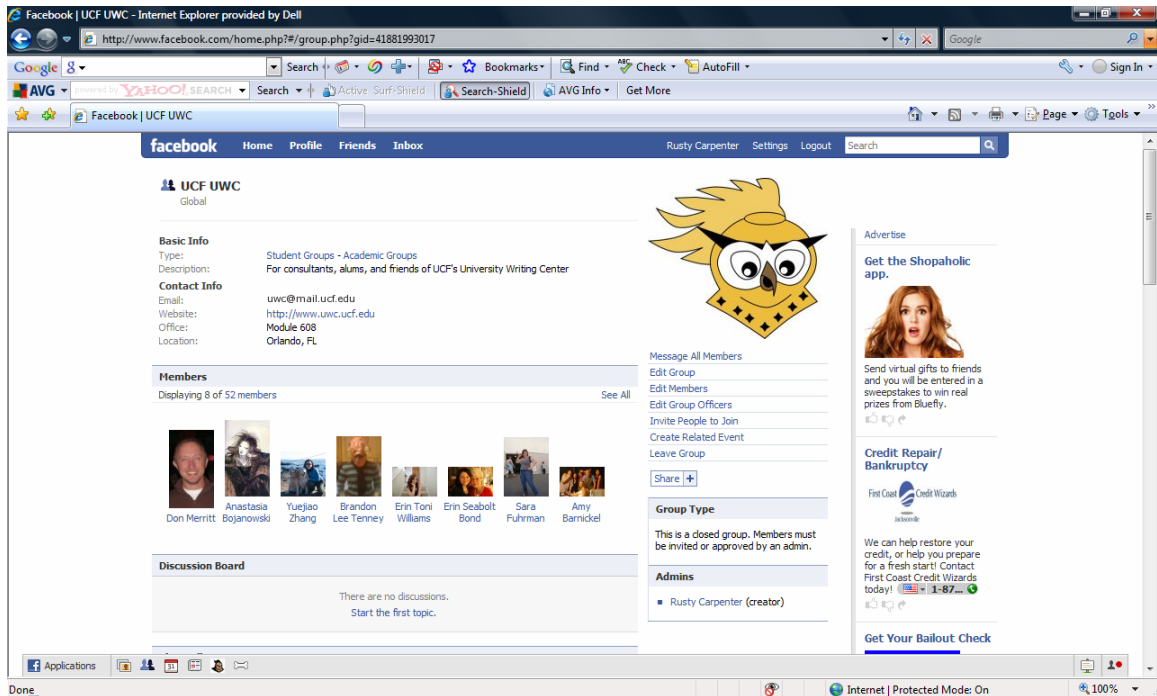


Figure 5: UWC Group on Facebook

The UWC’s Facebook page, for example, creates a virtual center, a storehouse for news and information. Furthermore, group members are welcome to post news, updates, invitations, and links as they see fit. Through the Facebook group, individuals interact in a larger and diversified network. The virtual space serves as a single source for information and status updates, a link not only to information but into the lives of its community, which consists of faculty, staff, consultants, and students. The UWC increases its sociability through this virtual space. David Weinberger seems to agree that the Internet has a highly social role in our society:

Space, time, perfection, social interaction, knowledge, matter, and morality—this is the vocabulary of the Web, not the bits and bytes, the dot-coms and not-coms, the e-this and B2That. The Web is a world we’ve made for one another. It can be

understood only within a web of ideas that includes our culture's foundational thoughts, with human spirit lingering at every joint. (25)

For many writing centers, the virtual space acts as a community hub, an electronic meeting space that might serve a similar function as an orientation or brown bag session in physical spaces. That is, virtual spaces serve to bring people in, provide information, and facilitate learning in a comfortable and perhaps informal environment.

However, social networking sites, like Facebook, also establish paths of access that were previously only available in traditional face-to-face settings through personal conversation, views that make lives more transparent than previously possible. These technologies offer powerful forms of observation packed with methods for accessing personal information and penetrating social networks that were previously disconnected. Educators have rapidly constructed groups in social networking sites in an attempt to appeal to younger students, a move to the student's turf, recalling the creepy treehouse effect: "A situation in which an authority figure or an institutional power forces those below him/her into social or quasi-social situations," as Jared Stein defines it (par. 7). The Creepy Treehouse phenomenon, according to Stein, is a virtual place built by adults with the intention of luring kids in (par. 2). Social networking sites allow for institutional spaces to be built within social, leisure networks, blurring the boundaries between the academy and society and facilitating new channels for communication, interaction.

In *Cyberspace of Everyday Life*, Mark Nunes expands the concept of space, explaining that "a relational account of space allows us to understand space as an event involving conceptual structures, material expressions, and lived experiences, both actual and virtual" (24). Primarily using the work of Lefebvre, Nunes seeks to understand how

the Internet produces social spaces. Through his study, Nunes suggests that “cyberspace,” a term coined by William Gibson in 1984 (51), has changed the way we think of virtual environments and networks. Further, Nunes claims that cyberspace (virtual space) is situated within the medium (3). The virtual space, in other words, offers a sense of place relieved of the constraints of physical distance or construction. Users experience a sense of space and place online; they express the negotiation of virtual space as if physically present. A user might “visit” a site or “surf” the Internet, for instance. Users situate themselves within the virtual space. As Nunes shows in his work, cyberspace is also a space of communication, providing a social context for the work that takes place virtually. William J. Mitchell, in *City of Bits*, works toward a new concept of Jürgen Habermas’s public sphere:

But the worldwide computer network—the electronic agora—subverts, displaces, and radically redefines our notions of gathering place, community, and urban life. The Net has a fundamentally different physical structure, and it operates under quite different rules from those that organize the action in the public spaces of traditional cities. It will play as crucial a role in twenty-first-century urbanity as the centrally located, spatially bounded, architecturally celebrated agora did . . .

(8)

Mitchell’s rather optimistic view of cyberspaces and the new image of the city space draws a close connection between physical spaces—the spaces of the public sphere, defined as the sphere of private people coming together as a public (Habermas 27)—and the virtual spaces or the “electronic agora.” Seemingly supporting Mitchell’s claims, Derek Foster writes, “The Internet is clearly the foremost among new information

technologies that promise to significantly impact the day to day circumstances of all social relations” (23). As Foster points out, space can be virtual as well. Access, for writing center users, means not only walking to buildings or physical sites but traveling virtually to digital destinations as well. These virtual geographies will be more accessible, though, allowing writing centers to grow digitally. Like Mitchell and Foster, I contend that virtual spaces hold promise. For writing centers, the virtual spaces will potentially alleviate spatial and financial pressure caused by constrained physical and political geographies. Through this discussion, I draw into comparison a distinction between physical and virtual spaces in the writing center as a way of expanding our notions of space and attempting to rearticulate the ways in which technology allows for expanded writing centers.

Cyber-Utopia and the Virtual Community

With limited degrees of success, WCDs have tried to replicate the social and inviting look and feel of their physical spaces with their ideal writing center “cyber-utopia,” as Margaret Wertheim says. Wertheim posits:

[C]yberspace is promoted as a space in which connection and community can be fostered, thereby enriching our lives as *social* beings. In these visions, cyberspace becomes a place for the establishment of idealized communities that transcend the tyrannies of distance . . . (283)

It will be quite a challenge to live up to Wertheim’s utopian outlook on virtual spaces, but we might view them as extensions of physical environments, based on inviting neutral

settings for intellectual conversation. In *City of Bits*, Mitchell develops a close connection between synchronicity, intimate social space, and virtual interaction: “A face-to-face human conversation—the sort for which dinner tables and traditional seminar and meeting rooms are designed—is a spatially coherent, corporeal, and strictly synchronous event” (15). Like physical spaces, well designed virtual spaces must be designed for synchronous communication through their architecture—offering a virtual “public sphere,” similar to a coffee house or salon (Habermas 30) that is accessible across great distances and from any computer. That is, virtual spaces enhance options for access to information—“liberation” from physical constraints, as Mark Nunes says (135). It is the potential for liberation that writing center scholars should find most intriguing about virtual spaces. While Wertheim’s position clearly favors virtual space, perhaps to an extreme, writing center scholars might exploit its flexibility.

Annette N. Markham argues that computer users also have very real experiences online. Some users see the virtual space as an outlet. More importantly, Markham’s research suggests that users experience and express real feelings in virtual spaces. Markham’s study focuses on MOOs as textual virtual reality spaces. Many of her participants “experience cyberspace as a place” (213), which speaks to the potential of these early online spaces. In perhaps the most touching example of building virtual space and community, Howard Rheingold uses his experiences in “Whole Earth ‘Lectronic Link” or WELL, as Rheingold writes (1), to show that, in fact, virtual spaces have significant real-life implications. Rheingold defines “virtual communities” as “social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal

relationships in cyberspace” (5). WELL provides a compelling example of how virtual spaces are also engaging and powerful social spaces, much like remediations of the great good places that Oldenburg studied. In some cases, Markham notes, participants built virtual spaces like rooms, as her study reveals (44). “Rooms” often have special meaning for MOO participants, as Markham’s results show. At times, a virtual space can compensate for a lack of “room” in physical spaces, and a MOO participant creates a space online to compensate for a lack of physical space, presence, or identity. Participants’ virtual rooms might remind them of their home. Gaston Bachelard argues that “all really inhabited space bears the essence of the notion of home” (5). While Bachelard discusses an affinity with physical spaces, the theories of space are critical to developing an understanding of virtual spaces as well. I use these examples to highlight the importance and presence of people within space. The heart of virtual geographies is people, including their personalities, needs, and goals.

Spatial Research in the Writing Center

Spatial research holds special meaning for writing centers. Primarily, it allows them to locate their services and practices within larger institutions. Theories of space, mapping, and technology together prompt a new perspective on writing centers that highlights individuals along with their geographic positionings. More specifically, cognitive maps allow us to articulate in visual form complex spatial information, promoting the creation of new spatial knowledge for discussion and analysis. For this study, the cognitive map is a visual representation of the WCD’s perception of his or her

space. Cognitive maps allow for WCDs to create meaning. A new perspective also allows for a look toward the future of writing centers built in technological, virtual spaces.

This chapter deciphers the sometimes convoluted physical and virtual geographies in an attempt to rearticulate the central role of technology and media in the writing center. Technology serves social purposes and virtual geographies are inhabited by people with very real goals and purposes. At times, the writing center's spaces appear nebulous, confusing, and convoluted. Without a doubt, these social spaces bring with them significant political implications. Space cannot exist outside of politics, and this has never been clearer than as shown through the lens of writing centers.

This dissertation is part of larger conversations in writing program administration, cultural geography, and technology studies. From this intersection, the following chapters consider multiple levels of cognitive and digital mapping from members of the writing center community at the heart of spatial discussions, negotiations, and debates within the institution. In the chapter that follows, I apply mapping techniques to interrogate our notions of space in the writing center.

Many writing centers are founded on the notion that they provide supportive space where students can feel comfortable to discuss their intellectual pursuits, as Toni-Lee Capossela explains in "Getting to Know You" (8). Writing center scholars, however, do not often view virtual space as a crucial component of their daily operations. In fact, current writing center and OWL scholarship reflect an unsettling complacency with online consultations, suggesting that staff members simply repurpose face-to-face practices, give in to the urge to edit students' papers in online sessions, or follow up

electronic sessions with face-to-face sessions (Capossela 108). Writing center scholars need to seek a more complete understanding of the ways in which space is employed on the university or college campus, both physically and virtually. New theories should reflect a deeper understanding of place and space. Place and space are limited in our educational and personal geographies. These theories can tell us a great deal about politics, practices, and priorities.

In this chapter, I analyzed the geographies of physical and virtual writing center spaces, arguing that writing centers need technological theories—ways to imagine and visualize space or the places where writers learn, collaborate, and think. In the chapters that follow, I attempt to rearticulate or reinvent writing centers through the practices of cognitive and digital mapping, urban planning and the city, and the architecture of virtual spaces.

CHAPTER THREE: THE PRODUCTION OF WRITING CENTER SPACES

A good environmental image gives its
possessor an important sense of emotional security.

- Kevin Lynch, *The Image of the City* (4)

Computer networks become as fundamental to urban life
as street systems. Memory and screen space become
valuable, sought-after sorts of real estate. Much of the economic,
social, political, and cultural action shifts into cyberspace.
As a result, familiar urban design issues are up for radical reformulation.

- William Mitchell, *City of Bits* (107)

Introduction

In this chapter, I will explore how space is constructed in the writing center through its geographical positioning on campus and then through maps developed by members of the writing center community, primarily current WCDs. More specifically, I will analyze ways in which writing center spaces are constructed through technologies and perception by using the cognitive mapping technique, which builds on the spatial theories set forth in Chapter Two. Studying how spatial constructions influence, expand, or constrain writing center services reveals a clearer perspective on the ways in which WCDs can employ technology to enhance pedagogical practices and priorities in an attempt to rethink how we might reach students when we seem to have exhausted resources available in physical spaces.

It is important for writing centers to consider how our spaces are produced—to gain a better sense of our place within the academic community and develop improved

remediated spaces moving forward. This chapter deciphers writing center spaces through cultural and political geographies and the use of mapping techniques. Moreover, this study of writing center spaces, mapping, and technology develops from and extends a diverse range of complementary literature on spatiality. Colin MacCabe, in the Preface to *The Geopolitical Aesthetic*, explains that “[c]ognitive mapping is the least articulated but also the most crucial of the Jamesonian categories. Crucial because it is the missing psychology of the political unconscious . . .” (xiv). Tightening the connection to Lynch’s cognitive maps, MacCabe posits,

. . . it works as an intersection of the personal and the social, which enables people to function in the urban spaces through which they move. For Jameson, cognitive mapping is a way of understanding how the individual’s representation of his or her social world can escape the traditional critique of representation because the mapping is intimately related to practice—to the individual’s successful negotiation of urban space. (xiv)

Foremost, it is important to view the writing center’s physical space within the context of the institution. Spatial positioning influences the writing center’s perception on campus. Furthermore, spatial limitations confine or restrict the services offered. This chapter looks closely at the geographical positioning of writing centers and how space might reveal the priorities of the institution and shifting emphasis toward a more comprehensive, sustainable virtual presence. I use spatial and mapping theory to analyze the future of writing center work and the need for revised practices within the framework of the larger institution. I also explore the theoretical and practical implications of expanding writing centers beyond physical space through technology. Spatial analysis

and mapping call into question the sustainability of physical spaces and suggest that WCDs might find that virtual spaces are critical to the development of 21st century writing centers. Virtual spaces are, this research suggests, worthy of serious consideration. That is, WCDs might foreground virtual spaces as a way of meeting the needs of wired and dispersed campuses and students. Further, I show how mapping can be used to interrogate the ways in which virtual spaces might allow writing centers to expand services.

Cognitive and digital mapping provide methods for locating the writing center within current campus spaces. Cognitive mapping, for example, more accurately promotes and activates spatial discussion than, say, description in writing. Lefebvre, in *The Urban Revolution*, writes:

Description is unable to explain certain social relations—apparently abstract with respect to the given and the ‘lived’—which appear concrete but are only immediate. These include relations of production and exchange and market relations (although we should really speak of markets). These relations are both legible and illegible, visible and invisible. (46)

More specifically, cognitive maps allow for a more detailed and engaging analysis and critique than words. They capture visually the writing center’s relationship to programs, other centers, and traffic. They also depict current marginalized spaces within the larger institution. Iris Marion Young, in *Justice and the Politics of Difference*, claims that marginalization is the most dangerous form of oppression. Through it, a whole category of people is expelled from useful participation in social life and subjected to material deprivation and extermination (53). The cognitive map depicts the struggle between

current and ideal space visually. At times, however, the digital map—produced by a mapping program—inscribes the writing center’s marginalized status within the larger institution. Moreover, digital maps capture current geographies in virtual form and allow for an analysis not only of current spaces but of potential spaces as well. It is here, then, that we begin to decipher space, as Lefebvre says. “As a form of representation,” Lefebvre explains in *The Urban Revolution*, “urbanism is nothing more than an ideology that claims to be either ‘art’ or ‘technology’ or ‘science,’ depending on the context” (158-159). While technology informs urbanism, the same technology also informs practices within virtual spaces. Moving forward, writing centers might explore a new form of urbanism in the construction of virtual spaces, as the early parts of this chapter depict.

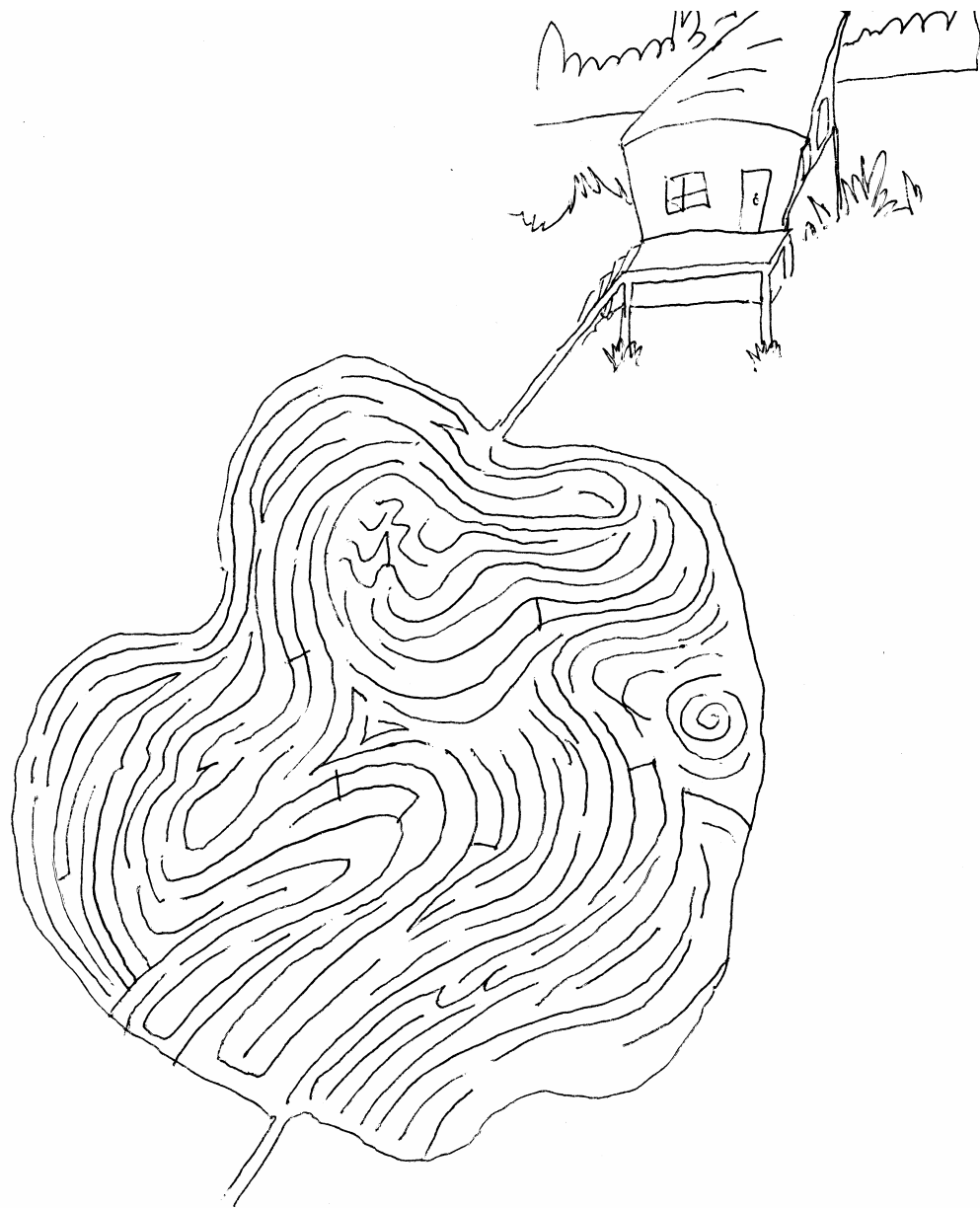


Figure 6: Consultant Depiction of Peripheral Location in Physical Space

In this chapter, I explore opportunities to decipher space in sustainable and meaningful ways through mapping. As Nedra Reynolds explains, I use spatial practices informed by negotiations of space (6). I also analyze the geography of the city in order to

make connections between writing centers and spatial practices. Soja, in “Inside Exopolis,” argues:

If we can recapture our critical ability to see the ‘spatiality’ of social life as inherently and instrumentally political, we may be able to take apart those deceptively embracing simulations and reconstruct a different cartography of power than the one now being mapped . . . (122)

The map marks spaces of control—governed and regulated spaces. Mike Davis, in “Fortress Los Angeles,” depicts convincingly the “mean streets,” where he shows how public spaces have been made less friendly through the design of round benches that prevent the homeless from sleeping on them (160). Similarly, Davis’s work in *City of Quartz* focuses on features designed to keep people out—the increasing regulation of public space. In fact, Davis’s study highlights the politics of spaces, providing compelling examples of spatial practices dictated largely by capital (101). Thus, the politics of space can be illuminated by the imagery of the modern city or, similarly, the physical layout of the campus.

Seeing the city as a set of capitalist ideals might help writing center scholars understand much of the campus culture in which institutions construct and allocate space. I turn to the city to help illustrate political practices that inform campus and writing center spaces or spaces of capital. The city is a sophisticated and politically driven image; visitors rarely want to see the depressed areas. Often, “contested spaces,” as Reynolds calls them (93), experience little foot traffic and are off of the well-traveled path. Visitors go to the most attractive sites, and pedestrians walk in areas that are

heavily populated, constructed spaces designed for frequent foot traffic. The city serves as a visual metaphor for deciphering writing center space within the context of the institution. I use the city as an entry point to deciphering space. As Kevin Lynch explains, “Every citizen has had long associations with some part of his city, and his image is soaked in memories and meaning” (1). Lynch uses the “imageability” of cities, showing how these images contribute to an understanding of the social and political production of space. It is here that I turn to the “image of the city,” as Lynch says, an entry point in this study of institutional space and the writing center’s positioning within it.

Mapping Urban Campus Space

Jeff Rice, in “Urban Mapping: A Rhetoric of the Network,” explores digital mapping software, such as MapQuest and Google Maps, emphasizing the role they play “in the navigation of online and physical spaces” (198). There should be little doubt that these online mapping services play a significant role in the ways in which virtual and physical spaces are perceived and navigated. Rice claims that these mapping services arrange space in order to facilitate meaningful and productive navigation. These services, in other words, employ specific types of informational arrangements for the purpose of invention. In particular, these services showcase new ways space, in the age of new media, affects inventive practices. (199)

Rice goes on to explain that the “role of online mapping in the arrangement of information cannot be deemed insignificant” (199). These online mapping services offer

flexibility for users as they interface with GPS systems and other increasingly popular mobile devices. In *Mobile Communication and Society*, Manuel Castells writes:

Wireless communication networks are diffusing around the world faster than any other communication technology to date. Because communication is at the heart of human activity in all spheres of life, the advent of this technology, allowing multimodal communication from anywhere to anywhere where there is appropriate infrastructure, raises a wide range of fundamental questions. (1)

The digital map helps construct a new, political campus space—one that is established in the virtual. This is not to say that physical geographies have no meaning. Physical spaces will not be eliminated, but through digital online mapping, we might take a new approach to deciphering space. The online digital mapping services foreground the virtual space, establishing the physical within the virtual. “Thus,” Castells writes, “wireless communication does not eliminate place. It redefines the meaning of place as anywhere from which the individual chooses or needs to communicate, even if these places are often the home or the workplace” (174). As Castells says, we are undergoing a redefinition of space. That is, our notion of what constitutes space is changing with the political and cultural geographies of the academic institution. Mobile communication devices interface with mapping software, such as Google Maps (Figure 7). Increasingly popular mapping software allows users to reframe their notion of space. For one, locations depicted within mapping software serve as an intersection between physical and virtual space. Users access physical spaces through virtual spaces. Mapping software also reveals changing topographies in physical spaces and displays virtually the politics of physical location. As a remediation of print maps, digital mapping makes physical

spaces interactive because each space is easily manipulated, altered, or relocated through the digital technology.

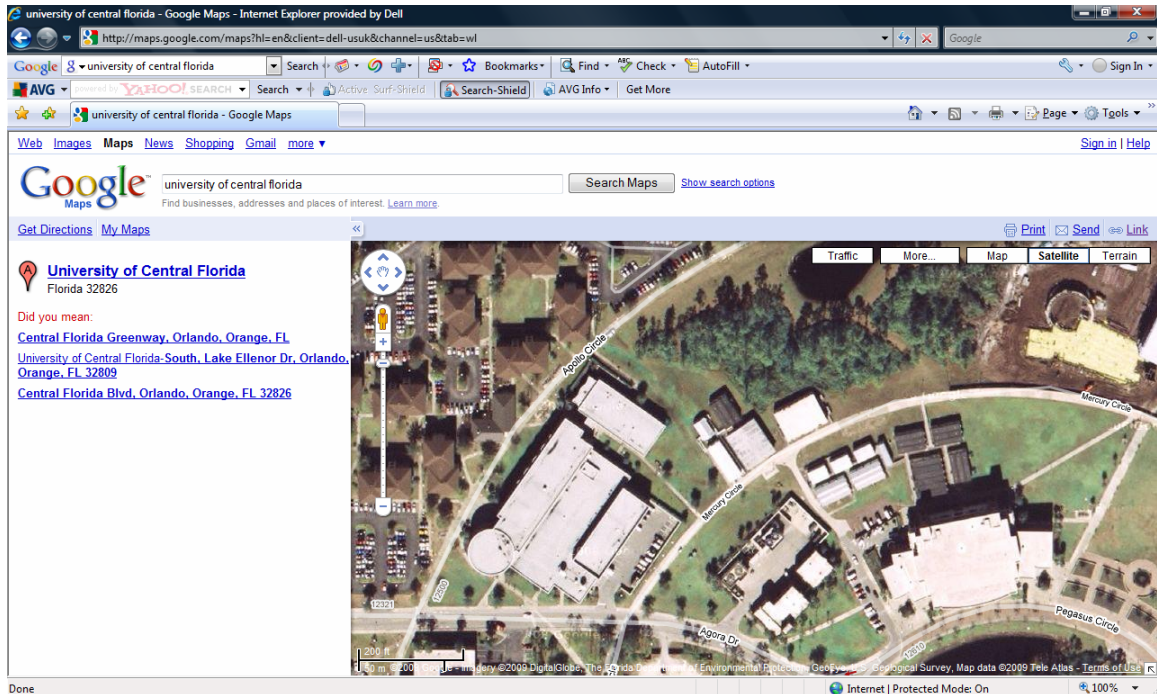


Figure 7: UWC on Google Map

Figure 7 depicts the UCF UWC's physical location on the periphery of campus. It shows the UWC's proximity to nearby buildings, roads, and walkways, but it also accurately depicts its proximity to undeveloped woodlands. Sidewalks circle the UWC, but the physical location is distanced from parking, major gathering places, and high-traffic areas. The writing center is located closest to several other temporary spaces and the physical plant, both low-concentrated foot-traffic areas of campus or underdeveloped spaces. Jane Jacobs, in *The Death and Life of Great American Cities*, identifies trouble in uncultivated urban spaces. Jacobs explains,

Deadening and space-taking low-economic uses like junk yards and used-car lots grow like pigweed in spots which are *already* uncultivated and unsuccessful.

They sprout in places that have low concentrations of foot traffic, too little surrounding magnetism, and no high-value competition for the space. Their natural homes are gray areas and the dwindled-off edges of downtowns, where the fires of vitality and diversity burn low. (301)

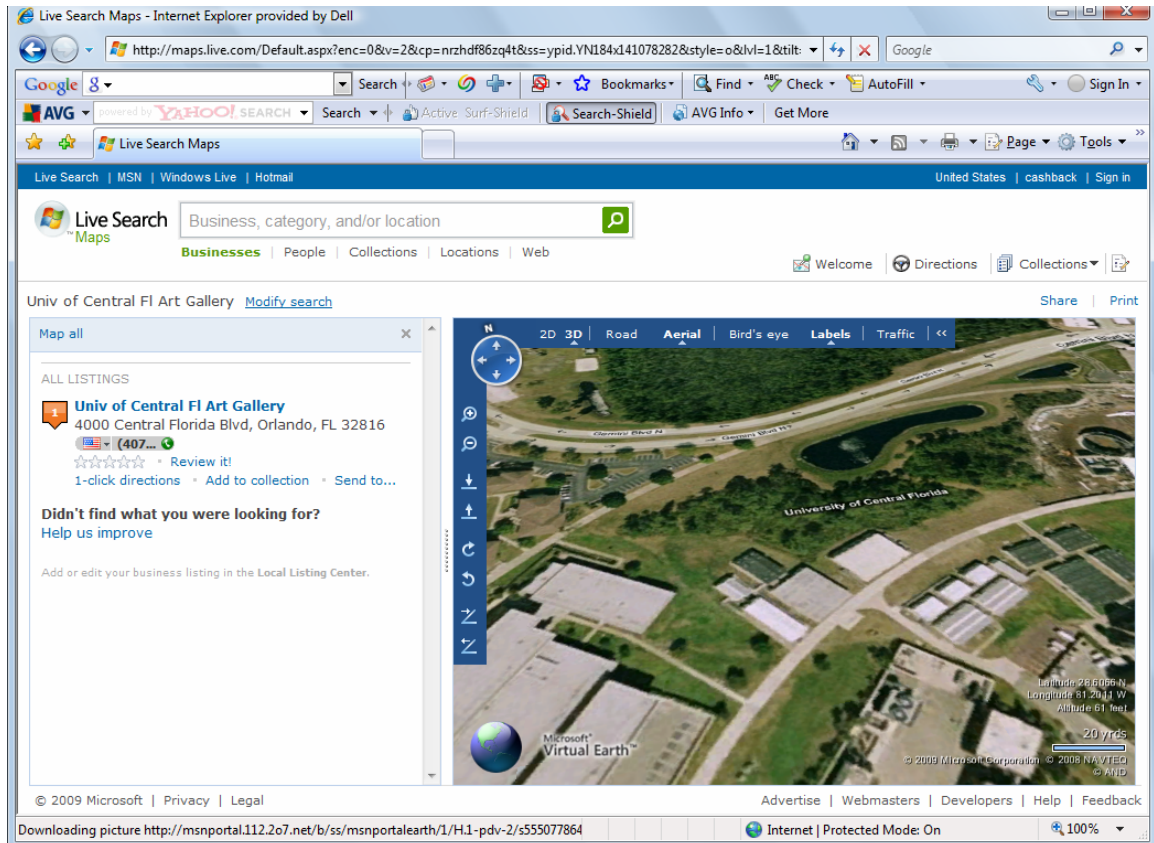


Figure 8: UWC Live Search Map

Figure 8 shows that the writing center sits in close proximity to other temporary places; however, the university has condemned many of them. Other temporary spaces in this area are used as offices for part-time faculty. Digital mapping reveals the peripheral positioning of the UWC and its temporary structure. Troublingly, Florian Haydn reminds

us of the intent of temporary spaces, arguing that temporary uses should be equated with a prototype that forms a point of departure for future, stable programs (72). Beth Young established the UCF UWC in 1997. Since then, the university has moved the UWC four times, always to a space that was never intended for permanent use. Haydn explains:

The current practice of urban planning is based entirely on the principle of supply and demand—or rather, on supply alone. Temporary uses can be understood as the demand itself. From the perspective of planners and communes involved in planning, this means a step in the direction of residents, who become participants in the planning of the city through their active involvement in temporary uses.

(72-73)

Rarely are WCDs active participants in the discussion of physical spaces on campus. Discussions of physical space take place at the institutional level, and spatial decisions are governed from the top down. All too often, physical spaces are allotted by the college or university with little input from the writing center. Figures 9 through 12, for example, depict the proposed future of the UWC. In a troubling commentary on the instability of physical spaces, a four-story parking garage has been placed over the UWC's physical space.

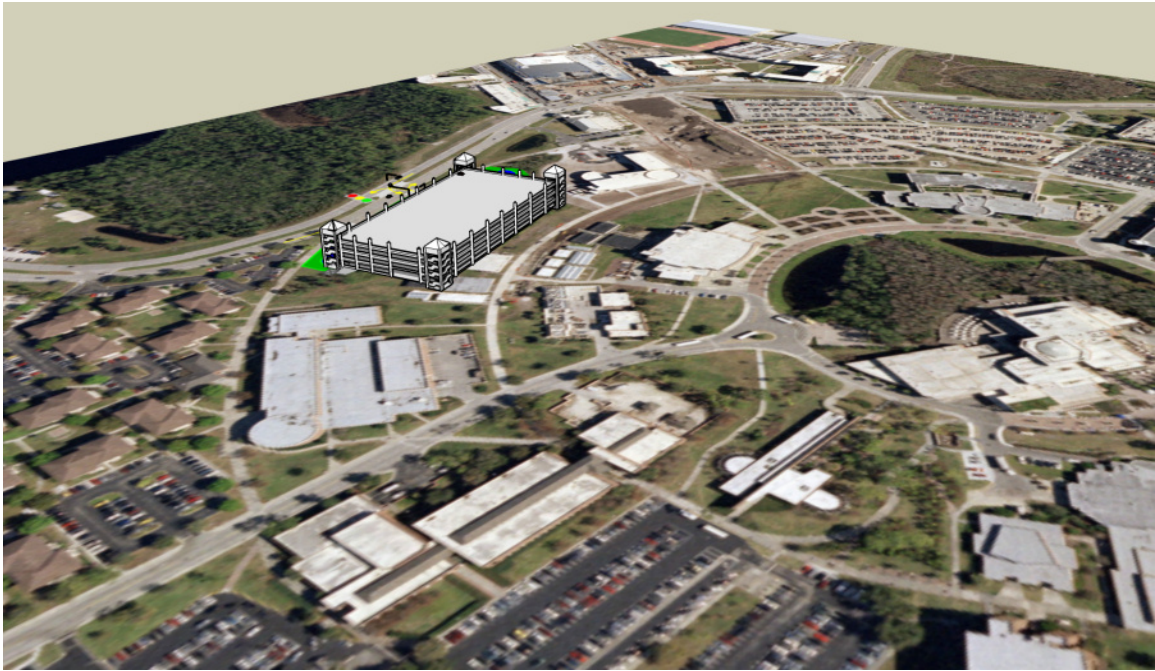


Figure 9: Digitally Enhanced Parking Garage over UWC 1

The UWC's physical space is completely consumed by the proposed parking garage. In perhaps the most strikingly political commentary, fall 2008 digital campus maps reveal NO physical space for the UWC. Instead, digital aerial images show the its physical space replaced by the construction of a new parking garage or the digital image of a new parking garage superimposed over the physical location on the campus map. According to the map, the UWC's physical space is erased, with no discussion of relocation or future plans.

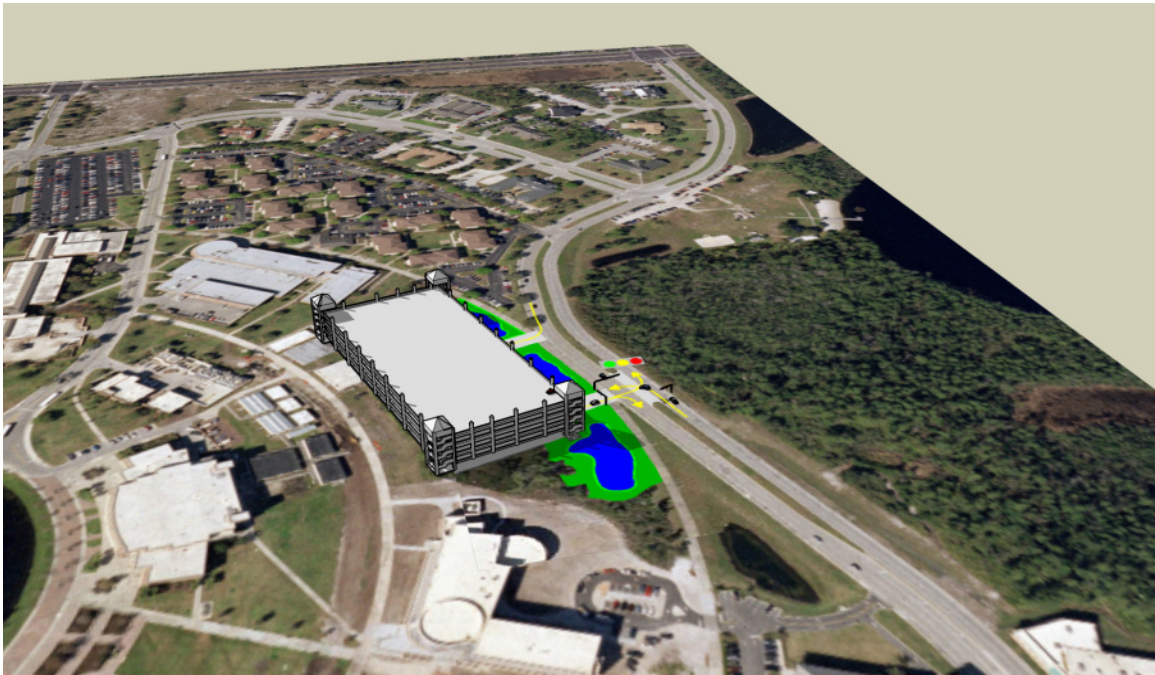


Figure 10: Digitally Enhanced Parking Garage over UWC 2

These maps depict the writing center's physical location (or lack thereof) within the college or university setting. Students use these maps to locate the writing center's physical space. Mapping, as Crampton says, is political engagement with space (171). Maps of physical spaces, like the ones discussed here, should encourage WCDs to question the permanence and sustainability of physical locations; because, as the map and our temporary physical structure show, the writing center is not permanent in the eyes of the larger institution, at least not in the current physical configuration.

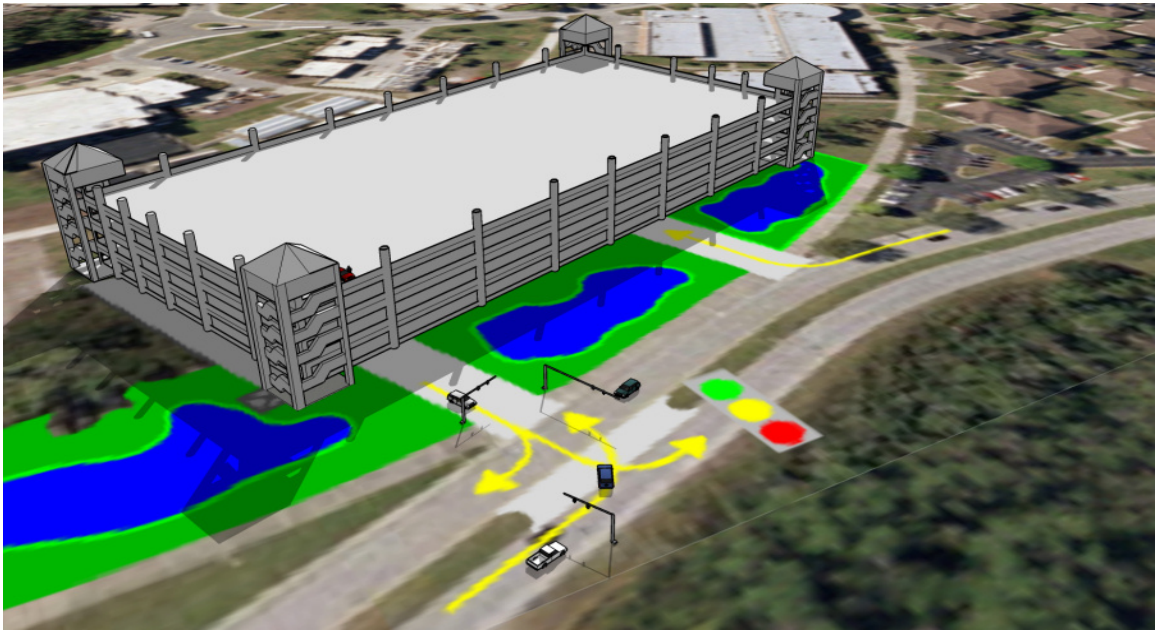


Figure 11: Digitally Enhanced Parking Garage over UWC 3

Lefebvre argues that spatial relations are the outcome of capital, and nowhere is this more apparent than on the university or college campus, where new buildings supported by multi-million dollar budgets are increasingly common. Moreover, Lefebvre says, “the spatial practice of a society is revealed through the deciphering of its space” (“The Production of Space” 140).



Figure 12: Digitally Enhanced Parking Garage over UWC 4

The positioning of UCF’s physical space, like that of many other campuses, is driven by capital, which puts the future of the writing center’s physical space in a precarious position. However, it has also prompted an increased interest in the expansion of virtual spaces that allow writing centers to circumnavigate under-funded and lacking physical spaces.

Mapping the Writing Center

In *The Production of Space*, Henri Lefebvre argues that “From the analytic standpoint, the spatial practice of a society is revealed through the deciphering of its space” (38). More specifically, the layout of a campus can reveal important political

priorities. The campus is rich with political decisions reflected through the spatial positioning of its resources. In the pages that follow, I will first offer an analysis and critique of the ideal OWL as depicted through consultants' maps, which served as a springboard for exploring mapping as a method for deciphering space. Using the maps of consultants' ideal virtual space as a basis for further exploration, I will then analyze the results of the mapping exercises produced by current WCDs from around the country. I will also consider ways in which this analysis reveals priorities and attitudes toward the work of the writing center and the institution's virtual presence, which encourages further development of sustainable virtual spaces.

The study of space reveals important political and financial priorities within the university setting as shown through digital maps. Furthermore, a spatial analysis and critique of writing center spaces at a large, metropolitan university, like UCF, reveals important priorities regarding decentralized and accessible educational opportunities, sometimes seemingly without regard to existing physical spaces and conditions.

Unfortunately, many writing centers across the country are in similar situations. WCDs must maintain high standards of work with less-than-desirable physical spaces. Thus, physical space serves a regulatory role for writing centers. The political nature of writing center space is often overlooked. "While location is not 'everything,'" Carol Peterson Haviland and Edward M. White write, "it wields considerable power over the futures of writing centers . . ." (212). Haviland and White comment on the importance of a central physical location, if the writing center is to serve students from across the curriculum (220). Regardless of the importance of physical location, it is well documented that writing centers are located in secondary physical spaces—library

basements, adjunct offices, refurbished labs—that do not support the goal of establishing a centrally located, student-centered, hub for writing activities. Jameson argues that “architecture and space can slowly be seen as persisting in the middle of politics” (“Is Space Political?” 256). The sometimes lacking physical locations of writing centers—leaky roofs, poor lighting, and obscure locations—make an important comment on the status of the writing center within the institution. Although writing is central to much of the work students do in their classes, the writing center is often under-funded and overlooked.

Constantly burdened with the stigma of doing “remedial” work and the assumption that all students should know how to write upon entering college, the writing center’s status is often diminished by its peripheral location and lacking physical space. Leslie Hadfield et al. offer their insights on designing an “ideal writing center” by re-imagining space and design (166). They claim that the “look and feel of architectural spaces does influence its occupants and visitors (167). Upon seeing the physical space of the writing center, students are left wondering if writing is, in fact, valued on our campus. If it is valuable, why is writing support physically hidden? If writing is central to the mission of any university, why would it not be situated in an adequate location? Supporting the “remedial” label of writing centers, the trek that students make to the physical location of the writing center promotes feelings of banishment to the writing “lab” and the notion that “inadequate” or “bad” writing should be hidden from the other more acceptable public spaces.

WCDs know that their services do not cater to “bad” writers. Indeed, we know that all levels of writers revise. Revision and discussion are central to the writing

process, and students feel more comfortable in a physical space “where people enjoy spending time and where they are happy, productive, and social” (Hadfield et al. 170). The UWC at UCF offers an unfortunate example of happy, productive, and social students working and collaborating within physical space that does little to enhance or promote those activities. In fact, the writing center’s physical space is located in one of the few remaining temporary modules left on campus where it is vulnerable to mold, leaks, and even tornadoes.

For writing centers, increased presence in virtual spaces might offer important political edges. UCF has one of the largest student populations in the United States, distributed across central Florida on a number of regional campuses and campuses dedicated to specialized professional training like gaming and digital media, the medical college, and the college of hospitality management. Like many large universities, UCF has used virtual spaces to link physical spaces through innovative multimedia technologies, websites, and an increased selection of online courses and degree programs. Without a doubt, UCF has shown its interest in and dedication to an increased virtual presence and innovative technologies that span great distances and reach its large and growing student population.

While the writing center’s physical space is in flux, as is the writing center’s future physical location, the university has invested in the development of online spaces, revealing priorities and attitudes toward the work of the writing center. Space is a social product, as Lefebvre says (*The Production of Space* 131), and the university has attempted to make its virtual spaces social as a way to centralize virtually the university’s increasingly decentralized physical spaces.

Haviland, Fye, and Colby, however, remind us that most online work “is located within already existing physical writing-center locations” (93). This comment is sobering even for writing centers with thriving virtual spaces. While we can expand virtual spaces to meet the needs of our students, universities, and administrations, we cannot completely forgo the need for physical space on the college campus. In fact, it is problematic to view virtual spaces as independent of physical spaces; as long as the institution itself still exists physically, students will expect face-to-face services. Like the rest of the university, the writing center can expand virtually, but it cannot necessarily forgo the need for physical spaces altogether. Unfortunately, this outlook seems to be lost within the physical and virtual architecture of the institution, prompting the writing center to establish its presence in virtual space and develop practices for working in this virtual space, sometimes at our peril.

The increased virtual presence of the UCF UWC is a social product, as Lefebvre says (*The Production of Space* 26), of the larger institution. Through various technologies, like blogs and digital videos, and through social networking sites like Facebook, organizations have attempted to create virtual communities for students to establish a connection with the university, even if they are not located near the campus. Lefebvre claims that social space remains the space of society, of social life (*The Production of Space* 35). The university has attempted to solidify its virtual social life to meet the growing number of students who consider themselves “wired” or “networked” through the use of technology. Lefebvre writes, “If space is a social product, our knowledge of it must be expected to reproduce and expound the process of production. The ‘object’ of interest must be expected to shift from *things in space* to the actual

production of space . . .” (*The Production of Space* 37). Regarding the production of space, Lefebvre prompts writing centers to follow the university’s lead by producing (or reproducing) social virtual spaces. This is not as simple as placing “things,” as Lefebvre says, in space.

With questionable physical spaces, it will become increasingly important that writing centers build virtual spaces that also support a variety of services. The building process is much more involved than simply creating a static website. The virtual space must connect the writing center with other institutional spaces. In the production of space, “things” will become “objects,” which will allow new urban architects to construct “the electronic agora,” as Mitchell says in *City of Bits*, redefining our notions of gathering places and spaces, community, and urban life (8). Without these considerations in the production of virtual spaces, we are left to question our physical space, place, and sustainability on the campus (and the image of the future for our physical space on the troubling map). I am not arguing to simply replace our physical spaces with virtual ones at all, but writing centers will need to solidify their presence online if they are to meet the changing social demands of a digital culture and wired university.

It appears that we have reached capacity in our physical spaces, and we can extend or enhance our presence in a networked society through producing visible, accessible, and social virtual spaces. We can only hope that solidified virtual spaces also enhance our presence physically as well—a political and spatial statement showing that writing centers are not necessarily sites for remedial or hidden practices. Rather, writing centers will be both physical and virtual spaces not only for discussing writing but also for the research and development of pedagogy that takes us beyond the four walls that

seem so restrictive. With the future of the writing center's physical space at UCF unsure, this increased attention on virtual space might also be an opportunity to align ourselves more directly with the institution's priorities.

So far, I have offered an analysis and critique of the spatial positioning of physical and virtual writing centers. I have also considered ways in which this analysis reveals the institution's priorities and attitudes toward the work of the writing center and the institution's virtual presence within the framework of writing center literature. In *E-topia*, Mitchell argues, "We must put in the necessary digital telecommunications *infrastructure*, create innovative *smart places* from electronic hardware as well as traditional architectural elements, and develop the *software* that activates those places and makes them useful" (8). Writing center scholars are in a position to take a leadership role in the development of innovative virtual spaces, following Mitchell's lead. The apparent instability of writing center space revealed by digital campus maps makes a convincing argument for intense study of virtual space, and Mitchell's innovative architectural theories add important depth to the discussion. Given the perceived need for increased attention on virtual writing center spaces, the next section focuses on consultants' perspectives on the "ideal" OWL.

Mapping the OWL

Missing from the OWL and writing center literature is a perspective on current practices in virtual spaces. Researchers have called for additional studies in media and writing centers, but none have carved out a method for thinking through these issues in

complex, compelling, or meaningful ways. Thus, I begin to delve deeper into the concept of space, technology, and writing centers.

Patricia Sullivan and James E. Porter propose mapping as a method for “constructing positionings of research that are reflexive” (78). While OWLs seem to have great promise for writing centers, WCDs often move forward with little idea of what their ideal virtual spaces might look like. “A new ‘cognitive mapping’ must be developed,” Soja explains, “a new way of seeing through the gratuitous veils of both reactionary postmodernism and late modern historicism to encourage the creation of a politicized spatial consciousness and a radical spatial praxis” (75). Based on Soja’s call for new cognitive mapping, I explore a method for understanding, critiquing, and theorizing virtual spaces in the writing center. I attempt to situate this mapping study by beginning with an overview of consultants’ maps.

As a way of encouraging staff members to think about KnightOWL in comparison with others nationwide, I asked consultants to look at several writing center virtual spaces during a weekly seminar. I then asked them to map their ideal OWLs. How should they be designed? Having a clear idea of the infrastructure and design of KnightOWL, my goal was for consultants to think wildly about what they could and should look like, what would allow them to work more efficiently with students, and what the current virtual space might lack.

The results of the mapping exercise are compelling. Consultants’ maps depict avatars, objects, and settings that are not currently available in the purely textual spaces of the synchronous chat room. In *The Political Mapping of Cyberspace*, Crampton proposes an important relationship between representation and space, which seems to

support mapping as a viable method for deciphering the spaces we inhabit: “The totality of relations and practices between things and people, the discourses or representations of space, all act to produce space. They do not just act within a passive space, but actively generate or produce real spaces and places” (14). Consultants not only inhabit spaces but they should also play a role in shaping them. Through mapping techniques, consultants are able to articulate their vision for their ideal space, which includes elements of the physical space.

Interestingly, early writing center research in Multi-User Domains (MUDs) and MOOs (MUD, Object-Oriented) revealed that manipulation of virtual objects is no new phenomenon. A MOO, as Jennifer Jordan-Henley and Barry Maid explain, “is text-based and allows for the manipulation of virtual objects” (2). More specifically, a MOO is a text-based online virtual reality system that allows users to connect synchronously. In fact, the consultants I worked with expressed a desire to employ visuals in their work from the start. Virtual spaces have attempted to tap the “sometimes elusive reservoir of imagination and motivation,” as Jordan-Henley and Maid explain in their study (2). Their research began in Tuesday Night Café, a virtual meeting place on MediaMOO designed by Amy Bruckman for media researchers, and led quickly to questions about the viability of online writing consultations. MediaMoo is considered a virtual “third place.” Oldenburg explains this notion further: “Third places exist on neutral ground and serve to level their guests to a condition of social equality. Within these places, conversation is the primary activity and the major vehicle for the display and appreciation of human personality and individuality” (42). Bruckman and the creators of MediaMOO and Tuesday Night Café attempted to construct this “neutral” virtual space for the purpose of

conversation. Interestingly, this virtual space is also intended for exclusive use by media researchers and not the general student. Only media researchers were invited to the party at Tuesday Night Café. Presumably, discussion taking place in this educational and pedagogical virtual space would enhance research and teaching. Much like my purposes in this study, Jordan-Henley and Maid sought to create and use available technology to enhance teaching (2). At the heart of their study was the idea that the “traditional writing center,” or the brick-and-mortar space, is based on collaboration, student responsibility, and the sharing of power (2). All too often, writing centers view their virtual spaces as tangential to the physical space, which serves to marginalize the activities that take place there as secondary to services offered face-to-face.

Jordan-Henley and Maid made the decision to build their virtual spaces near “a body of water,” claiming that one pleasant outcome of establishing virtual space is that the “builder/programmer has unlimited resources, complete autonomy, and almost full control of the setting” (4). A closer look at the visuals depicted in these text-based virtual spaces is especially revealing about the initial vision for online consultations. Jordan-Henley and Maid write:

Inside, the Center has an idea board for writing terms and help, a robot lab assistant that works cheerfully for 24 hours a day and can answer simple questions, and even an M&M dispenser. A hot-air balloon on the deck is geared toward curing writer’s block. It can transport students to other areas of the MOO where they can disembark and poke around. (4)

The perceived need for objects and humanistic elements is evident. Virtual objects, as Jordan-Henley and Maid argue, were designed to put student writers at ease (6).

Consultants developed a variety of strategies for working in text-based virtual spaces, all of which involved the manipulation of visuals. One consultant provided virtual fried chicken, while another made use of the coffee pot (Jordan-Henley and Maid 6). Jordan-Henley and Maid's work seems to be heading toward a climax but falls short of theorizing the significance of visual elements in text-based spaces. At the time, perhaps the real significance of this study was still unclear. Over ten years later, however, the technology has changed as have the students and their expectations. Jordan-Henley and Maid's MOO research now serves as an appropriate historical foundation for future studies involving writing center virtual space, especially as OWLs develop and become even more interactive spaces.

Consultants conduct online sessions through KnightOWL on a weekly basis. These consultations are synchronous and held in a secure chat room. In this virtual space, consultants are bound to communicating through text. Consultants must apply emoticons, interpersonal cues, and visuals through text on the screen. During the pilot stage of this online program, visual thinking in textual space was a new concept. Consultants were accustomed to seeing the student, to watching his or her movements, to incorporating physical objects like books, handouts, and pens. The transition to working online was not always a natural one; some consultants felt disconnected from the student and material being discussed.

After browsing the Online Writery and Purdue OWL, consultants mapped their ideal OWL based on their experiences and thoughts on what the virtual space of the UWC might look like. These maps were revealing about the potential design and structure of future virtual spaces.

Foremost, OWL maps were visually appealing and included avatars in addition to elements from the physical space of the UWC. Other maps included elements of the “real” world—objects and visuals that are present in consultants’ daily lives. Maps often included structural elements that tied together the virtual space. Many maps proposed a theme or scene that would help attract students. For example, Figure 13 offers an avatar on a surfboard. Thus, the consultant depicts an ideal virtual space with humanistic connections. Current virtual spaces in use at writing centers rarely feature humanistic connections. However, Figure 13 prompts us to consider the actions that users perform in virtual spaces. Surfing is a common pastime associated with relaxation. The consultant suggests an environment where we can visualize information. Meredith Bricken, in her overview of virtual worlds, offers insight into designing highly visual interfaces for virtual spaces:

In a virtual world, we are inside an environment of pure information that we can see, hear, and touch. The technology itself is invisible, and carefully adapted to human activity so that we can behave naturally. We can create any imaginable environment and we can experience entirely new perspectives and capabilities within it. A virtual world can be informative, useful, and fun; it can also be boring and uncomfortable. The difference is in the *design*. (363)

The mapping activities provided consultants with the chance to design their own spaces, to think creatively about the ways in which virtual space is deciphered in the writing center. It also gave consultants an opportunity to think about the potential of technologies as they are employed into the writing center. Consultants thought creatively about the ways in which virtual space is deciphered for writing center work. This

creativity yields results that have significant implications for the future of writing centers, as it allows participants to think beyond physical constraints.

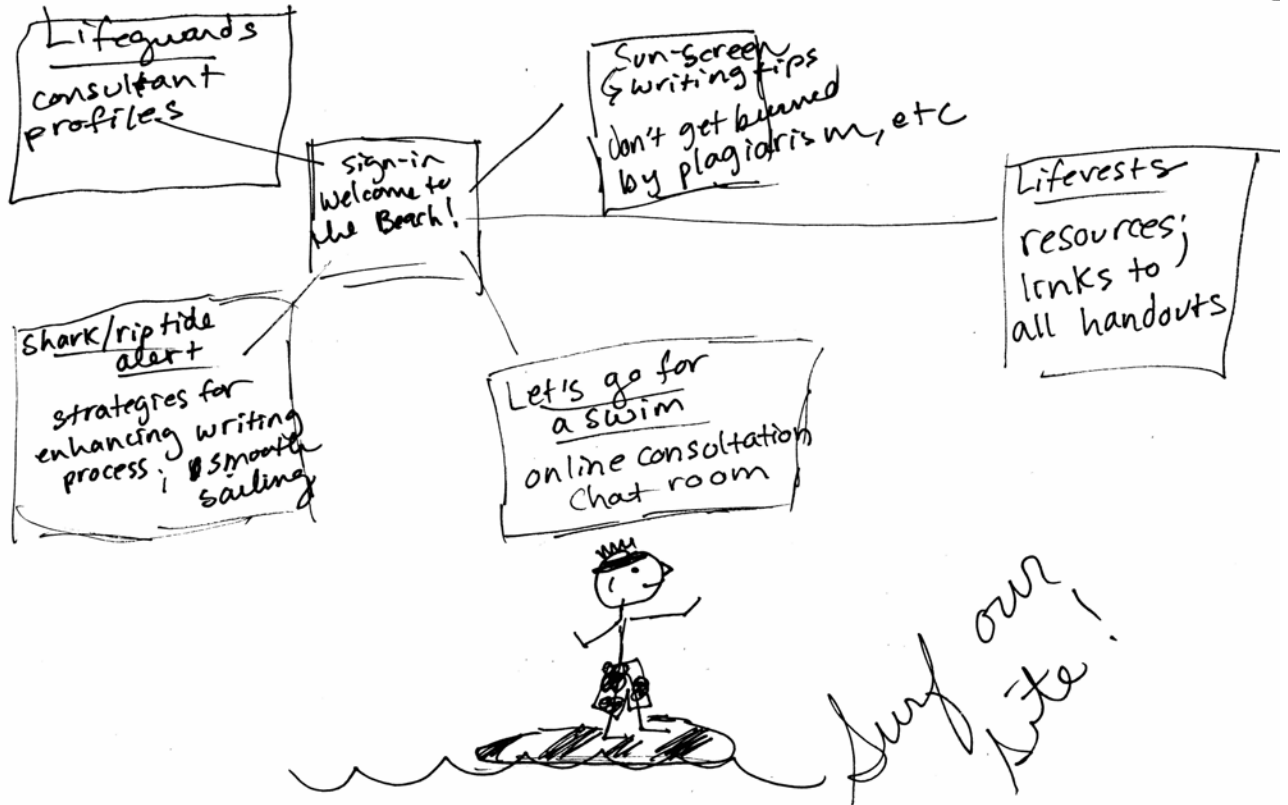


Figure 13: Surfing

texts dedicated to teaching writing in a visual age. Lee Odell and Susan M. Katz's *Writing in a Visual Age*, for example, focuses on how "words and images work together to convey meaning" (10). Similarly, Wendy S. Hesford and Brenda Jo Brueggemann's *Rhetorical Visions: Reading and Writing in a Visual Culture* attempts to introduce students to rhetorical analysis as a method for creating visual and verbal texts (6). These textbooks attempt to expand our notion of "text" as we have known it to include visual compositions like multimedia and digital images. As we continue to develop virtual spaces, we might also consider the expanded notion of the text to include visuals and multimedia. Virtual spaces might offer a space for the display of media compositions.

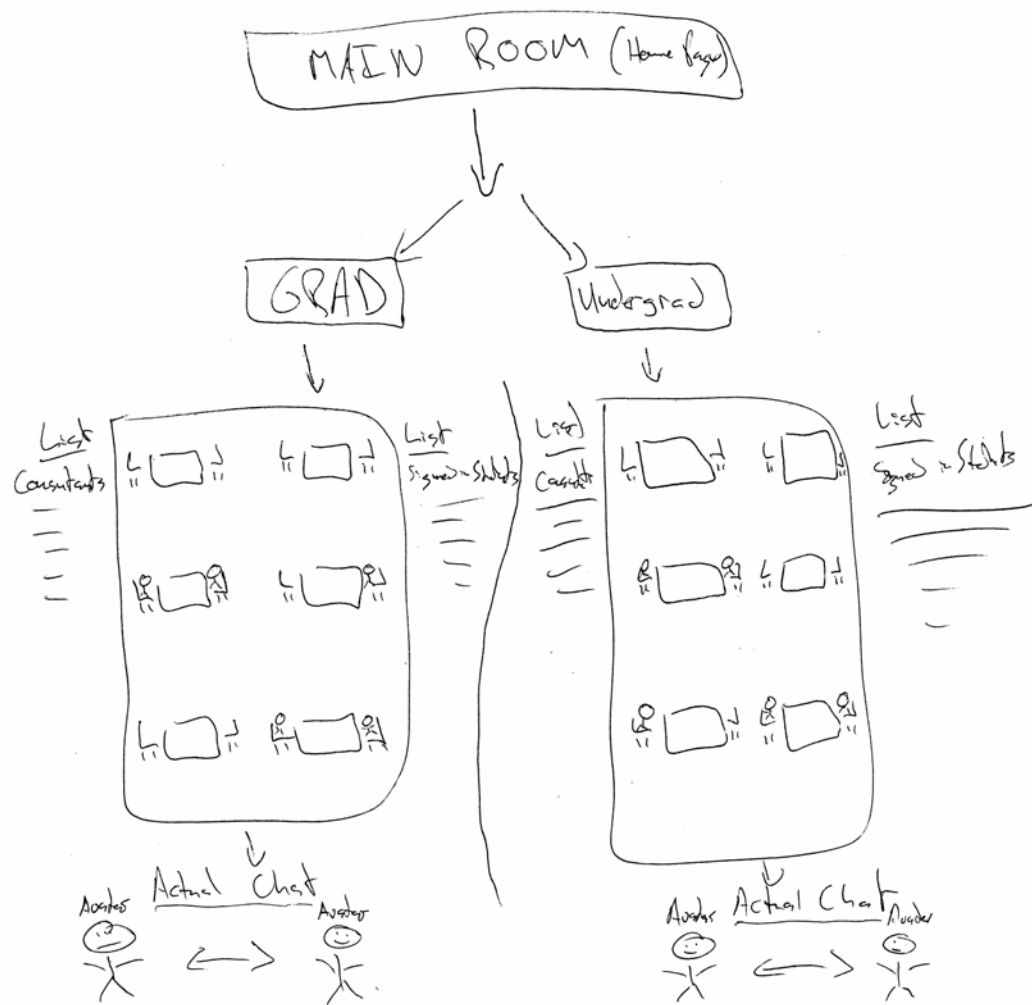


Figure 15: Tables and Rooms

Figure 15 offers a traditional-looking physical space reproduced or remediated in virtual space. The virtual space depicted here resembles the traditional classroom. In fact, the consultant suggests that online consultations might also take place in rooms. Again, we see avatars and objects that are present in physical spaces. Figure 15 suggests that as we continue to consider online work, we might also think about visuals that contribute to the comfortable and calming nature of most physical writing center spaces. In building virtual spaces, we might consider thoughtful remediations of these objects in

visual, multimedia, or hypertextual form and how they will contribute to the virtual space, perhaps by facilitating the immediate exchange of writing-related information between student and consultant. Figure 15 also represents a traditional notion of writing center space. That is, it reflects our attachment to physical spaces such as rooms and desks. While we might begin exploring virtual space by constructing traditional spaces, the remediation of physical architecture is still somewhat constraining.

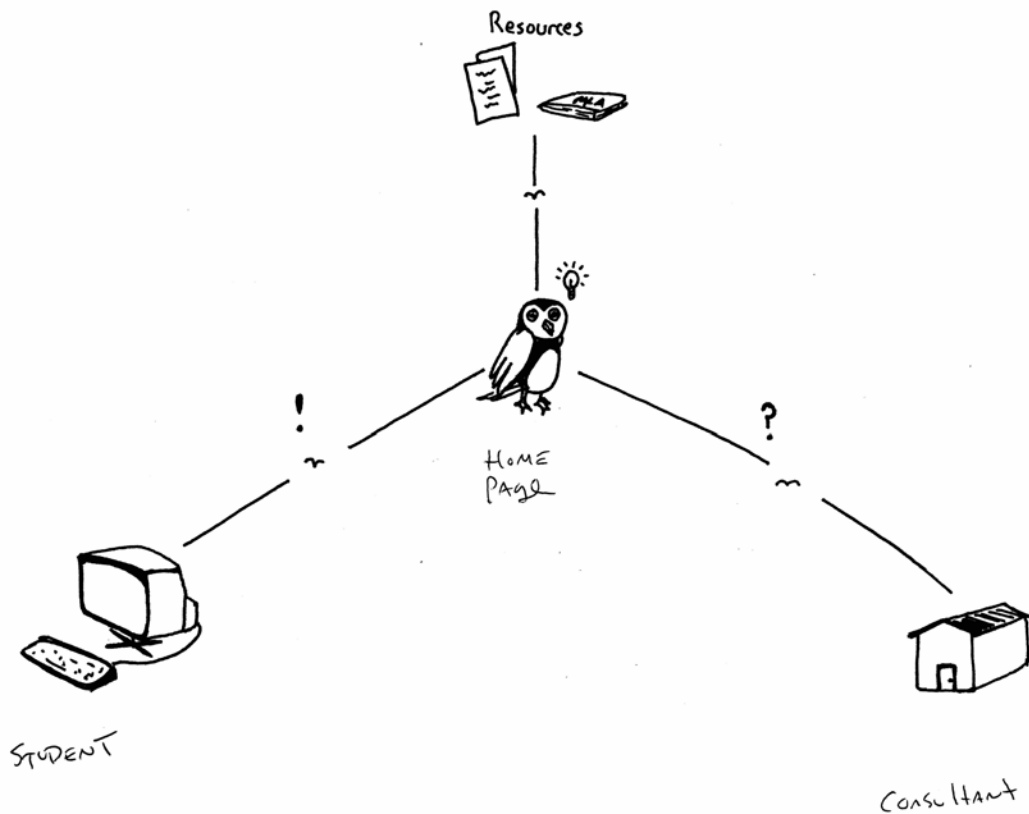


Figure 16: Central OWL

The OWL in Figure 16 is central to the student, consultant, resources triad. The OWL serves as the link among these three perhaps physically disparate entities. The map also indicates that the student might enter the OWL with questions and that the

technology might help facilitate the exchange by providing answers. The map suggests that the student would have to go through the OWL to link to the consultant or resources. The OWL, then, is central to the process, a hub. Furthermore, the map suggests that the computer is the student's connection to the OWL, consultant, and resources. Without the computer, the student cannot access the lines (quite literally depicted in this map) of electronic communication. The presence of the light near the OWL suggests that this is an informational space, bringing together resources, ideas, and questions as indicated by the icons.

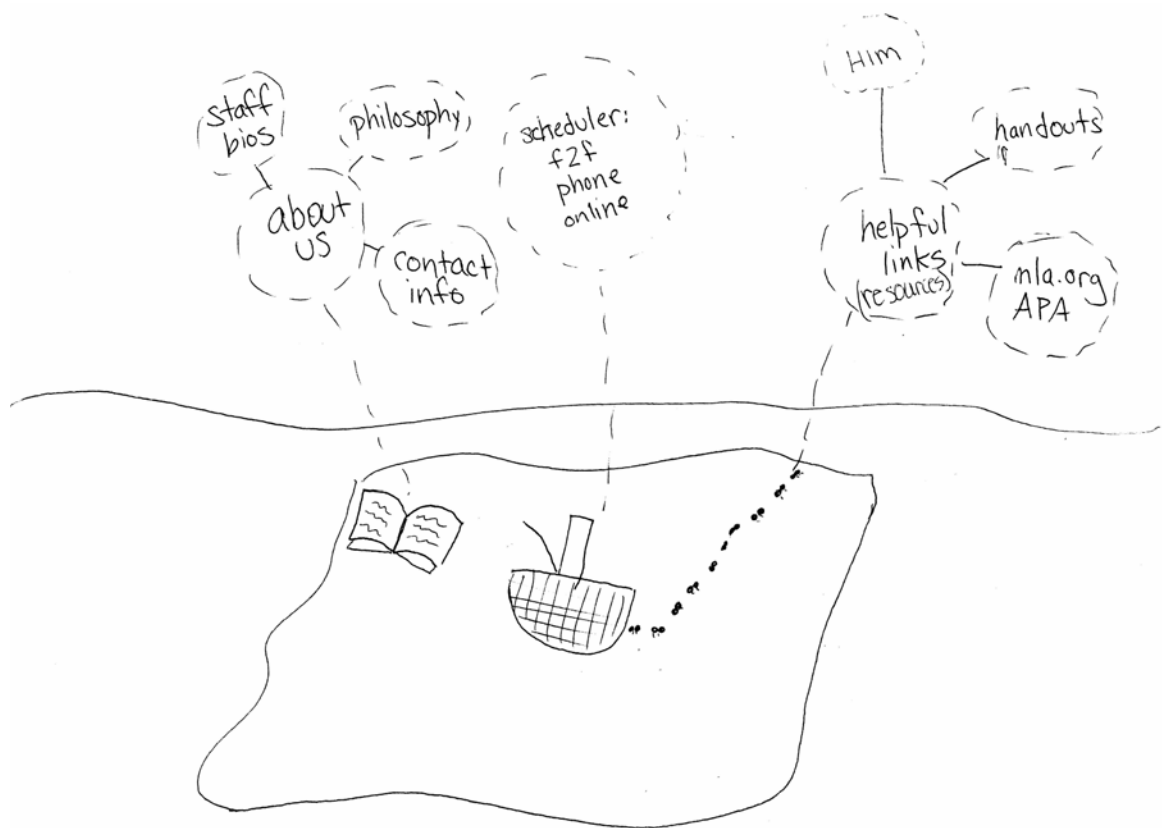


Figure 17: Picnic

Figure 17 suggests a picnic arrangement, which might indicate a comfortable exchange among friends. Foremost, this map suggests that the virtual space should be inviting. The inviting space should promote conversation between equals, as the picnic scene suggests.

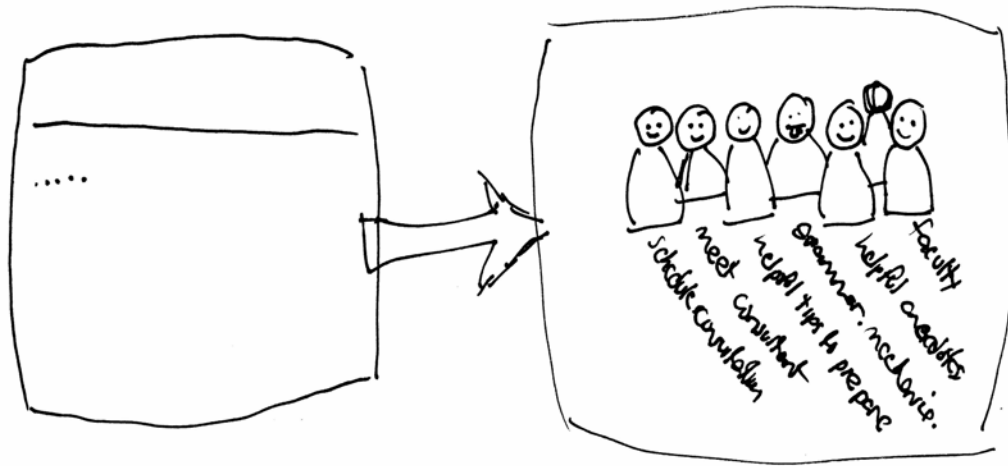


Figure 18: Blank and Populated Screens

In Figure 18, the consultant offers two screens: one blank and the other with avatars. The arrow indicates the transition from current virtual space to ideal virtual space, which also suggests the consultant's desire to move from a vast void to a space populated with avatars and humanistic connections.

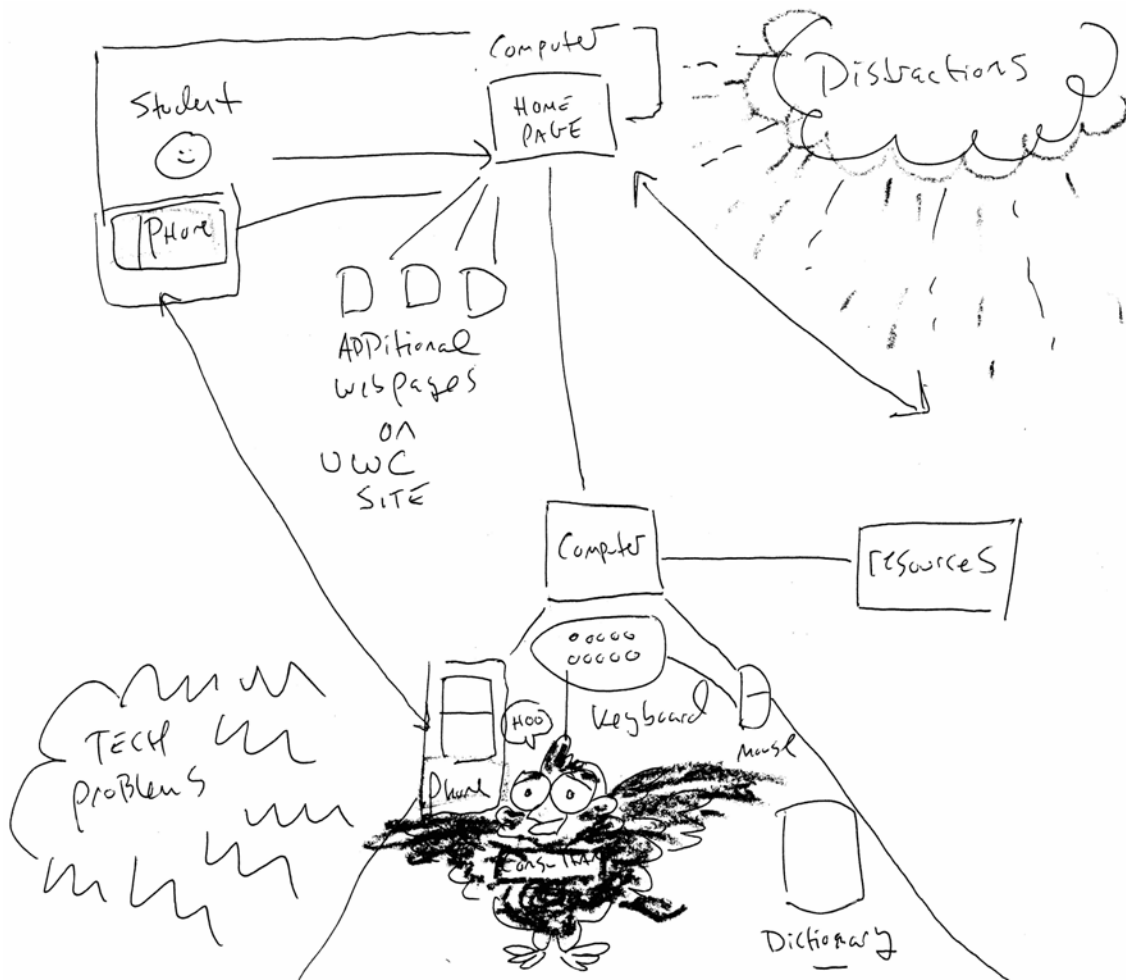


Figure 19: OWL as Cyborg

Figure 19 suggests the convergence of consultant and OWL. In fact, the consultant is the OWL, recalling Donna J. Haraway's notion of the cyborg. The OWL, a construct of technology, and the consultant, composed of flesh and blood, become one in Figure 19. Haraway explains that "[a] cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Social reality is lived social relations, our most important political construction, a world-changing fiction" (149). We often think of the consultant operating the OWL or

“working in KnightOWL.” Haraway pushes this notion much further by tightening the connection between human and technology, suggesting that “mind, body, and tool are on very intimate terms” (165). Furthermore, the presence of the consultant *in* the OWL might help to map the body into the technology. That is, the map suggests that the consultant become a part of the OWL. Haraway argues that the body is not innocent: “The machine is not an *it* to be animated, worshiped, and dominated. The machine is us, our processes, an aspect of our embodiment” (180). The consultant, as this map suggests, *is* the OWL.



Figure 20: Traversing Physical Space

In Figure 20, the consultant maps physical distance. We see the campus, the student, and the UWC depicted in the map. The UWC appears to be the lifeboat. The map depicts a physical connection between the student and the UWC. Technology must facilitate the connection here, forming a link between the student and the lifeboat, which is intended to “save” the student. Most interesting about this map is the importance of the UWC and the perceived connection between resource and student. The ideal virtual space, as depicted in the map, transcends physical distance.

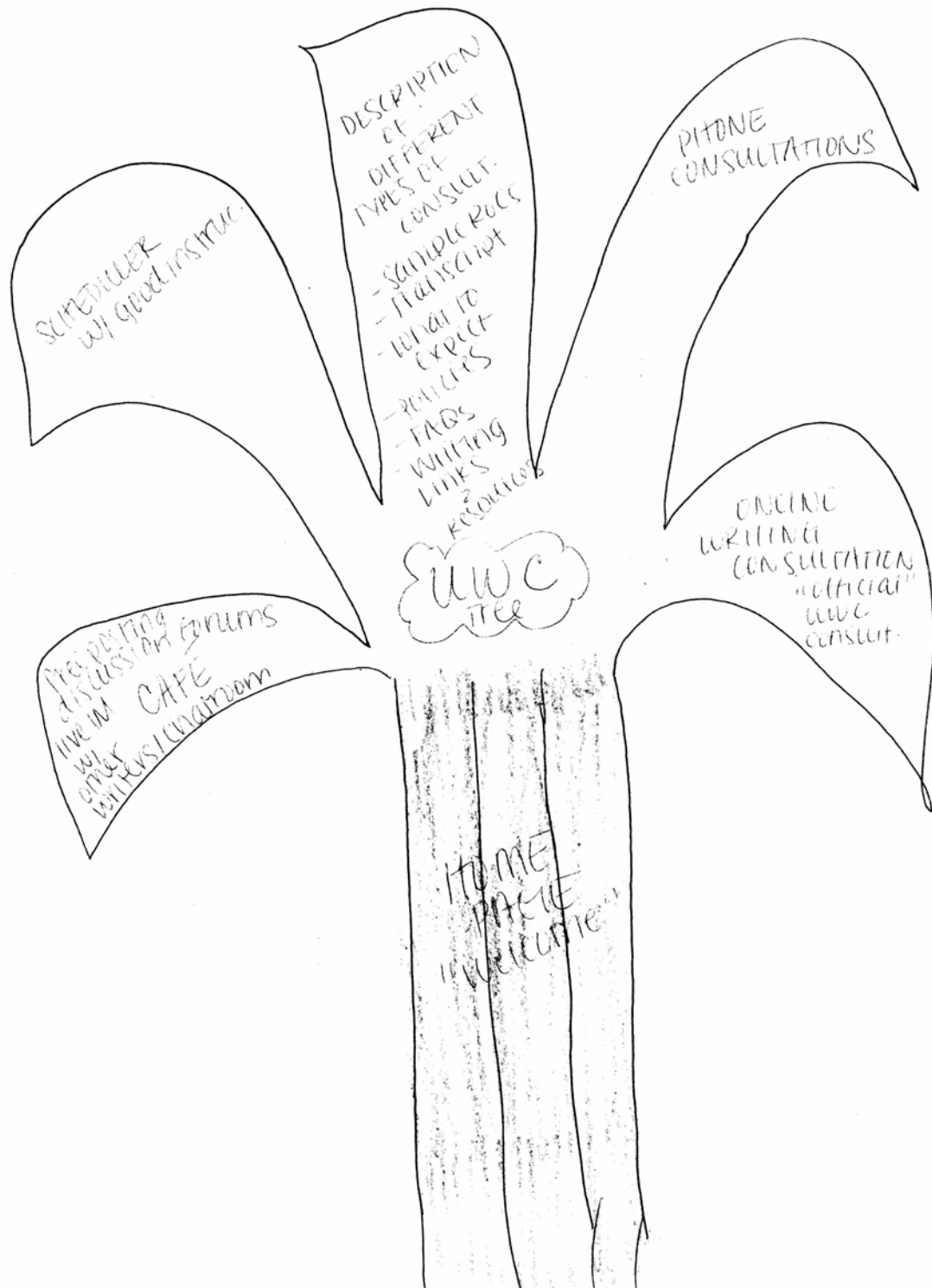


Figure 21: Tree

The tree in Figure 21 offers a structure for the ideal virtual space. Perhaps most interesting about this map is the way that the consultant situates the entry point at the bottom, presumably a space that is easy to find, and then builds more specific areas for writing and research where the user would suspect to find them: on the limbs of the tree. The consultant thoughtfully guides the users to the branches, where he or she can locate information. Consultants' maps highlighted several key issues that will prove important in the development of virtual spaces:

- Addressing a preference for objects and visuals
- Establishing humanistic connection
- Designing social space
- Challenging or repurposing architectural practices used in physical spaces
- Rethinking what it means to become the technology

A number of the maps featured avatars, and many maps also featured objects and visuals that are not currently available in textual spaces such as synchronous chat rooms. These maps shed light on the importance of humanistic connections in virtual spaces. Maps also highlighted the perceived need for social virtual spaces where consultants and students can openly discuss a variety of visual and verbal texts. However, writing center researchers abandoned the discussion of visuals and objects in virtual spaces, as MUDs and MOOs were overlooked for e-mail and text-based chat systems. Thus, we might see object-oriented research resurface in newer remediations of virtual space. I draw a parallel between object-oriented spaces like MOOs and more recent immersive virtual spaces like SL. Given the perceived interest in visuals when working in MOOs as writing centers began to explore virtual spaces, it should not be surprising to see that

consultants value social opportunities in virtual spaces. Additionally, consultants expressed interest in communicating visually through objects.

I begin with consultant maps as a preliminary method for deciphering writing center spaces and foregrounding the potential for remediating virtual spaces. The mapping exercise offered here is an entry point into a larger discussion of the potential for mapping to allow WCDs to decipher both physical and virtual spaces, to think creatively about the ways in which they design spaces, and finally to think about the political nature of writing center spaces. Consultants' maps of their ideal virtual space should prompt WCDs to think critically about how they design virtual space and also how writing centers might, in turn, redesign (or redecipher) both physical and virtual spaces.

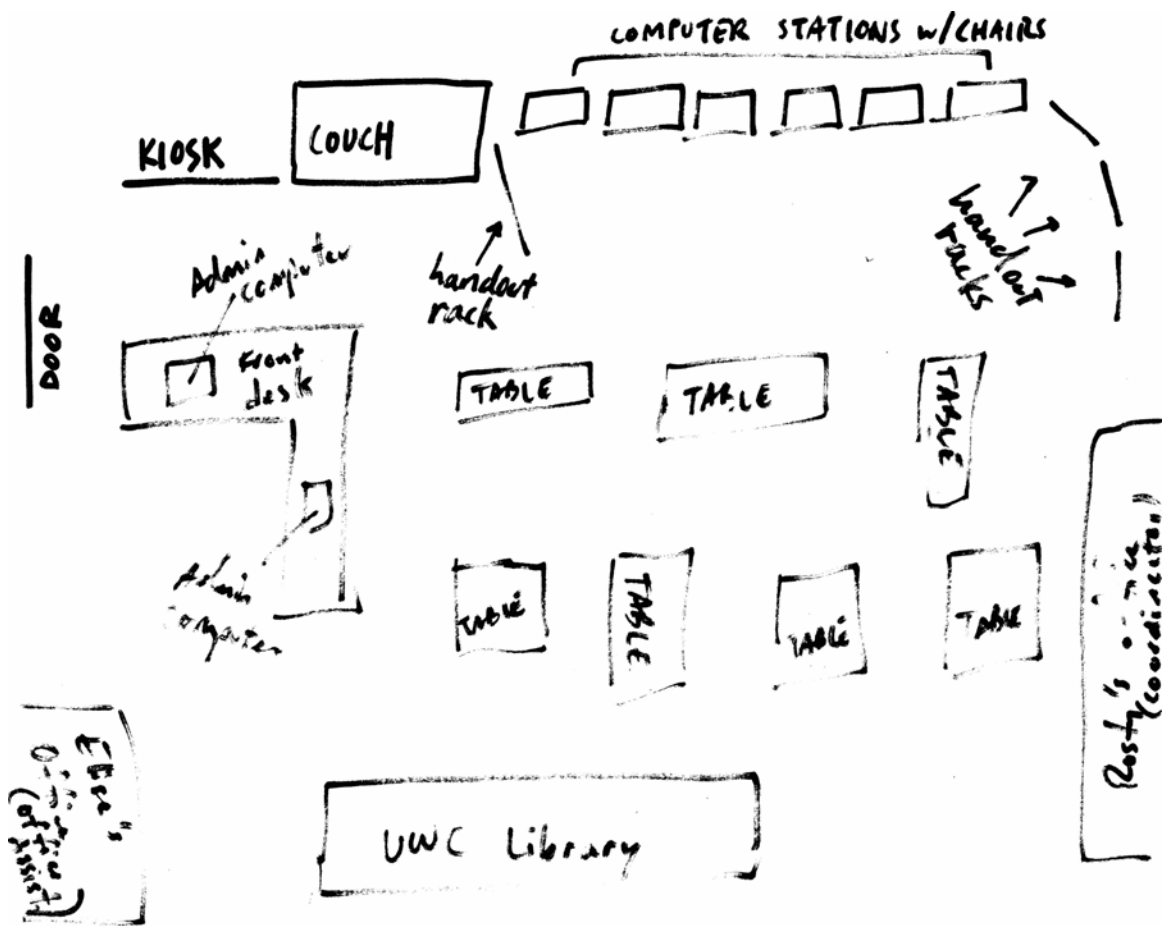


Figure 22: Original Map of SLUWC

I begin the discussion of WCDs' maps by offering a glimpse at the humble beginnings of the SLUWC. When we first discussed the development of a virtual space in SL, we deferred to models of physical space. As Figure 22 shows, the original plans for the SLUWC would have replicated the physical space of the UWC. While replicating physical space might be a place to start, we must begin to challenge the temptation to build virtually what we build physically. In an attempt to rearticulate the ways in which space is deciphered in the writing center, I turn to WCDs' maps.

Mapping the Writing Center: An Overview

Muriel Harris and Michael Pemberton provide a thorough taxonomy of OWLs. They argue that attempting to replicate face-to-face services online will only lead to frustration:

Attempting only to replicate familiar face-to-face tutorial sessions in an electronic, text-oriented environment can lead to frustration and to defeat as OWL planners find themselves unable to simulate all characteristics of effective tutorials. Instead, it is important to recognize that OWLs can have a number of very different configurations—configurations that take advantage of the strengths of online environments and that work with, not against, both local conditions and writing center theory. (145)

Digital maps make the compelling argument for increased attention to virtual writing center spaces. Concerns and questions with the physical layout of the campus might prompt us to rethink the ways in which virtual spaces are produced in the writing center. The OWL, specifically, offers potential for increased presence in line with the popular use of mobile devices, digital mapping, and new media technologies. Writing center virtual spaces need further development to intersect, connect, and interface with recent technological developments.

I begin this portion of the study by analyzing mappings of five WCDs' writing center spaces: current physical space, ideal physical space, current virtual space, and ideal virtual space. To situate the study, I will provide an overview of each space before presenting the maps and analysis.

Mapping Current Physical Space

Current physical space is the space in which consultants, students, and WCDs work face-to-face; these maps depict the space where writing centers currently operate. Consultants will commonly sit down with students at a table to discuss writing-related issues and questions. Often, current physical space is provided by the institution. Current physical space might serve as the motivation for more creative practices—the production of ideal physical and virtual spaces.

Mapping Ideal Physical Space

WCDs were asked to map their ideal physical spaces as well. These physical spaces would allow writing centers to offer the services that students want and need, services that are ideal for the institution's student population, and offer the most accessible and user-friendly space for student writers. Ideal physical space represents the space that writing centers would want if budget and administration permitted.

Mapping Current Virtual Space

I also asked five WCDs to map their current virtual spaces. Current virtual spaces depict the spaces—online, digital, and technological—that are currently offered at these institutions. Traditionally, virtual spaces have simply supported physical spaces. Current virtual spaces complement physical spaces. WCDs have viewed OWLs, for example, as storehouses for handouts, calling cards for face-to-face services, or consultancy services that cannot be as productive or useful as services offered face-to-face. In some cases,

current virtual spaces are provided by the institution. Current virtual spaces are often textual, with static images that complement the text. In some cases, OWLs house e-mail links where students can send their documents to consultants.

Mapping Ideal Virtual Space

I asked WCDs to map their ideal virtual spaces as well. Maps of ideal virtual spaces depict the spaces that WCDs would develop with unlimited resources and the technological capabilities and resources to build them.

Mapping the Writing Center: Directors' Perspectives

I begin with a discussion of the first WCD's spatial scenario. Interestingly, the first writing center does not currently have a physical space. To account for a lack of physical space, the WCD employs "professional tutors" from around the country and sends papers to them electronically for feedback.

Maps of current physical spaces revealed that WCDs felt restricted in their building practices. These maps included outcomes that will prove important for the ongoing development of new sophisticated physical spaces:

- Dispersed space
- Peripheral workspaces
- Unutilized open space
- Peripheral technological spaces usually for computer use or connectivity
- Controlled space

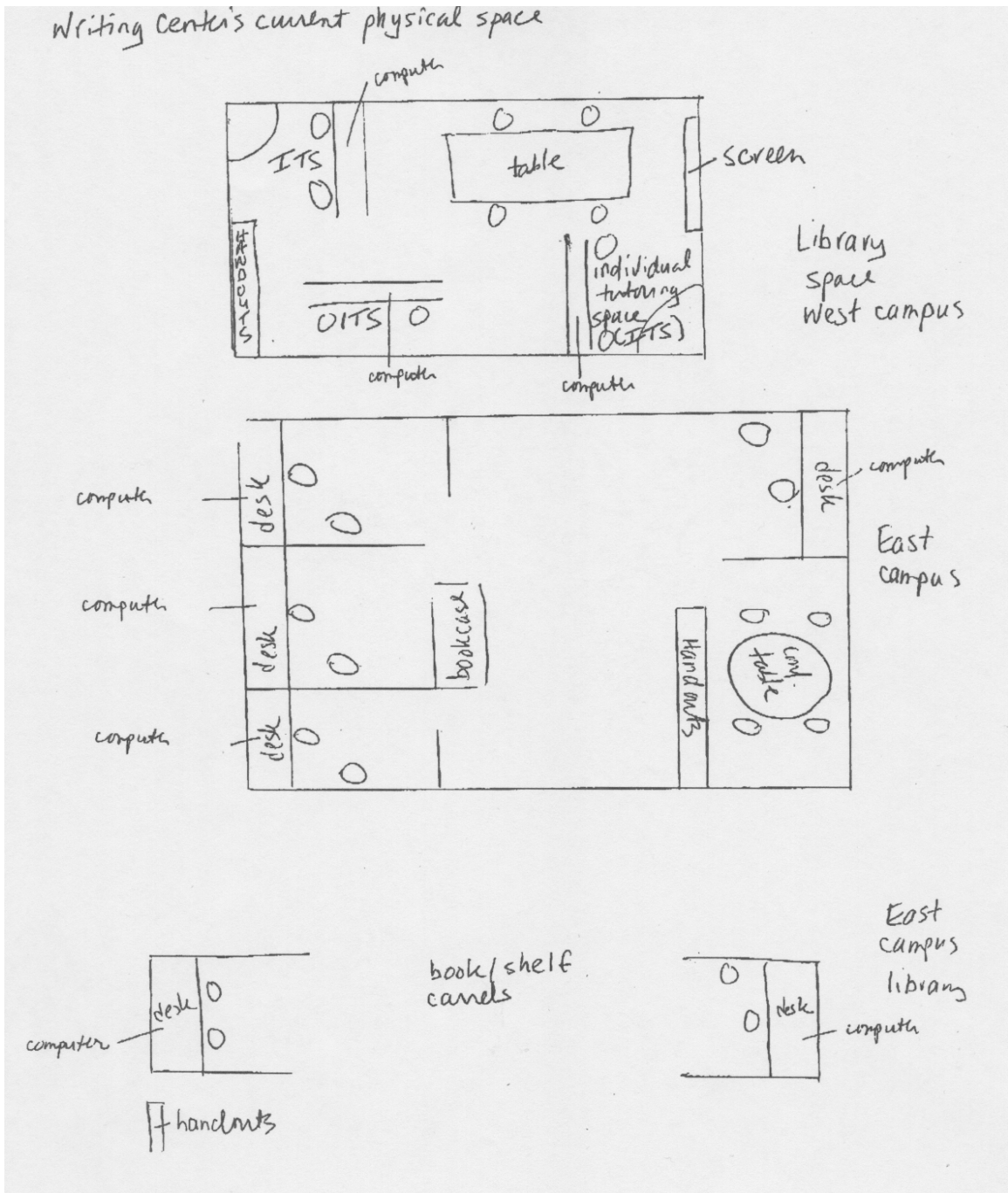


Figure 23: Current Physical Space 2, Dispersed Locations

The WCD in Figure 24 makes the point that the writing center staff can only add to existing structure, but they cannot edit the structure. This point suggests that the

university is in the power position here, as outside administrators will make decisions for the writing center but rarely with the WCD's input. The WCD also notes that students miss opportunities for learning because the physical space does not adequately suit the needs of the writing center.

Through mapping, the WCDs suggest, we might gain a better understanding about how writing center spaces are deciphered. In other words, we might understand how WCDs can begin to analyze and critique the spaces in which they work on a daily basis. The WCD describes her space as "bolted down," suggesting that it is difficult, if not impossible, to enact change in these spaces. Spaces appear fixed and perhaps static, yet not always stable.

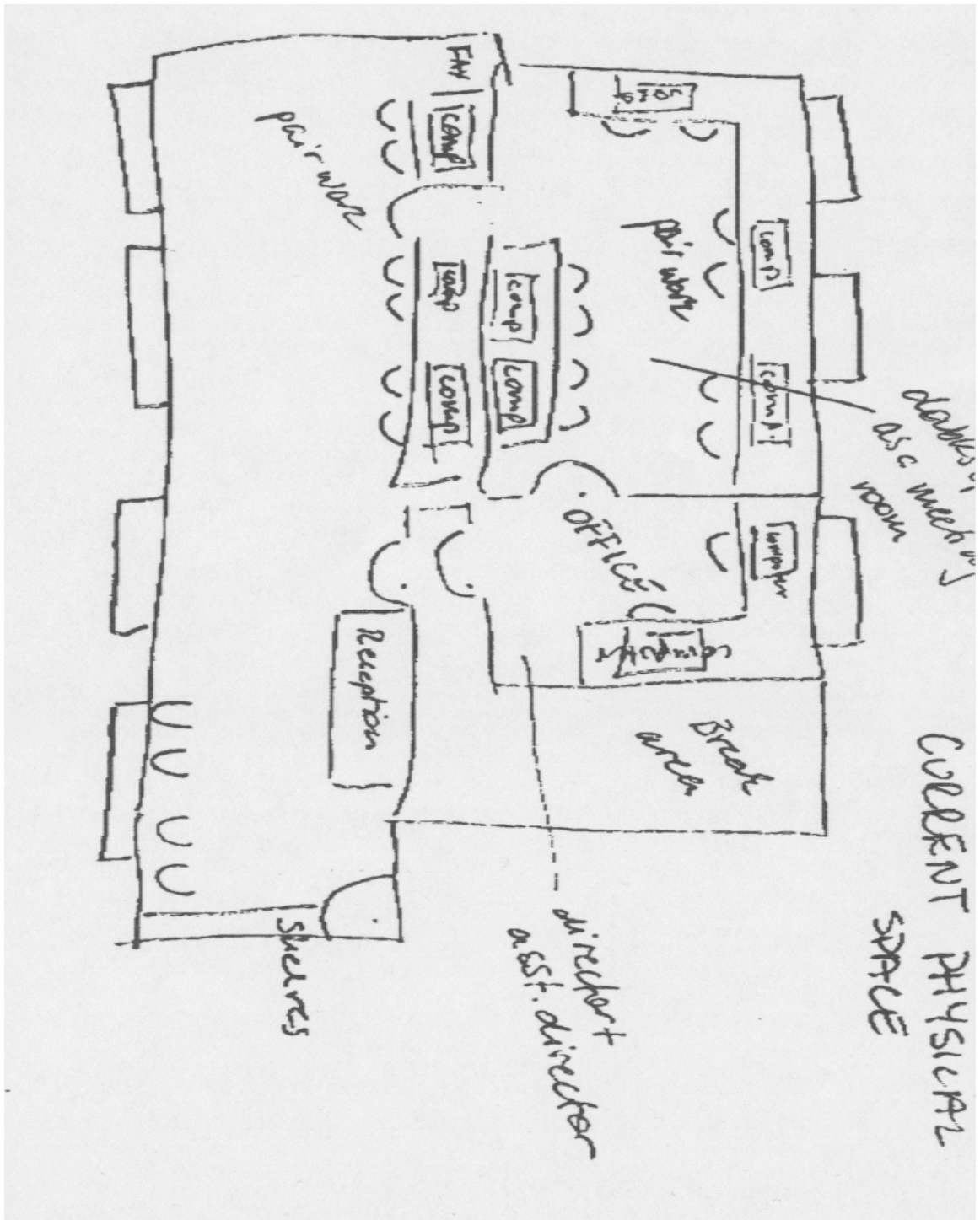


Figure 24: Current Physical Space 3, Peripheral Technological Spaces

WCDs express concern with physical space, saying that the mapping exercise confirms that it is too limited. The WCD for Figure 25 also notes that a lack of space is not used as an excuse and that they try to do as much as possible to maximize services. Furthermore, this WCD notes that physical spaces are often repurposed or maximized by adding shelving. Interestingly, the WCD also notes that not all writing center activities take place in the writing center.

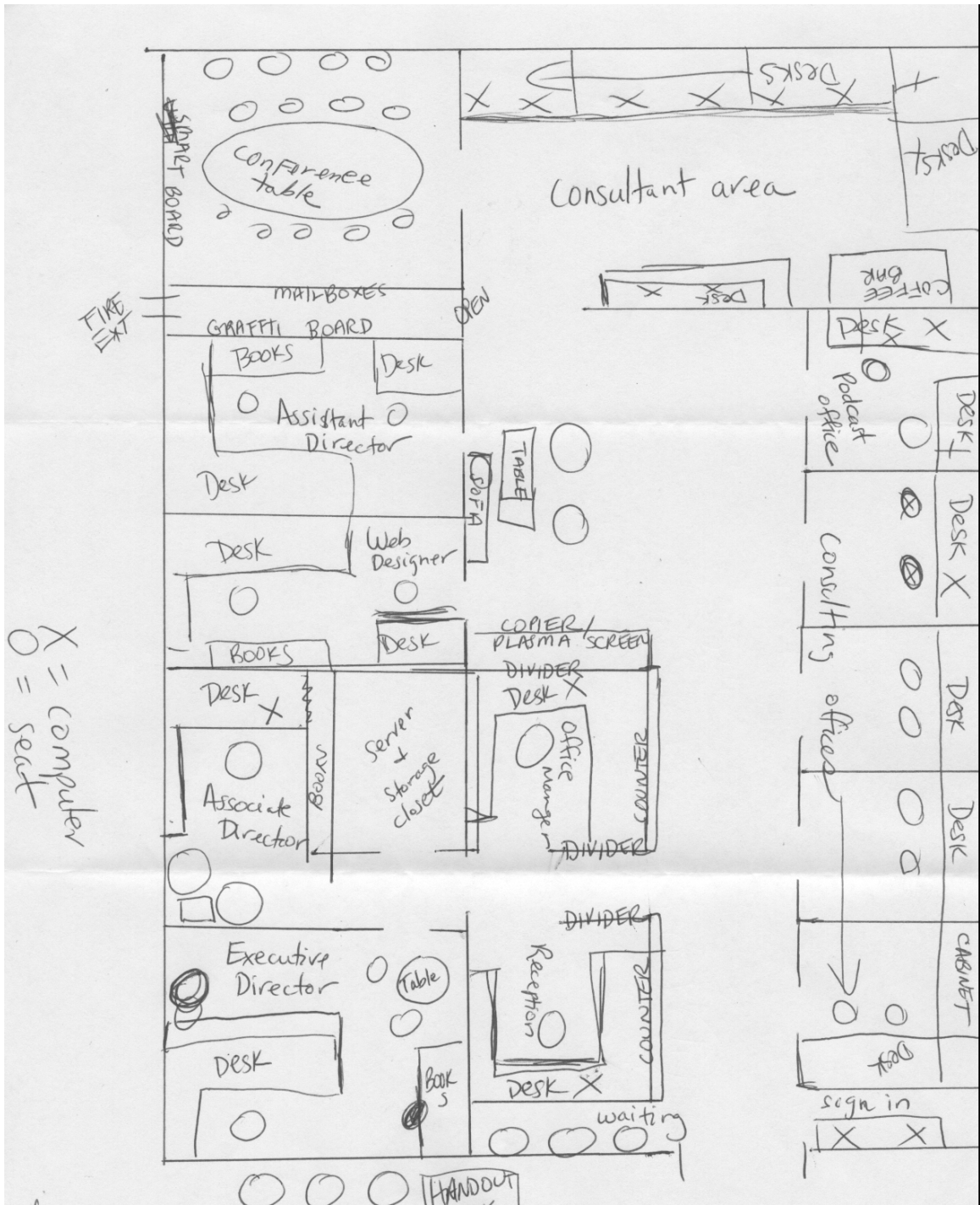


Figure 25: Current Physical Space 4, Dedicated and Segregated Space

To account for lacking physical spaces, in Figure 25, some staff members work at home or in the library to expand the writing center outside of the main walls. Writing

centers dealing with a lack of physical space have had to allocate spaces in creative ways.

In Figure 25, it is important to note the lack of consulting areas in open spaces.

While current physical spaces highlighted rather peripheral positioning of technology and underutilized areas, maps of ideal physical spaces offered WCDs more freedom, control, and creativity with their designs:

- Space for collaboration
- Technology and virtual space centralized in physical space
- Integrated spaces for writing, oral communication, and digital media production
- Tranquil and calming visual elements
- Potential for mobile technology

Ideal physical space one, Figure 27, provides insight into spaces where services are offered exclusively online. That is, the writing center does not currently have a physical presence at this university. Sessions take place online, although the maps reveal an interest in physical spaces.

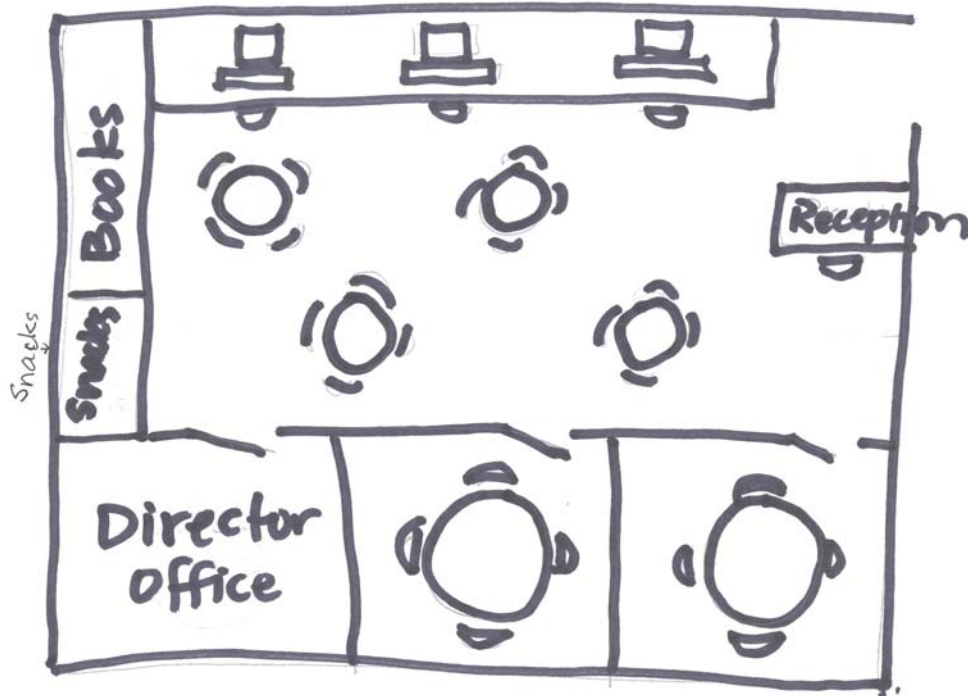


Figure 27: Ideal Physical Space 1, Space for Collaboration

Although the writing center in Figure 27 does not have a physical space, the WCD mapped an ideal physical space with an open area for individual consultations and rooms for group consultations. The WCD also mapped a space for snacks and books. It is interesting to note the importance of snacks (or the snack area), which presumably enhances the sociability of the physical space. The WCD would also have a significant presence in the physical space, parallel with the group consultation areas. In the ideal physical space, the WCD would be able to see sessions taking place, answer questions, and meet with students. Ideally, the map shows that the WCD would be involved in the daily workings of the writing center.

The WCD also indicates a lack of control over physical space and that eventually physical space was eliminated at this writing center, apparently without a clear plan or dedicated virtual meeting space. Thus, the WCD is worried more about the elimination of physical space. The ideal physical space indicates that the writing center has a marked or inscribed space on the university's campus; however, similar designations do not currently exist virtually. In the survey response, the WCD indicates that students often have difficulty locating each other virtually. In the response, the WCD notes that virtual space counteracts physical distance. The WCD's use of "counteracts" is potentially significant in itself, as it suggests a struggle rather than productive partnership or harmonious exchange in virtual space.

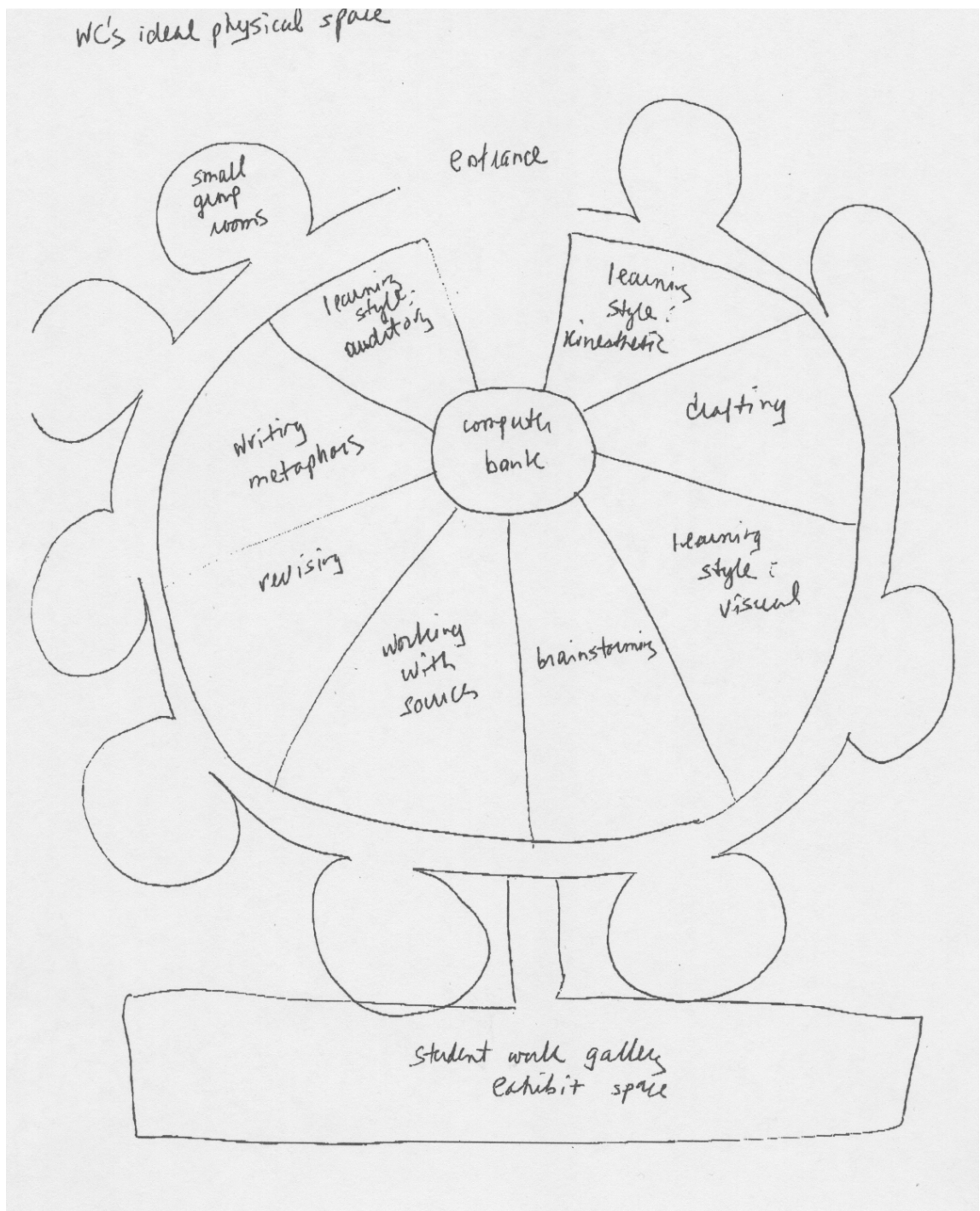


Figure 28: Ideal Physical Space 2, Central Technology

The map in Figure 28 shows that technology is central to the physical space, in contrast to current physical spaces where computer stations are located on the periphery.

The design of this writing center is significant for future physical spaces, as this WCD sees technology playing a more centralized role.



Figure 29: Ideal Physical Space 3, Central Computers

The mapping exercises presented here suggest that the WCDs have considered the importance of space in the writing center. The map in Figure 30 highlights the perceived importance of maximizing spaces and making the best of marginalized or inadequate physical spaces. In the ideal space, Figure 30, the WCD depicts more “open tutoring” spaces in addition to consulting rooms. It is also significant to note that the digital media lab is much larger and more pronounced than in the current physical space, although it uses the same basic shape. The WCD clearly values the potential for digital media in the writing center. In fact, the web designer would have an office of comparable space to director-level administrators. Figure 30 is, perhaps, the best example of how writing centers must maximize their allotted space. Two reasons prevail, as Figure 30 shows. First, writing centers must often work in small or constrained spaces. Second, WCDs might become more creative with their spaces through the use of cognitive mapping exercises as shown here.

The ideal writing center physical space in Figure 30 also promotes social activity through the development of collaborative space. The conference room is also centered on the smart board, while the walls surrounding the consulting area are augmented by graffiti space, which suggests public expression and openness to conveying thoughts through visuals.

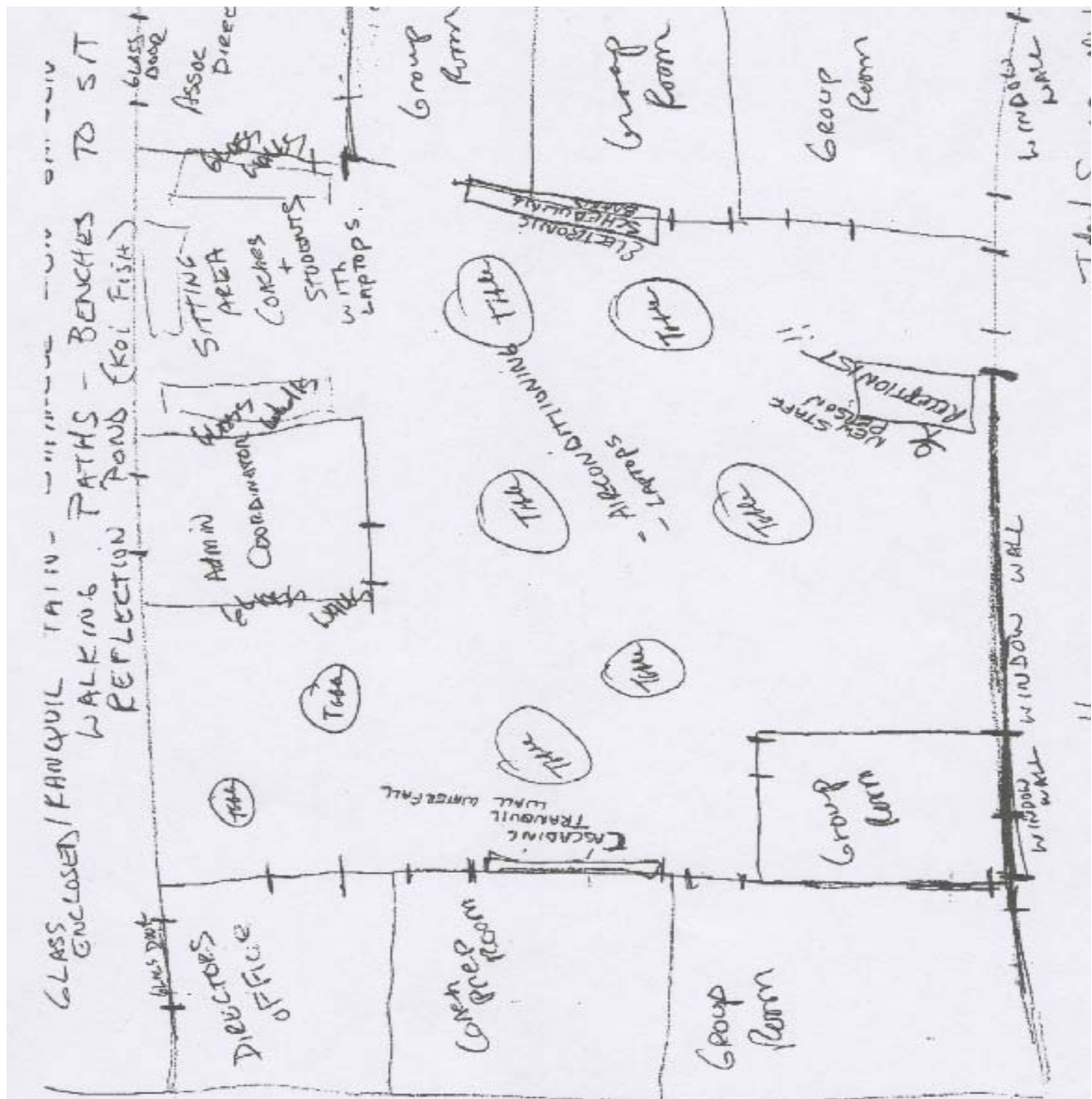


Figure 31: Ideal Physical Space 5, Tranquil Spaces with Mobile Technology

Interestingly, the current virtual spaces (the WCD offers two views in Figure 32 and Figure 33) show that the students are separated by distance and that the virtual space should bring them together as shown in Figure 32. However, Figure 32 suggests that the virtual space also introduces interference into the session. The waves between the students appear disruptive to the communication transfer displayed in the ideal virtual space map (Figure 38) on page 124. Also, students are not connected to the document as they should be in any productive session. Maps of current virtual spaces yielded the following outcomes:

- Avatars and cues indicating one-way distribution; information output; linearity
- Interference
- Interest in visuals in the form of galleries or display areas
- Institutional control
- Segmentation and disconnection

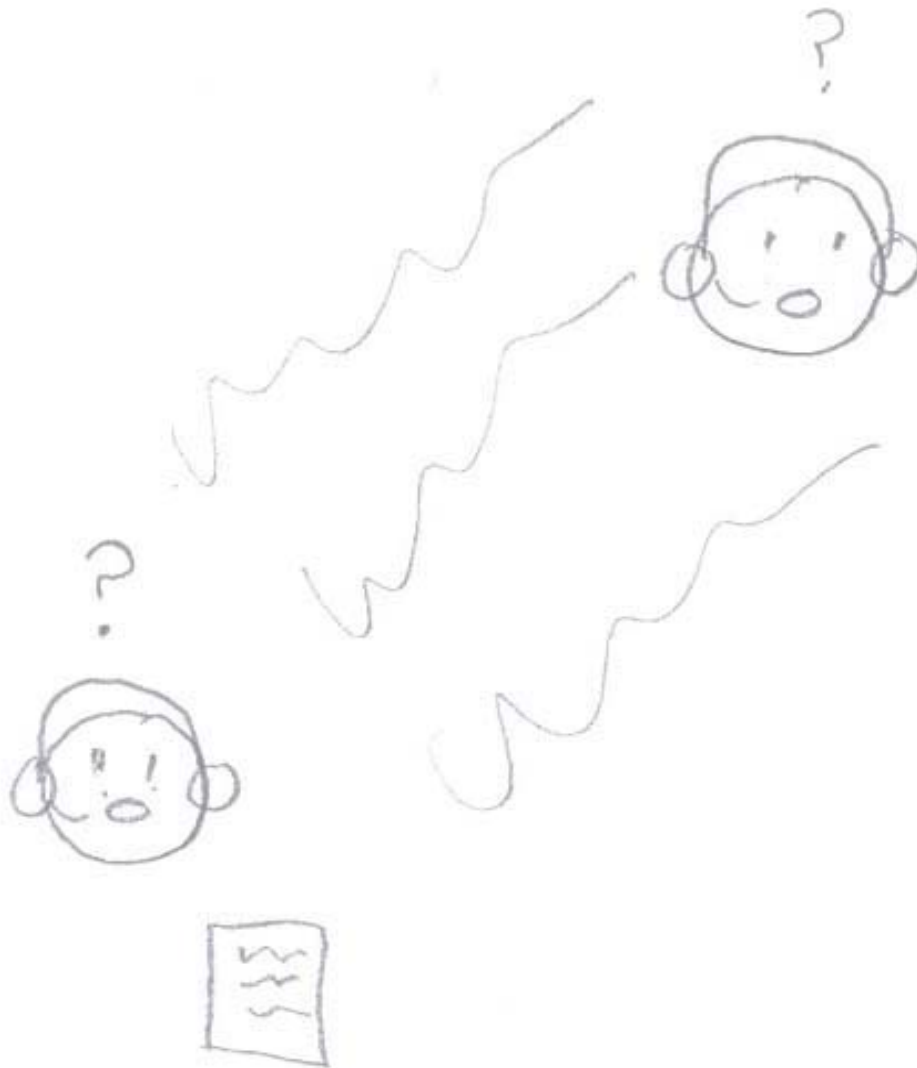


Figure 32: Current Virtual Space 1A, Interference

The Current Virtual Space B map (Figure 33) also suggests that the main transfer of information is headed one way, and the paper brings student and tutor together. In the map of the ideal virtual space (Figure 38), student and tutor have what appears to be equal access to the paper and the arrows indicate an equal exchange, which might suggest that the communication is nondirective.



Figure 33: Current Virtual Space 1B, One-Way Transfer

The arrows in the Current Virtual Space B map (Figure 33) suggest a more directive communication, the transfer of information that goes one way in the map as opposed to a reciprocal exchange or even an exchange where the student takes charge and owns the paper.

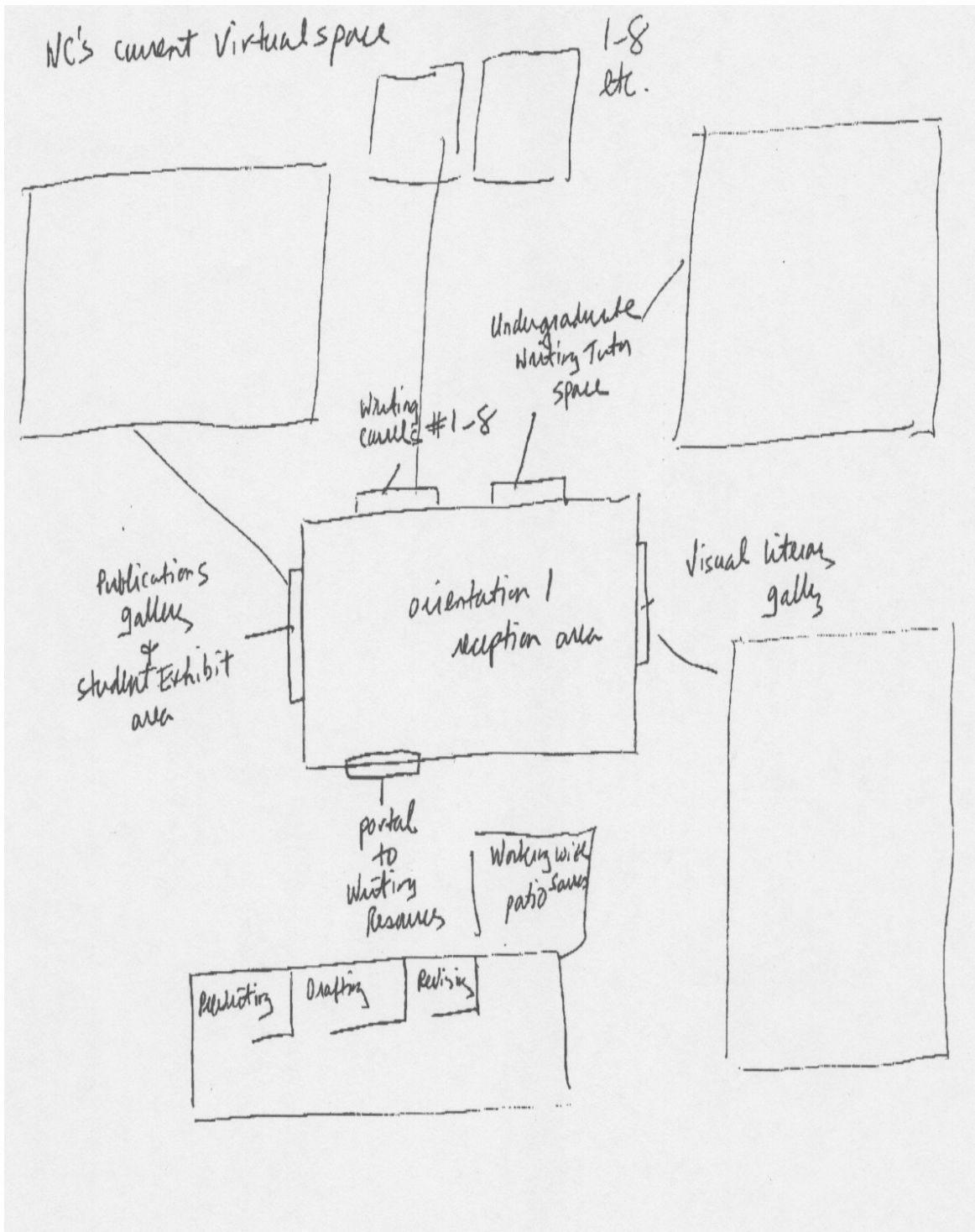


Figure 34: Current Virtual Space 2, Exhibit and Gallery

The current virtual space depicted in Figure 35 indicates that the space is college controlled. The website and scheduler are central to the organization of the virtual space,

and the map shows that the virtual space is organized around these two interfaces. In Figure 35, the website and scheduler are both governed by the college, and therefore the spaces linked to the website and scheduler are also, to an extent, governed, negotiated, and dictated by the college. The ideal virtual space depicted in Figure 40 is self-controlled, as the map indicates. This map suggests an interest in multimodal pedagogical spaces through the use of iTunes, podcasts, and video online tutoring, indicating innovative uses of technology. Notes within the ideal virtual space map suggest the WCD's attempt to "define" spaces as areas where iTunes or podcasts might offer students unique ways of accessing writing-related material. Furthermore, the writing center might capitalize on the pedagogical advantages of iTunes over textual possibilities that force the student to read or scan for embedded information that is difficult to find.

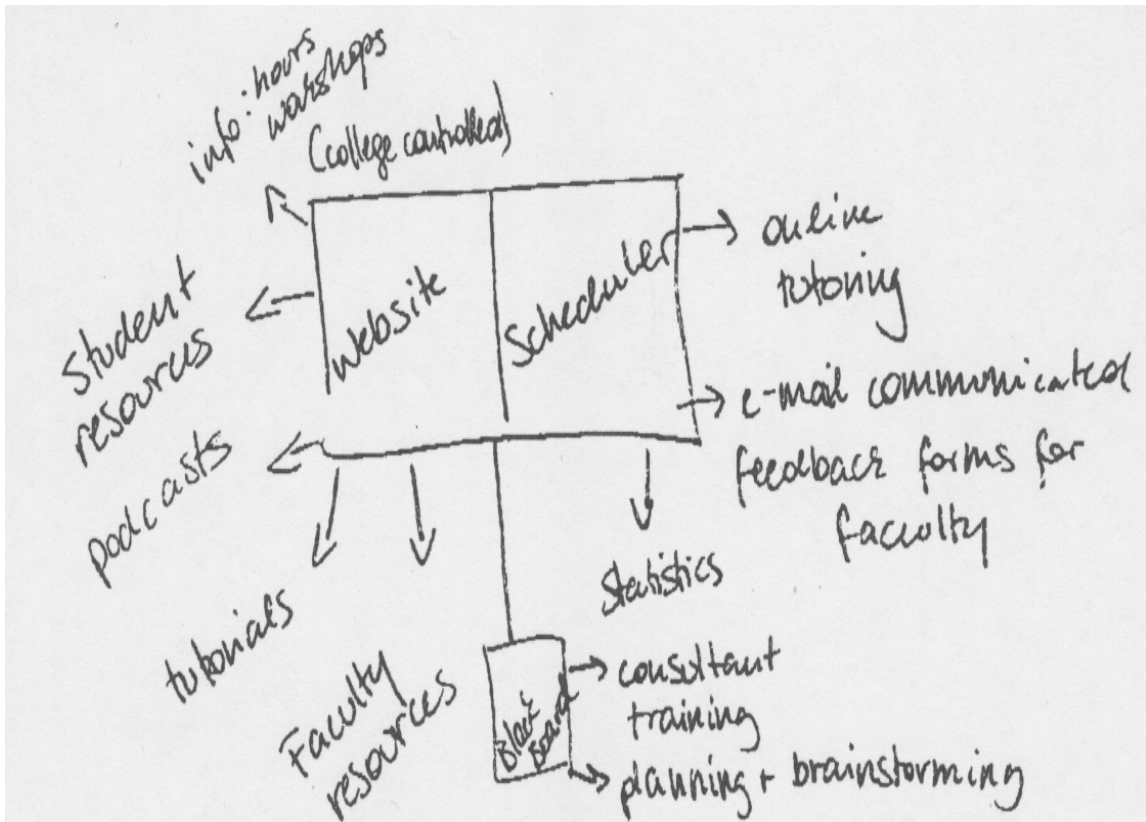


Figure 35: Current Virtual Space 3, College-Controlled

The current virtual space in Figure 36 depicts a four-tier organization, while the ideal virtual space in Figure 41 appears to be more streamlined. The WCD maps a space based on the organization of the website. The site appears linear with standard components involving existing software options. However, the ideal virtual space map in Figure 41 indicates an interest in synchronous online sessions, whereas the current virtual space is limited to asynchronous interaction where the student sends a request and is not involved again in the process until he or she receives the response. Even more interesting is the WCD's word choice in the description of the current virtual space depicted in Figure 36, "student reads," which suggests passivity.

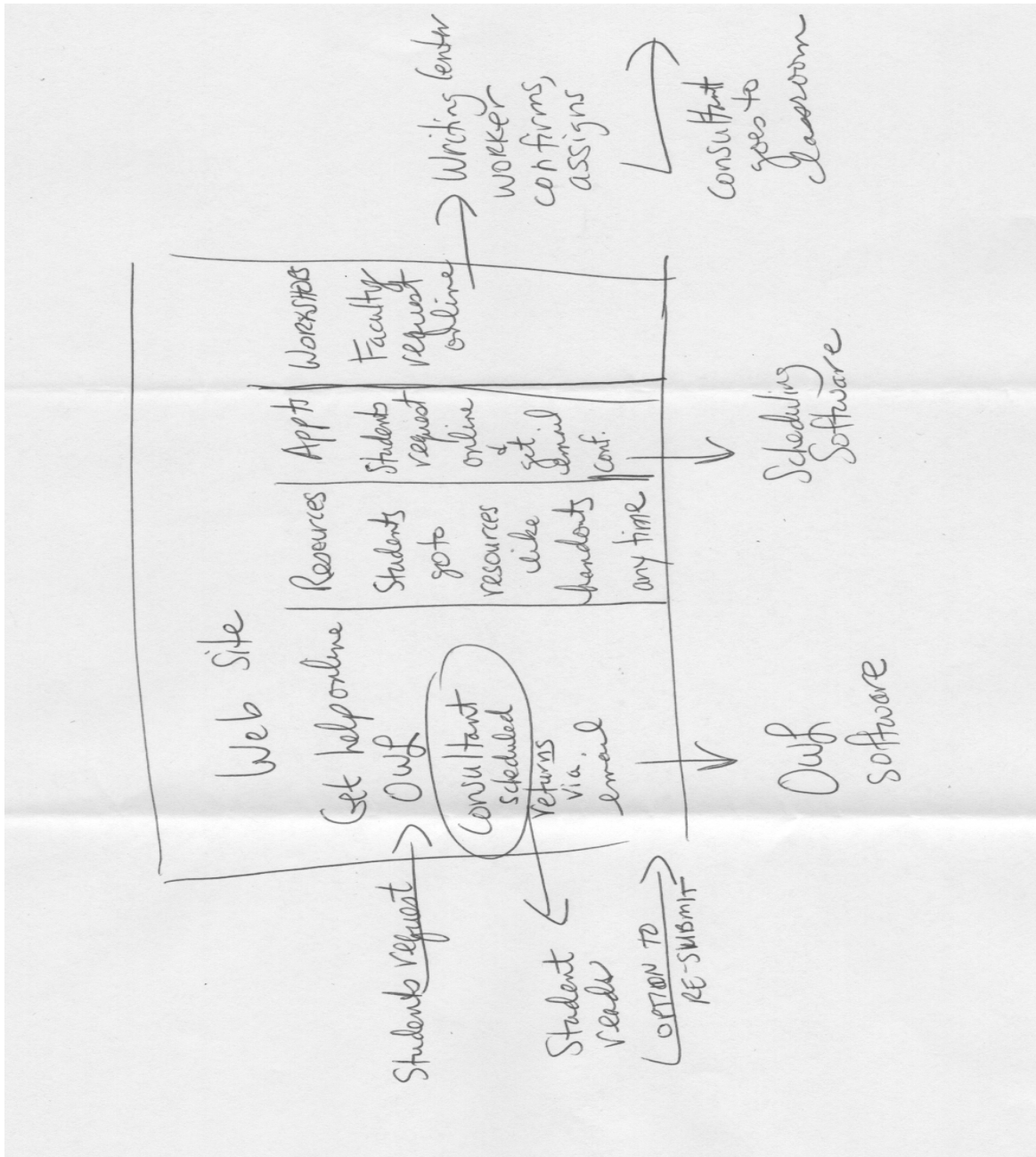


Figure 36: Current Virtual Space 4, Linearity

The student simply reads the feedback and has the option to resubmit without further discussion with the consultant. In the current system, the student is minimally involved other than passively receiving the paper.

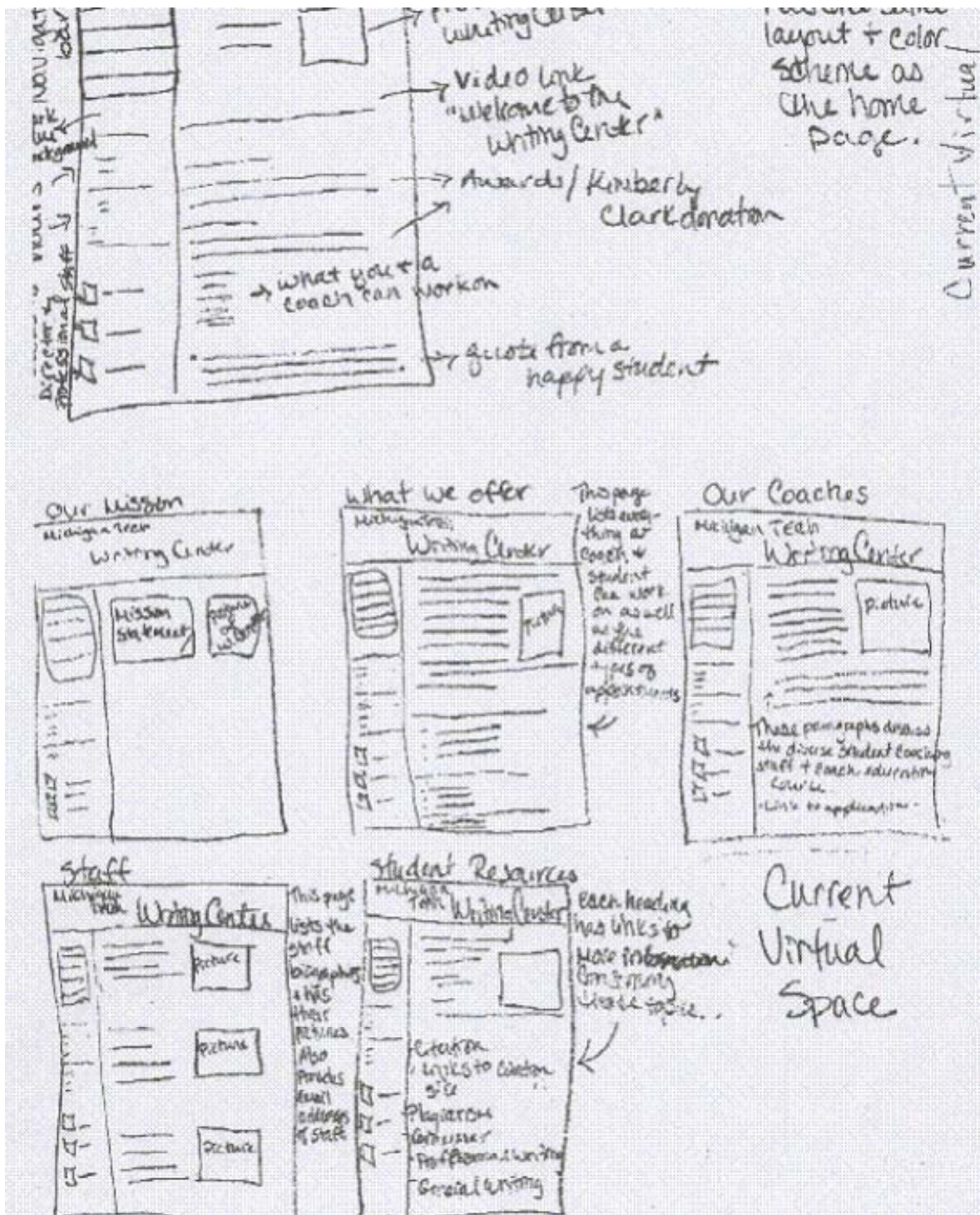


Figure 37: Current Virtual Space 5, Pages

In Figure 38, a humanistic connection dominates the map. That is, the student or consultant appears to be at the beginning and end of the communication exchange. The maps suggest that in virtual spaces, consultant and student do not work side-by-side but exist and communicate in opposition to one another. Writing centers most often value the interaction between the student and consultant, an even exchange that shows a peer-to-peer relationship. The opposing sides of the current virtual spaces suggest a friction in the exchange, that virtual spaces are secondary to physical spaces due to the interference, unreliable connections, or lack of public and social virtual meeting places where students and consultants do not risk missing each other.

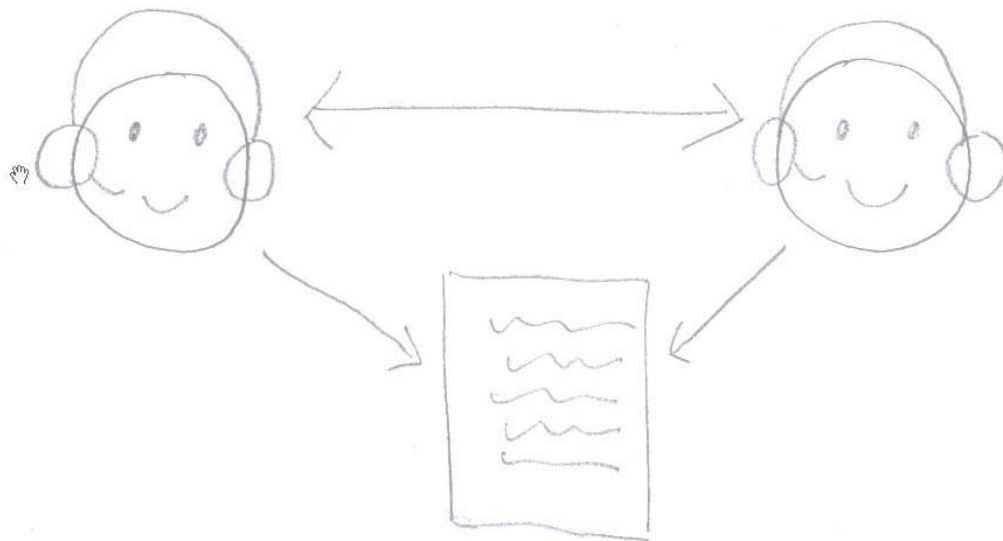


Figure 38: Ideal Virtual Space 1, Even Exchange

In the maps of ideal virtual spaces, the WCDs highlight the potential for virtual spaces to expand physical space. Also, the WCDs discuss the potential to customize

resources in virtual space. The potential for customization is important in virtual space, considering that the WCD in Figure 27 expressed concern with the lack of control or insight into decisions made for physical spaces. Figure 23 suggests that the current physical space of the writing center is segmented and distributed across three locations. However, the ideal physical space (Figure 28) indicates an interest in making the space more social and open with small group rooms on the periphery. Perhaps most interesting in Figure 28, and to the redevelopment of physical writing center spaces, is the central location of the technology. In Figure 28, technology is physically central to the redesigned space.

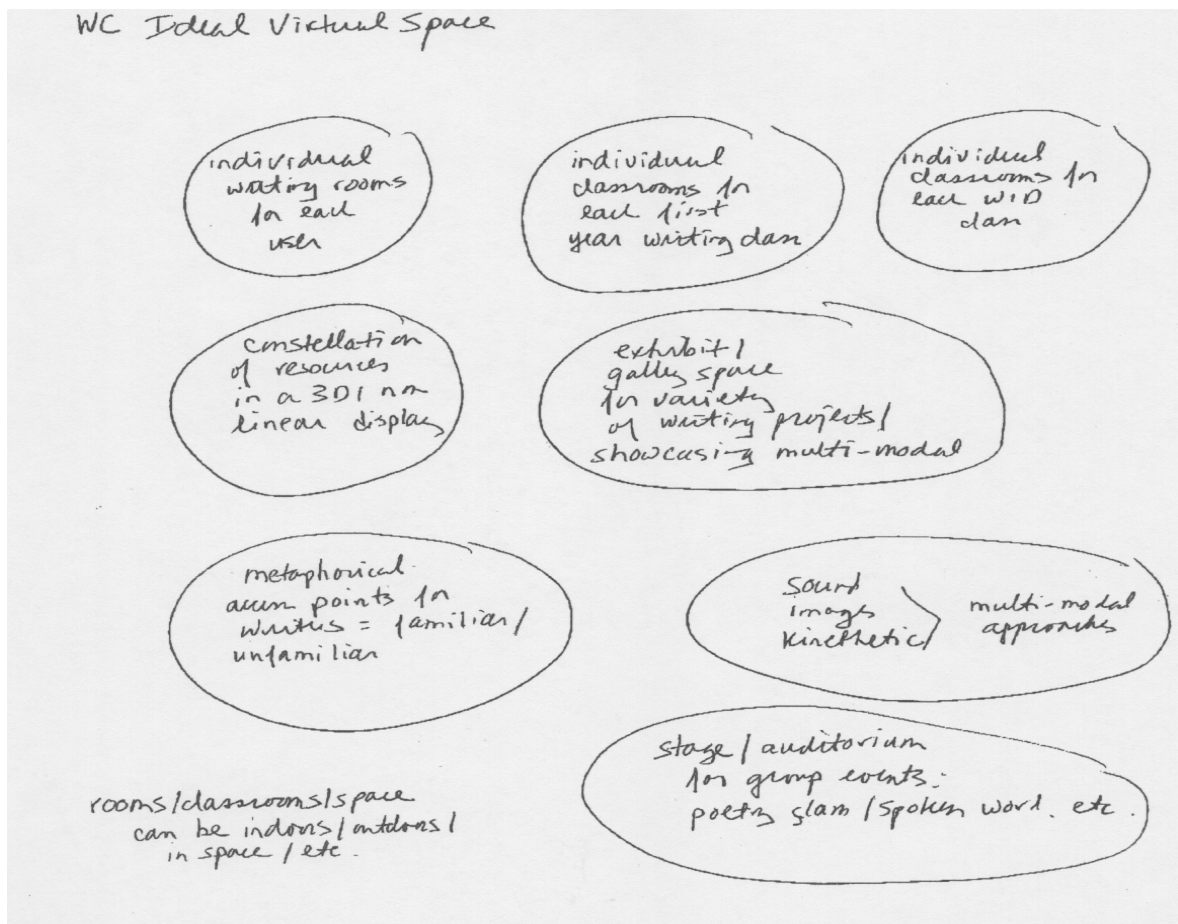


Figure 39: Ideal Virtual Space 2, Multimodal Space

Maps of ideal virtual spaces suggest that writing center researchers might need to break from the notion of what it means to decipher space. That is, virtual spaces should not necessarily reflect common practices for building in physical spaces. In Figure 39, the WCD attempts to expand notions of building in virtual spaces but discusses the importance of having virtual reference points that organize or segment virtual space. It is interesting to note that this WCD's ideal physical space would be organized around virtual space as well. The computer bank, to this WCD, represents the interface of physical and virtual (Figure 28). The virtual space is clearly central to the physical space and therefore appears central to this writing center.

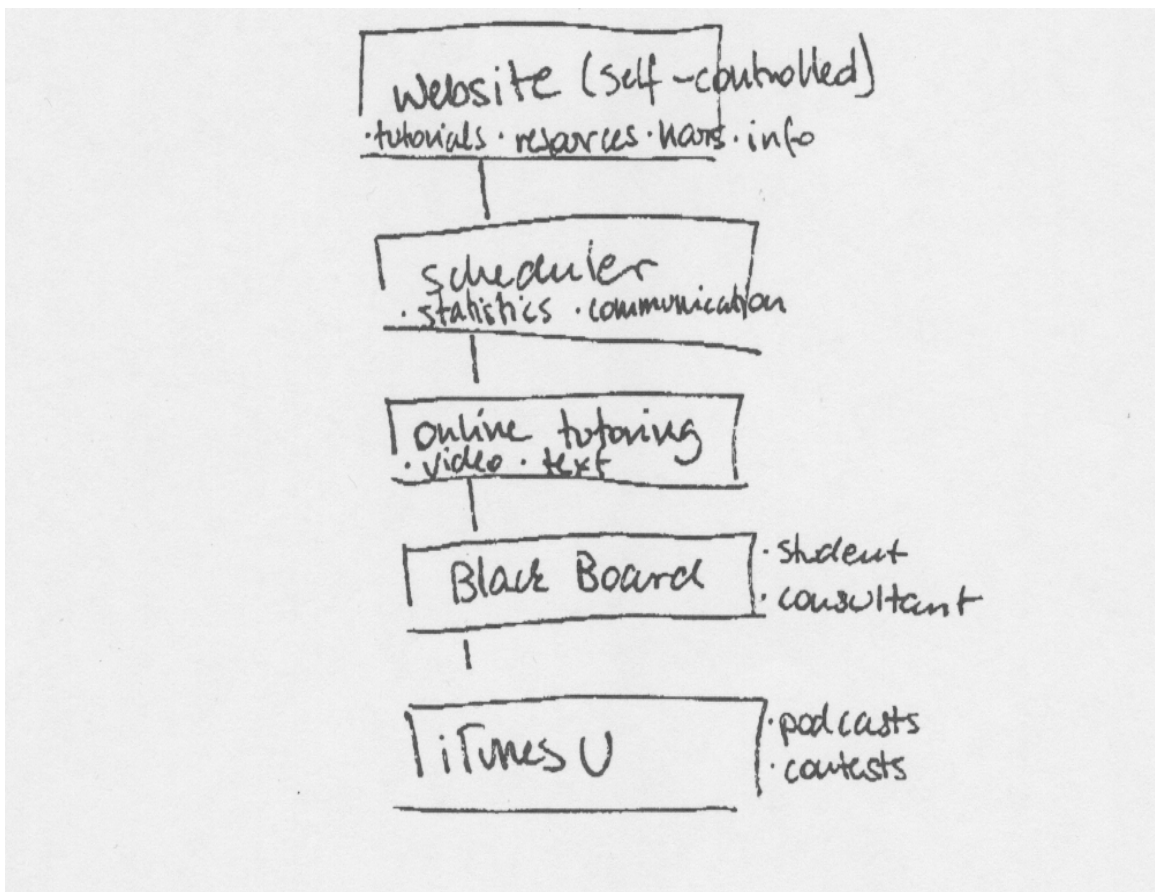


Figure 40: Ideal Virtual Space 3, Video

WCDs reported feeling liberated by the mapping exercise, especially when drawing the ideal virtual space. Maps, traditionally serving the purpose of locating the writing center in physical space, serve an important creative purpose where the WCD can think more imaginatively about interactive and engaging spaces. The maps allow WCDs to focus on concept as opposed to physical landscapes. The WCDs did not feel compelled to fit spaces into an existing structure. This example might suggest that physical spaces are confined and constrained and thus the opportunity to develop creative inspirational spaces is also limited to the resources available.

The ideal virtual space map depicted in Figure 41 also suggests that the currently separate aspects of the space will need to interface. In this case, the scheduling system would also need to track classroom visits. The ideal virtual space map suggests that the WCD sees a need for multipurpose software. Therefore, the virtual space might serve a number of functions including allowing instructors to book a class visit. The ideal virtual space, as suggested by the map in Figure 41, should be perpetually available so that students can use it at any time. Students, regardless of location or time, will have access to materials.

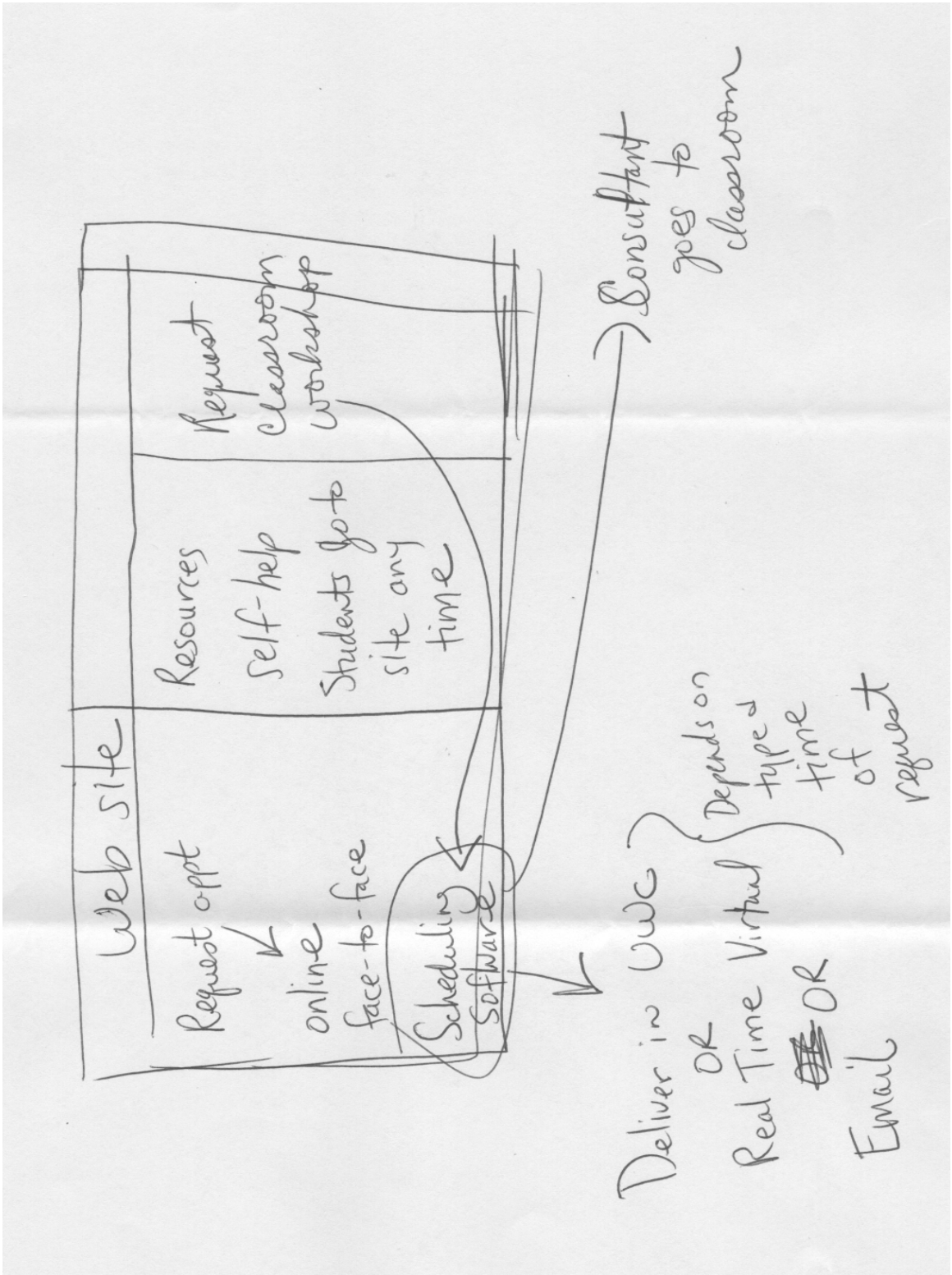


Figure 41: Ideal Virtual Space 4, Synchronicity

The virtual spaces mapped reveal a connection to physical space or a reference to building in physical space. There is a central orientation and reception area linked to consulting spaces along with visual literacy and publications galleries. The ideal virtual space map, though, indicates an interest in multimodal spaces where sound and image converge. Interestingly, the WCD in Figure 39 noted that rooms and classroom space can be indoors or outdoors, which makes a liberating comment on the idea of writing center space. The WCD did not feel compelled to build traditional structures in virtual spaces that simply replicated indoor and outdoor architectural distinctions.

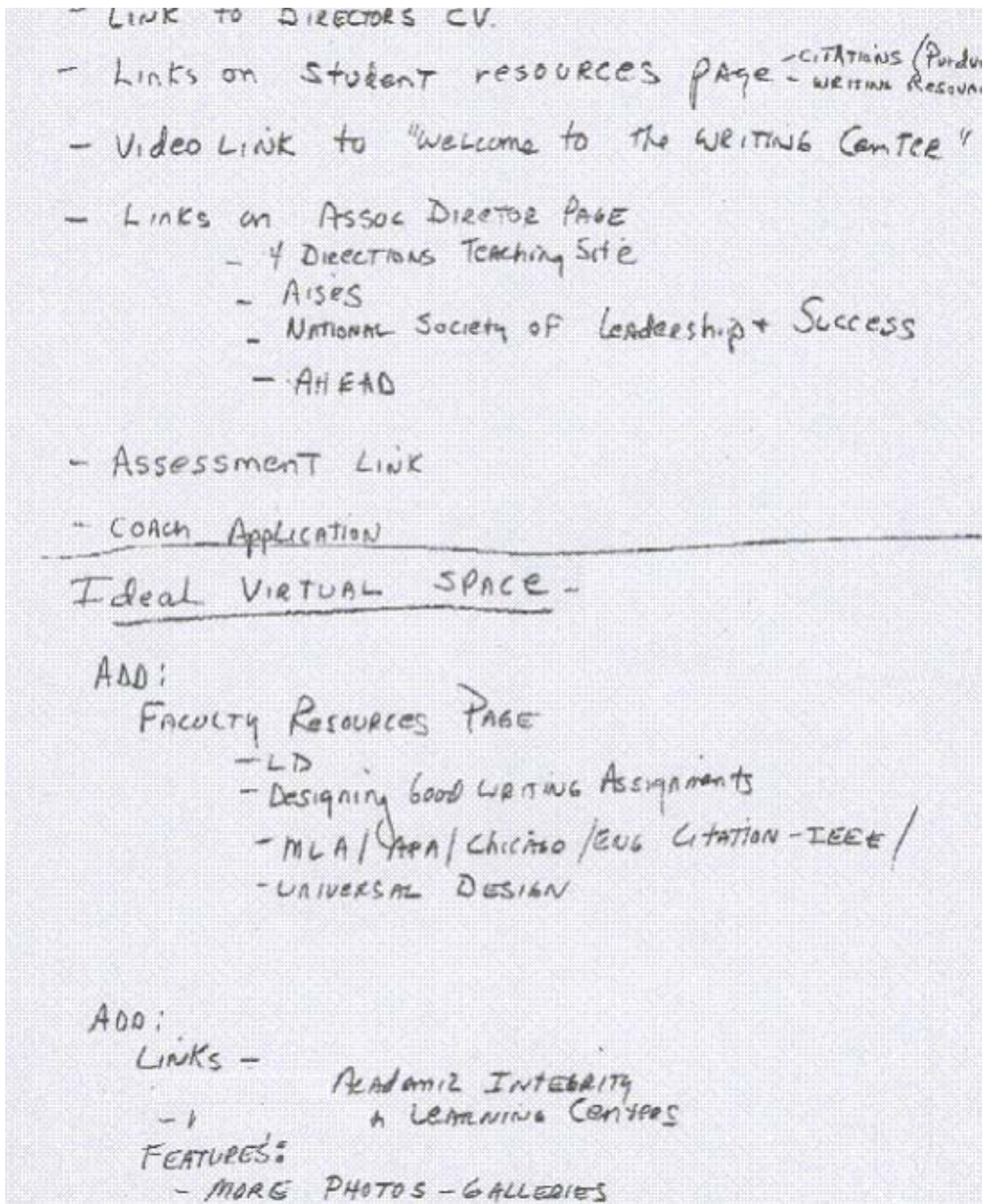


Figure 42: Ideal Virtual Space 5, Galleries

The maps revealed that virtual spaces offer opportunities for building beyond brick-and-mortar constructs. It is also significant to note that this WCD would house resources in a

3D, non-linear display, perhaps for interactivity or immersiveness. The ideal virtual space also offers places for collaboration and social events, like the stage/auditorium area for poetry slams and spoken word events, where students might gather. Maps of ideal virtual spaces included the following outcomes:

- Importance of visual references
- Cues indicating activity or movement
- Cues indicating connectivity
- Interest in synchronicity
- Interest in social space

The maps appeared to serve the purpose of helping WCDs envision space.

Similarly, the WCD might use maps to help writers think about individual writing rooms in an attempt to understand how they work best or think about where they do their best writing.

One WCD noted a lack of input in designing physical or virtual space and that most often space is dictated by the college or administration. Responses suggest that writing center spaces are closely governed and thus political in that the writing center WCD may not have much control over how spaces are allocated. Figure 29 shows that a great deal of space is allotted to open space and pair work. Furthermore, Figure 29 situates computer spaces at the center, similar to the allocation of physical space in Figure 28 where the technology or virtual space was represented as central to the work taking place.

Discussion of Mapped Spaces

The fixity with which many WCDs discuss and map their current physical spaces should be interesting in a discussion of cultural and political geographies, especially in relation to maps of virtual spaces. At times, WCDs described their physical space as being bolted down, which works against the creativity that they often attempt to foster. Many institutions attempt to secure their creative spaces and resources as a way of sheltering them from potential turf wars and theft. Virtual spaces offered an interesting mix of political and cultural indicators as well. In fact, the current virtual spaces also offered a wide range of responses. While one current virtual space was also governed by the institution, another offered virtual orientation areas. Even the current virtual space, in this instance, was well conceived and developed.

The ideal virtual space mapped in Figure 39 offered the concept of more creative areas that take advantage of new media. Furthermore, one WCD found that after mapping the ideal virtual space, she no longer felt tied to a physical landscape. Mapping allowed her to focus on concepts in a more cognitive way and less on molding services to preconceived notions that commonly constrain building in physical space. I offer a snapshot of spaces mapped in Table 1 as a synthesis of significant points derived from this study.

Table 1: Snapshot of Spaces Mapped

Current Physical	Ideal Physical	Current Virtual	Ideal Virtual
Dispersed space	Collaborative space	Avatars and cues indicating one-way distribution; information output; linearity	Importance of visual references
Peripheral workspaces	Technology and virtual space centralized in physical space	Interference	Cues indicating activity or movement
Unutilized open space	Integrated spaces for writing, oral communication, and digital media production	Interest in visuals in the form of galleries and visual displays	Cues indicating connectivity
Peripheral technological spaces usually for computer use or connectivity	Tranquil and calming visual elements	Institutional control	Interest in synchronicity
Controlled space	Interest in mobile technology	Segmentation and disconnection	Interest in social space

Virtual geographies are political. As digital spaces become more prevalent, new forms of observation and governance will emerge. WCDs, often caught in political discussions, might turn to “traffic” as a way to track usage and monitor activity. The dashboard concept offers perhaps the most politically driven method of deciphering virtual space. The notion of traffic in virtual spaces relies on many concepts drawn from physical spaces. For example, the virtual space of the UWC received 82,457 visits during the month of March 2007. Further, the virtual space received 2,659 visits per day,

which includes traffic to 2,158 files. During this time, 35 writing consultants worked in the physical space, but this space maxed out at only eight concurrent consultations at any given time. I draw from the dashboard concept to show the political nature of deciphering space visually. Without a doubt, WCDs will need to continue to think about the ways in which space is deciphered in their writing centers, even virtually.

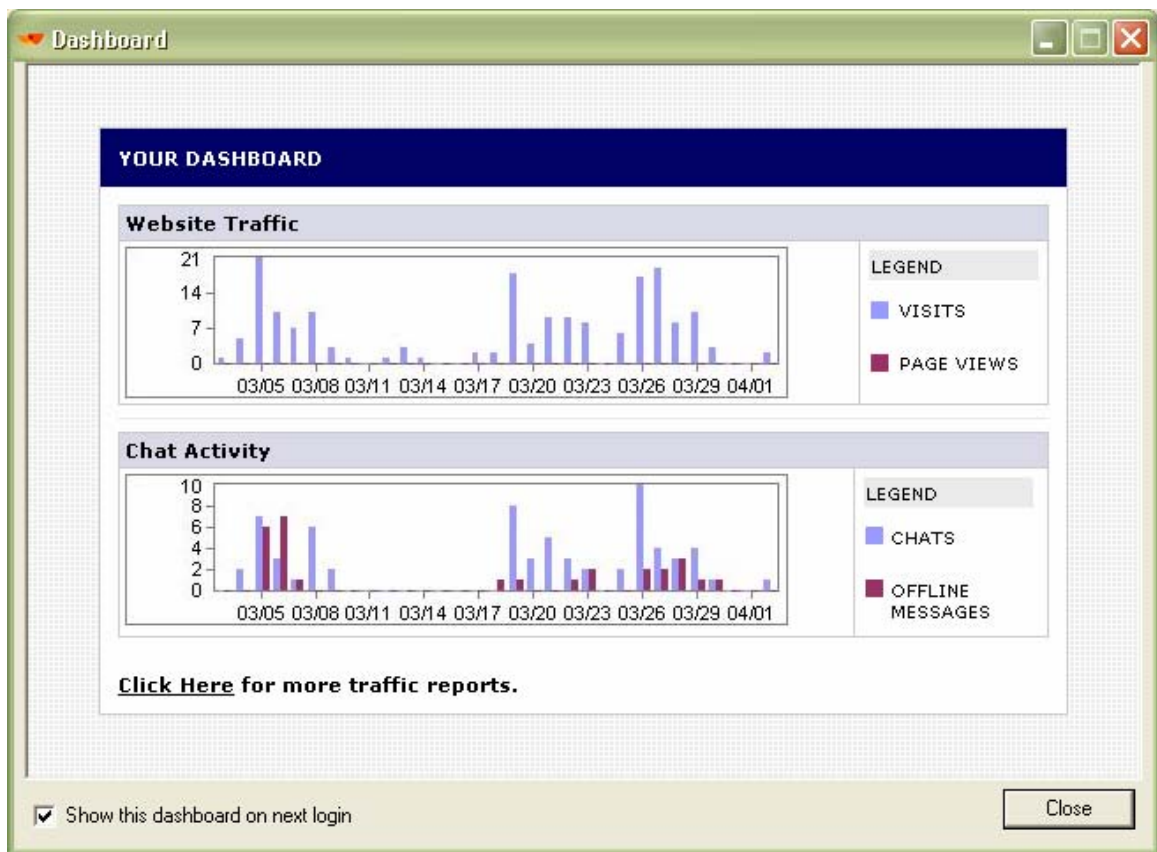


Figure 43: Dashboard for Tracking Virtual Traffic

Figure 43 offers a visual method for tracing the politics of writing center spaces through a virtual dashboard. Writing centers that are interested in tracking student traffic may also consider visual representations of their virtual work. Figure 43 offers one of the most political instances of virtual space where visitors are tracked using a grid.

Mapping, a method for deciphering virtual space, can serve pedagogical and political purposes. The maps also reveal that virtual spaces are not neutral in their politics. Virtual spaces are highly political. WCDs should continue to develop the connection between their work and the technologies that have become so critical to their goals and interests. As WCDs continue to develop their virtual spaces, they will also need to draw on technological and spatial theory to inform their decisions. WCDs will need theory to critique their current and ideal spaces. Perhaps more importantly, WCDs will need a method for entering spatial and political conversations at the university level. The technology at the heart of virtual spaces is also political, and it can give writing centers an important edge. Changing cultural and political geographies will encourage WCDs to develop more creative virtual spaces. At first, these spaces might resemble physical spaces. A WCD's thinking about virtual space might shift, as the maps reveal, from concepts familiar to us in physical spaces like virtual rooms to promote a more visually stimulating virtual space that breaks traditional building practices. Virtual spaces do not demand an adherence to traditional geographies, and WCDs might consider the potential advantages of immersive virtual spaces, for example, as they assume an identity for their writing centers online.

Mapping can be used to critique the writing center's physical and virtual spaces in meaningful and visual ways. Foucault shows that social forces manifest themselves in space—they inscribe themselves on the landscape, the plan, and the map (*Space, Knowledge, and Power* 37). The physical space of the writing center is inscribed on the map as well, an objective and constant reminder of physical location and often peripheral positioning on campus. Using mapping, we can locate the writing center's physical and

virtual spaces within the structures of the larger university by showing physical location in reference to other structures, departments, and the flow of walking or surfing student traffic, for example.

Maps can also show virtual location through connecting networks, links, and references online, even revealing situations where virtual spaces are more directly connected to students' needs and expectations than physical locations. Further, maps of virtual spaces can depict the centrality of the writing center's virtual spaces in addition to important relational factors such as ease of access to virtual resources and virtual traffic. Mapping allows for a direct comparison between physical foot traffic in the writing center, which is often related to physical location on the campus, and virtual traffic (or the number of visitors to virtual spaces).

Foucault's work in *Space, Knowledge, and Power* shows us that geography unsettles and disturbs (33). By using maps of physical and virtual spaces, WCDs can make convincing arguments about the need for expanded physical and virtual spaces—spaces that are more networked, connected, and conveniently situated than physical spaces. Maps allow us to locate spaces and the bodies within them, revealing physical spaces in relation to other departments on campus and virtual spaces, all of which can produce important political statements. Porter and Sullivan explain that we can make space for our positioning of research practices as critical through postmodern mapping (12). Mapping can also help WCDs locate physical space in relation to others as well as the virtual spaces they inhabit, showing important intersections in physical and virtual spaces.

Crampton's *The Political Mapping of Cyberspace* shows how mapping cyberspace, specifically, allows us to situate ourselves virtually. Crampton shows that cyberspace is also political, consisting of networked practices and power relations. Importantly, though, Crampton explains the importance of maps, saying that, through maps, we can come to understand our spaces. I contend that mapping, as Crampton describes, can allow us to make arguments not only for improved physical spaces but also for the value of increasing our presence virtually, especially if it is unlikely to enhance physical spaces.

Virtual spaces might allow writing centers to expand services by moving the services offered in the physical spaces online, making them more accessible to a wider range of students and potentially saving educational institutions money. Online services will also allow writing centers to break free of physical spaces and reach students that otherwise would not visit. Virtual space will help writing centers account for a lack of physical space. Writing centers can expand a virtual space with little to no additional funding. A writing center's virtual space can be easily accessible by students, and staff members can reference it on a regular basis in consultations, announcements, and presentations. A virtual space can often be more accessible than the writing center's physical location, especially if the physical space of the writing center is situated on the periphery of campus or not in a building at all but in a temporary place.

Writing centers can assume a "life online," as Annette Markham says. "To be present in cyberspace is to learn how to be embodied there. To be embodied there is to participate," Markham writes (23). Writing centers can offer synchronous or immersive online consultations without expanding staffs, which will decrease the number of

physical items—seats, tables, chairs, and square footage—needed for adequate operations. In assuming a life online, an online presence, by expanding services in virtual space, the writing center might consider technologies such as blogs, wikis, synchronous chat spaces, and immersive virtual worlds. As these technologies interface with one another, they will allow writing centers to increase their presence (and services) in virtual spaces while maintaining important writing center philosophies and practices established for face-to-face, physical spaces. As writing centers continue to build websites and employ various forms of media, like blogs, wikis, 3D virtual spaces, and interactive immersive workspaces, Crampton’s notion of mapping cyberspace becomes even more important. Through mapping, we might locate where our center is currently and where we would like it to reach in the future. Mapping might promote creative and imaginative thinking in WCDs, visually displaying current situations and future possibilities.

Mapping allows us to gain a valuable perspective by providing a method for documenting and archiving new or experimental immersive environments in relation to existing virtual spaces, like a website that promotes the writing center’s space in the immersive world. Maps reveal connections and possibilities in our new spaces as well and may make valuable cases for an enhanced presence in virtual worlds that connect or even parallel practices that take place in physical, face-to-face environments. Perhaps most important to the development of writing centers, mapping can also serve as a strategy for documenting ideal physical and virtual spaces, which may allow WCDs to restructure, redesign, or expand existing offerings for students.

Jameson, in *The Geopolitical Aesthetic*, challenges our notion of geography and perception. Mappings of physical spaces as we know them might only serve as an entry point to discussions of virtual spaces. Like Jameson, we are challenged with developing a system for deciphering space that “cannot be encompassed by the natural and historically developed categories of perception with which human beings normally orient themselves” (2). I apply Jameson here to attempt to rearticulate the ways in which space is deciphered in writing center work. Based on the maps presented here, WCDs will need to continue to redevelop and expand their notions of space, which will not be an easy task. Jameson offers insight into perception of geography. WCDs should not succumb to traditional notions of space but use these ideas to challenge the ways in which space is developed, discussed, and planned in their writing centers. “Space and demography offer the quickest short-cuts to this perceptual difficulty,” Jameson writes, “provided each is used like a ladder to be kicked away after it has done its work” (*The Geopolitical Aesthetic* 2). Our digital culture might challenge writing center scholars to develop new notions of spatiality in which we are not tied to traditional forms of architecture and design but immersed in new forms of composition.

Using the results of the mapping exercises as a basis for further exploration, Chapter Four offers a glimpse at the spatial implications that writing centers face and the technological applications that will be significant in an attempt to rearticulate the ways in which WCDs decipher spaces. As the mapping exercises discussed in this chapter help point out, there is little question that virtual spaces will also carry important political edges. However, writing centers can serve as the forefront to a redevelopment of technologically sophisticated physical and virtual spaces as we know them. Thus, WCDs

will be in an ideal position to decipher the ways in which virtual and physical spaces might be designed given developments in new media, technology, and composition in the 21st century.

CHAPTER FOUR: INSTRUMENTALISM AND SPATIAL IMPLICATIONS

New discourses need to be invented and more thought has to be put into the languages used to interpret and describe virtual space.

- Ron Burnett, *How Images Think* (99)

At any rate, the very concept of space here demonstrates its supremely mediatory function, in the way in which its aesthetic formulation begins at once to entail cognitive consequences on the one hand and sociopolitical consequences on the other.

- Fredric Jameson, *Postmodernism* (104)

Introduction

Chapter Four rearticulates the way we interpret space and technology in the writing center. Further, this chapter also interrogates how virtual spaces might allow writing centers to expand their services, taking into consideration the political implications of this development and humanistic ends of technology. Haviland, Fye, and Colby's discussion focuses largely on the physical space of the writing center—the writing center with four walls, tables, and chairs that is located (and identifiable) on the map, next to (or far from) other structures on campus. This space is allotted to writing centers by their departments, colleges, or universities. Unfortunately, writing centers are commonly not the highest priority of the institution. Although WCDs would like for their spaces to be conveniently located, physical structures are sometimes situated (or hidden) on the periphery of campus. Within writing centers, cyberspaces—the online

spaces that writing centers inhabit virtually—are commonly produced, maintained, and developed in-house, giving them more flexibility and “space” to expand beyond the four walls and physical spaces allotted by the institution. Physical spaces and locations are often dictated by capital, as Jameson argues. Newer buildings highlight the “financial centrality” of the department or college on the campus, as Jameson explains in “Is Space Political?” (257). However, in *City of Bits*, Mitchell offers an optimistic view for architects of virtual spaces. Here, Mitchell makes the claim that cyberspace reduces the need for built space (49). Mitchell’s statement holds promise for writing centers suffering from inadequate physical space. By built space, he is referring to the physical geographies that construct the writing center—the four walls and building located on the institution’s campus. Mitchell suggests that we have more control over virtual spaces—that WCDs may become architects or producers of virtual spaces.

Oldenburg argues that public and neutral spaces are important to the unity of societies (23). Further, Oldenburg proclaims that neutral ground provides the place and leveling sets the stage for the cardinal and sustaining activity of third places everywhere . . . conversation (26). Physical writing center spaces thrive on intellectual conversation on neutral ground. In many ways, writing centers try to exemplify “great good place” that Oldenburg argues is sorely deficient in American life (13). Writing centers offer informal places for discussion of texts, learning, and questioning what we know and think we know. These intellectual conversations might be similar to those that occur at other public places at the heart of the community, like cafes or coffee shops, to use Oldenburg’s examples. Similar to Oldenburg’s great good places, writing centers offer physical locations where conversations take place within a comfortable, intellectually

stimulating, inviting physical space. Leslie Hadfield et al. explain that the look and feel of architectural spaces does influence its occupants and visitors (167). Visitors may see that the writing center is physically located at the edge of campus in a less-than-desirable structure and immediately assume that the work done within this structure is not as valuable as the work done in the brand new building adjacent to the writing center. If Carol Peterson Haviland and Edward M. White argue that writing centers should be located centrally on the college campus (221), what does the physical location mean for the work that writing centers do and their image on campus? What about the potential (and need) for a strong virtual presence?

Blogs, for example, allow writing centers to create a centralized presence online. They are easy to update and often highly searchable, which allows the writing center to increase its virtual presence. Furthermore, consultants and interested visitors can post their thoughts in this virtual space. A blog allows participants to contribute insights freely and archives them in virtual space. Many writing centers have used blogs to immediately link students to writing support like tutors, editors, and proofreaders, services outside of the writing center's mission or goals. Students and writing center staff post projects that others can pick up outside of the writing center. In many cases, the student or community member seeking support is looking for an editor because they do not possess the skills, knowledge, or time to do the work themselves. Maps can reveal or highlight important outreach efforts, whether they are situated virtually or physically. In *Nostalgic Angels*, Johndan Johnson-Eilola claims that “[v]irtual space potentially calls into question—at both philosophical and experiential levels—our normally secure sense of location” (120). Johnson-Eilola considers space as fundamental to developing theories

for online work, arguing that the virtual space is informational space, the “datacloud.” Blogs allow participants to create information spaces, as Johnson-Eilola calls them (*Datacloud* 95). These virtual spaces allow for participation, active involvement, as opposed to more passive reading.

Similarly, wikis invite participation by encouraging contributions—consultants can build a virtual space through the information they contribute. They can add to and edit existing information, creating their own archive of events or suggestions on methods for consulting students. This virtual space becomes an extension of the physical spaces of the writing center; in some cases, students can access the consultant-created and managed virtual space more easily than physical space. Through mapping, as shown in Chapter Three, we can more readily depict these spaces in relation to one another.

Envisioning a future for OWLs through the maps offered in this study, immersive virtual spaces might also offer more engaging, interactive, and visual practices for teaching writing in the 21st century. Mapping, as a method, lends itself to discussion not only of political and cultural geographies but of the bodies within these spaces as well. Through her experiences, Markham explains that participants in her study of life online built “rooms” within the MUDs that were intended to resemble physical spaces (44). Similarly, Nicole Brown suggests that we become architects of our learning and social space (1). Spatial theories will become increasingly important as we construct virtual space where learning will take place, “rooms” where we discuss our writing and learn about ways we can become better writers. These virtual spaces will also provide places where students and consultants, in the case of writing centers, will meet and interact. For example, in designing a writing center in SL, we wanted to create a social space that was

every bit as accessible as our physical space, if not more accessible. There are virtual areas, remediated physical spaces, where consultants and students can meet, pull up a document, and discuss a piece of writing. We might argue that the space created in SL is also a remediation of MUDs, where Markham did her valuable research. These virtual spaces are not without political implications.

Space and Instrumentalism

Instrumental theories deem technology as “neutral,” Feenberg explains in *Critical Theory of Technology* (5). Technologies are not neutral in their presence in the writing center, though. They bring with them expectations beyond the production of goods and standardization of services. Technology can be much more than a tool in the writing center. As the cognitive maps depict, technology might be used to expand spaces beyond those that are currently exhausted. That is, technology can be employed to construct sustainable virtual spaces that transcend physical borders and boundaries. Writing center scholars, however, must be aware of the political edges that their spaces will carry. In the pages that follow, I take a closer look at the politics of space in the writing center by considering the concept of instrumentalism.

Writing centers are often informed by instrumentalist techniques that are facilitated through technological applications. At times, instrumentalist views of writing center work seem to supersede their pedagogical and theoretical importance and potential. Too often, the writing center is bound to instrumentalist notions of success or failure, while seemingly overlooking the pedagogical and theoretical richness as a space

where academic conversation and research take place beyond usage statistics or student retention.

Current writing center assessment models are commonly informed by instrumentalist interests, seemingly favoring quantitative data over theoretically driven scholarship. It should not come as a surprise that instrumentalist techniques might provide a number-driven depiction of where writing centers have been; however, they overlook the bodies and humans using technology. Instrumentalist techniques in the writing center seem to discourage the development of new and important scholarly models that emphasize the humanistic ends of technology. Terry Eagleton, in *After Theory*, offers a critical perspective on instrumentalism, saying that “modern history makes it especially hard for us to think in non-instrumentalist terms. Modern capitalist societies are so preoccupied with thinking in terms of means and ends, of which methods will efficiently achieve which goals, that their moral thinking becomes infected by this model as well” (123). Instrumentalist techniques, while allowing WCDs to justify the existence of their services, do not promote the development of new ways of thinking or the development of theory.

Blythe, in “Networked Computers + Writing Centers = ?,” argues for a critical theory of technology in the writing center:

This need for posing and researching theoretical questions means, in turn, that instrumentalism and substantive theories of technology are inadequate for the task. If one accepts the argument that technology is worth looking at, that it merits our attention as an important variable in determining the quality of

education, then an instrumental theory will prove inadequate because it suggests that a focus on technology is not as important as a focus on its users. (102)

This critique of instrumentalism will look closely at administrative and theoretical conceptions of technology, theorizing the two sides of the debate—why administrators and scholars seem to be headed in different directions. Administration sees technology primarily in instrumentalist terms, which seems to neglect the humanistic ends of writing center technologies and resources.

Feenberg, in *Critical Theory of Technology*, offers perhaps one of the most relevant discussions of instrumentalist theories of technology. I will rely heavily on that discussion here as I critique instrumentalist views of technology's use in the writing center. Feenberg explains that, "Instrumental theory offers the most widely accepted view of technology. It is based on the common sense idea that technologies are 'tools' standing ready to serve the purposes of their users" (5). The idea promotes that technologies are neutral in respect to politics and capitalism. Furthermore, an instrumentalist theory of technology holds that technology increases productivity of labor, as Feenberg explains (6). Therefore, the presence of technology increases expectations for productivity. In writing center terms, productivity is determined in number of students seen or even the standardization and replication of services and resources. Given the individualized nature of most writing center activities, the notion that technology would serve to standardize services might seem problematic to writing center scholars. Standardization connotes assembly line and dry cleaners stigmas that writing centers often fight. The visual itself might be troubling enough for WCDs. In the eyes of students, the presence of technology might indicate that the perfect paper is

attainable with the click of a button. Historically, though, the writing center has worked to establish itself as a space for discussing writing with the idea that through joint engagement in ideas students can come to new insights about their papers.

Instrumentalist ideals focus on deadlines, bottom lines, and numbers, which conflicts with much of the writing center's place within the institution—to provide a neutral space for writers to discuss their work outside of the political space of the classroom or professor's office. The writing center is also a place to question current practices, expectations, and notions of what constitutes “good” writing. Often, it is a place of exploration and risk-taking. That is, the writing center promotes critical thinking and discussion, furthering this space as one that is social.

Instrumentalism works against traditional writing center philosophies in many ways. Philosophically, the two do not always agree. Writing centers and writing center philosophy often promote inquiry and discovery, while instrumental interests favor goals, outcomes, and quantifiable results. In justifying their existence through instrumentalist approaches, writing centers risk being viewed as a military “unit” and not as an intellectual space for engaging in critical thinking. When discussing student retention, it is easy to see the writing center as a “solution” to a “problem,” a place where “bad” writers might go for “help.” The writing center has its roots in the “writing lab.” The word “lab” itself connotes being sick or needing help, suggesting that someone is diseased and is in desperate need of a cure. The writing lab, where bad writers go for help, has the power to simply “fix” or triage remedial writers. The viewpoint is that writing labs have the ability to cure writers and they can do this on a regular basis. The writing lab, then, is viewed as the solution to the perceived problem. Thus,

instrumentalism is a mechanism of power. There is also the notion that the sick need to be kept in quarantine; thus, they should be isolated from the healthy. The sick should not be part of the public. The lab is a place of confinement, as Foucault says, a home for the poor, unemployed, or insane (*Madness and Civilization* 39). Foucault might consider instrumentalism a technology of power. Through instrumentalist means, writing centers report success rates and the number of student visits. Outside administrators often draw on annual reports and numbers as a means of determining the success or failure of a writing center. Budgets, in fact, are largely a result of reporting and figures. Numbers and reporting lines tell only part of the story of a writing center. Foucault probes further:

Why is this juridical notion of power, involving as it does the neglect of everything that makes for its productive effectiveness, its strategic resourcefulness, its positivity, so readily accepted? In a society such as ours, where the devices of power are so numerous, its rituals so visible, and its instruments ultimately so reliable, in this society that has been more imaginative, probably than any other in creating devious and supple mechanisms of power, what explains this tendency not to recognize the latter except in the negative and emancipated form of prohibition? Why are the deployments of power reduced simply to the procedure of the law of interdiction? (*The History of Sexuality: An Introduction* 86)

Technology, in the writing center, serves social functions beyond reporting lines and quantitative figures. For example, beyond allowing WCDs to track usage statistics, technologies are largely a response to cultural demand. Students use social networking technologies to keep up with events and announcements. Furthermore, digital video

technologies allow writing centers to employ multimodal communication to appeal to digital-centric students.

In *Questioning Technology*, Feenberg explains that media design is shaped by the hegemonic interest of the society it serves (174). Technology's role in the writing center should be far more invested in students than numbers, in culture more than regulation. The truth of technology's use in the writing center surpasses the "problem" of "fixing writers," as if visiting writers need to be fixed or writing centers could or should perform this service anyway. To see technology in instrumentalist terms is a disservice to students. If technologies are employed purely for instrumentalist purposes, scholars risk overlooking the potential for new media or hypertext in the writing center. They will be too busy looking for solutions to problems that either do not exist or exist far outside of the scope of responsibilities to the institution, larger writing center community, or students. To see the writing center, and technology's use in it, in instrumentalist terms is to overlook the underlying philosophies of writing center work—the pedagogical practices embraced by consultants and applied in an attempt to make better writers, fostering a community of "scholarship and shared leadership" through peer consulting, as is the case at UCF ("About UWC Home").

An instrumentalist approach might favor mechanization, the idea that, through technology, the writing center can create perfect writing and writers. Blythe provides several reasons for rejecting an instrumental theory of technology in the writing center. "For one thing," Blythe writes, "the very complexity and power of today's computers force us to see them as more than mere writing tools" (98). For example, Bolter highlights writing spaces. Technologies help writing centers construct much more than

tools but whole environments. As Blythe explains, the computer is not only a tool; “it is also a medium and an environment, and it is these things simultaneously” (98).

Instrumentalist theories place technology “beyond the need or ability of humans to intervene,” as Blythe says (102). This notion of instrumentality seems especially problematic when we consider the social nature of writing centers. Writing centers embracing technologies to build online spaces might find that theories of instrumentalism are counterproductive, and new media, cultural, and geographical theories create friction with instrumentalism. That is, an instrumentalist approach does not challenge writing centers to push virtual spaces forward but to view the technologies at work in this rich creative space as tools. Technologies are rooted to the cultures in which they are developed, extended, and perpetuated. Martin Heidegger views technology as a means to an end, as he argues (5). “That is why the instrumental conception of technology conditions every attempt to bring man into the right relation to technology” (Heidegger 5). Many outside administrators view technology as a tool, suggesting that it allows writing centers to simply make resources available, compile data, or replicate services. The relationship is more complex than this, though, as this viewpoint seems to neglect the idea of technology as an environment to be explored, an immersive space capable of sustaining pedagogical practices. Heidegger encourages us to see our relationship to technology while not neglecting our surroundings. Instrumentalist techniques can be superficial, glossing over important details that originate from cultural relationships. Such methods do not bring bodies in relation to technology; therefore, we must look outside of instrumentalist techniques to read space.

As writing centers continue to build spaces online, instrumentalist viewpoints will become increasingly problematic. Writing centers might justify their interest in virtual spaces not through numbers of students helped or the number of students who passed composition courses but in terms of available options for multimodal composition and distribution of curriculum—the essence of technology. Instrumentalism disconnects technology and student, texts and technologies, while it might be more effective to think of technologies as texts or spaces to be explored rather than simply tools to be used as a means to an end.

Instrumentalism is deeply embedded in industrial society. In an age of replication, reproduction, and even remixing, instrumentalism serves as a tool of governance and productivity. It is, as Foucault might say, a technology of the self, of domination, a method for constraining space. Instrumentalism encourages a “disciplinary space,” which “tends to be divided into as many sections as there are bodies or elements to be distributed,” according to Foucault (*Discipline and Punish* 143). Numbers reveal actions over time; they reveal productivity, and technological “tools” are often viewed as the instruments of these figures. Instrumentalism assigns individuals places—most often WCDs—and establishes prerequisites for successful operation. It overlooks the bodies that engage technology. The body is reduced to a number. I suggest that we move beyond instrumentalism to see a collection of practices and relationships within the writing center. Foucault writes:

The organization of a serial space was one of the great technical mutations of elementary education. . . . By assigning individual places it made possible the supervision of each individual and the simultaneous work of all. It organized a

new economy of the time of apprenticeship. It made the educational space function like a learning machine, but also as a machine for supervising, hierarchizing, and rewarding. (*Discipline and Punish* 147)

Instrumentalism is viewed as the active solution to budgets and time-management. Through instrumentalist philosophy, administrators far removed from the daily workings in the writing center can require them to offer a certain number of face-to-face, online, or phone consultations. The technological system is merely a means for collecting data, and usage statistics reveal accomplishments and shortcomings for the overall operation, a machine-like reproduction of resources. For many, technology is an instrument of control. What this might suggest is a desire to control the operations through technological tools. Technological spaces, in instrumentalist terms, allow for the production and distribution of bodies within the institutional space of the writing center. Anne Balsamo, however, encourages us to think of the body not as product but as a process so that we might “begin to ask questions about how the body is staged differently in different realities. Virtual environments offer a new arena for the staging of the body . . .” (131). Technologies serve much more profound purposes beyond repetition and control, however. They allow for the creation of meaningful, sophisticated, and embodied spaces where people interact and engage one another.

Enhancing Ethos through Virtual Spaces

A great deal of research attempts to draw a close connection between physical and virtual spaces (Kendall, Markham, Stone, Turkle). Lori Kendall, for example, conveys

that participants “do recognize the benefits they obtain from their current online interaction, and their analogy of the space to offline spaces such as clubs or bars . . .” (225). Similarly, Turkle writes, “In traditional theatre and in role-playing games that take place in physical space, one steps in and out of character; MUDs, in contrast, offer parallel identities, parallel lives” (14). Future virtual writing center spaces will need to encourage participation and engagement; that is, they will need to be compelling. I will now discuss how writing center scholars might enhance ethos through virtual spaces.

Johnson-Eilola, in *Nostalgic Angles*, argues that “we must understand technologies as political structures and activities rather than neutral, easily demarcated, and isolated objects. We must begin looking and acting from positions of critical awareness during the development and expansion of these technologies” (17). Writing centers might also use virtual spaces to enhance ethos. At the most basic level, WCDs might consider their virtual spaces the “front door” of the writing center. In a society where everything virtual is searchable and many writing centers have a web presence of some kind, WCDs might use this opportunity to network with students and faculty members. In their discussion of developing ethos through mailing list discourse, Diana C. Bell and Mike T. Hübler aptly highlight their “realization that technology in the writing center is not just a vocational tool that enhances efficiency and productivity, but a rhetorical space in which members of our particular community interact” (56). In the development of these virtual spaces, however, WCDs will want to consider the perception of the writing center on campus. How might these virtual spaces be perceived by users—including students, faculty, and administration? A poorly designed and

haphazardly constructed virtual space might have real implications in physical space as well.

WCDs can increase their presence on campus through virtual spaces as well. The writing center interface—perhaps best considered as the intersecting point between user and virtual space, as Steven Johnson says in *Interface Culture* (24)—might serve as the point at which students and faculty engage the writing center’s various spaces. Virtual spaces can promote activities that occur in physical space. Most importantly, though, virtual spaces can lead to the development of engaging pedagogical practices as well. Pedagogical spaces might include interactive immersive environments where students can submit their papers, discuss potential issues, and receive immediate feedback, a thoughtful remediation of the writing center’s physical space.

Enhancing ethos through virtual space is not a simple process; in fact, WCDs will need to address several complex design challenges: an engaging interface, networkability, and believability or the feeling of being (virtually) there. Johnson’s research into the interface is, perhaps, the best starting point here. In his introduction, Johnson explains that “metaphors are the core idiom of the contemporary graphic interface. . . . The word interface itself conjures up cartoon images of colorful icons and animated trash cans as well as the inevitable saccharine platitudes of ‘user-friendliness’” (15). Johnson’s valuable work is only a starting point for further exploration in interface design for the virtual space of the writing center. Through Johnson’s discussion, we gain a valuable perspective on where we have been, and we now must look more closely at where we need to go as virtual spaces continue to develop and serve more important functions for writing centers. In “Data Visualization as New Abstraction and Anti-Sublime,”

Manovich, seemingly pushing against instrumentalist views, challenges readers to “represent the personal subjective experience of a person living in a data society” (11). Manovich’s work helps to bring new meaning to the purpose and goals of the interface and technology. Through Manovich’s work, writing centers might see a future in immersive and augmented spaces. Thus, we might draw from Manovich’s research on “augmented space” in establishing ethos for virtual learning and writing spaces. Newly constructed virtual spaces for learning and writing should be comprised of electronic and visual information (“The Poetics of Augmented Space” 221). Virtual and physical spaces as we know them might be augmented with digital video or immersive virtual worlds—to build ethos, users must feel a sense of being in a writing center space virtually. Burnett calls this sensation “reverie.” Here, I rely on Burnett to explain the concept of reverie even further:

Reverie is often referred to as ‘suspension of disbelief’ with respect to viewing films and television shows, reading novels, listening to music, and so on. But the process is more complex than that. Reverie is one of the foundations for all of these activities, one of the fundamental ways in which humans are able to activate the relationships among their own thoughts and daydreams and the requirements of viewing and listening experiences. (53)

Current virtual spaces are often static. Writing centers will need to activate virtual spaces, as Burnett says, to enhance visitors’ experiences of “being virtually there.” WCDs will need to draw from far outside of their comfort zones to apply research in digital media when thinking through future virtual spaces.

To maximize the potential of the virtual space, writing centers will also need enhanced networkability and immediacy. As a node of the institution, they must interlink to significant (re)mediated spaces and students. In *Emergence*, Johnson explains:

Our spatial memory, for instance, is more powerful than our textual memory, so graphic interfaces emphasize icons over commands. We have a natural gift for associative thinking, thanks to the formidable pattern-matching skills of the brain's distributed network, so the graphic interface borrowed metaphors from the real-world: desktops, folders, trashcans. Just as certain drugs are designed specifically as keys to unlock the neurochemistry of our gray matter, the graphic interface was designed to exploit the innate talents of the human mind and to rely as little as possible on our shortcomings. (206)

Visuals will be positioned within virtual spaces, but these are not visuals as we know them. They will need to be interactive and serve important pedagogical functions. WCDs must look for ways to teach students visually through images, digital media, and hypermediated icons. Marcel O'Gorman's notion of "hypericonomy," a new method of research "more suitable to a picture-oriented, digital-centric culture" (xvi) provides writing center scholars with a provocative methodology with which they might begin to break from instrumentalist notions of technology and rearticulate the design of virtual spaces. Perhaps most important to the development of sustainable virtual spaces is the way that O'Gorman foregrounds the visual nature of digital-centric spaces. Through this critique, O'Gorman also offers a method for rethinking the role of the interactive visual. Scholars should apply O'Gorman's provisional methods to rethink engagement and design in virtual space. In much the same way, I offer a critique fitting for virtual spaces,

viewing the map as hypericon and method for rearticulating the technological and cultural spaces of the writing center.

Over the course of the previous few pages, I have offered suggestions for enhancing ethos in virtual spaces, for considering the “essence” of technology, as Heidegger says, and our cultural geographies. As the virtual spaces of the writing center continue to develop and our political and cultural geographies increasingly suggest the importance and viability of virtual spaces, it will become important for scholars to continue to develop a theoretical and technical knowledge of new media and technology. This, of course, is no easy task. At first, we might consider the theoretical implications of constructing more sustainable virtual spaces. Through this theoretical understanding, in part presented in this dissertation, scholars will develop more viable, coherent, and progressive virtual spaces. Thus, I will now discuss the implications of these theories and practices for the writing center field.

Implications for the Writing Center Field

Writing center scholars must begin to consider the cultural and political geographies in which they are situated. In the past, writing centers have embraced technologies, but the field has not, for one reason or another, generated theory or scholarship that furthers virtual space’s implementation and potential to expand writing center practices. Writing centers risk, then, developing spaces that are not, in any way, sustainable, usable, or improved. Moving forward, WCDs can theorize their own writing

center work and technology not only through the lens of cultural and political geographies but also through research in new media.

There is little doubt that as writing center scholars continue to take interest in the development and implementation of technology and virtual spaces that theories of technology, new media, and information architecture will play a crucial role in the ways in which new spaces are conceived, developed, and understood. The convergence of writing center and technology theory is not simply a call for additional research. Moreover, it is a call for WCDs and scholars with a close connection to the development and administration of writing centers to enhance the language and foundation from which we create and conceptualize space.

Quite often, the writing center is a personal environment, providing WCDs with the ability to see close-up the inner-workings of their designs, structures, resources, and policies. In this role, WCDs might also view themselves as architects of the spaces they build and operate. This is, of course, within the framework of the institution and mission of the writing center. Architecturally, writing centers might advance their status as commonly marginalized spaces on the campus to more advanced, technologically savvy spaces where serious research and development takes place. It is more likely that WCDs can advance the writing center's status, though, from the center of vibrant spaces, ones that they study on a regular basis, rather than from afar. That is, many writing center scholars should take advantage of their positioning within the writing center and consider the potential for institutional change enacted by work that takes place within this rich academic space. Spatial research and intelligent, theoretically sound technological development, then, might provide a timely interjection into the conversation about where

the field is going next, in an attempt to advance existing practices in fruitful and productive ways. The field cannot forget, however, its roots in social, communicative, and pedagogically sensitive spaces. Virtual spaces, as they are developed, should promote and extend notions of writing center community; if we lose sight of social foundations, we risk losing our identity as we know it. If we embrace instrumentalist notions, we risk selling short our role in the development of informed, sophisticated spaces for 21st century literacy practices. Writing centers should become sites of technological advancement, but the development should take place thoughtfully and constructively.

Without a doubt, the material discussed in this dissertation might serve as a framework or starting point for technological development on par with the exploration of the SLUWC, one of the first attempts at establishing a writing center within a virtual immersive space, constructed during the summer 2008 semester at UCF. If WCDs are honest with themselves in believing that new virtual spaces are, without a doubt, highly experimental and continue to study the potential for the work taking place there, they might also see research and development in these virtual spaces as thoughtful remediations of physical space. Research into technology and media will reveal important concepts for use in physical spaces as well. In a cultural process of constructing spaces through technology, we will, concurrently, remediate the writing center space.

Chapter Five will explore the writing center as a remediated space, the visual nature of writing center spaces, and limitations for this study. In Chapter Five, I also add a reflection on developing, constructing, and composing in virtual spaces.

CHAPTER FIVE: REMEDIATING THE WRITING CENTER SPACE

The cities of to-day cannot respond to the demands of the life of to-day unless they are adapted to the new conditions.

- Le Corbusier, *The City of To-Morrow and its Planning* (84)

On a social level, buildings have the purpose of constraining behavior. . . . In the virtual realm, the existence of a 'building' is purely symbolic. . . . Its symbolic functions bring legibility to what could otherwise be an incomprehensible abstract space.

- Drew Harry, Dietman Offenhuber, and Judith Donath, "The Role of Virtual Architecture" (65)

Introduction

Ulmer, in *Teletheory*, raises concern with "how our discourse might be affected by electronic technology," writing that, "cognition itself might be changing in a civilization switching to electronics" (18). Here, Ulmer claims that we "will speak and write differently within the frame of electronics" (18). While Ulmer attempts to remediate academic discourse, I attempt to remediate writing center discourse by rethinking the concept within the context of 21st century literacy practices. Through this chapter, I argue that the space of the writing center is changing and that the concept of remediation furthers our academic discourse by providing a framework through which to analyze current spaces and invent theories for the development of new immersive virtual spaces. The space of the printed text is remediated by the virtual space of the MOO, and

the space of the immersive virtual world remediates the MOO yet again. Similarly, physical spaces are remediated when forms of new media increase immediacy by offering improved access to information. Bolter and Grusin explain:

Now our public spaces are entering into a further set of remediating relationships with multimedia as well as the ‘cyberspace’ of the World Wide Web and other Internet communication services. The supposedly immaterial world of cyberspace is itself both a reflection and extension of these public media spaces.
(169)

The physical and virtual spaces are remediated when new media technologies are integrated into the writing center. Traditional physical spaces—based on print texts—are themselves media spaces, according to Bolter and Grusin, which technologically sophisticated spaces reproduce and refashion (173). Much like the theme park remediated the traditional city, interactive remediated space offers an improved cultural experience for students. In this chapter, I not only map a trajectory for the virtual spaces of writing centers but physical spaces as well, in preparation for “a new expressive space,” as Richard Lanham writes (20). I borrow from Lanham’s concept of the economics of attention, claiming that in the remediated writing center,

[t]he screen works differently from the page. Words don’t stay put. They dance around. Images play a major role and they move too. Color is everywhere. And sound, too, spoken and synthesized. Above all, a different expressive economy prevails. (20)

I turn, then, to a critique of writing center practices, looking toward the future of physical and virtual spaces.

In “Virtual or Virtually U,” Nancy Jennings and Chris Collins overview the growing number of educational institutions using Second Life (SL), saying that they have begun to utilize these technologies for instruction and have established research centers to further evaluate the potential of virtual environments (180). The future of writing centers will inevitably involve a close relationship with technology, and immersive virtual spaces like SL offer writing centers options for building engaging and interactive OWLs. In fact, J. Paul Johnson claims that the technology-driven writing spaces of modern writing centers are “technoprovocateurs,” writing spaces where quietly subversive activity can emerge from the interstices between computer networks and writing centers. Writing centers will need to maintain strong ties with their student populations, as students will expect the writing center’s technology to change in large part with their own. Immersive technologies offer potential for writing centers in the following ways:

- Offering public and social virtual spaces
- Offering increased flexibility over physical space
- Providing increased opportunities for composing and displaying visual texts in virtual spaces
- Offering opportunities for virtual group interaction and discussion
- Reducing dependency on physical spaces and the elements of physical space (i.e. tables, chairs, and most importantly, square footage)
- Increasing attention on the icon.

Using virtual spaces, as Sarah Robbins-Bell explains, “requires a shift in thinking and an adjustment in pedagogical methods that will embrace the community, the fluid identity, and the participation—indeed the increased conversation—that virtual spaces can

provide” (34). Writing centers throughout the country have a storied history of integrating technology into their daily operations in innovative ways. In 2005, Texas A&M University set a new standard for writing centers with their “UWC Right Away” program, the podcast of the Texas A&M University Writing Center. They saw podcasting as an engaging way to reach their student population, including the option to download episodes using iTunes. Podcasts could mark an important cultural shift for the future for writing centers in that they allow students to download information immediately regardless of their location. This cultural phenomenon also marks a shift in agency to the digital.

Technologically savvy writing centers in the 21st century will need to address their digital culture’s call for immediate information. With its potential for increased immediacy, entire virtual environments will refashion the informational “space” of the writing center. In fact, students might come to expect this technology. Similarly, writing centers will also integrate digital videos into their training sessions, recording training and making it available for download on the Web. Further, writing centers will offer synchronous consultations via live streaming video. Synchronous video consultations stand to remediate current online chat and phone consultations, once again refashioning the writing and consulting “space” of the current writing center, making the space more real, social, interactive, convincing, and engaging.

Current trends in technology and digital media will dictate to a large extent the need for technology in the writing center. As cyborgs, many students “tune in,” “log on,” “sign in,” “download,” and “upload” as part of their daily routine. Writing centers will need to also stay “logged in” to students’ needs and expectations. The remediated space

will allow student to become part of the environment. Table Two offers a visual progression of remediation in the writing center from print to Virtual Reality (VR).

Table 2: Remediating Writing Center Work

Print	MOO	SL	VR
Static paper	Synchronous text	Engaged discussion with immersive images and avatars	Embodied discussion

As digital technologies continue to influence writing center work, practitioners will find that the “writing space” is no longer on the printed page. In a rapidly advancing digital culture, it appears that writing spaces will take a more aural or visual form, as practitioners and students “tune in” to a podcast, engage in a streaming video consultation, or teleport to an immersive space. To a large extent, society and students of the academic community have determined the writing center’s need for technology.

Remediation and the Physical Space of the Writing Center

Writing centers will maintain face-to-face physical spaces *and* solidify online presence. Studies in virtual spaces inform practices in physical spaces as well. It is through the thoughtful remediations that take place in virtual space and the visual methodologies developed in this dissertation that writing center scholars might set new standards for multiliteracies and integrated spaces that are starting to emerge throughout the country (see the Noel Studio for Academic Creativity at Eastern Kentucky University

and Converging Literacies Center at Texas A&M University—Commerce). As writing centers find ways to solidify their presence online, they might also discover ways to improve multiliterate practices that are operational in physical spaces and more appropriate for a digital culture. Technologies that give depth and substance to virtual spaces will allow writing centers to hold multimodal face-to-face consultations utilizing touch-screen, immersive virtual, and three-dimensional learning spaces, as Table Three shows.

Table 3: Remediating the Writing Center Space

Print	MOO	SL	VR
Discuss paper text in person	Discuss print text synchronously through text in virtual space	Become immersed in the visual; text as icon and environment	Feeling of being there; you are the text

Additionally, similar mobile technologies will allow WCDs to build paperless writing centers. Technologies employed in virtual spaces will also allow writing centers to offer physical spaces for modeling or simulating communication practices. To inform this development, we might recall Robbins-Bell’s salient advice as we continue to envision and construct technologically sophisticated virtual and physical spaces for teaching and discussing writing: “We need to learn to embrace more participatory pedagogy if we’re to make the most of the technologies that are available to us” (34). Robbins-Bell favors virtual environments that encourage interactivity, and writing center

scholars interested in solidifying their presence online will want to pay specific attention to her advice.

One of the major concerns addressed in this dissertation is ways in which writing center scholars need to develop and assess virtual spaces in light of the values of traditional (face-to-face) writing centers to ensure that they do not devolve into web-based editing shops. Based on my professional experience with developing an OWL and on my research, I will explain ways in which best practices within digital environments might also shape future preferred practices in brick and mortar writing centers. In so doing, I will focus primarily on the following:

- Uses of digital artifacts, such as videos in OWLs, and the ways in which multimedia can also be employed in brick and mortar writing centers
- Preparation for use of hypertext and other digital and electronic texts in the brick and mortar writing center
- Importance of embracing visual and digital literacy
- Ways in which WCDs might remediate the writing center space
- A movement toward critical and rhetorical literacy to develop an informed critique and reflective praxis in technologically sophisticated spaces, as Stuart Selber explains (25).

Bolter and Grusin's term "remediation" has special relevance for the development of virtual spaces and future preferred practices in brick and mortar writing centers, as they argue that "new media are doing exactly what their predecessors have done: presenting themselves as refashioned and improved versions of other media" (14-5). Bolter and Grusin explain that they have adopted the term to express the way in which

one medium is seen by our culture as reforming or improving upon another (59).

Recently, we have witnessed an increased attention to media. Physical and virtual writing center spaces no longer simply feature static images but often employ digital videos, audio recordings, and hypertexts to distribute information. Bolter and Grusin might say that these media remediate earlier forms of media in the writing center, for example the picture or the printed handout.

Hobson explains that “there exist any number of exciting next steps for members of [the writing center] community to explore within the concept of the wired writing center—video conferencing, distance learning, virtual conferencing spaces, etc.” (“Straddling the Virtual Fence” 487). Instead of simply describing the consultation by writing out a dialogue, OWLs might offer a digital video. Instead of publishing interviews with consultants in a linear, text-based PDF file, virtual spaces now offer podcasts or services housed in SL. These provisional methods within virtual space might also shape future preferred practice in brick and mortar writing centers. Bell and Hübler extend the conversation on physical and virtual writing center spaces:

[M]ore work is needed to explore the ways virtual writing center activity symbiotically interacts with the physical and symbolic spaces occupied by the writing center within the university community. Further, understanding how these virtual spaces function as a significant part of the rhetorical context of writing centers will provide insight into ways we can better utilize these communicative situations to improve what we do. (74)

That is to say, digital practices will indeed shape future practices employed in face-to-face sessions.

Virtual environments often employ multimedia, like videos and audio files, to convey information about the work done in the center, a writing strategy or exercise, or an interview. These multimedia options engage the viewer and claim to improve upon previous forms of media. In some ways, the video is more engaging than a purely textual file, for example. Multimedia may also remediate face-to-face sessions by offering an improved version of the previous media. In brick and mortar spaces, consultants employ various forms of media, like a digital video, when making a point about writing or offering a suggestion to the student. Consultants might refer to digitized information as they would a handout, which I will explain in more detail in the following paragraphs.

During the spring 2009 semester, the UWC worked with Career Services and Experiential Learning to produce a podcast about writing personal statements. Included in the podcast were both audio and visual elements. In a face-to-face discussion of personal statements, for example, the consultant could easily integrate this video into the consultation by using the writing center's computers or laptop. The digital environment highlights the value of using multimedia, and the brick and mortar writing center can replicate these new practices as well.

In an exploration of hypertexts and the writing center, Pemberton explores the possibility of training consultants in website design (305). While we cannot anticipate how many students will expect feedback on websites in particular, Pemberton's point prompts us to consider our ability to consult, discuss, and analyze the rhetorical conventions of digital artifacts. In the writing center, we say that students can bring in anything written, a text of any kind. "As student writers become more technologically savvy and proficient at producing websites and other hypertext documents," Pemberton

asserts, “writing centers will—if they have not already done so—begin to assist student writers with hypertext projects” (294). The work consultants do online demands that they understand and employ conventions of hypermedia. Online consultants cannot simply hand a student the MLA handout, of course. Instead, consultants must learn how to send, receive, and employ hyperlinks, video, and multimedia. Consultants, for example, can “push” a Web page to a student. More advanced hypertextual options might encourage consultants to “co-browse” with a student, a feature where the consultant can browse a Web page simultaneously with a student. Working in virtual spaces, consultants experience hypertext firsthand. If we truly want to advertise that students can bring anything written to the writing center, consultants will need to be trained in conventions of hypertext and digital artifacts. The conventions taught (and applied) in the virtual space enhances a consultant’s understanding of the rhetorical issues or concerns of media artifacts. In fact, future preferred practice in the brick and mortar writing center will demand familiarity with hypertext, as Pemberton says, and knowledge of media artifacts. We will expect to navigate and consult these texts in the OWL, but we should also anticipate them in the physical space.

Virtual spaces often employ a number of important and rhetorically significant visuals that convey a variety of feelings to the student. OWLs, like the one developed at UCF and the Online Writery at the University of Missouri, use visuals to enhance ethos in virtual spaces. Eric Miraglia and Joel Norris map the dialogic space of the physical writing center:

In the WSU writing lab, garage-sale lamps illuminate a scene of 1970s vintage side tables and couches whose personalities consistently outperform their looks.

It's a place where you're sure to find a lava lamp if you look around long enough, where you can almost smell the incense. It's a place for people to feel comfortable, to make eye contact, to put their feet up and talk. (86)

Without a doubt, Miraglia and Norris have put a great deal of thought into the visual appeal of their OWL. In fact, some of the most popular OWLs around the country rely on aesthetics to create their virtual space—not necessarily in terms of excellent design but by using visual elements that extend (or even improve upon) physical spaces. Adobe Connect and other Web conferencing software will offer even more visual options for online consultations and interaction, perhaps providing an early glimpse of the potential for virtual reality in the writing center. OWL administrators have realized the importance of the visual in creating successful, usable virtual spaces, and these visuals will continue to serve prominent purposes in physical spaces as well.

Through this portion of the study, I have explained ways in which best practices within virtual spaces might also shape future preferred practice in brick and mortar writing centers. Future preferred practices in writing centers might consider the remediating potential of digital artifacts, such as the use of videos, and the ways in which multimedia can be employed, the importance of preparing for hypertexts and other digital and electronic texts, and finally the importance of embracing new forms of literacy that have become integral in OWLs, namely visual and technological literacy.

I find it encouraging when I see a consultant and student writer huddled in front of a laptop watching a YouTube video of a debate. It shows that consultants and students are engaged in the assignment and the available resources. Often, though, these resources are archived online, whether within the virtual spaces of the mediated class or somewhere

within the more public domain. It is not uncommon for a student and consultant to read a digital copy of a paper on a laptop or the writing center's lab computers. With the increasing availability of media-producing technologies, brick and mortar writing centers will need to broaden their definition of "texts" and "writing" as well. In these cases, it is highly likely that consultants will rely on the best practices as explained here.

Visual OWLs and the Remediation of Physical Space

Miraglia and Norris have attempted to create social spaces online and consider OWL designers the architects of these social spaces (92). In many ways, OWLs rely heavily on the visual. Online consultations demand that consultants become familiar with the visual nature of OWLs, demonstrating value in the text on the screen and the navigational cues employed. The importance of the visual may inform practices in the brick and mortar center by encouraging the use of visual representations in face-to-face consultations. OWL technologies allow us to situate words (ideas, visuals) in space. In much the same way, consultants must archive visual, textual, and verbal cues using writing technologies in the brick and mortar center. In online textual spaces, consultants must rely on the visual (text) because there is no oral communication. In the brick and mortar center, much of the consultation is accomplished orally—by discussing ideas, issues, and concerns. Drawing from best practices in the OWL, consultants can view their face-to-face technologies in much the same way. The text of the OWL communication also highlights the importance of archiving visually what takes place in the face-to-face session, reminding us that we should not take for granted that the student will remember a point discussed in the consultation if it is not archived visually, usually

on the student record. The OWL prompts us to embrace new forms of literacy—technological and visual—that are often overlooked or taken for granted in the brick and mortar center. Irene Clark writes, “Those of us in writing centers, who have long been concerned with literacy, must recognize that technology impacts literacy as much as literacy impacts technology and that we must become involved with technology so that we can contribute to its creation and determine how it is utilized” (565). I would argue that OWLs demand attention to visual literacy—an understanding of the ways in which text and image are employed and their meaning for audiences—that will be important in shaping future preferred practice in brick and mortar writing centers.

New Methods for New Media

Samantha Cleaver, in “Beyond Blackboard,” argues that online learning is evolving into more than discussions via Blackboard, where students are limited primarily to asynchronous and text-based discussions within the predefined boundaries of a corporate system. Best practices in OWLs—ones that are highly multimodal—might encourage us to explore the potential of visuals in our face-to-face sessions. Inman and Sewell, in “Mentoring in Electronic Spaces,” claim that “[e]lectronic media influence more and more of contemporary writing center theory and practice . . .” (177). Electronic media theories and practices commonly employed and recommended in OWLs can shape the way we think and work in other areas. The application or integration of multimedia resources—like videos and hypertexts—into the brick and mortar writing center can indeed remediate our practices. The remediated spaces of the writing center not only claim to “improve upon” our virtual spaces but our physical spaces as well. Media, in the

brick and mortar center, offer students and consultants a sense of immediacy, as Bolter and Grusin say (5), with the claim of enhancing the user's experience. In writing center terms, this means that consultations are more interactive and engaging, that students and consultants are more engaged, that students are more involved, or that students and consultants feel a connection with the paper and material being discussed.

Remediation and the Virtual Space of the Writing Center

According to Horan, “The key to building vibrant digital communities is to understand the differences and intersections between communities of place and communities of interest” (62). Writing center scholars will face the challenge of building digital communities in both physical and virtual settings. However, immersive virtual spaces hold great promise for writing center work. The immersive virtual space allows students to engage one another with many of the humanistic and interpersonal connections that are significant to face-to-face work. Through immersive virtual spaces, writing centers also create communities of place and interest by offering visual elements of the physical environment that serve to enhance experiences online. In many cases, these elements are not readily available in purely textual spaces—like IM chat or e-mail. However, they might serve to bridge the perceived gap in creating a more genuine, engaging, and believable experience for users.

In some cases, current virtual spaces resemble physical spaces. For instance, Nancy Jennings and Chris Collins tell us that “Ohio University’s virtual campus reflects its physical location by virtually reproducing actual architectural elements and creating brick-and-mortar buildings similar to those on its physical campus” (184). That is,

developers have constructed virtual spaces with walls, doors, and ceilings, for example. While this method of building is a start, developers in the future might want to explore their building practices within immersive spaces. In accordance with several mapping exercises offered in this study, writing centers repurpose traditional-looking buildings, prompting digital architects to expand their notions of space beyond what we see in the construction of buildings and cities. Writing centers might take more open and visually engaging architectural forms that promote new converged literacies—visual, computer, or digital—that aid students in writing not only with print but also in composing digital texts. As maps of ideal virtual space indicate, future virtual spaces are not limited to static visuals, but might offer social spaces where students can gather in 3D environments.

Horan explains that “[d]igital places can also enhance cultural and scientific inquiry through innovative threshold connections. Over the last decade, several new interactive museums, especially science museums, have provided a new digital place threshold for informal and cultural learning” (78). Echoing Horan, researchers have noted the potential of immersive virtual environments to provide students with educational experiences that transcend space. Rodney Harrison, for example, discusses several virtual building projects:

[O]ver the past decade we have witnessed the increased ‘virtuality’ of museums, both in their use of virtual reality and digital imaging within the context of the museum itself, and in the development of vast online catalogues which allow their objects to be interrogated, viewed and studied remotely. (79)

Virtual museums, galleries, and installations offer perhaps the most compelling example of what writing centers might ultimately look like and offer in virtual spaces. Following Harrison, Suzanne C. Baker, Ryan K. Wentz, and Madison M. Woods contend that one of the advantages of teaching with (or in) SL is that students can travel to architectural sites, visit art galleries, and attend performances (61). Furthermore, Julia Gillen, in her discussion of Schome Park, the first European enclosed island on Teen SL (59), argues that a student's participation there is a hugely literate activity—engaging literacy practices involved in cultural knowledge and the employment of artifacts and representations of the world (72). Gillen points out that students learn new literacy practices in virtual spaces. By working in virtual spaces, students expand their notion of literacy beyond linear print-based concepts. Physical and virtual writing centers serve the important role of developing multiliterate students responsive to the “ongoing conversation about the special responsibilities of humanities teachers in a digital age,” as Selber says (23). The writing center, therefore, serves as a member of the university community not only for traditional print-based literacy practices but multimedia practices as well. Horan notes that “local communities can play a crucial role in defining the nature and types of electronic-community services available to their citizens” (81). In fact, writing centers must also assist students in the composition and production of digital media texts.

Augmented Space

Kathryn Farley, Michael Nitsche, Jay Bolter, and Blair MacIntyre, in
“Augmenting Creative Realities,” “blend the world of Second Life with real world

artistic practices and their expressive range” (96). They call the artistic practices re-iterations of the interface where users make artistic statements and express opinions in virtual spaces (96). Furthermore, they argue that Augmented Reality (AR) systems in SL, for example, virtually conflate two spaces: the real and virtual (96). Furthermore, Manovich’s concept of augmented space will be central to the development of virtual writing center spaces.

Writing center scholars interested in developing virtual spaces responsive to the interests of students will want to prepare for visual forms of building and production. W. J. T. Mitchell, in *Picture Theory*, uses Habermas’s notion of the public sphere to pose his prescient question: “How should we picture the public sphere and the place of visual representation in it?” (363). As writing centers continue to decipher their spaces and rearticulate the role of technology within them, Mitchell’s question should continue to drive our scholarly practices. The virtual spaces in which we build have social foundations and goals. We should not deny these spaces their social potential. Texts, broadly defined, are inherently visual and will serve as the center of virtual spaces, augmenting, to recall Manovich’s research, space within digital environments.



Figure 44: New Building Methods in Virtual Space

Figure 44, for example, challenges notions of building in physical spaces. Viewing can take place anywhere in this public virtual environment, as depicted by the avatars floating in space near the central screen. Figure 44 should prompt deeper thought into the ways in which writing center scholars decipher physical and virtual space. Thus, the visual will be central to the development of virtual spaces. Virtual spaces are composed of visuals, offering a space where literacies converge. Further, virtual spaces allow for digital forms of composition to emerge. Compositionists will become part of the visual environment and help develop meaningful forms of immersive scholarship.

The Great Good Place in an Immersive Space

We must consider pedagogical implications when attempting to relocate physical space in a virtual one. First, can it be done? Second, should our goal be to replicate the physical in the virtual, especially in terms of education? The discourse online changes from that of the f2f physical space. Several important ideas surface from existing research. In an attempt to rearticulate the role of technology, scholars should begin by deciphering the writing center's existing spaces. Tom Boellstorff, in *Coming of Age in Second Life*, looks at SL from an anthropological perspective. Early on, Boellstorff draws an even closer connection between the third places of Oldenburg's cafés, coffee shops, bars, and bookstores to the virtual public life of people in SL. These third places stand outside the dichotomy of the public and private sphere. With this, Boellstorff contends, we have always been involved in virtual communities (181). Similar to the third place, Boellstorff indicates that virtual spaces, like SL, are social spaces:

A few residents came to Second Life for solitude, but socializing with other residents was the most common activity inworld. Since the first days of MUDs, there has been a remarkable degree of consensus across a range of virtual worlds that social relationships are their most important aspect: as one Second Life resident put it, 'people wouldn't be here without other people; they are here for social reasons. No matter how fancy the tool, it comes back to connecting with people.' (181)

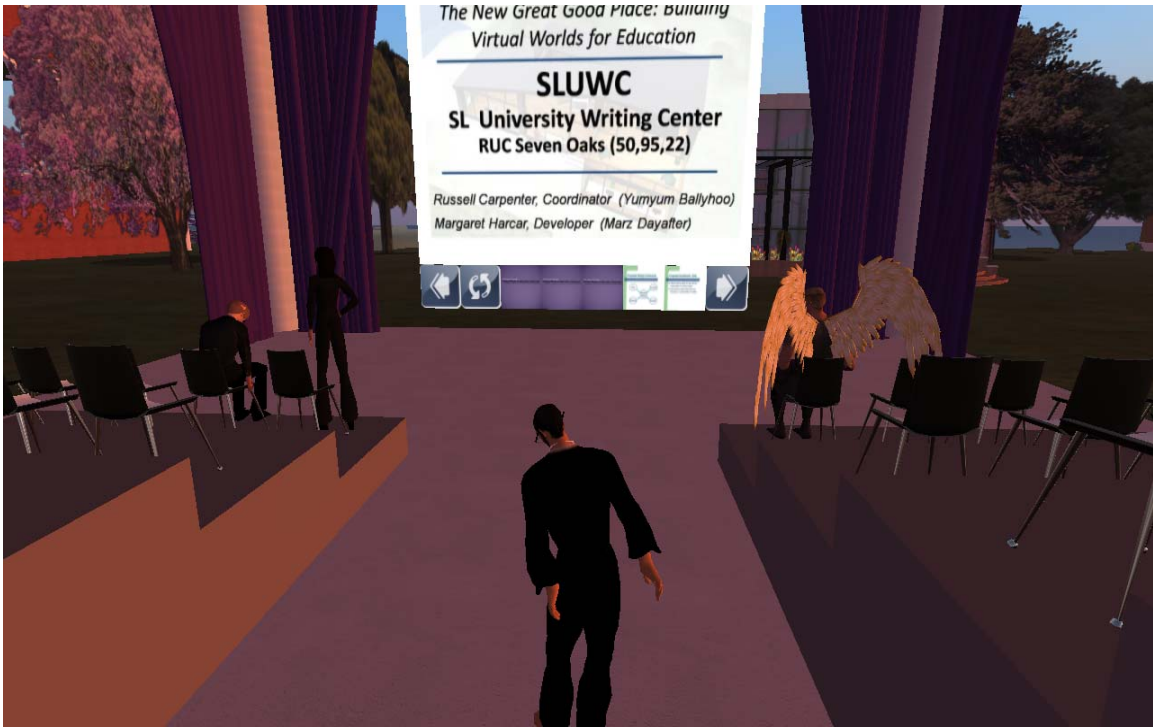


Figure 45: The New Great Good Place Presentation

To analyze pedagogical practices in virtual spaces, we should start with what we know, what we experience on a daily basis in physical spaces. I frame an interdisciplinary study of technologies, like SL, and spatial studies by looking at existing research along with the needs of the field moving forward.

SL as a pedagogical technology offers realistic advantages and disadvantages when compared to online course spaces like Blackboard. Virtual spaces like Webcourses, for example, perpetuate the constricted space already governed by the institution, allowing scholars to inhabit a shell but not a truly social virtual space. I should say that there are political implications involved that confine users to predefined notions of building and space. Foremost, SL provides a platform for more interactive and interpersonal online interaction, furthering the culture of remediation in the writing

center. SL technology is more immersive than current online courseware. However, the virtual space of SL is still experimental in its potential for educational uses. Writing centers might see it as a frontier to be explored.

Just from this reflection, though, I can envision an engaging and rich virtual space focused on the teaching of writing, one that parallels in many ways UCF's College of Business's SL space. In fact, I can also see virtual peer review taking place in this new online space. Currently, many institutions are partnering with the Educational Support Management Group (ESMG) to develop writing center spaces in SL. This organization develops user-friendly areas in SL for discussing and teaching writing. Developmental spaces include white board areas, large discussion areas, and other customized video resources. Much like the session shown in Figure 46, virtual immersive environments offer social spaces where students might share their ideas in a central and public location.



Figure 46: Example of the Electronic Agora

If planned carefully, realistic possibilities exist for this technology to serve as a remediation of previous electronic spaces. Students would need to go through SL training, though, to avoid common pitfalls and frustrations. The WCD would also need to establish distinct parameters for attendance, peer review, and communication in the session. For the SL session to be effective, the consultant and student would also need to embrace the virtual space and take it seriously. F2f session protocols might be enforced in SL as well. Although there are a number of challenges, the future of the online session might be in multi-user environments.



Figure 47: New Digital Forms of Composition

Building educational environments in new virtual spaces might call us to foreground, as Alan Liu says, subcultural paradigms (5). The ways in which scholars

will disseminate knowledge in virtual spaces will inevitably change as writing centers consider new digital and cultural artifacts. Cultural youth movements, or the “mobile youth culture,” as Castells et al. call it, have a significant impact on the technologies in place where we work, play, and learn. “By ‘youth culture,’” Castells et al. write, “we mean the specific system of values and beliefs that inform behavior in a given age group so that it shows distinctive features vis à vis other age groups in society” (127). As a culture, we have become alert to the ubiquitous nature of technology and computing. Castells et al. work with the hypothesis that “*there is a youth culture that finds in mobile communication an adequate form of expression and reinforcement*” (127). The cultural shift that Castells et al. describe should also influence the ways in which writing centers operate. WCDs, in tune with digital developments and technologies, might also adapt practices that reflect cultural preferences and trends. Castells et al. continue:

Technologies, all technologies, diffuse only to the extent that they resonate with pre-existing social structures and cultural values. However, once a powerful technology is adopted by a given culture because it fits into its pattern, the technology grows and embraces an ever-greater proportion of its group of reference . . . (127)

Writing centers might see themselves as an important extension of this subculture, for they employ technologies to communicate with students on a regular basis. Culture plays an important role in the ways that we communicate. The students visiting the writing center’s physical space wear signs of the culture—the iPod, headphones, and mobile communication technologies, for instance. Paul du Gay et al., in their cultural study of

the Sony Walkman, help to drive the point that meaning-making, as they say, “lies at the interface between culture and technology” (23). Furthermore, Dick Hebdige writes:

However, in highly complex societies like ours, which function through a finely graded system of divided (i.e. specialized) labour, the crucial question has to do with which specific ideologies, representing the interests of which specific groups and classes will prevail at any given moment, in any situation. (14)

Hebdige’s point is particularly relevant here when we look closer at the number of mobile devices and “wired” students in our culture.



Figure 48: Attending Virtual Presentation

While virtual environments offer important pedagogical spaces for rearticulating the role of technology in the writing center, they are not without shortcomings and concerns for future educational uses. Here, I will highlight several potential issues with

virtual environments. Foremost, virtual spaces should be designed with consideration given to users. For example, it would take students a great deal of time to acclimate themselves to SL. Students would start at Orientation Island before entering their new virtual world. On Orientation Island, students would complete a number of tasks that they would need to perform in SL. Additionally, SL requires substantial space and memory to operate on a computer, and the student would need to download the software before taking part in the class. Again, the instructor would need to devote valuable class time to working out technological glitches.

What are the pedagogical implications of teaching in virtual spaces? More specifically, what are the implications of consulting and conducting peer review in virtual spaces? Thinking through these questions might give writing centers a clearer idea of how we interact, write, and communicate in virtual spaces so that we can develop more substantial theories for teaching online and with computers. For one, we will need to assess security concerns in immersive virtual spaces. “Griefers,” as they are called in SL, may present a serious concern for identity and intellectual property, for example. When constructing virtual spaces, builders must also keep in mind that they are not alone. Virtual spaces are also public places. Students will inevitably encounter personalities far removed from the academic setting. As we continue to develop virtual spaces, builders will also need to ensure security. The sustainability of new environments will depend on security measures—students will need to feel comfortable using these new environments.



Figure 49: “Grief” in Virtual Spaces

While we will certainly face many challenges in constructing new virtual spaces for serious academic work, there are also examples of scholarship already taking place within spaces like SL. This work, in its highly visual, interactive, and personal form, can serve as a starting point for the ways in which these spaces are used in the future. It is, at least, worth taking a historical look at how these spaces have been used in the past so that we can attempt to rethink our methods of composition and the future of virtual writing center work.

Tim Guest, in *Second Lives*, provides a number of valuable examples of very serious work taking place online. Guest describes 9/11 monuments erected in SL shortly after the tragedy:

In 2005, SL residents constructed hundreds of 9/11 memorials. Most

avoided controversy: They built virtual memorial gardens, or virtual memorial plaques, or virtual memorial statues of New York firefighters raising the American flag. One man, ‘Rusty Vindallo,’ listed the names of all who had died that day. But another resident, ‘Sexy Casanova,’ bit the bullet, and constructed a much more detailed replica of the World Trade Center. (16)

SL residents saw the virtual space as a place where they could show their emotion. Residents erected powerful visual displays to pay tribute to the many people who lost their lives that day. While the monuments took many shapes and sizes, they had one thing in common—they were visual reminders. We might also consider them “electronic monuments,” as Ulmer calls them. Like public announcements, these electronic monuments remind people of personal or cultural sacrifices or tragedy. Guest and Ulmer articulate a cultural and political shift—a move, as Ulmer says, to “electracy.” Ulmer offers insight into rearticulating the role of technology in an academic space, depicting visual forms of composition and scholarship in electronic environments.

Ulmer articulates the power of catastrophes to “motivate collective as well as individual reflection on the meaning and purpose of life” (*Electronic Monuments* x). He explains that the “disaster of 9/11 occurred at a time of apparatus shift—the emergence of a global electrated world out of a modern literate society” (x). Ulmer and Guest depict important cultural changes taking place in virtual spaces. Everyday citizens are performing a new composition—one concerned, perhaps, with visuals more than words. The electronic monuments are, at any rate, transcending physical space.

The concept of remediation also prompts WCDs to rearticulate existing definitions of writing. Thus, we might learn to compose in these new ways as well

through the use of virtual spaces and new media technologies. I use the electronic monument as an example of multimedia composition and the potential for the serious and meaningful academic work that is taking place within virtual spaces.

I take an interest in SL and other immersive spaces not simply as an example of what we “can” do or “must” do but as a logical extension of the spatial study and creative thinking offered in the mapping exercises. The outcomes of this study encourage creative thinking in physical and virtual spaces, which should also include reformed pedagogical practices. As depicted here, virtual spaces provide writing center scholars with the freedom to explore their interests independently of physical constraints. Similarly, future writing centers might consider broadened concepts of what constitutes a “text” and the importance of developing meaningful virtual environments based on these notions. These technologically sophisticated spaces will help students “[l]earn not only how to write about images, but also to write *with* images,” as Rice and O’Gorman help me explain in their introduction to *New Media/New Methods* (11). Technologically sophisticated academic spaces should be responsive to a digital culture while embracing new methods even if experimental or provisional. As the mapping exercises help to show, it is when writing center scholars free themselves of physical constraints that they will begin to see the potential for newly developed and technologically enhanced virtual and physical spaces for serious academic work. The mapping exercises also show the potential for writing with images, preparation for working in technologically sophisticated and immersive spaces.

Challenges and Future Research

I will address several challenges with this research along with ideas for future studies involving technology, space, and mapping. First, the sample size of five mapping participants could be expanded to allow for a wider range of perspectives. Also, it might be useful to select participants in a more methodical way. For instance, participants might come from universities without a virtual or physical space. Additionally, the research design might benefit from gathering data from writing centers offering face-to-face services with an interest of going online in the future. That is, the study might have been more interesting if I had also included the insight of WCDs without virtual spaces at all to see how they perceived the ideal virtual space.

Future research might also include maps from the student-user perspective on physical and virtual spaces. Similar to the method applied in this dissertation, students might be asked to map the current physical and virtual spaces of the writing center along side their ideal perception of what the writing center's physical and virtual spaces should look like. The student perspective might provide a productive way to look at the spaces perceived from a user standpoint; therefore, they might offer a unique look at the usability, necessity, and design of writing center spaces.

With increased attention focused on writing center work in virtual spaces, a subsequent study might also analyze SL as a pedagogical space. In a discourse analysis, the study might analyze students' interactions in text-based synchronous online sessions and SL sessions. Virtual spaces can also be studied in other ways, perhaps as a space for analyzing gender and online persona within the scope of online writing center work.

Future research might also extend existing work in MUDs and MOOs. Earlier text-based electronic spaces used for writing center work emphasized visuals. Through text, users constructed rooms and exchanged text-based objects from food to writing utensils. A future study can extend this thought, assessing the perceived usefulness and function of visuals in immersive virtual space with the premise that, in previous virtual spaces used for writing-related support, visuals were not necessarily a feature of the technology but were perceived as important to establishing interpersonal connections between consultant and student.

APPENDIX A: RECRUITMENT E-MAIL

Dear Writing Center Director,

I am a doctoral student in the Texts and Technology program at the University of Central Florida. As part of my dissertation work, I am theorizing Online Writing Labs (OWLs) through the lens of cultural and political geographies. In an attempt to gain a better understanding for physical and virtual writing center spaces, I am asking several current writing center directors to participate in cognitive mapping, a research strategy proposed by Patricia Sullivan and James E. Porter in *Opening Spaces*. This project will give you an opportunity to think about writing center spaces at your university and “map” the current and ideal physical and virtual spaces.

Please consider participating in this research study involving cognitive mapping of writing center spaces. The purpose of this research is to gain a better understanding of the real and perceived, physical and virtual, spaces that we inhabit in the writing center. Only current writing center directors are being asked to participate in this study. Benefits might include a better understanding of writing center spaces as your institution, and this study could lead to a better understanding of writing center spaces nationally, especially in light of technological developments. There is no direct benefit in participating and no penalty in not participating. There is no compensation to participants. You do not have to answer any questions that you do not wish to answer.

Study Contact: Russell G. Carpenter, Graduate Student, Texts and Technology Program, College of Arts and Humanities, (407) 882-0076 or by email at rgcarpen@mail.ucf.edu; or Dr. Melody Bowdon, Faculty Supervisor, Department of English and Texts and Technology program at (407) 823-6234 or by email at mbowdon@mail.ucf.edu.

IRB Contact: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

Russell G. Carpenter
P.O. Box 161347
Orlando, FL 32816-1347

APPENDIX B: INFORMED CONSENT

Informed Consent

Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study which will include about five people. You can ask questions about the research. You can read this form and agree to take part right now, or take the form home with you to study before you decide. You will be told if any new information is learned which may affect your willingness to continue taking part in this study. You have been asked to take part in this research study because you are a writing center director. You must be 18 years of age or older to be included in the research study and sign this form.

The person doing this research is Russell G. Carpenter of the UCF Department of English and Texts and Technology Doctoral program. Because the researcher is a Doctoral student, he is being guided by Dr. Melody Bowdon, a UCF faculty supervisor in the Department of English.

Study title: POLITICAL SPACES AND REMEDIATED PLACES: REARTICULATING THE ROLE OF TECHNOLOGY IN THE WRITING CENTER

Purpose of the research study: The purpose of this study is to understand writing center directors' perceptions of space: virtual and physical, current and ideal. Currently, there is little research that addresses the production of virtual and physical spaces in the writing center. As writing centers continue to develop online writing labs, the production of space will be increasingly important. This study will help provide a theory of constructing physical and virtual spaces in the writing center through the use of technology.

What you will be asked to do in the study: As a participant in this study, you will be asked to map, by hand, four spaces: current physical space, ideal physical space, current virtual space, and ideal virtual space. After you have completed the mapping exercise, you will be asked to take a brief, three-question survey about your experience.

Voluntary participation: You should take part in this study only because you want to. There is no penalty for not taking part, and you will not lose any benefits. You have the right to stop at any time. Just tell the researcher or a member of the research team that you want to stop. You will be told if any new information is learned which may affect your willingness to continue taking part in this study.

Location: Since I am asking you to return the maps and surveys to me via e-mail attachment, you may complete them at the location of your choice.

Time required: There is no set time requirement. However, I do not estimate that the exercise will take more than fifteen to twenty minutes to complete.

Audio or video taping: This study does not include any audio or video taping.

Risks: There are no expected risks for taking part in this study. You do not have to answer every question or complete every task. You will not lose any benefits if you skip questions or tasks. You do not have to answer any questions that make you feel uncomfortable.

Benefits: As a research participant, you will have the opportunity to think about the spaces at work

in your own writing center and to think creatively about the ideal spaces you might employ if you had the opportunity, support, and technological resources to do so.

Compensation or payment: There is no compensation or other payment to you for taking part in this study.

Confidentiality: Your identity will be kept confidential. The researcher will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places. Your information will be assigned a code number. The list connecting your name to this number will be kept in a locked file cabinet or in a password protected computer. When the study is done and the data have been analyzed, the list will be destroyed. Your information will be combined with information from other people who took part in this study. When the researcher writes about this study to share what was learned with other researchers, he will write about this combined information. Your name will not be used in any report, so people will not know how you answered or what you did.

There are times when the researcher may have to show your information to other people. The researcher may have to show your identity to people who check to be sure the research was done right. These may be people from the University of Central Florida or state, federal or local agencies or others who pay to have the research done.

Study contact for questions about the study or to report a problem: Russell G. Carpenter, Graduate Student, Texts and Technology Program, College of Arts and Humanities, (407) 882-0076 or Dr. Melody Bowdon, Faculty Supervisor, Department of English and Texts and Technology program at (407) 823-6234 or by email at mbowdon@mail.ucf.edu

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

APPENDIX C: APPROVAL FROM UCF IRB



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Expedited Initial Review and Approval

From : UCF Institutional Review Board
FWA00000351, Exp. 10/8/11, IRB00001138

To : Russell G. Carpenter

Date : February 13, 2009

IRB Number: SBE-09-06084

Study Title: **POLITICAL SPACES AND REMEDIATED PLACES: REARTICULATING THE ROLE OF TECHNOLOGY IN THE WRITING CENTER**

Dear Researcher:

Your research protocol noted above was approved by **expedited** review by the UCF IRB Vice-chair on 2/13/2009. **The expiration date is 2/12/2010.** Your study was determined to be minimal risk for human subjects and expeditable per federal regulations, 45 CFR 46.110. The category for which this study qualifies as expeditable research is as follows:

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

A **waiver of documentation of consent** has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

To continue this research beyond the expiration date, a Continuing Review Form must be submitted 2 – 4 weeks prior to the expiration date. Advise the IRB if you receive a subpoena for the release of this information, or if a breach of confidentiality occurs. Also report any unanticipated problems or serious adverse events (within 5 working days). Do not make changes to the protocol methodology or consent form before obtaining IRB approval. Changes can be submitted for IRB review using the Addendum/Modification Request Form. An Addendum/Modification Request Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at <http://iris.research.ucf.edu>.

Failure to provide a continuing review report could lead to study suspension, a loss of funding and/or publication possibilities, or reporting of noncompliance to sponsors or funding agencies. The IRB maintains the authority under 45 CFR 46.110(e) to observe or have a third party observe the consent process and the research.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 02/13/2009 02:38:27 PM EST

IRB Coordinator

APPENDIX D: MAPPING EXERCISE

By hand, draw a cognitive map of your writing center's current physical space.
By hand, draw a cognitive map of your writing center's ideal physical space.
By hand, draw a cognitive map of your writing center's current virtual space.
By hand, draw a cognitive map of your writing center's ideal virtual space.

1) Did you realize anything new about your physical or virtual spaces as a result of doing this mapping exercise?

2) Did anything in the maps surprise you?

3) What might these maps tell you about the ways in which space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

APPENDIX E: SURVEY RESPONSE 1

1) Did you realize anything new about your physical or virtual spaces as a result of doing this mapping exercise?

Not too much. Maybe that we are closer to our ideal than I thought. My map of our current space would suggest that all students are equally close (or far) from the writing consultant. Virtual space counteracts physical distance.

2) Did anything in the maps surprise you?

A lot is left out of my picture of the current cyber space: the map assumes that the student and tutor have found each other in cyberspace. My biggest concern is that sometimes students get lost while tutors are waiting by their computers. I've add a map of sessions where tutor and student fail to connect, e.g., the student doesn't "find" us.

3) What might these maps tell you about the ways in which space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

Because our writing center is now completely online, I worry primarily about eliminating space, not creating it. I think students could benefit from such mapping as a tool for looking at their relationship to their writing, to their education. I haven't given this a whole lot of thought, because even when we had a physical space, I knew I would never have control over it, and because all our centers were at satellite sites, all we ever had was business cube.

APPENDIX F: SURVEY RESPONSE 2

- 1) Did you learn anything new about your physical or virtual spaces as a result of doing this exercise?

The exercise validated for me that the virtual space has extraordinary potential. We can take everything from an ideal physical space and expand that space – without having to pay attention to physical or financial constraints. A virtual space allows us to customize the resources for each individual writer and for individual classes as well, with no ceiling on numbers. We can add as many forums as we want. The drawback of the present virtual space is that we are still tied to certain building concepts and feel the need to have something familiar for users in the sense, for example, of needing a horizon or point of reference and posters on the wall, etc.

- 2) Did anything in the maps surprise you?

I was surprised that the mapping exercise proved as helpful as it did. I stumbled upon some new ideas as I was mapping; for example, I now plan to add a computer cluster for class sized groups to work on their documents together in our present virtual space. We can also have a virtual computer cluster for students to work on writing projects and mingle with other writers and tutors at the same time. The lack of restraints on space and time creates an environment more conducive to collaborative projects. One of our new initiatives is to nurture a writing culture across the university, and a virtual presence can help move this forward.

I also found that when I drew my ideal virtual space, I no longer felt tied to a physical landscape. I was then able to focus on concepts, in a more cognitive way, and less on building a structure to fit the concepts I have in mind.

- 3) What might these maps tell you about the ways that space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

If I ever have the opportunity to design a new physical writing center space (we will need a writing minded benefactor), I can see possibilities I had not thought of before. The cognitive mapping exercises could prove helpful in our writing center for writers to consider their own individual writing rooms (a la Virginia Woolf's "A Room of Your Own"). We are interested in helping writers more clearly understand what works best for them as far as their writing a process and learning style is concerned.

APPENDIX G: SURVEY RESPONSES 3

- 1) Did you learn anything new about your physical or virtual spaces as a result of doing this mapping exercise?

I realized that we have very little input in the planning and executing either space: everything (literally) is college dictated and bolted down. All we can do is add to the structure, we cannot edit ourselves though.

- 2) Did anything in the maps surprise you?

The two spaces are very similar now: pockets of varied activity and content. I would like to define them more though, and make them more purposeful.

- 3) What might these maps tell you about the ways in which space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

The space is defined by the physical needs of the session. Although we have the possibility of holding grouped sessions, we do not have isolated or private areas right now. Students are not given an opportunity to work in a more secluded environment and sometimes feel embarrassed due to their paper's contents.

This mapping exercise might force our consultants to think about how they see the space themselves: some people might find particular aspects more useful than others, and the sharing can help understand the dynamics more.

APPENDIX H: SURVEY RESPONSES 4

- 1) Did you realize anything new about your physical or virtual space as a result of doing this exercise?

I have already considered this at length, and the drawing only confirmed that physical space is too limited. Also, it is difficult to draw alternate spaces.

- 2) Did anything in the maps surprise you?

They took quite a long time to draw, and I have no drawing skills. I don't think well using maps or physical space and find it hard to move into new ideas.

- 3) What might these maps tell you about the ways in which space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

This tells me that we have been creative with space and we continue to find that necessary. For example, we don't have adequate office space and the paper was not large enough nor my skills good enough to include all I could. So we have had to balance the ideal and real by adding shelves everywhere for storage, having people work at home, working in the library to negotiate alternative spaces away from our main walls, and converting spaces to multi-functional uses (a consulting room serves as a podcast room, an office meant for one is re-tooled for two). The main issue we face is not using space or lack of it as an excuse—we try as much as possible to balance virtual and actual space to maximize services.

Cognitive maps would be a good invention exercise for many learners who find this conducive to their topic or style of thought. It would be important to train consultants to produce them because I suspect many are more verbal thinkers and it may not occur to them to use them.

APPENDIX I: SURVEY RESPONSES 5

1) Did you realize anything new about your physical or virtual spaces as a result of doing this mapping exercise?

Physical Space

We recently underwent a major remodeling of our physical space. This exercise made us aware of what we would have done had we more money and space for additional remodeling. In other words, we let our imaginations free without institutional or financial restraints. At the top of our list for ideal space was an indoor Japanese Zen Garden with a Koi Pond for Reflection Space. (We were feeling beaten down by a long winter in the Upper Peninsula of Michigan.)

Other realizations were that we would love an as-yet-to-be-invented large, networked, iPhone-like scheduling terminal; a real live receptionist for the receptionist desk; more quiet spaces (surrounded by glass enclosures), and a climate-controlled environment (more humidity in winter, something to melt the big snow bank outside our window, and air-conditioning for summer. We'd gladly get rid of a hallway in exchange for some of the above.

Virtual Space

We identified links we could add to a Faculty Resource Page, and we discovered ideas for using the website to maintain connections with writing center alumni. We were particularly enthusiastic about adding a photo album of past and present writing coaches and activities as well as a gallery of the t-shirts that staff members design each year. We also decided to link our yearly newsletter to the website.

2) Did anything in the maps surprise you?

We were surprised at how appealing the Zen Garden became as we elaborated on it.

3) What might these maps tell you about the ways in which space is produced at your writing center? How might similar cognitive mapping exercises be used in sessions at your writing center?

Space at our university is defined institutionally, with little regard for human comfort. The changes we were able to make in a recent remodeling project all had to begin with the previous structure of hallways, classrooms, offices, often leaving us with less than ideal configurations.

Virtual space has fewer restrictions, but even that has become increasingly regulated.

Cognitive mapping exercises are already used in our sessions. Given our scientific and technical institutional mission, many of our students process graphic information well and are accustomed to drawing, sketching, charting, etc. as means for producing ideas.

LIST OF REFERENCES

“About UWC Home.” 9 February 2009

<http://www.uwc.ucf.edu/About_the_UWC/about_home.htm>.

Bachelard, Gaston. *The Poetics of Space*. Boston: Beacon, 1994.

Baker, Suzanne, Ryan Wentz, and Madison Woods. “Using Virtual Worlds in Education: Second Life as an Educational Tool.” *Teaching of Psychology* 36.1 (2009): 59-64.

Balsamo, Anne. *Technologies of the Gendered Body: Reading Cyborg Women*. Durham: Duke UP, 1999.

Bell, Diana C., and Mike T. Hübler. “The Virtual Writing Center: Developing Ethos Through Mailing List Discourse.” *The Writing Center Journal* 21.2 (2001): 57-77.

Berners-Lee, Tim. *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*. New York: Harper, 2000.

Blythe, Stuart. “Networked Computers + Writing Centers = ? Thinking About Networked Computers in Writing Center Practice.” *The Writing Center Journal* 17.2 (1997): 89-110.

Boellstorff, Tom. *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton: Princeton UP, 2008.

Bolter, Jay David. *Writing Space: Computers, Hypertext, and the Remediation of Print*. Mahwah: Lawrence Erlbaum, 2001.

Bolter, Jay David, and Richard Grusin. *Remediation: Understanding New Media*. Cambridge: MIT P, 1999.

- Boquet, Elizabeth. *Noise from the Writing Center*. Logan: USU P, 2002.
- Bricken, Meredith. "Virtual Worlds: No Interface to Design." *Cyberspace: First Steps*.
Ed. Michael Benedikt. Cambridge: MIT P, 1991.
- Brown, Nicole. "The Regionalization of Cyberspace: Making Visible the Spatial
Discourse of Community Online." *Composition Forum* 15, Spring 2006. 7 May
2008
<<http://www.fau.edu/compositionforum/15/browncyberspace.php>>.
- Burnett, Cathy. "Learning to Chat: Tutor Participation in Synchronous Online Chat."
Teaching in Higher Education 8.2 (2003): 247–61.
- Burnett, Ron. *How Images Think*. Cambridge: MIT P, 2005.
- Carlson, David A, and Eileen Apperson-Williams. "The Anxieties of Distance: Online
Tutors Reflect." *The St. Martin's Sourcebook for Writing Tutors*. Ed. Christina
Murphy and Steve Sherwood. New York: Bedford, 2008. 285-294.
- Caldwell, John Thornton. *Electronic Media and Technoculture*. New Brunswick:
Rutgers UP, 2000.
- Capossela, Toni-Lee. *The Harcourt Brace Guide to Peer Tutoring*. Fort Worth: Harcourt
Brace, 1998.
- Carpenter, Rusty. "Enhancing Diversity Initiatives through Technology: Writing Center
Access from Dallas to Afghanistan." *Praxis: A Writing Center Journal* 5.1 (2007)
<<http://projects.uwc.utexas.edu/praxis/?q=node/170>>.
- Castells, Manuel, et al. *Mobile Communication and Society: A Global Perspective*.
Cambridge: MIT P, 2007.

- Clark, Irene. "Information Literacy and the Writing Center." *Longman Guide to Writing Center Theory and Practice*. Ed. Robert W. Barnett and Jacob S. Blumner. New York: Longman, 2008. 561-570.
- Cleaver, Samantha. "Beyond Blackboard and Into Virtual Communities." *Issues in Higher Education* 16 Oct 2008: 32.
- Coogan, David. *Electronic Writing Centers: Computing in the Field of Composition*. Stamford: Ablex, 1999.
- , "Towards a Rhetoric of On-line Tutoring." *Longman Guide to Writing Center Theory and Practice*. Ed. Robert W. Barnett and Jacob S. Blumner. New York: Longman, 2008. 555-560.
- Corbusier, Le. *The City of To-Morrow and its Planning*. New York: Dover, 1987.
- Cornett, Kaylia. "Studio for Academic Creativity to Replace Current Writing Center." *Eastern Progress Online*. 15 January 2009. 5 May 2009
<www.easternprogress.com>.
- Crampton, Jeremy W. *The Political Mapping of Cyberspace*. Chicago: U of Chicago P, 2003.
- Crump, Eric. Resume. 10 July 2008
<http://interversity.com/eric/resume/index_print.php>.
- Cushman, Ellen. "The Rhetorician as an Agent of Change." *College Composition and Communication* 47.1 (1996): 7-28.
- Davis, Mike. *City of Quartz*. New York: Vintage, 1990.
- , "Fortress Los Angeles: The Militarization of Urban Space." *Variations on a Theme*

- Park: The New American City and the End of the Public Space*. New York: Hill and Wang, 1992.
- de Certeau, Michel. *The Practice of Everyday Life*. Berkeley: U of California P, 1984.
- Deibert, Ronald J. *Parchment, Printing, and Hypermedia: Communication in World Order Transformation*. New York: Columbia UP, 1997.
- Dodge, Martin, and Rob Kitchin. *Mapping Cyberspace*. New York: Routledge, 2001.
- du Gay, Paul, et al. *Doing Cultural Studies: The Story of the Sony Walkman*. London: Sage, 2003.
- Eagleton, Terry. *After Theory*. New York: Basic, 2003.
- English, Joel A. "Putting the OO in Moo: Employing Environmental Interaction." *Taking Flight with OWLs: Examining Electronic Writing Center Work*. Ed. James Inman and Donna N. Sewell. Mahwah: Lawrence Erlbaum, 2000. 171-179.
- Eodice, Michele. "Do We Really Need That? Choosing Technology for the Writing Center." *Praxis: A Writing Center Journal* Spring 2005
<<http://projects.uwc.utexas.edu/praxis/?q=node/20>>.
- Farley, Kathryn, Michael Nitsche, Jay Bolter, and Blair MacIntyre. "Augmenting Creative Realities: The Second Life Performance Project." *Leonardo* 42.1 (2009): 96-97.
- Feenberg, Andrew. *Critical Theory of Technology*. New York: Oxford UP, 1991.
- . *Questioning Technology*. New York: Routledge, 1999.
- Foster, Derek. "Community and Identity in the Electronic Village." *Internet Culture*. Ed. David Porter. New York: Routledge, 1997. 23-37.
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Trans. Alan Sheridan.

- New York: Vintage Books, 1995.
- . *The History of Sexuality: An Introduction*. New York: Vintage, 1990.
- . *Madness and Civilization: A History of Insanity in the Age of Reason*. New York: Vintage, 1988.
- . "Space, Knowledge, Power." *The Foucault Reader*. Ed. Paul Rabinow. Trans. Christian Hubert. New York: Pantheon Books, 1984. 239-56.
- . *Space, Knowledge, and Power*. Eds. Jeremy W. Crampton and Stuart Elden. Ashgate, 2007.
- Gelernter, David. *Machine Beauty: Elegance and the Heart of Technology*. New York: Basic, 1998.
- Geller, Anne Ellen, et al. *The Everyday Writing Center: A Community of Practice*. Logan: Utah State UP, 2007.
- Gibson, William. *Neuromancer*. New York: Ace, 1984.
- Gillen, Julia. "Literacy Practices in Schome Park: A Virtual Ethnography." *Journal of Research in Reading* 32.1 (2009): 57-71.
- Gitelman, Lisa, and Geoffrey B. Pingree, eds. *New Media, 1740 – 1915*. Cambridge: MIT P, 2003.
- Goody, Jack. *The Interface between the Written and the Oral*. Cambridge: Cambridge UP, 1987.
- Guest, Tim. *Second Lives: A Journey through Virtual Worlds*. New York: Random House, 2007.
- Habermas, Jürgen. *The Structural Transformation of the Public Sphere: An Inquiry into a*

Category of Bourgeois Society. Cambridge: MIT P, 1991.

Hadfield, Leslie, et al. "An Ideal Writing Center: Re-Imagining Space and Design." *The Center Will Hold: Critical Perspectives on Writing Center Scholarship*. Ed. Michael A. Pemberton and Joyce Kinkead. Logan: Utah State UP, 2003. 166-176.

Haraway, Donna J. *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, 1991.

Harris, Kenny. "Writing Center Offers Help on Creative Pieces as Well as Essays." *The Eastern Progress* 26 March 2009: B3.

Harris, Muriel. SLATE (Support for the Learning and Teaching of English) Statement: "The Concept of a Writing Center" 20 February 2007. 1988
<<http://iwca.syr.edu/IWCA/Startup/Slate.htm>>.

Harris, Muriel, and Michael Pemberton. "Online Writing Labs (OWLs): A Taxonomy of Options and Issues." *Computers and Composition* 12 (1995): 145-159.

Harrison, Rodney. "Excavating Second Life: Cyber-Archaeologies, Heritage, and Virtual Communities." *Journal of Material Culture* 14.1 (2009): 75-106.

Harry, Drew, Dietmar Offenhuber, and Judith Donath. "The Role of Virtual Architecture: Function Follows Form." *Space Between People: How the Virtual Changes Physical Architecture*. Ed. Stephan Doesinger. New York: Prestel, 2008. 64-72.

Harvey, David. *The Condition of Postmodernity*. Cambridge: Blackwell, 1990.

Havelock, Eric A. *The Muse Learns to Write*. New Haven: Yale UP, 1986.

Haydn, Florian. "A Material that Never Comes to Rest: Concepts and Potentials of Temporary Spaces." *Temporary Urban Spaces: Concepts for the Use of City*

- Spaces*. Boston: Birkhauser, Boston: Birkhäuser, 2006. 67-73.
- Healy, Dave. "From Place to Space: Perceptual and Administrative Issues in the Online Writing Center." *Computers and Composition* 12 (1995): 183-93.
- Hebdige, Dick. *Subculture: The Meaning of Style*. New York: Routledge, 1979.
- Heidegger, Martin. *The Question Concerning Technology and Other Essays*. New York: Harper & Row, 1977.
- Hesford, Wendy S., and Brenda Jo Brueggemann. *Rhetorical Visions: Reading and Writing in a Visual Culture*. Upper Saddle River, NJ: Pearson, 2007.
- Hobson, Eric. "Straddling the Virtual Fence." *Longman Guide to Writing Center Theory and Practice*. Ed. Robert W. Barnett and Jacob S. Blumner. New York: Longman, 2008. 475-93.
- , ed. *Wiring the Writing Center*. Logan: Utah State UP, 1998.
- Horan, Thomas A. *Digital Places: Building Our City of Bits*. Washington, D.C.: Urban Land Institute, 2000.
- Inman, James A., and Donna N. Sewell. "Mentoring in Electronic Spaces: Using Resources to Sustain Relationships." *The Center Will Hold: Critical Perspectives on Writing Center Scholarship*. Ed. Michael A. Pemberton and Joyce Kinkead. Logan: Utah State UP, 2003. 177-89.
- Jacobs, Jane. *The Death and Life of Great American Cities*. New York: Modern Library, 1993.
- Jameson, Fredric. *The Geopolitical Aesthetic: Cinema and Space in the World System*. Bloomington: IU P, 1992.

- . "Is Space Political?" *Rethinking Architecture: Reader in Cultural Theory*. Ed. Neil Leach. New York: Routledge, 1997. 255-269.
- . *Postmodernism: Or, the Cultural Logic of Late Capitalism*. Durham: Duke UP, 1991.
- Jennings, Nancy, and Chris Collins. "Virtual or Virtually U: Educational Institutions in Second Life." *International Journal of Social Sciences* 2.3 (2008): 180-86.
- Johnson, Paul J. "Writing Spaces: Technoprovocateurs and OWLs in the Late Age of Print." *Kairos: A Journal for Teachers of Writing in Webbed Environments*. 1:1 (1996). 15 November 2006 <<http://english.ttu.edu/kairos/1.1/owl/johnson.html>>.
- Johnson, Steven. *Emergence: The Connected Lives of Ants, Brains, Cities, and Software*. New York: Scribner, 2001.
- . *Interface Culture: How New Technology Transforms the Way We Create and Communicate*. San Francisco: Basic, 1997.
- Johnson-Eilola, Johndan. *Datacloud: Toward a New Theory for Online Work*. Cresskill, NJ: Hampton Press, 2005.
- . *Nostalgic Angels: Rearticulating Hypertext Writing*. Norwood: Ablex, 1997.
- Jordan-Henley, Jennifer, and Barry Maid. "MOOving Along the Information Superhighway: Writing Centers in Cyberspace." *The Writing Lab Newsletter* 19.5 (1995): 1-6.
- Kastman Breuch, Lee-Ann. *Virtual Peer Review*. Albany: State U of New York P, 2004.
- Kemp, Fred. "Getting Smart with Computers: Computer-aided Heuristics for Student Writers." *The Writing Center Journal* 8 (1987): 3-10.
- Kendall, Lori. *Hanging Out in the Virtual Pub: Masculinities and Relationships Online*.

- Berkeley, U of California P, 2002.
- Kist, William. *New Literacies in Action: Teaching and Learning in Multiple Media*. New York: Teachers College P, 2005.
- Kohoutek, Rudolf, and Christa Kamleithner. "Temporary Uses, Deregulation, and Urbanity." *Temporary Urban Spaces: Concepts for the Use of City Spaces*. Eds. Florian Haydan and Robert Temel. Boston: Birkhäuser, 2006. 25-37.
- Lanham, Richard. *The Economics of Attention: Style and Substance in the Age of Information*. Chicago: U of Chicago P, 2006.
- Lefebvre, Henri. "The Production of Space." *The Spaces of Postmodernity: Readings in Human Geography*. Ed. Michael J. Dear and Steven Flusty. Oxford: Blackwell, 2002. 131-141.
- . *The Production of Space*. Trans. Donald Nicholson-Smith. Oxford: Blackwell, 2000.
- . *The Urban Revolution*. Trans. Robert Bonanno. Minneapolis: U of Minnesota P, 2003.
- Liu, Alan. *The Laws of Cool: Knowledge Work and the Culture of Information*. Chicago: U of Chicago P, 2004.
- Lynch, Kevin. *The Image of the City*. Cambridge, MIT P, 1960.
- MacCabe, Colin. "Preface." *The Geopolitical Aesthetic*. Bloomington: IU P, 1992. ix-xvi.
- Man, John. *Gutenberg: How One Man Remade the World with Words*. New York: MJF Books, 2002.
- Manovich, Lev. "Data Visualization as New Abstraction and as Anti-Sublime." *Small Tech: The Culture of Digital Tools*. Eds. Byron Hawk, David Reider, and Ollie

- Oviedo. *Electronic Mediations Ser. 22*. Minneapolis: U of Minnesota P, 2008.
- . *The Language of New Media*. Cambridge: MIT P, 2001.
- . "The Poetics of Augmented Space." *Visual Communication* 5.2 (2006): 219-240.
- Markham, Annette. *Life Online: Researching Real Experience in Virtual Space*. Walnut Creek: AltaMira, 1998.
- Marvin, Carolyn. *When Old Technologies Were New*. New York: Oxford UP, 1988.
- McLuhan, Marshall. *The Book of Probes*. Corte Madera, CA: Ginko Press, 2003.
- . *The Gutenberg Galaxy*. Toronto: U of Toronto P, 1962.
- Melzer, Dan. "Synchronous OWL Tutoring: A Self-Study of Chat Room Conferences." *The Writing Lab Newsletter* 29.10 (2005): 10-3.
- Miraglia, Eric, and Joel Norris. "Cyberspace and Sofas." *Taking Flight with OWLs: Examining Electronic Writing Center Work*. Ed. James A. Inman and Donna N. Sewell. Mahwah: Lawrence Erlbaum, 2000. 85-103.
- Misa, Thomas J. *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present*. Baltimore: Johns Hopkins UP 2004.
- Mitchell, William J. *City of Bits: Space, Place, and the Infobahn*. Cambridge: MIT P, 1996.
- . *E-topia: Urban Life, Jim—But Not as We Know It*. Cambridge, MA: MIT P, 1999.
- Mitchell, W. J. T. *Picture Theory*. Chicago: U of Chicago P, 1994.
- Moseley, Ann. "From Factory to Workshop: Revising the Writing Center." *The Writing Center Journal* 4.2 (1984): 31-38.
- Negroponte, Nicholas. *Being Digital*. New York: Vintage, 1995.
- Neuleib, Janice, and Maurice Scharon. "Tutors and Computers, An Easy Alliance." *The*

- Writing Center Journal* 11.1 (1990): 49-59.
- North, Stephen. "The Idea of a Writing Center." *College English* 46.5 (1984): 433-46.
- Nunes, Mark. *Cyberspaces of Everyday Life*. Minneapolis: U of Minnesota P, 2006.
- O’Gorman, Marcel. *E-Crit: Digital Media, Critical Theory, and the Humanities*. Toronto: U of Toronto P, 2007.
- Odell, Lee, and Susan M. Katz. *Writing in a Visual Age*. Boston: Bedford, 2006.
- Oldenburg, Ray. *The Great Good Place: Cafés, Coffee Shops, Bookstores, Bars, Hair Salons and Hangouts at the Heart of a Community*. New York: Marlowe & Co., 1999.
- Ong, Walter J. *Orality and Literacy*. New York: Routledge, 2002.
- Palmquist, Mike. "A Brief History of Computer Support for Writing Centers and Writing-Across-the-Curriculum Programs." *Computers and Composition* 20 (2003): 395-413.
- Pegg, Bruce. "UnfURLed: Twenty Writing Center Sites to Visit on the Information Superhighway." *Wiring the Writing Center*. Ed. Eric C. Hobson. Logan: Utah State UP, 1998. 197-215.
- Pemberton, Michael A. "Planning for Hypertexts in the Writing Center . . . Or Not." *The St. Martin’s Sourcebook for Writing Tutors*. Ed. Christina Murphy and Steve Sherwood. New York: Bedford, 2008. 294-308.
- Perlin, Ken. "Can There Be a Form between a Game and a Story?" *First Person: New Media as Story, Performance, and Game*. Ed. Noah Wardrip-Fruin and Pat Harrigan. Cambridge: MIT P, 2004.

- Peterson Haviland, Carol, Carmen M. Fye, and Richard Colby. "The Politics of Administrative and Physical Location." Eds. Jane Nelson and Kathy Evertz. *The Politics of Writing Centers*. Portsmouth: Boynton/Cook, 2001. 85-98.
- Peterson Haviland, Carol, and Edward M. White. "How Can Physical Space and Administrative Structure Shape Writing Programs, Writing Centers, and WAC Programs?" *Administrative Problem-Solving for Writing Programs and Writing Centers: Scenarios in Effective Program Management*. Ed. Linda Myers-Breslin. Urbana: NCTE, 1999. 212-222.
- Postman, Neil. *Technopoly: The Surrender of Culture to Technology*. New York: Vintage, 1993.
- Reynolds, Nedra. *Geographies of Writing: Inhabiting Places and Encountering Difference*. Carbondale: Southern Illinois UP, 2004.
- Rheingold, Howard. *The Virtual Community: Homesteading on the Virtual Frontier*. New York: Harper, 1993.
- Rice, Jeff. "Urban Mappings: A Rhetoric of the Network." *Rhetoric Society Quarterly* 38.2 (2008): 198-218.
- Rice, Jeff, and Marcel O'Gorman. "Introduction." *New Media/New Methods: The Academic Turn from Literacy to Electracy*. Ed. Rice and O'Gorman. West Lafayette: Parlor, 2008.
- Rickly, Rebecca. "Reflection and Responsibility in (Cyber) Tutor Training: Seeing Ourselves Clearly on and off the Screen." *Wiring the Writing Center*. Ed. Eric Hobson. Logan: Utah State UP, 1998. 44-61.
- Robbins-Bell, Sarah. "Higher Education as Virtual Conversation." *Educause Review* 43.5

(2008): 24-34.

Rudolph, Frederick. *The American College and University: A History*. Athens: U of Georgia P, 1990.

Rymaszewski, et al. *Second Life: The Official Guide*. Indianapolis: Wiley, 2007.

Selber, Stuart. *Multiliteracies for a Digital Age*. Carbondale: SIU P, 2004.

Sewell, Donna N., and James A. Inman. "Reeling in the Horizon: OWLs and Perspective in Writing Center Work." *Taking Flight with OWLS: Examining Electronic Writing Center Work*. Mahwah: Lawrence Erlbaum Associates, 2000. xxv-xxx.

Shadle, Mark. "The Spotted OWL: Online Writing Labs as Sites of Diversity, Controversy, and Identity." *Taking Flight with OWLs: Examining Electronic Writing Center Work*. Ed. James A. Inman and Donna N. Sewell. Mahwah: Lawrence Earlbaum, 2000. 3-15.

Simpson, Jeanne H. "What Lies Ahead for Writing Centers: Position Statement on Professional Concerns." *The Writing Center Journal* 5.2/6.1 (1985): 35-39.

Smith, C. Michael. "Efficiency and Insecurity: A Case Study in Form Design and Records Management." *Writing Centers: Theory and Administration*. Ed. Gary A. Olson. Urbana: NCTE, 1984. 115-22.

Soja, Edward W. *Postmodern Geographies: The Reassertion of Space in Critical Social Theory*. New York: Verso, 1989.

---. "Inside Exopolis: Scenes from Orange County." *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Hill and Wang, 1992.

Stein, Jared. "Defining Creepy Treehouse." *flexknowlogy*. 9 April 2008. 12 June 2009

<<http://flexknowlogy.learningfield.org/2008/04/09/defining-creepy-tree-house/>>.

Stone, Allucquère Rosanne. *The War of Desire and Technology at the Close of the Mechanical Age*. Cambridge: MIT P, 2001.

"Studio Home." 5 May 2009. <<http://www.studio.eku.edu/>>.

Sullivan, Patricia, and James E. Porter. *Opening Spaces: Writing Technologies and Critical Practices*. Westport: Ablex, 1997.

Trimbur, John. "Multiliteracies, Social Futures, and Writing Centers." *The Writing Center Journal* 20.2 (2000): 29-32.

Turkle, Sherry. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon and Schuster, 1995.

Ulmer, Gregory. *Electronic Monuments*. Minneapolis: U of Minnesota P, 2005.

---. *Heuristics: The Logic of Invention*. Baltimore: Johns Hopkins, 1994.

---. *Teletheory: Grammatology in the Age of Video*. New York: Atropos, 2004.

Wallace, Ray. "Random Memories of the Wired Writing Center: The Modes-to-Nodes Problem." *Wiring the Writing Center*. Logan: USU P, 1998. 163-170.

Waller, Susan. "A Brief History of University Writing Centers: Variety and Diversity."

28 September 2002. New Foundations. 27 March 2007

<<http://www.newfoundations.com/History/WritingCtr.html>>.

Weinberger, David. *Small Pieces Loosely Joined*. Cambridge: Perseus, 2002.

Wertheim, Margaret. *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet*. New York: Norton, 1999.

Young, Beth. "History of UWC Locations." E-mail to Russell Carpenter. 4 February 2009.

Young, Iris Marion. *Justice and the Politics of Difference*. Princeton, NJ: Princeton UP, 1990.