

1-1-2010

Technology Use in a First-Year Composition Program

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TECHNOLOGY USE IN A FIRST-YEAR COMPOSITION PROGRAM

A Thesis submitted to
The Graduate College of
Marshall University

In partial fulfillment of
the requirements for the degree of
Master of Arts

Department of English
by
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Approved by

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Marshall University
July 2010

Date of Defense: July 1, 2010

Keywords: Technology, First-Year Composition, Writing, Computers, Multimodality,
New Media

Acknowledgements

I would like to thank the members of my committee for their encouragement throughout this process. This project began as an annotated bibliography in Dr. Kelli Prejean's Composition Theory course in the fall of 2008. Her guidance continued in an independent study class in the fall of 2009 where I learned about qualitative methods in the composition field. She has been incredibly supportive and encouraging and without her mentorship and experience, this thesis would not have come to fruition. I also received intellectual encouragement from Dr. Whitney Douglas during a literacy studies class in the spring of 2010, where I learned about literacy development and was able to broaden my understanding of digital literacy through research. Additionally, Dr. Douglas was extremely positive throughout this project, and her optimism was refreshing and welcoming during good and difficult times while writing and researching this project. I would like to thank Dr. David Hatfield for his intellectual contributions and professionalism. Without his feedback, I would not have considered alternative conclusions for this project.

I want to thank Trevor Gates for providing encouragement for over twelve years in the pursuit of my educational goals. There were times where his voice was the only one nudging me to move forward, and it was only through his persistence that I continued. I look forward to addressing you as Dr. in the near future, Reverend Gates.

I offer a special thanks to Betty Thompson for her unconditional support.

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Abstract

This study examines how instructors view and work with technology in a first-year composition program at a four-year, public university in central Appalachia. Six interview questions were developed for this study as a means to explore the instructor's definition of technology, level of use (functional, critical, and or rhetorical), difficulties using technology, pedagogy, and socioeconomics of the student population. Using qualitative methods to find patterns in the data, correlations were present among participant responses with functional uses, access, and socioeconomics. Educators primarily use technology functionally for the purpose of creating linear-based essays; have broad access to technology, but do not understand or have no way of receiving training to use software programs; and see how student socioeconomics affects access and digital literacy development. Resulting from the participant responses, there are recommendations to adjust the university's professional development program, change current training practices, and offer faculty development and training within the department.

Chapter 1: Introduction

The attractiveness of using technology in classrooms has resulted in numerous texts covering claims about the impact of multimodality and technology use in composition studies. The research tends to provide 1) support for digital projects and digital literacy initiatives in the composition classroom (Takayoshi & Selfe, 2007; Kress & Leeuwen, 2001; Wysocki, 2001; Selfe, 1999) 2) the importance of visual rhetoric in the 21st century classroom (Yancey, 2004; DeVoss, 2003; Lynch & Wysocki, 2003; Wysocki, 2003; George 2002); and 3) descriptions of effective multimodal assignments and assessments, along with guidelines for setting up various writing technologies (Selfe, 2007; WIDE, 2005; Wysocki, Johnson-Eilola, Selfe, Sirc, 2004; Selber, 2004). Broad claims such as “If our profession continues to focus solely on teaching alphabetic composition—either online or in print—we run the risk of making composition studies increasingly irrelevant to students engaging in contemporary practices of communicating” highlight sweeping arguments supporting multimodal projects in classrooms (Selfe 72). These findings are intriguing as the field of composition has heavily relied upon what Cynthia L. Selfe calls “alphabetic” writing, or linear-based argumentative essays since its inception in the late 1800s. Technological advancements in the last sixty years have allowed people to communicate over electronic mediums through text, images, and sounds. It makes sense that educators in the field of composition should keep up with the times and include these modes in their classrooms and scholarly work. As instructors redefine the field to include multimodality, how are educators using technology in perhaps the most foundational of composition classes,

first-year composition in college? Is it only the incorporation of word processing alphabetic essays, or more advanced work with hypertext and images? Are educators finding that technology is accessible and easy to use? Are their students equipped with the skills necessary to work with technology at or beyond a functional level?

The research literature on technology use in classrooms is largely descriptive; we know that writing with technology is effective in classrooms given the proper support, i.e. institutional, departmental, curricular, technological, and pedagogical (Stuart Selber, 2004). Yet, there is not enough literature supporting field practices at small to moderate-sized four-year public institutions, especially where the educators have a four/four teaching load each academic year. The trumpeters of technology use, such as Cynthia L. Selfe, Stuart Selber, Gail Hawisher, Pamela Takayoshi, and Dànielle Nicole DeVoss (just to name a handful) work out of moderate to large and/or technologically rich institutions: Ohio State University, Penn State University, University of Illinois at Urbana-Champaign, and Michigan State University that have suitable support. In addition to their placement at these institutions, what are their teaching loads? One/One, Two/Two, or Four/Four like the majority of the participants in this study? Combined with the teaching load and technological resources, what are the current field practices at institutions, such as the one in this study, where instructors carry a four/four load in addition to university service, and publications, alongside a low to middle socioeconomic student population, and perhaps low to moderate access to technology outside of the university? This research begins to explore the practices of educators at one institution where teachers have a four/four teaching load; have access to technology, but no training to further

develop technological literacy in the classroom; and a student population that uses technology functionally, but is reluctant to use it critically.

Several questions arise when discussing electronic technologies in first-year composition classes. How do instructors use technology? Is it strictly word processing or mixing blogs and webtexts with word processing? Is technology accessible not only to faculty members, but to the student population as well? Are both groups comfortable using technology and or know where to go to receive training on how to use hardware such as video recorders and smart classrooms or software programs such as the Adobe Creative Suite or Microsoft products? How do faculty members use technology to teach rhetorical concepts that are crucial to composition: audience, purpose, and genre? Do faculty members shy away from or saturate technology within their classes? There are many more questions and the list can be exhaustive but the overall question is how faculty members use electronic technologies in first-year composition program not usually represented in our field's research, i.e. with faculty members that have a four/four teaching load along with requirements for university service, publication, and other areas.

The research literature will help position the field research by showing how the composition field views technology use in composition classrooms; how it proposes the incorporation of it in curricula, addresses literacy and digital literacies of users, discusses access and the digital divide; and how students respond to electronic technologies in relation to how faculty members at the institution I research use technology in their first-year composition classes.

Background

When I first began graduate studies, I wanted to explore literary theory and criticism. I had developed a passion for applying theory to contemporary and modern literatures as an undergraduate. I enjoyed it so much that I applied theory to movies, much to the chagrin of my friends who wanted to experience a film viscerally without going through the intellectual rigors of applying deconstruction or feminist theories to a motion picture. My passion for theory took a new direction when I enrolled in a composition theory course in my first semester of graduate school. Mid-way through the semester, we were asked to complete an annotated bibliography exploring one subfield within composition. I began my search by looking at Rebecca Moore Howard's extensive bibliographic website and found research by Jeff Rice labeled cool studies. I began reading his research and was piqued; however, there was not enough information relating to cool studies to support a working bibliography. I noticed in Rice's research and elsewhere on Howard's site words like new media and multimodality. I had never heard of these terms and was curious about this terminology. I began reading works by Cynthia L. Selfe and Gail Hawisher, Stuart Selber, Lev Manovich, Anne Francis Wysocki, Kathleen Blake Yancey, and others. I was hooked. I had never experienced the kinds of electronic technologies they were working with and calling for in the field of composition. I wanted to learn more and be a part of a field that called for more technology use in composition classes.

This came about after I moved back to West Virginia after living eight years in Illinois and Virginia. During my time away, I developed a strong digital literacy skill set

where I routinely used electronic hardware and software for professional and private use. When I moved back to West Virginia, I took a job working for a large agency. I began to notice that my colleagues were not as advanced with technology use as I was. There were some who did not know how to attach an email, did not understand how to cut and paste in Microsoft Word, or even how to operate a copier. After years working for a national corporation in Chicago, where technology use was integrated within my everyday working life and adopted for social uses to keep up with family and friends, I was shocked to see my fellow West Virginians were not as adept at electronic technology use and began to wonder at the reasons. It was not until much later in my research that I learned that issues such as access, power, and privilege probably had significant effect on why they did not have developed digital literacies.

Through my journey as a graduate student, concluding with this master's thesis, I wanted to revisit my earlier assumption of underdeveloped digital literacies from my experiences with the colleagues at the agency and combine that with my interest in teachers and students. After many ideas tossed around with my committee, I decided to explore technology use in first-year composition program. This allowed me to combine my interests in literacy, technology, and composition. The result is the culmination of a two-year's work of reading and researching in these fields. My study has the following objectives: to explore technology use in first-year composition classes through qualitative means; to contribute to scholarship in the fields of composition, literacy studies, and technology; to provide awareness for faculty to consider further integration of technology in their classrooms; and to make recommendations for change based upon the participant

responses from this research.

Incidentally, I do have bias within this research. Within my own teaching, I incorporate and draw upon a wide range of modes and I believe that the construction of messages through images, sounds, and words allows students to understand the greater rhetorical concepts of audience, purpose, and genre with more ease than just an alphabetic essay. I believe that teaching students critical thinking and rhetorical knowledge in composition allows them to apply those concepts to other fields such as health professions, the sciences, and business. The medium of technology just allows easier access to understanding rhetorical concepts because it integrates multiple modes of text, images, and sounds; these modes operate with different logics such as time and space. People in the 21st century are in the midst of a digital age, and those in the composition field are poised to integrate into composition classes what is happening culturally. For instance, the three basic types of learners, visual, auditory, and kinesthetic respond to the underlying logic structures of the modes. Since software programs can incorporate many modes, it speaks to the widest audience of learners and culturally the electronic medium of television and the internet combines many modes. Let's face it: most students entering the university have advanced digital literacies from working with computers for most of their lives. The role of composition, for me, is to continue to work within and to enhance those digital literacies they have already acquired by allowing them to compose visual arguments, video public service announcements, and websites. I believe the field of composition will remain relevant if we continue to push towards allowing students to develop their digital literacies in critical ways supported and

encouraged by the field, the university, and the department(s).

The main purpose in performing this research was to discover how faculty members at four-year public institution in Appalachia incorporated technology in first-year composition classrooms and discover any patterns with electronic technology use, and how faculty and students used their digital literacies to work with assignments. The research broadly investigates three areas: how faculty members in the English Department at the University of Appalachia (pseudonym) define and use technology; how socioeconomic conditions might affect access to electronic technologies among the student population; and what technological tools and training the university provides its faculty and students. This qualitative research provides information on how educators at a university in Appalachia work with technology to contribute to the ongoing scholarship in the field of composition concentrating on technology and literacy.

Study

The participants in the study were from the English Department at four-year public, open-admissions university in West Virginia, the University of Appalachia. Two tenured, one tenure-track, four full-time, and one graduate teaching assistant participated in the study. The years of teaching experience range from less than a year to over ten years. The ages of the participants ranged from under 25 to over 40. There was an equal mix of males and females. At the time of the study, there were over 60 faculty members in the English Department at the University of Appalachia at the time of this study, thus this represents only 13% of faculty from this department. Above all, since this is such a

small sample of educators at one university, I will not be making sweeping conclusions about technology use in first-year composition courses, only make broad conclusions and recommendations for change based upon the participant's statements.

Organization

The thesis is comprised of five chapters, with Chapter 1 being the introduction where I broadly outline the rest of the research. In Chapter 2, I discuss relevant literature in the fields of composition, literacy, linguistics, and digital history to provide background and situate this research within the broader discussions of technology and writing that have been happening in the field of composition in the last fifteen to twenty years. The composition field is currently redefining itself to include technology and design in writing classrooms. There are articles in scholarly journals and position statements from the Conference of College Composition and Communication to include digital technologies with composition. The literature includes discussions about problems educators face and how to overcome issues with technology. The research helps position the fieldwork in this study through triangulating the data collected from the participants through crosschecking it against these sources to arrive at corroboration.

Chapter 3 presents the methodology of the University of Appalachia study to show how I collected and worked with the qualitative data and how I came to my results. I discuss the setting of the University of Appalachia, its geographic location and institutional size; the participants in the study; my data collection methods; theoretical methods for setting up my research, risks of research, and my position as a qualitative researcher. Chapter 4 presents a narrative of responses from the participants in this study.

This section provides an overall look at how the interviewees viewed technology in first-year composition classes.

The last chapter of this work provides a discussion of the results and conclusion, recommendations, and limitations and indications for future research. One of the major findings is faculty members use technology more predominately functionally in their first-year composition classes. This may be because six out of eight of the participants have specialty areas outside of the field of composition and may be largely unaware of current discussions to include a range of multiliteracies such as functional, critical, and rhetorical in their classes. This range, borrowed from Stuart Selber, begins with functional uses of the computer, which includes the use of technology to reach goals and the understanding of how technology operates to a rhetorical praxis wherein students understand and dialogue about the designs and limitations of technology included with discussions of content. Another major finding is faculty members are largely unaware of where they can receive professional development with technology through the university. I make several recommendations of this finding in the conclusions, including making the current professional development program more prominent through multiple layers of communication.

Chapter 2: Literature Review

When teachers of composition limit the bandwidth of composing modalities in our classrooms and assignments, when we privilege print as the only acceptable way to make or exchange meaning, we not only ignore the history of rhetoric and its intellectual inheritance, but we also limit, unnecessarily, our scholarly understanding of semiotic systems (Kress, "English") and the effectiveness of our instruction for many students.
–Cynthia L. Selfe, *The Movement of Air, the Breath of Meaning*

Historical Perspective

According to Irene Clark, within the field of composition in the last 30 years, there have been calls for teaching students how to understand the process of writing. Historically, this was not always the predominate mode of operation. When the composition program began in 1885 at Harvard College, as Robert Connors notes, it was for a corrective action to the product of writing (31). Teachers and administrators were appalled that young boys could not write for the university and called it an illiteracy of American boys. Harvard College began freshman composition courses as a temporary solution between preparatory schools and universities to prepare freshmen to write for the university. The creation of handbooks for the boys focused on surface-level corrections to the finished product, but the manuals and classes did not address the process or the act of writing.

By the late 1900s, there were calls by faculty to abolish the composition program. As senior literature faculty members were teaching composition, it took away from what they perceived as their primary duty of teaching literature. The abolitionist movement didn't eradicate the composition program thanks to the argument of Thomas Loundsbury who claimed that composition, while flawed, was necessary for incoming college

students (Conners 31). In the 1930s, there were further calls to end composition programs, according to Conners, as a study completed during this time showed no real improvement of the writing skills of university freshmen (32).

At the 1963 College of Composition and Communication Conference, a radical shift in approaching the teaching of composition occurred. Participants at the conference called for a focus on the process of writing, and not the product. Members claimed teachers should teach the development of writing from staging, drafting, revising, editing and how to move from stage to stage in the process. Composition programs across the nation began teaching a process structure to students. However, in the 1970s, there was a backlash to the process movement. Oppositionists claimed that teachers could not teach structure to students (as it was concept not teachable), but the concepts of process could. For about 40 years, educators in the field of composition have taught process in writing classes across the country.

Redefining the Field of Composition

In the last 20 years, there have been calls to redefine composition to include technology and design as developments with computers and technology have moved rapidly during that time and people have become more accustomed to working with electronic technologies. Technology has allowed people across the globe to connect in ways not previously available. People who access and use the Internet can create websites, blogs, wikis, message boards, and interact on social media websites such as MySpace and Facebook. Outside of the university, people are increasingly making

computers and technology—along with writing—a part of their everyday social lives.

Because of this movement, compositionists are redefining “composition,” what it means to compose, in what environments, and for what audiences. Jody Shipka, who works with multimodal framework composition, claims that in the field of composition there has been reliance upon linear-based argumentative writing that is passed forward and geared to an audience of one, the instructor (232). The entire field of composition, from its inception at Harvard University was seen as preparing students how to write in academic environments, and typically for instructors. In 2004, the College Composition and Communication (CCCC) issued a position statement about teaching, learning, and assessing writing in digital environments. The introduction to this statement states:

Increasingly, classes and programs in writing require that students compose digitally. Such writing occurs both in conventional ‘face-to-face’ classrooms and in classes and programs that are delivered at a distance. The expression ‘composing digitally’ can refer to a myriad of practices. In its simplest form, such writing can refer to a ‘mixed media’ writing practice, the kind that occurs when students compose at a computer screen, using a word processor, so that they can submit the writing in print (Moran). Such writing may not utilize the formatting conventions such as italics and boldfacing available on a word processor; alternatively, such writing often includes sophisticated formatting as well as hypertextual links. Digital composing can take many other forms as well. For example, such composing can mean participating in an online discussion through a listserv or bulletin board (Huot and Takayoshi). It can refer to creating

compositions in presentation software. It can refer to participating in chat rooms or creating webpages. It can mean creating a digital portfolio with audio and video files as well as scanned print writings. Most recently, it can mean composing on a class weblog or wiki. And more generally, as composers use digital technology to create new genres, we can expect the variety of digital compositions to continue proliferating.

The focus of writing instruction is expanding: the curriculum of composition is widening to include not one but two literacies: a literacy of print and a literacy of the screen. In addition, work in one medium is used to enhance learning in the other.

As we refine current practices and invent new ones for digital literacy, we need to assure that principles of good practice governing these new activities are clearly articulated. (CCCC)

The position statement amply addresses all forms of electronic technology use from functional uses such as word processing and sitting at a screen to type to rhetorical uses by creating digital works such as webpages and digital portfolios. Furthermore, the statement addresses the formation of literacy in composition classes: print and screen. CCCC's recommends to instructors in the field to incorporate and teach competence in these two subject areas. In what follows, I consider the relationship between writing and technology and how the field of composition is shaping itself to move the literacy of print to include the literacy of the screen to help students make meaning of the world in richer

ways than just writing alone.

Theoretical Underpinnings and Practical Applications

Numerous researchers illustrate technology use and literacies and how to conceptualize and theorize about electronic technologies in composition classrooms, the most pertinent being Gunther Kress, Stuart Selber, and Cynthia L. Selfe. Their works in the fields of literacy, composition, and linguistics intersect with technology and provide theoretical and practical concepts for instructors in first-year composition classes.

Linguist Gunther Kress provides the composition field with a foundation to the modes of communication. These modes function to provide expressions that allow us to place structures to understand or make sense of our world. Kress's examples of modes are dance, gesture, speech, music, writing, and image. When the modes interact with one another in the same space, it is called multimodality. Each mode, however, has different logics. These logics govern the way the modes operate. The logic of writing is time. The logic of image is space. The best example of the logic of writing is the narrative; events are ordered along a linear plane and there is a beginning, middle, and end. Things may have existed outside of that linear plane, but within the craft of that narrative, items are purposively situated by the author to create an understanding about an event. As language is completely arbitrary in nature, that is we affix words to concepts and objects in order to communicate meaningfully with others¹ words do not encapsulate or inherently capture the full essence of the meaning of the concept or object. With images, Kress argues that meaning *is already contained* within the image. He supports this through his conception of the logics of images, how it occupies space, and its spatial organization. If images

already contain meaning, we have to place meaning upon concepts and objects through language, and we are applying structures to the world to have it make more sense, would it be wiser to include the teaching and creation of images alongside text in composition classes, as meaning for would be easier to grasp? While this is highly theoretical and abstract, it does serve to offer a foundation for the argument of including images alongside text in composition courses. If the field of writing is applying structure to critical thinking about a particular topic, and through that understanding, we apply meaning to concepts and objects through language, but that meaning is already inherent within images, we may be able to come to a richer understanding of the world. This foundation provides gives us an understanding of images and writing, but how do compositionists who want to include the discussion and creation of imagesⁱⁱ in existing composition classrooms find the support needed to incorporate varying modes?

Stuart Selber provides us with a model for systemic change for incorporating digital literacies in composition classrooms. His model is five-fold and it calls for changes at different levels: institutional, departmental, curricular, pedagogical, and finally, networks. At the institutional and departmental levels, Selber claims institutions must first hire and retain faculty who work within digital environments to instruct students in composition courses about varying modes and literacies of technology and how it is situated in composition classes. In addition, institutions and departments must offer ongoing training and faculty development for advances made in technology for instructors to remain relevant in their instruction. At the curriculum level, institutions, departments, and faculty must provide the theoretical foundations for including

technology in the classroom. Gunther Kress's work with multimodality serves as an excellent primer. In addition, Lev Manovich provides a rich text that gives us working language to help describe digital environments with concepts such as variability and representation. Pedagogically, Selber claims instructors must be able to integrate the philosophies and theories of digital environments with composition. Teachers must be prepared to defend their position for technology use in composition classrooms. Such positions can be that technology use is widespread and so often used, that for English departments and composition programs to remain relevant as a field and within the university, there must be some sort of incorporation of digital understandings in composition. Of networks, Selber says that for a successful integration of digital literacies in composition to surface, institutions must invest in networks that allow for full capabilities of digital expressions. This means there must be enough bandwidth, server space, software programs, and hardware for entire student populations. Selber's theory of systemic change helps situate digital literacies within composition classes, but how do instructors practically work with digital works, how might teachers assign and assess multimodal compositions?

Selber proposes another model of computer literacy for incorporating multimodal assignments in the composition classroom. The computer literacy model has three parts: functional literacy, critical literacy, and rhetorical literacyⁱⁱⁱ. Elements in functional literacy include looking at computers as tools, and students being users of computers. The critical literacy part explores computers as artifacts, and students become questioners of technology. Rhetorical literacy claims computers become hypertextual, and students are

producers of technology. Together, these three parts represent transitional, increasing stages of computer competence where the last stage also combines the previous two stages.

It is understandably difficult to work with technology if one of Selber's five areas fail or stress is placed in one or more of these areas. If the burden of responsibility lies in one area, for example, curricular development, without the proper technical training and support from the institution or department, there will be a loss of focus for integrating multimodal assignments in the classroom. Research suggests that if teachers do not understand the infrastructure and all its elements, then faculty members will fail to realize the complex relationship of technical, institutional, and cultural patterns (DeVoss, Cushman, Grabill 2005). When instructors fail to see the interrelationships of technology across many areas, they will naturally become resistant to working with technology in a rhetorical manner and default to functional literacies. This is not to condemn functional literacies as something "less than" critical or rhetorical literacies. Being able to functional operate a computer, for example, provides the foundation to critically examine its creation and existence and rhetorically create hypertextual compositions. However, DeVoss, Cushman, and Grabill claim that to understand new media composition, instructors and students must understand its infrastructure. Without an adequate understanding of it, teachers and students will fail to anticipate the complex interrelationships of technical, institutional, discursive, and cultural patterns. The authors believe that if teachers and students do not consider these contexts, then there will be limitations to new media, technology, and computers use in the classroom. They go on to

say:

Writing within digital spaces occurs within a matrix of local and more global policies, standards, and practices. These variables often emerge as visible and at times invisible statements about what types of work are possible and valuable (encoded, often, in curricula, assessment guidelines, standards, and policies). Some of these issues need the attention of teachers and of program administrators, but we would be miseducating student writers if we didn't teach them that these issues—that which we can too easily dismiss as “constraints”—are indeed deeply embedded in the decision-making processes of writing. If students are to be effective and critical new-media composers, they should be equipped with ways in which they can consider and push at practices and standards in strategic ways. (16)

In my experience and later within my research, educators are aware of the mix of practices and standards from the university, department, and outside forces such as student socioeconomic conditions and cultural nuances; however, there does not seem to be enough discussion about the invisible forces that affect writing with technology and new media composition between faculty and students and among students as a whole. This is not to say there is not a curiosity and willingness to participate in such discussions, it is just that in my experience these discussions are not generated on a routine basis. DeVoss, Cushman, and Grabill do provide a rhetorical matrix of characterizations to help teachers and students navigate the new media infrastructure by

defining terms such as embeddedness, transparency, and embodiment of standards alongside technological components of networks, design of classes, and metaphors of computer programs. These concepts link to issues of power, privilege, and literacy sponsorship by looking at the underlying political structures and authorities that provide technology and the groups that have the advantages to enjoy these benefits. By discussing these concepts with students, the authors assert this will make the infrastructure visible to faculty and students and will help them navigate the political and institutional practices which allow new media to thrive or wither.

If we investigate practices in the classroom, then we can consider what Jeff Rice argues in that college English should be the study of new media by considering the problems and demands of the networks of new media. Rice claims that current English studies relies on fixed writing that is singular to work, space, and time: essays and exams. Instead of this static environment for teaching English, Rice contends that networks can introduce social and institutional relationships which allow multiple works, spaces, and times to thrive. He contends that the academy has long championed fixed, stable knowledge and imparted that to students. Instead of rote learning, Rice considers the network as a metaphor for writing that suggests knowledge and ideas flux through the spaces and contexts it passes and reacts to within these spaces. Ultimately, it is his claim that instruction of College English should mimic networks as a way to consider discourse that imparts various areas of thought and knowledge that continually shift and change.

In addition, Rice invents a method for writing composition in a new media environment through exploring the structure of “cool” and its impacts upon culture.

Based on his research, he asserts cool is a cultural attitude that is reflected in writing and in new media. He argues that traditional paradigms of composition are prehistoric to analyzing, creating, and discussing the structures of writing in new media. Rice offers six rhetorical categories for exploring cool composition studies in new media. For example, one of the categories is chora. This is a pattern of argumentative/narrative strategy most commonly seen in hypertext link. By exploring the various links throughout a webpage, we can see how these connections produce a meaning that can be in conflict, or concord and still exist simultaneously. The six categories combined present a working terminology for the rhetorical matrices that make up new media composition. The terms help to foreground discussions about new media composition for educators who work with multimodality in their classrooms by providing a specific vocabulary.

This vocabulary is extended in Rice's practical textbook where he considers ways of approaching new media. The strategy uses the word *cool* as a way to understand current cultural attitudes and electronic writing. Rice defines electronic writing broadly, considering writing that appears on the Internet and hypertext writing. His contention is hypertext writing can create connections that would not normally be present in linear-based print because of the nature of the hypertext. The links to other documents, images, and files that authors can create in their composition create relationships of concepts and logics that may not be present in one type of mode alone. For example, Rice argues that the word 'cool,' when connected to website titles, hyperlink names, or lists, connects writing and cultural attitudes about what is currently fashionable among online communities. Rice's work highlights how new media study is relevant towards current

cultural attitudes and behaviors in society, the composition field, and the classroom.

Sensitivity towards technology infrastructure and new media literacies is not contained within the educator/student relationship in the classroom; it also exists within scholarly publishing. Composition, technology, and design is not limited to opening up new media in the classroom, as Cheryl Ball argues, it must be open in scholarly journals. If the composition field wants to usher in a redefinition of electronic technologies and writing, then the practice of it must occur in scholarly venues. Ball asserts that new media scholarship must move from traditional print areas to digital spaces. Using the example of the new media site *Kairos* and the multimedia text, *Digital Multiliteracies*, Ball examines the appropriateness of new media for scholarly discourse. By commenting on the misuse of “new media,” where it has been applied to *online scholarship* of new media, or to linear print-based articles situating new media into scholarship, she suggests that scholars can safely create viable discourses of new media *through* new media creations. In addition to this commentary, Ball provides a guide for instructors to analyze new media texts. She explains how embedded objects within a multi-layered work (text, audio, and still clips) provide additional meaning to text that is how multiple modes of communication work in tandem to create complex expressions of symbols.

Ball is not the only scholar recognizing the importance of this change in scholarly publishing about new media. In her new media text, Patricia Webb Boyd revisits her early assumptions from a scholarly article she wrote in 2001 that addresses changes and developments over seven years. She attends to the need for bring awareness between traditional expectations of linear-based print texts and digital texts among writers who

publish in academic journals. This attentiveness towards new media texts comes from a user-level wherein the audience reads the text. New media encourages multiple reading paths through the embedded hyperlinks. Boyd asserts that educators must develop strategies to help student readers of new media texts orient themselves to new media, which, Boyd claims, can be confusing and dizzying to read at first. Her work allows instructors to challenge the way they approach reading text and ultimately move towards creating hypertextual compositions.

One of the tools to help teachers and students in first-year composition classes understand the theory and application of technology is Lev Manovich's research in *The Language of New Media*. Manovich's research provides a working theory of new media by exploring the history and cultural forces surrounding new media. His research provides principle characteristics of new media. One area of his work has implications for new media research, and that is variability. The idea is a new media object can exist in infinite versions. Manovich considers hypermedia as a conceptual sibling of variability because of the connections through hyperlinks. He concludes that every reader of a hypertext receives a personalized version of a text through the navigation of hyperlinks. Ultimately, the theories Manovich present in his text offer a language or code for discussing new media's properties in any given context, including dialogues in composition and rhetoric. His work can help audiences with reading hypertext through his theory and it provides enough of a foundation to move from Selber's idea of a functional understanding of computers towards a critical application of technology and its uses through discussing the way the modes relate to each other on the screen and speak to

ideologies of its creators. It is important to note, however, that theory and application undergirds pedagogical and curricular components of multimodality, but we must also pay attention to the actual networking, the details of construction and operation of how hardware functions in real environments.

By taking the theory and practice of technology and composition and forming literacy for the screen, educators can develop relevant curriculums for the 21st century student. Cynthia L. Selfe, a pioneer in the fields of literacy and composition, has written extensively in the past 20 years about technology use and its importance in classrooms. She has become a leading advocate for advancing modes of image, sound, and text in composition classes. Her work with Gail Hawisher highlights increasing dominance and reliance upon technology in our global society. Together they argue that for English to remain a relevant field, educators must turn their attention to digital literacies that move past word processing essays and the linear-based argumentation that Shipka claims is prevalent with composition field. Not only does Selfe argue for the incorporation of digital literacies, but also she provides practical ways to delivering digital assignments in classes. In *Writing New Media*, Cynthia L. Selfe, Anne Francis Wysocki, Johndan Johnson-Eilola, and Geoffrey Sirc all work to provide assignments such as the creation of digital websites, visual arguments, video arguments, public service announcements, and so forth. Each assignment asks students to critically examine the roles of image and text in composition, the roles of computers and technology and how race, class, sex, and gender effect or plays into access or creation of technology, and finally calls upon the students to become producers of digital artifacts.

Digital Literacy Debate: Access, Privilege, and Power

Kathleen Blake Yancey, in a chair's address to the College Composition and Communication conference called for a renewed understanding of literacy and writing within the fields. She asked what is writing? Is it for the page, or for the screen? Do we privilege one set of literacies over another? Who is our audience, and what are their literacies (298-99)?

Right now, I am engaging in a digital literacy event. I am typing an essay onto a keyboard and watching symbols (letters and words) appear on the screen before me. I have learned this skill from cultural practices of the various communities I belong to (school, work, social and civic groups). David Barton and Mary Hamilton define literacy not as an act, but as a cultural practice (7). They also say there are many forms of literacy. One such is digital literacy. Barbara Jones and Suzanne Flannigan claim digital literacy is the act of engaging in digital environments where information is coded into numerical representation. It is the ability to participate actively in digitized worlds (n.p.).

Digital literacy, however, is more than just a cultural practice and the engagement of participating in digital environments. We need a finite definition that gives descriptions to the many concepts and practices that surround digital literacy^{iv}. Selber's work broadly defines working with digital elements as functional, critical, and rhetorical actions. The functional action is using the computer as a tool to get to the product. Users see technology as subordinate to their engagement with their primary purpose of communication that uses computers or technology in some way to get messages out into

the world. The critical action allows users to question technology's creation and existence along race, class, and gender lines. What sponsorship groups create and foster technology advancements? Gail Hawisher and Cynthia L. Selfe explore this further in their work with their idea of cultural ecologies. They tend to look at all the cultural elements that embody human experience, such as race, class, sex, national origin, education, access, and opportunity and look at how those elements shape technology use and production (644-45). An understanding of cultural ecologies, then, allows us to move into Selber's last part of his model for digital understanding, the rhetorical. The rhetorical action allows users to become integrated and fully functioning producers of digital communications and technology. No longer is the user just a consumer, but the user can engage in digital events by seeing technology as parallel to their needs of communicating to the world. Selber's model for digital elements helps provide a finer understanding of digital literacy. If we pull from Barton and Hamilton and define literacy as a cultural practice, and from Selber and say there are levels of understanding to computers and technology, along with Hawisher and Selfe's cultural ecologies theory, we may arrive at a finer definition of digital literacy being the cultural practice of using technology in functional, critical, and rhetorical ways using cultural ecologies as a foundation. However, not everyone is fully adept at using technology and this foreshadows conversations about access, privilege, and power.

Marc Prensky offers commentary about computer users before 1990 and after 1990 in his work, *Digital Natives and Digital Immigrants*. He says of digital natives—those born after 1990—they have grown up in a world where technology was

surrounding their every move in society. They have worked with computers, technology, and digital environments in school, at jobs, in social environments, public areas, and churches. He says, “Digital natives are used to receiving information really fast. They like to parallel process and multi-task. They prefer their graphics *before* their text rather than the opposite. They prefer random access (like hypertext). They function best when networked” (2). Digital natives have been immersed in digital environments since their birth and as a result seem to work in these areas with ease. Digital immigrants, on the other hand, did not have technology as part of their primary and secondary literacy skills. Some may have learned to use technology, but they are immigrants to the digital revolution, and in many ways will never be as adept with technology use as digital natives. However, having technology as a primary literacy skill, as with the digital natives, does not necessarily mean that the natives have the critical thinking skills necessary to question and reflect upon how people in power positions influence and shape technology to meet the needs of particular cultural and economic groups. Educators can guide digital natives, and immigrants, to develop the critical thinking skills necessary to question technology and its place in society. It simply is not enough for students to be adept at working with technology, to be functional users, but to question technology and critically think about its uses in a broad ways to help make sense and to improve the communities they engage in on a daily basis. Educators are the key to creating and shaping digital native’s and immigrant’s critical literacy skills with technology, and the brushstrokes for discussing literacy practices begins with the development of discourse.

James Paul Gee has written extensively about discourse and environments people

engage in discourse activities within. He says that everyone has a primary discourse, one that is shaped and developed through the home, the family. This discourse allows privilege and acceptance into the group that communicates in this way, and it can exclude others. After the primary discourse is in place, people can develop what Gee calls secondary discourses. These are often developed through memberships with schools, jobs, churches, civic groups, social groups, and so forth. There are times, however, when a primary and secondary discourse can come into conflict. With digital immigrants who did not grow up with technology being a part of their primary discourse, this may come into conflict when they have to work in their secondary discourses. Also, the very idea of privilege to use technology and to create and to work within digital spaces can come into conflict among the varying discourses a person develops over a lifetime due to problems with access and concerns over power, i.e. political control over resources and the authority to engage in digital environments.

Written widely over the course of the mid to late 90s and well into the 21st century are debates over access to technology and the digital divide. Barbara Monroe writes that access is an important issue to consider along socioeconomic and racial groups in global societies, but warns us not to reduce the debate over access strictly along those lines. The digital divide was a real issue in the 1990s when the Clinton-Gore administration issued a report calling for everyone in America to have access to technology and provided funding for states and communities to meet this goal. Even with this initiative in place, however, there were whole communities from lower socioeconomic backgrounds and minority groups that did not have access to technology. The question became who is technology

privileging. What groups are sponsoring technology? What groups are excluding others, why, and to what effect? Also, how does one gain membership and access into these groups?

David Bartholomae in his article *Inventing the University* discusses how each time first-year students write academically, they must invent the conventions of the academic environment for which they are writing. What is particularly useful about his article in terms of access and power in conversation with digital literacy is he writes that students must command their space with the academic environment and demand their voice be heard by those who are already members of the group. This means students can use their primary and secondary discourses to create their own voice and act as if they are already members of this group. Educators aware of this concept can help digital immigrants develop their functional and critical skills while in the first-year composition program. All of this hinges, however, on how those without access and power to technology develop and invent their writings in digital spaces.

Access to acquiring digital literacy depends on privilege and membership to certain groups that have computers and technology available for use. With privilege, if one is a digital native or immigrant, their awareness of personal power—in a Freirian sense^v— will allow them to assume responsibility for their learning. With membership, the host of cultural ecologies and functional, critical, and rhetorical understandings of technology will help a person develop skills over a lifetime. Even in a brief discussion about digital literacy, we must pause and think about access, privilege, and power and how that shapes use in our society. We must look at our cultural practices to unearth how

we sponsor (Deborah Brandt, 1998) or gatekeeping digital elements from certain groups. We must also turn a critical eye towards the production of technology and the producers of technology and what cultural ecologies they bring into the production of hardware and software, and how as consumers, we indirectly pick up on their cultural ecologies through the use of their creations.

In an effort to remain relevant to the demands of the 21st century, educators in the field of composition have incorporated technology in not only their writing classes, but their scholarship as well. The incorporation represents varying levels of technological use to what Selber refers to as functional, critical, and rhetorical to what CCCCs says as a myriad of practices of mixed media. The push to incorporate technology leaves some groups in the background such as those that are a part of the digital divide. We cannot deny that economics plays an integral role in how students come to learn and use technology in public and private spaces. This research focus on how instructors—within an economically depressed area of Appalachia—use technology in their first-year composition classes. The scholarship in the field of composition calls for technology use in writing classes, but how can educators who work with students from low- to middle-class backgrounds help students develop the digital literacy skills over the course of a 16-week class to become critical or functional users when their earlier academic or personal experiences have excluded (because of economics) this development? Thus, this research brings into conversation the views of educators at a four-year, public institution who use and work with technology in their first-year composition courses and who see the backgrounds and experiences of their students as economically challenged.

University and Department Policy and Curricula

At the time of this study, the university and department were undergoing change at both levels. The university adopted a new plan of study for incoming freshmen for the 2010-2011 academic year, and the chair of the English Department appointed a new writing program director (pseudonym) in the Spring of 2010. These changes affect writing programs within the English Department, and what the department will require for first-year composition programs for the 2010-2011 academic year. At the time of the study, data is available for both the current university undergraduate education (the Appalachia Plan) and the current writing program plan and policies. The writing program plan and policies was developed under the direction of the previous writing program director and adapted from Texas Woman's University FYC, Arizona State University's portfolio system, and the University of Appalachia's writing program committee.

The Appalachia Plan calls for six hours of English Composition (first-year composition coursework consisting of English Composition I, and English Composition II), three more hours of writing intensive classes, and a computer literacy/competency requirement through the department where the student's major plan of study resides. Through exploring the English Department's writing program plan and the department website to learn how the department defines the computer literacy/competency requirement, I was able to find an objective, but not a methodology and evaluation of the requirement for English majors. If the university, under this plan, claims the student's major department will outline computer literacy, then it is the responsibility for each department to clearly define the goals/objectives, methodology, and evaluation and report

that back to the university to ensure that there each student receives comparable computer literacy training through each department (I focus on this more in the concluding chapter).

The English Department's writing program plan and policies outlines, "The principal goal of the Writing Program is to provide the best quality writing instruction to first-year students at University of Appalachia and to serve as an important venue for the support of writing instruction throughout the university." The primary focus of the writing program is *writing*. Writing in the form of, "[giving] students plenty of practice generating, supporting, organizing, revising, and editing written arguments" (University of Appalachia Writing). The writing here is linear-based alphabetic writing. Even the title of the department's plan, "writing program" limits the scope and interpretation of composition programs by not including other elements of composition such as multimodality and design by its title of 'writing.'

It seems the university is allowing departments to decide how to define and assess computer literacy development among its majors. Within the English Department, and under the current plan for the writing program, the computer literacy development is a line item on a list of goals for students to accomplish during their studies in the first-year composition program. And, yes, the syllabi on the department's website does show instructors integrating technology on a functional level through word processing and the use of online classroom space, but is that it? Where is the assessment of computer literacy, and at what level should the faculty within the English Department assess computer literacy: functional, critical, or rhetorical? Do educators want students who

only use technology as tools and as consumers, or do they want students who question the design and origination of technology, how technology access works among class, disability, gender, race, and sex along with producing rhetorical artifacts and becoming producers of technology? These are complex issues to deal with in a program where the faculty work four/four teaching loads and are expected to serve on numerous university and department committees, complete academic advising, submit publications, and on. How does a department, specifically the English Department, begin to address and change its practices when its members are working on multiple projects and serving on committees during the academic year, and further, does it need to? Are the current practices enough to meet the needs of preparing students for the demands of the 21st century where technology is cultural factor in communication?

The composition field has undergone many changes since its inception in the late 19th century. It was first designed as substitute, and later revised to focus on the process of writing, and much later included multimodality and design. Leading proponents in the field call for the inclusion of technology beyond functional means. They ask educators to consider critical and rhetorical areas within their classrooms. It is precisely in those classrooms, where educators in the field meet a divide. There are students whose digital literacy far surpasses the teacher or on the other end of the spectrum, trails behind their peers in development. There are educators, even, who are digital immigrants and face a classroom full of digital natives. At some point, there will be classrooms full of digital native educators, however, I hypothesize by that time there will be some new literacy that supersedes digital environments and thus the cycle will continue with those being the

haves and those being the have nots. Nevertheless of the calls for more inclusion of technology in first-year composition classrooms and a student population that are digital natives, this study examines the current field practices of educators in an English Department at four-year, public institution that provides lots of technology to its faculty and students within the constraints of a four/four teaching load each academic year to suggest changes to policy and curriculum.

Chapter 3: Methodology

Sooner or later in qualitative research, texts become the basis of interpretative work and of inferences made from the empirical world as a whole. The starting point is the interpretative understanding of a text, i.e. an interview, a narrative, an observation as these may appear both in a transcribed form and in other documents. In general, the aim is to understand and comprehend each other.

–Uwe Flick, *An Introduction to Qualitative Research*

Setting

My primary purpose in conducting this research was to position scholarly research and recommendations about technology use in first-year composition programs and the application of technology in the field and to learn how faculty members at a moderate-sized institution in West Virginia used technology in writing classes. This research developed at a time when I was seeking to adopt the suggestions of Cynthia L. Selfe and Stuart Selber to incorporate electronic technologies in my own first-year composition classes, but was informally observing—through discussions and class observations—that faculty members at a couple of local institutions were working with technology alternatively to Selfe and Selber. My interest was piqued at how instructors described their classes and assignments, so I sought to document their experiences. Interviews are the primary source of material for this research, as it provides enough raw materials for data coding. Finally, the findings of the interviews inform us about the view and practices of faculty who participated in this study who work with technology hands-on in first-year composition classes, and whether electronic technologies are beneficial or detrimental to learning rhetorical concepts such as audience, purpose, and genre alongside the process of writing.

The eight participants work at the University of Appalachia, a moderate-sized institution in West Virginia near the capital of the state. The university rests in a thriving college town of approximately 50,000 residents where students from in- and out-of-state attend for its public, open-admissions policy, vibrant campus programs, and access to amenities such as public recreation sites, local theatres, shopping and dining establishments, and proximity to larger cities in the state. The university has approximately 18,000 undergraduate and graduate students with over 100 areas of specialization for students to choose. Founded by local townsfolk, the open-admissions public institution has served the Appalachian region for over 200 years.

To select participants for the study, I focused on faculty members (tenured, tenure-track, full- and part-time) and graduate teaching assistants within the university's English Department. I sought a range of faculty experience, from the more seasoned members who have taught for over ten years to the graduate assistants who were just beginning their teaching careers, to gain a wide perspective of electronic technology use in first-year composition courses. Faculty rank, however, is not the only condition that influences technology use. There are many factors such as digital literacy development professionally and personally, access to technology, educational background, i.e. composition, rhetoric, linguistics, literature, and so forth, teaching load, and age, just to name a few areas. I also assumed that faculty members who had been teaching for over ten years may be categorized as what Marc Prensky terms digital immigrants instead of digital natives and may have less comfort with technology, and was interested to see how Prensky's terms would apply toward teaching experience.

Upon institutional approval of my study, I sent an inquiry email to the English Department at the University of Appalachia asking for participants in the study. I selected this institution for its assorted faculty members, diverse student population, and availability and access to electronic technologies. The faculty in the English Department has a wide span of academic interests ranging from varying literary periods, linguistics, composition, rhetoric, and creative writing. In addition, many of the faculty members completed their doctoral work outside of Appalachia or West Virginia and had previous experience at other institutions, and I hypothesized that they would have comparative understanding to draw upon during the interviews. Their experiences at the University of Appalachia and other institutions in the state of West Virginia proved insightful for characterizing the student population. The undergraduate population at University of Appalachia is mainly millennial students who are digital natives to technology; however, I was aware of a non-traditional student population and millennial students who were digital immigrants to technology because of low access throughout their lives. I was curious to learn how faculty members worked with a diverse student population that had a myriad of technological experiences in their lives within first-year composition classes. The University of Appalachia makes many electronic technologies available such as Dell and Mac desktops, laptops available for checkout at the library, mini FLIP HD video recorders, alongside server space for saving documents and creation of student and faculty personal web pages, and various software suites such as Adobe and Microsoft products. In addition, the university provides integrated computer classrooms, and many computer labs throughout many buildings on campus. The English Department has access to three computer classrooms and two computer labs in the building where the majority

of the first-year composition classes are held. There are approximately 20-25 computers in each room, with overhead technology, and built-in sound systems.

Participants

The eight participants in this study are faculty members in the English Department at the University of Appalachia from varying ranks from professor to graduate teaching assistant. Of the ranks, there are one professor who has taught for over ten years, one associate professor who has taught for over eight years, one assistant professor who has taught over one year, four full-time instructors who have taught from one to three years, and one graduate teaching assistant who has taught for one year, all in professional capacities. With the exception of the graduate teaching assistant, who teaches one class per semester, the rest of the participants teach four classes per each 16-week semester, with there being two semesters per academic year. In addition, only two of the eight participants hold degrees with specializations in composition. Five participants hold degrees with specializations in literature. At the time of this study, the graduate teaching assistant is working on a degree in literature as well. It is of merit to note that it is generally accepted that faculty work outside their fields of creative writing, feminist studies, linguistics, and literature to teach—in the field of composition—first-year composition classes at the University of Appalachia.

I have only included their teaching experiences at the University of Appalachia and not their teaching experience over the span of their careers as I am focusing on their experience at this institution; however, the participants drew upon their experience at other institutions to compare technology availability and student populations. At the time

of this study, there are sixty faculty members in the English Department, and because of its size and close-knit community, it makes participant identification easy to detect. I have guaranteed complete anonymity for the participants by creating pseudonyms; furthermore, I will maintain this by not identifying the rank of the participant to their pseudonym as it may allow for assumptions about the real identities of the participants.

Data Collection

There was one method of data collection: confidential interviews. The purpose of the interviews were to learn of English Department faculty member's perspectives about institutional, departmental, and pedagogical practices alongside their experience working with the student population at the university with technology use in first-year composition classes. The interviews were held at the interviewee's preference, seven out of eight times at the participant's university office. The interviews lasted no less than ten minutes and no longer than half an hour. I recorded the interviews with a digital recorder so there was no loss of data. I identified each participant by a coded number that I assigned before beginning collection that way if the recorder were lost or stolen, the participants would not be identified by their name. I kept this master list on a secure web server offered by the university and kept the document password protected. After transcription, I provided the transcripts to the participants to review for data integrity and validity, along with any modifications they saw appropriate.

Theoretical Methods

“Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints

that shape inquiry” (Denzin, Lincoln 8)

Choosing a theoretical method proved taxing at the inception of this research project. There were many theories of qualitative research that were appealing to what I endeavored to accomplish. As my goals and priorities shifted while working through the preliminary stages of this project, I focused on grounded theory as a foundation for this research, specifically constructivist grounded theory. The theory accounts for multiple perceptions and attitudes and allows a space for the interviewer and interviewee to collaboratively understand and work towards a shared meaning (Charmaz 510). This theory aligned with my perception of it being feminist in nature. I relate it with Sonja Foss and Cindy Griffin’s *Invitational Rhetoric* wherein participants in a rhetorical event create a space for open dialogue and reciprocity is the hallmark for mutual understanding of different perspectives. I perceive of coding data as allowing different perspectives to come from the data, instead of imposing a structure upon the data and looking for specific themes that fit any preconceived structures. Keith Grant-Davie says of coding data, “More often, however, and more interestingly, researchers do not find exactly what they expected, or they may approach the data without clear expectations or with a range of alternative hypothesis” (273). Coding data allows for open interpretations and different perspectives, and allows an understanding to develop between the researcher and the participant responses.

According to Joyce Magnotto Neff, there are three components to grounded theory: coding, memoing, and diagramming (125). I eliminated the visual representations of the data as the words themselves provided enough categorization without having to

draw a network of figures. After the collection of data, the researcher codes the data, going through the transcriptions line-by-line for ideas and key words emerging from the information. According to Grant-Davis, coding allows researchers to understand how the participants order and make sense of the world,

One explanation might be that division and classification are strategies people commonly use to organize their experience of the world. . . . The main reason for dividing and classifying data is to simplify the material and impose order on it. Coding organized data, allowing researchers to abstract patterns by comparing the relationship placement and frequency of categories. (272)

Coding data allows the researcher to see patterns in the responses of the participants and to compare that to other responses of other participants and make conclusions. In memoing, the researcher uses the codes and writes interpretations alongside positioning his or herself within the research. This step helps the researcher record their responses to the interview and highlight sections from the participants that stand out to the researcher. The memo also helps the researcher become aware of any bias he or she may indirectly include in the coding scheme or findings (Grant-Davis, Neff).

Potential Risks of the Research

At the beginning of this study, I outlined potential risk as discussion of practices that may tarnish the English Department and or the University of Appalachia. I mitigated that risk by providing copies of the transcriptions to the participants of the study and

planned to flag any potential discussions that may have caused undue harm towards the department or institution. Fortunately, all of the participants discussed information in a respectful manner that not only highlighted the university and student population, but also brought insight that elevated understanding of technology use in first-year composition classes in an objective manner.

The other risk of the research and the greater risk of all qualitative research is the bias the researcher brings in the process. Researchers discuss the risks of bias in research (Grant-Davie, Gergen and Gergen), particularly within the field of qualitative research where the researcher must explore their own agenda and role from inception to culmination and position his or herself among the research. I had many biases at the outset of this project, chiefly where I viewed technology's place in a first-year composition program, and thankfully, my committee was able to steer me in a direction that allowed me to perceive my bias and negate it throughout my process.

Position

At the outset of the project, I wanted to investigate how faculty members in the English Department at the University of Appalachia worked with technology in the composition classroom, as I perceived faculty members shying away from using technology beyond word processing essays. I knew that there were efforts underway to inject greater technology use in first-year composition classes through programs offered by the Department of Technology Coaching (pseudonym), Team Digital (pseudonym), and department and university provisions of hard and software technologies such as video camcorders and editing programs. I hypothesized that faculty members were resistant to

integrating technology in a rhetorical way in first-year composition classes and sought to offer solutions for faculty members who may have wanted to use technology on a larger scale.

I based my hypothesis off a cursory glance of the syllabi on the English Department webpage where it appeared faculty members tended to lean towards more traditional literacy practices of what Cynthia L. Selfe calls alphabetic writing instead of digital projects. The major writing assignments are linear-based essays with revisions, peer reviews, and final portfolios. What I was ignoring, however, was the implicit understanding that faculty members and students were already using technology in other ways that I did not conceive of to produce their major essay assignments, such as creating web pages, blogs, word processing essays alongside using televisions and video clips. These areas were not present in the syllabi, I only learned of these explorations through interviews. Faculty members were using technology in first-year composition classes, just not in the way I had envisioned it happening, and I realized a bias in my research.

Conversely, I must discuss my own pedagogy as it specifically relates to technology use. Positioning myself within rhetorical areas, I believe writing involves an understanding of purpose, context, and audience. As writers, we have responsibilities and commitments toward our practice and our readers. These include the need to understand the reasons for writing, exploring the needs and desires of people reading our texts, investigating and engaging in the conventions of discourse communities, and finally realizing one's own writing processes. Treating writing this way mirrors how I conceive and instruct my classes. It is my responsibility, then, to impress the importance of writing

for a group and occasion, along with realizing the process of writing from brainstorming, revision, and completion.

Teaching students about writing involves using technology beyond functional ways. Not only do I see technology as tools for a product, but I ask students to examine the purpose of technology through discussion of how the design of hardware makes it easy or difficult to operate, or examination of how software programs operate and how the layout and design of the software affects how end users work with the product. Lastly, I ask my students to work with technology rhetorically by creating websites and video public service announcements. I find students understand rhetorical concepts better after working with websites and video projects as it not only engages their cultural conditioning to use technology, but they get to create and produce technological artifacts and disseminate them locally or globally. I sincerely think that the composition field is not solely about linear-based writing, but it is also about design and technology. How writing and designing work in tandem to complex communicative artifacts that engage audiences in ways that linear-based writing cannot do alone. This includes an understanding of multimodality, and an inclusion of the theory of different modes into class discussion.

Collection of evidence

I recorded all eight interviews with a digital recorder and later personally transcribed each session. I replayed the recordings after each transcription to ensure that I captured all content expressed during the interviews. The transcription process proved to be challenging. I wanted to preserve as much original speech as possible, but did not

want to keep incomplete sentences and verbal utterances that occur in everyday speech patterns as I wanted to see clearly data patterns with ease and I wanted to represent the clear thoughts of the participants. To help make a decision on how to transcribe the data, I consulted Deborah Brandt's transcription process in for *Literacy in American Lives*, where she writes, "All quotations from the interviews have been edited into standard written English with hesitations, misstarts, and pauses eliminated. . . . What is gained by these decisions, I hope, is greater clarity and efficiency for the reader" (13-14). I felt that representing the participants speech patterns in lightly edited Standard Written English would help allow readers to focus on their content.

After transcription, I began coding the interviews to look for patterns in the data. I did not assign a code set to the data, but instead looked for codes inherent in the data. I did not want to constrict the data by applying a code set from outside the data; instead, I wanted to see if patterns would emerge through line-by-line coding. I began applying Bryan G. Glaser and Anselm L. Strauss's comparative method of grounded theory by comparing the codes that surfaced from the participants of the research to find an overall pattern from the participant responses.

During and after each interview, I recorded brief notes about my overall impression of each interview including the setting, objects in the room, engagement between myself and the participant, and my thoughts about their responses. When I began memoing the data, I blended my notes, the codes, and summarized the responses of each participant. I then compared the memo results to the original transcriptions and codes to

be aware of any bias that I injected in the memo.

During the memoing process, I realized that I not only wanted to synthesize and provide the findings from the data in the results section of this thesis, but I sought to provide a narrative of each participant in the study. I thought their voices and thoughts on the questions were illuminating and could provide additional weight towards any discussion about how educators may use or view technology in a first-year composition classroom within Appalachia.

Chapter 4: Results of Data Collection

Many literate interactions are based on such cooperative acts as answering questions; giving accounts of where we have been and what we have seen; providing, storing, coordinating, and making information accessible; offering directions and instructions, mutual planning and designs. Of course, within these coordinated tasks individuals may have differing views and interests. Representations may be tinged with those differences and interactions saturated by competition for control of the reigning representations. Recognition and evaluation of these differences are part of reflective participation and action.

--Charles Bazerman, *The Wonder of Writing*

The eight participants in the research have been teaching for one to ten plus years, and represent a broad range of ranks within the English Department from professor, associate professor, assistant professor, full-time instructor, and graduate student, among different age groups, the youngest being under the age of 25, and the oldest being over the age of 40. All participants, except one, were currently teaching a first-year composition class at the time of this study. All have had teaching experiences with first-year composition classes, and the majority have experience teaching first-year composition at other universities in and out of Appalachia.

The arrangement of the participants occurs in alphabetical order by last name, and appears in the third-person, which is a summary from the coded data and memos I wrote during research collection. At times, I have included the direct response from the participant where the respondent made mention to information that was particularly insightful or engaging. This information appears in indented and in italics to separate their words from mine.

Serena Abbott

Technology is functional, critical, and rhetorical. Not all students are comfortable with using

technology in first-year composition, but Abbott gives her students the option to write linear-based argumentative essays or hypertextual webtexts.

For Serena Abbott, technology is anything that is electronic in nature; it is beyond paper, pen, and pencil. It includes word processing programs that are prevalent in first-year composition programs today. She is aware, however, that her students see word processing as an “other” form of technology. Students are more used to technology as forms of entertainment and consumption, instead of forms of professional and academic use or rhetorical forms of production.

Abbott says it has become necessary to use word processing in composition classes. She thinks there would be student revolt if she asked students to handwrite an essay, as students are use to composing with computers. She also uses the online class web space through Blackboard, but only because the department currently requires her to have students submit electronic versions of their papers for backup purposes.

Abbott allows her students to go beyond functional uses of technology with assignments, and even asks students to question technology in critical ways. She gives her students the option to create websites, to become producers of technology and to use writing in a hypertextual way if they are comfortable in producing such work; however, she does not teach how to use software programs because she does not know that much about technology. She says that students will ask her questions about video editing software and she points them to the university computer services for answers to their questions. She thinks, though, that technology serves the function of writing. If students can best express themselves hypertextually, she gives them the latitude to do so, but she

does not make it a requirement for all students in her composition classes. This serves to allow students to make independent decisions about their work and to decide how they want to represent their writing in the best possible medium. It also requires a degree of personal accountability and pride in writing.

Abbott will mix technologies with differing concepts she is trying to teach in class. Sometimes she will use the Internet to explore websites or to allow students to email free writes, or watch videos to learn about visual images and how they function rhetorically. For Abbott, technology is about ease of the form. The form of technology that is most easily to aim at teaching the concepts necessary for her classes are what she uses. An example she used is in the online class meeting space to discuss logical fallacies. She had her students post examples of logical fallacies and the results were instant interplay because they could see how logical fallacies operated and got hands on experience through their peer's examples.

Abbott does not feel comfortable using technology because she has never received formal training with hardware and software applications.

I don't know what I'm doing! I've never been trained to use the technology that my students are so comfortable with. The web-based programs, the social programs, I'm pretty good with that and I could probably do an entire class on identity with Facebook. To videos, and video editing, and even the act of filming a video, I don't know how to do that. I don't know how to use Photoshop, I don't know how to set a

webpage. I would love to know how to do that.

Abbott enthusiastically expressed wanting to learn how to use software programs for rhetorical purposes in her first-year composition courses. She is adept at using a computer, and other technological devices like a laptop, projector, photocopier, and fax machine and web-based social networking sites; but, does not know how to create and edit videos in software programs, use Adobe Photoshop, or create a webpage from scratch. She did attend a digital literacy boot camp that the university sponsored through the campus library and she did learn some concepts about video editing, and she knows whom to contact if she ever has questions about the software. There is an opportunity, here, for the university to provide training classes. If the university provides this type of training, Abbott is unaware of its existence.

For Abbott, the goal of a first-year composition course is give students the tools they need to clearly and accurately express their own ideas and have the critical thinking skills to interpret and understand other ideas as they arise. Technology is just another tool for students to use to analyze concepts.

If my end goal is supposed to be to give my students the tools they need to clearly and accurately express their own ideas and have the critical thinking skills to interpret and understand other ideas that they run across then technology is just another tool.

Abbott's students have experience with using word processing programs. It has never been an issue that her students did not have the necessary skills to perform an

assignment required in her course. She sees that a majority of her students use the computer for Internet access, with a large part of that access being for entertainment purposes only. When she discusses concepts such as composing, analyzing, and critiquing and overlay those ideas with technology, her students become hesitant to engage in the discussion. She suspects it has to do with technology access that her students met during their formative years. Some students may not have had a technologically rich environment, and may have relied upon computer use at school. When this happened, students began to use computers as sources of entertainment, but hid their use from their teachers. That taboo is still hardwired into their brains. Abbott is able to point out which of her students had a computer in their home because they are much more comfortable with technology than their counterparts.

My students have been extremely willing, even the ones that have only used word processing programs, and not having the internet. They've been extremely willing to talk about and use technology.

Abbott's experience with technology use reflect a shift between functionally using technology and moving into critical and rhetorical uses through her descriptions of how her students are reluctant to discuss technology in critical terms, but willing to converse about it as a means to an end. This may reflect a lack of student exposure to engaging in critical discussions about technology use outside of its functionality.

Bette Clark

Technology is functional. Clark uses technology in first-year composition for linear-based writing and database research.

Bette Clark's first thought about technology is computers; however, she understands that technology encapsulates more than computers and includes pencils and pens. When she hears technology, however, she thinks of computers immediately. It seems that technology and computers are synonymous.

Clark runs discussion-based classes, and uses technology in a functional manner for word processing, database research, and Internet inquiries. For her, technology is fundamental for composition. Students today grew up with technology academically and privately. The millennials—or digital natives as Marc Prensky calls them—have grown up with technology. They prefer to compose on computers.

Word processing, typing their papers, writing their papers online and using the Internet for research, all of those things is fundamental to composition. You can write with the technology of a pencil and paper or pen, but they [students] really grew up on computers.

Clark has a technology classroom for her first-year composition classes and dislikes the environment. She thinks it is a challenge to have students sit at individual computer stations as students have a tendency to fiddle, and she sees computers as distracting from class discussions. In addition, using computers require a time commitment. Students have to log in and open software programs that may take about

five minutes to complete, whereas just having students open a notebook to write on paper takes about a minute. Clark did not have positive comments about the online program, Blackboard. Comparing it to WebCT, which she used at her previous institution, she said Blackboard was not reliable in being available 24/7 and there were glitches in the programming that blocked access to some students in her classes.

Clark has to keep after her students, and cannot assume that her students know to bring material to class. For example, she has to put in her syllabus for students to bring paper and pen to class. She encourages her students to bring electronic copies of their papers to class on a USB drive on peer review days so that changes can happen faster than on paper copies; but, some resist working electronically versus hard copy.

Clark has had problems using technology in the classroom from students having problems with the project to not knowing how to operate the sound. In her experience, there is at least one computer in each computer classroom that is not fully functioning. In addition, she sees students have a need to use their cell phones during class time and that it is hard for students to divorce themselves for 90 minutes from their phones. There are also compatibility issues with the different versions of word processing programs such as Microsoft Word, with compatibility being between 97-2003 and 2007. Clark said she does not have 2007 installed on her computer at home so she cannot open 2007 documents. Clark acknowledges the hardware and software services the university provides from computers to the ILL service through the library.

Clark is worried that students today do not have an inquisitive spirit or the

motivation to learn new concepts on their own. Students will ask her questions in class and she will encourage them to perform independent research about their question, but finds that students are reluctant to do so on their own and will respond to her that he or she does not know how to do the search. She thinks it is not necessarily a technology impediment to researching using technology; instead, it is a personal motivational issue lying with the student.

Clark does not have a specific teaching philosophy for teaching first-year composition; but part of her general teaching philosophy rests in being a first-generation college student and realizing that not all students who come to college are here for knowledge for knowledge's sake. Instead, she sees that a majority of students come to university because they think that a college degree will help with a wider array of professional opportunities than not having a degree. She wants her first-year composition students to write better and more effectively. She wants to instill intellectual curiosity among her students as well. She sees composition as a practical course. Technology is integral to the class, as students must learn how to use technology, feel comfortable, and become competent with use.

I want them to learn how to write effectively. That's it. I want to instill in them some intellectual curiosity, because that's part of them succeeding in life. I think that there can be some fun in teaching, but ultimately my teaching has to reflect the practicalities of writing. For me, composition is a practical course. You're not just taking this. It has to be made useful to them. Technology has to be what is going to be most useful to them. They

need to know how to work with computers.

Currently, Clark is questioning how much technology she should use in her first-year composition classes. She sees technology as a backup or background tool instead of a primary focus. This is not to dismiss the work she wants to see happen in composition classes, but thinks students may be overwhelmed with a large amount of technology use and she is not confident that she will get the results she wants with more rhetorical technology based assignments versus alphabetic essays.

Clark sees a wide range of middle to lower-class students at University of Appalachia, with the majority coming from solid middle-class backgrounds. Her larger concern of the student population is most come from public schools and she has anxieties about the testing standards from those institutions. Her other concern is a disproportionate amount of students do not seem to have intellectual curiosity, enough to engage them with personal accountability. It seems that Clark's experiences with students are students are just doing enough to get by, instead of challenging themselves to do better.

Clark's concern about her students not having the intellectual curiosity to engage with the world around them touches on Paulo Freire's banking concept of education from a student perspective^{vi}. Freire writes, "The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world" (73). If students from low socioeconomic backgrounds have not developed the critical consciousness to

question education, then how will they approach technology use? This seems to touch on Abbott's remarks with her students' expression hesitancy when she combines technology and critical thought in instructional settings.

Meredith Driver

Technology is functional. Driver incorporates technology to deliver rhetorical concepts to different types of learners.

Meredith Driver defines technology as electronic. It is not part of the traditional classroom, which is typically full of desks and chalkboard.

Technology is defined as the use of many computers, projectors, overheads, tape recorders, and videos. Anything that is outside of what we consider as the traditional classroom.

Driver says technology helps teaching different types of learners such as auditory, visual, and tactile. For her, the students she sees in her classes respond better to the concepts she is teaching when there is a mixture of lecture, discussion, reading, and technology use in the classrooms.

If you have some students that need a picture presented to them, or need something on the screen or board; it's helpful for them to learn concepts.

A lot of times reading from the text isn't enough for students. It is helpful to change things up in the classroom, especially since the generation in the classrooms today is use to technology. It's going to make the classroom setting more interesting if there's a mix instead of lecture and reading based.

Driver uses technology in a functional sense. Functional according to Stuart Selber is looking at computers as tools and students being users of computers. Driver works with projectors and computers to show concepts to the class. She also asks the students to look at databases provided by the university library website.

We've gone in the computer lab to show things on the projector, to show the different library databases, to show students how to format their paper with margins and works cited.

Driver assigns projects where she asks students to look up two different blogs and asks them to compare and contrast the writing style and audience of the blogs to highlight the differences in audience and genres. Not only are students using technology to learn about these concepts, they are able to learn how rhetorical knowledge functions in digital spaces.

Driver expressed some frustrations and roadblocks with technology access and reliability on campus. Technology is not a part of all classrooms on campus, as it is not built in to the rooms. There is some frustration Driver expressed by technology failing during classroom meetings. She said there are various reasons why it does not work such

as any updates to the software and not knowing how to use the hardware. Access is available for technology, even though it is not built into the classrooms. However, she expressed appreciation for the staff in the Department of English who provides assistance with scheduling technology related needs, saying that the staff was able to provide her access when she needed it, even on short notice. Therefore, it seems that the department makes technology available for faculty and students as much as possible. In addition, Driver mentioned that the university provides televisions, DVD players, laptops, and projectors to checkout for instructors and handheld digital video recorders and laptops for faculty and students to checkout at the campus library.

When Driver works with her students and develops her course policies and approach to first-year composition classes, the first thing she asks of her students is accountability. She structures her class in a democratic fashion, by allowing her students to participate more in class discussions rather than lecture.

She likes to challenge their current ways of thinking about ideologies and concepts and introduces debates and new concepts that are relevant to students today. She does not confine her inquiries to academics; instead, she discusses current events to stimulate critical thinking. She is not strict in her teaching and approaches her class in a casual manner. She asks that her students respect each other and feel comfortable expressing their thoughts as it is applicable to the class discussions.

About her student population and their comfort with using technology, she says millennials are not afraid of technology. They are confident about hardware and software

use. She compares this to teaching at a neighboring institution where the student population is mainly non-traditional students in their late 20s onward to 40s. She says that a majority of these students come from a lower socioeconomic background than at Atlantic State University. Of this other institution, she comments most non-traditional students there have only had access to technology through schools.

For Driver, technology's place in the composition classroom is mainly functional. The outcomes of her course assignments rely upon students using technology to word process essays, look up research, and explore information on the Internet. She does to some degree explore technology in a critical way by asking students to question access and place of technology in the classroom, the university, and in social settings. While technology is available for her to use, she has experienced frustration with the hardware not working and with not knowing how to use some software programs. Nevertheless, she knows that technology is readily available on campus, and that staff will help her solve hardware problems and fix software glitches, but in her experience does not see available training for technology incorporation in the composition classroom. Perhaps this is a marketing problem on campus about the available services the university offers to faculty members who want to use technology in more critical and rhetorical ways in the classrooms.

Pamela Forsyth

Technology is functional. Forsyth uses technology in first-year composition as tools to create linear-based essays and complete research.

For Pamela Forsyth, technology is anything having to do with the computer. She

sees computers as tools, as functional. She is aware of the rhetorical uses of technology that students can become producers with blogs and websites, but she does not use that in her first-year composition courses.

When computer classrooms became available at the University of Appalachia, Forsyth felt compelled to use the classrooms, but she observed that most of the students never used the computers during class. She also did not like the setup of the classrooms. The rooms are large and the acoustics are not conducive to class discussion. She began requesting non-computer classrooms for the semester and only brought in technology like a television and DVD player or held class for period in a computer lab when needed to demonstrate concepts, generate discussion, or provide access to research databases. She mentioned that she would like to have computers available for peer review days when students share their essays with others for efficiency sake, yet she finds it to be cumbersome as computers are a distraction for students.

Forsyth uses computers in functional ways: word processing, emailing, making comments in documents, and highlighting sections in papers. She says that students must initiate the process of asking for feedback electronically, thereby highlighting her expectation that students take initiative and personal responsibility for their work. She realizes the benefits of communicating feedback electronically as it is faster, more efficient, and accessible during non-traditional work hours, i.e. weekends, and is convenient to access outside of her campus office.

While it has been a while since Forsyth has held a composition class in a

computer classroom and therefore not experienced many technology difficulties or frustrations, she has nevertheless heard faculty members express their irritations with technology like computers malfunctioning; however, she never professionally experienced issues.

Forsyth realizes the university provides ample hardware for faculty and students, however was not able to mention examples besides the photocopier. It seems that Forsyth views technology in functional terms and gears her first-year composition classes through that lens. Forsyth views class time as precious, does not want to waste time with distractions, and sees technology as a diversion. She also views computer usage as a one-on-one activity that students can engage in on their own time. For example, students can write their papers on their own time, and when they need assistance, can email her, or stop by her office for further assistance.

Forsyth does use University of Appalachia's email system to communicate with her students about upcoming assignments for classes. She notes that since a lot of information is available online, students are using online resources to complete their assignments. She thinks these aids in her teaching.

Forsyth's teaching philosophy for first-year composition relies upon seeing writing as a process. She sees the benefits of creating a messy draft and working through drafts and revisions and having peers review work. She sees that grammar is important to writing, and thinks that learning grammar is beneficial for first-year writing students. She stresses grammar, revision, and editing in her classes. She wants her students to write

better, and thinks that if technology will foster betterment, then she encourages her students to use technology.

I do think of writing as a process, because I myself do write in a process form, so I see the benefit of the messy draft and the revisions. I do believe that writing is a process and that students benefit a lot from looking at each other's work. I do feel that grammar is somewhat essential of first-year composition. I think composition as a balance of grammar, revision, and editing. I try to stress all three things in my classes. I do provide my students with a lot of guidance with topic choices, but I think students should be able to chose their own topics. Of course, I want them to write better and that applies to technology since they use computers in ways that will allow them to revise. I do talk to them about cutting and pasting with computers. But, it's more on their private end and not as a group in a classroom.

She sees that students from lower-income areas in the state of less access to technology than students from middle-income areas. She also realizes that some students do not have home computers and may commute long distances so computer access is limited for some of her students. She has had students approach her on how to use the basics of a computer to the more intermediate of how to research information and she has provided one-on-one sessions with her students.

If they don't have a computer at home, they have to do work on campus

and possibility because of a job—part-time job responsibilities or fulltime job responsibilities—they can't spend a lot of time on campus outside of the classroom. Their economic background may affect some students and that may affect their experiences with technology; they might not be as computer savvy as some of the other kids.

It seems that Forsyth, again, uses technology functionally. She is aware of rhetorical choices, but chooses not to engage in them during class time. I think this is because she sees technology in the classroom as distractions and that some students may not have access to technology in their personal time. Forsyth appears acutely aware of the student population at University of Appalachia.

Christopher McDermott

McDermott primarily uses technology functionally, but is aware of critical and rhetorical concepts for technology use in first-year composition.

Christopher McDermott broadly defines technology as writing, pens, pencils, and paper. He says that it's any sort of tool that allows for the concrete manifestation of thought that includes computers.

McDermott has taught in computer classrooms and non-computer classrooms. He has used technology in various ways to post comments to the online classroom space, to email students, provide sample papers, provide resources for students, and has used computers in the classrooms to show sample paragraphs for class discussions. Overall, McDermott uses technology functionally, as a tool for word processing. He is aware of

rhetorical uses of technology and sees the benefits of it, for example, creating a weekly podcast to summarize class discussions; however, he has not had the opportunity to work with the technology yet. He has never used blogs or wikis in his classes; however, can envision how they would be a useful component to a first-year composition class.

I've taught lots of classes in computer classrooms and not in computer classrooms and even if you aren't in a computer classroom you can use technology in various ways. I use it to post information to the UA online website such as reminders to students about assignments, syllabus changes, paper topics or emails. I have posted anonymous samples of other student's work online and have students on the computer screen to talk about paragraphs and what's working and not working. I've also done composition classes where it's all technology based, and there's no face interaction at all. The entire class is conducted online and they email the papers and I am comment and email them back. In the computer classrooms, I've done assignments where I've said everyone get online and write a summary of what you found on a website or assess for content or we are going to break into groups and this set of groups look at that reading and assess them.

McDermott's chief complaint with computer classrooms is that it is harder to generate classroom discussions when students are spread out all over the room and that the classroom is not favorable to clustering students in a circle or in small groups. He mentions that there is always one or two students who claim their computer user name

and password do not work, or that they are unable to access specific information in the online classroom environment. He says the main impediment to a computer classroom is not being able to generate a healthy class discussion.

McDermott is aware of the many technological resources that University of Appalachia makes available to faculty and students, including smart classrooms, computer classrooms and labs, televisions, DVDs, projectors, transparencies, photocopiers, and numerous software programs.

McDermott thinks that most first-year composition students use computers in their private lives, and that computers should be a part of the academic learning environment. That it is more of a reflection of what students are currently engaging in outside of university and technology allows them not necessarily a deeply interactive manner, but a more efficient one at engaging and creating writing projects.

McDermott sees there are a disproportionate amount of students who have some sort of personal situation that prohibits them from fully engaging in and participating in the demands of class, some examples range from low access to computers, to full- and part-time employment, to taking care of relatives. He thinks that given a student population that is diverse in its needs outside of the university he must take into account the obligations his students must perform on a daily basis and how that might impede class work. He says, though, that students do have a baseline of competency of technology comparative to five or ten years ago when that baseline was not as prevalent, so there is much less frustration among the students about using technology or having

access to it routinely. He says that he still has students who express irritation or lack of access and that tends to be among non-traditional students versus millennials.

My sense is that, in terms of access there is an issue. We all have access to computers, when students are on campus, but I do think there is a split between those students that have a computer in their dorm room or their house and those that don't. I am definitely aware of what I ask for outside of class, because I think there are invariably students that will have access to technology or not. There are students that have computers in their homes, but are working so many hours a week or are taking care of family members that there are real world impediments to doing their work. It does make it difficult to have time to do the work outside of class, much less get to class some days. I think the University of Appalachia has a disproportionate amount of students that have some level of that sort of situation. Certainly ones that have come from improvised high schools will have less familiarity with this kind of technology. I think that is one of the largest challenges at teaching here because of the huge levels of backgrounds to take into account. So, it definitely affects the knowledge as well. I do feel like students have a baseline of competency, now then say five or ten years ago. There's much less frustration. I still have those students, but they tend to be older students. The ones coming in understand how to get online.

Thomas Ringo

Ringo uses technology functionally and critically in first-year composition. He asks students to think about how different forms of technology are for certain audiences.

For Thomas Ringo, technology is the use of computers. He says that today's students have grown up with computers, and do things electronically. In first-year composition classes, he finds that the people who came from more rural areas in the state may not have had access to computers, and occasionally he has a non-traditional student who doesn't have access. He finds that he has to explain things that he assumed that his students already knew about technology.

Ringo currently uses technology in his first-year composition classes. He relies upon the previous online classroom space, WebCT, but has found that the new space, Blackboard, tends to be not as reliable and accessible as WebCT. He has scaled back on using Blackboard as a result. He uses word processing for in-class writing and major assignments. His technology, however, is more focused on word processing. He sees computers as tools, and uses them functionally. He does use a lot of videos from YouTube to demonstrate concepts such as audience, but does not have an assignment where his students can create a video and use computers rhetorically.

I do use a lot of videos to demonstrate ideas. My students have come to realize that I am more of a 80s person and I use 80s music videos, and anything that you want to learn in the world you can learn from 80s music videos. I mostly use them to talk about audience. How you address audience. A lot of times they think audience are just a group of people, but I use it to show context. The students now aren't the age group for the

videos and think they are horrible, but I saw they are the audience for it, but the audience was twenty years ago, it's just that the context is different.

Ringo did have his students create a website one semester; however, he said that was very challenging for him and the students. He had a minority of students who had experience with websites; however, the majority did not. He spent more time going over how to use the software programs to create websites than the actual composition concepts he wanted to focus on. He remembers the Department of English discussing creating public service announcements as a concept for students to work with in first-year composition courses; yet, after his experience with websites, he opted not to assign PSAs.

Ringo has experienced difficulties and frustrations with technology and realizes consequently to have a backup plan so his students do not miss a class period due to malfunctions. One semester he planned to use technology for a class demonstration; however, the sound did not work. He was able to get a hold of an IT employee to address the issue, but it took the entire class period before it was resolved. He accounts for students that are not as technologically savvy and realizes that he cannot assume what his students digital literacy skills are.

Ringo says the university has provided many electronic technology resources, but not every classroom has computers. There are televisions and DVD players in some classrooms, yet Ringo has not found a use for them in his instruction. He knows the university makes ample software programs available to faculty and students; however, no

one seems to know how to operate the software, nor do they know whom to contact to provide software training. This seems to be a prevalent issue across the board. No one has the training or knows whom to contact for training.

Ringo says most of his students have grown up with technology and understand technology as digital natives instead of digital immigrants and to include technology in a composition class would be absurd. He tries to get his students to understand that their writing, even aided by technology, is a reflection of what they are and their persona and even uses Facebook to demonstrate how writing operates.

Ringo taught at Atlantic State University and compares the general student population to University of Appalachia and notices most students at University of Appalachia are in their early 20s whereas the students at Atlantic State University are nontraditional students in their late 20s to 40s. He also notices a socioeconomic gap among the two student populations and that contributes to digital literacy. Ringo perceives the students at Atlantic State University tend to come from lower socioeconomic backgrounds whereas the students at University of Appalachia come from middle-class backgrounds. At Atlantic State University, there was one computer lab for an entire building that housed the English, History, and Psychology classrooms. There were fifteen computers in this classroom. He had to plan out how and when he was going to use the computer lab and schedule his time well in advance and around other classes. And it being a smaller school than the University of Appalachia, the students who were not a part of the scheduled class in the computer lab could access the lab at any time and faculty members were discouraged from barring access to those students because it may

have been the only time the students were able to use the computers for their assignments.

Ginger Simpson

Simpson sees technology as functional in first-year composition.

Ginger Simpson defines technology at first as the computer, but as a researcher of medieval literature, sees technology as whatever is new during the time. She sees technology as an opportunity for students to learn new concepts in the classroom and develop their interests through access to technology. For her, technology is functional, it allows for the exploration of critical thinking of concepts and ideologies that students must develop during their college years. She uses a lot of word processing her composition assignments. She wants students comfortable with technology, and knows the university makes technology available to students. She allows students to go beyond word processing in her assignments if students are competent and comfortable with using technology in rhetorically, i.e. Selber's rhetorical praxis.

She has experienced minor frustrations with hardware use that tinge upon not having training on how to operate the technology the university provides to its faculty and students. An example being not knowing how to use the volume controls on the projector or how to connect the projector to the laptop. She was able to figure it out quickly during class time; however, she had not been given a demonstration on how to work the hardware prior to entering the classroom, nor had she personally tested the hardware before entering the classroom. Perhaps there should be an instructional sheet, or a quick tutorial by the person who checks out the material to the instructor, or maybe the

department could sponsor a technology hardware day where they show interested faculty and staff how to operate the hardware the university provides.

She says that technology is readily available to use on campus. There are new televisions and blue ray players in English classrooms, and instructors can request their classes in computer classrooms for the entire semester. She says the Department of English technology staff employee is extremely helpful and readily available to address technology needs and concerns.

Simpson thinks one of the key components to a first-year composition classroom is giving students safe grounds to develop and revise their writing to prepare them for future work. She sees first-year composition as a space to practice different writing genres and students are willing to develop their writing and use technology to help them become better writers and communicators.

They are in a composition classroom, and they are really stretching their wings for the first time, and they need as many times to revise as possible.

They are in college right now and they have to practice that as much as possible. They should have the opportunity to revise continuously.

Sam Smith

Smith views technology in first-year composition as functional, critical, and rhetorical. He asks his students to produce linear-based essays and hypertextual documents.

Sam Smith sees technology as anything that makes it easier to complete a job, and sometimes that includes or precludes things that one would think it would make it easier

to complete a job, but does not. For example, Smith requested all of his first-year composition classes in computer classrooms; however, once he got in there he realized that he was only using computers four or five times out of a 16-week semester and beyond that computers are a distraction for students.

Smith uses technology both functionally and rhetorically. He has his students working with blogs and producing hypertextual documents. He also uses YouTube, videos, websites, and blogs as demonstrations to teach concepts to students, alongside word processing for essays. He assigned one project where his students compared two different blogs and analyzed the writing styles of each to assess high-style versus low-style and audience. For Smith, he wants his students to learn what is appropriate in different genres and audience.

I try to let them blog about some of their ideas informally and see the difference between the two. I found that a lot of them come into college level writing, thinking that the way they write to their friends, is the way that they can write in a composition classroom. So, I address to both forms. I try to show what is appropriate.

Smith has experienced some frustration with his students over using a blog. For example, a minority of his students said the online website blog format was confusing and was not confident about posting online. He reassured his students that the online blog could be set to private and that if they needed any assistance in setting up their blog or needed a brief tutorial, they could arrange a conference with him during his office hours.

No one took him up on his offer. At midterms, some students were surprised at their grades because they were missing grades for their blog postings, and when he addressed this, some students said they still did not know how to use the online blog. He thinks this is more stubbornness and resistance to writing online rather than not having the capability to write online and equates it to the association that people avoid in their personal lives, such as avoiding social networking websites; therefore, it is almost sacrilegious to ask students to post online.

Smith is aware of the technology the university makes available to faculty and staff. When he first began teaching he was in a traditional classroom without any electronic technology. He had to reserve space in computer labs. He said they were always available and the department technology staff member was very helpful in getting him the space he needed for instruction. Smith also voiced concern over the university's online class space, Blackboard. He is concerned over its lack of reliability and has relied upon other online web spaces for his class.

While Smith acknowledges the technology the University of Appalachia has made available to its faculty and staff, he is dismayed that a large number of classrooms do not have computers in them. He cites NCTE's February 2010 edition of their periodical which recommends that all composition classrooms be in 21st century classrooms, and wonders how the university will live up to that recommendation while still having 19th and 20th century classrooms.

Smith's teaching philosophy is to relate the content he's trying to teach to the

students. He has some nontraditional students that are surprisingly receptive to the ideas that the millennials are more receptive towards and uses technology to negotiate teaching concepts to his students. He says the largest obstacle for teaching writing is his students, while knowing how to write, not knowing how to write academically. He gives them projects that help develop their skills in this area.

Smith thinks that socioeconomics plays a large factor in access to technology. He has students that do not have regular access to computers and the only access they may have is on campus, when they are able to plan time to be on campus to work. There are some nontraditional students that don't see the need for computers and technology, especially for writing papers (some handwrite their work) and the reality is beginning to set in with them that need to learn how to use computers to complete their work, and they are expressing frustration with not knowing how to operate a computer to meet the assignment requirements.

Chapter 5: Conclusions and Recommendations

Is the curricular space that our field inhabits “rhetoric/composing” or is it “writing/composing?” Without tracing the debate over whether contemporary composition was born of rhetoric or parented by something else, I’ll simply note that “rhetoric” is a more capacious territory. A course in rhetoric, understood in the term’s current breadth, admits to “the available means of persuasion” any and all possible modes of delivery, paragraph to pixel to pantomime, with rhetorical situation determining the best fit. Writing describes a subset of rhetoric: those productions whose mode of delivery is written language. In composition-as-rhetoric, a wordless cartoon or a minor-key melody may be an acceptable target discourse. In composition-as-writing, they would not (though an intermingling of word and image in some fuzzy ratio and relationship would).

-Doug Hesse, Response to Cynthia L. Selfe’s “The Movement of Air, the Breath of Meaning: Aural and Multimodal Composing”

From the participant responses, I am able to offer six conclusions and six recommendations. I asked six questions^{vii} of the faculty members. The analysis of the data suggest the participants use technology more predominately in functional ways in first-year composition classes; have an abundant access to technology, but do not have all the skills necessary to operate the hardware and software the university provides; and student socioeconomics factor into student’s use of technology. After coding the data and crosschecking against research in the field, I came up with the following conclusions and recommendations:

Conclusions

1. Technology is defined more predominately as electronic objects; however, non-electronic objects such as a pen are generally viewed as technology or the product of electronic objects.
2. Instructors use technology to varying degrees in first-year composition

courses from functional uses to rhetorical praxis.

3. Instructors place more emphasis on students as consumers of technology rather than producers.
4. The university and department provide hardware and software, and while it is not available in every writing classroom, instructors can request access to technology.
5. Instructors are predominately unaware of how they can receive basic to advanced training on the operation of hardware and the use of software.
6. The socioeconomic landscape of the student population within West Virginia affects access to technology and technology use in first-year composition classes to varying degrees from little to low access to moderate to high access.

Summary and Discussion

I arrived at these findings through an analysis of the codes I generated while looking at the data line-by-line. There were many categories and codes in the data including availability of access, personal accountability, conceptualization, and resistance for example. There was repetition of the following codes in all responses: rhetorical knowledge, functional, access, training, limitations, resources, and economics. The primary code most prevalent was functional, i.e. having the skills necessary to operate technology for practical purposes. By cross comparing the codes and analyzing the line-by-line responses, I was able to make six broad concluding statements and later

recommendations from an analysis of the conclusions. The conclusions follow.

Research Question 1

How do you define technology and how do you see it play in a first-year composition course?

Six out of eight participants specifically mentioned “computer” and “electronic” in the definition for technology. Of the other two responses, the words “ease” and “electronic” were used to describe technology. The relationship between computer and electronic is not surprising as computers are made up of chips, circuits, and transistors that use electricity for power, and computers are forms of technology as they are machines and systems; however, technology can have a very broad meaning or a very narrow meaning. Bette Clark and Christopher McDermott described pens and pencils as technology, which leads to a broader sense of technology encapsulating tools and devices that allow for the application of processes. Other participants equated technology and computers limiting the definition of technology to just computers and not other devices and machines that aid users. I think this is easily explained by the nature of the question being with the field of composition wherein computers privileged as the dominant form of technological machines for the development of essays. This does not ignore other uses of machines such as projectors, tape recorders, televisions, copy machines, or typewriters; however, educators and students do not rely primarily on these objects on a regular basis to create essays. The participants did mention these objects within their description of technology, however. The responses from this question led me to conclude that technology is defined more predominately as electronic objects; however, non-

electronic objects such as a pen are generally viewed as technology or the product of technology.

This finding corroborates with the conclusions Dennis Baron makes in “From Pencils to Pixels: The Stages of Literacy Technologies” about writing technologies. Baron mentions the pencil as a form of technology, writing technology saying that leading thinkers such as Plato condemned writing, “fearing it would weaken our memories” (73). Writing is itself, Baron concludes, a form of technology. It is a way to make life easy, as one respondent in this research concluded, and as Baron writes, “writing itself is always first and foremost a technology, a way of engineering materials in order to accomplish an end” (71). While most of the participants find technology and computers synonymous and writing is a form of technology, the times we live in today present the computer as the premier form of technology for communicating.

Research Question 2

Are you currently working with technology in your first-year composition class? To what degree? Are you using word processing, websites, videos, blogs, or another form of technology?

Most respondents use technology in a functional sense, which is according to Stuart Selber viewing computers as tools and students are the users or consumers of that technology. All eight participants use computers for word processing essays and for database research and two educators go beyond functional uses, and explore and work with computers critically and rhetorically in their classes. The chief uses of technology in

composition classes among the respondents were to teach rhetorical concepts like audience, genre, and medium and because of the increasing use of technology and computers socially; the participants commented that they must incorporate technology to varying levels in composition to remain relevant in the field and to keep students engaged in learning about writing. Since the majority of respondents use technology in functional ways and a minority go beyond, I concluded that instructors use technology in different ways in first-year composition courses from functional uses to rhetorical praxis, and they place more emphasis on students as consumers of technology through functional usage rather than produces through rhetorical makings.

This finding corroborates with Stuart Selber's divisions of functional literacy and with the CCCC's 2004 position statement. In Selber's research, however, he is careful to note that "functional" carries a pejorative connotation of understanding the *basics* and limits functional towards a "tool metaphor" for "its strong commonsense appeal and because it is generative for novice users" (36). This implied meaning of functional does not fully encompass the complexities of operation. He therefore concludes that functional includes educational goals, social conventions, specialized discourses, management activities, and technological impasses. The verb describing each category is *uses*, *understands*, *makes*, *manages*, and *resolves*. These words invoke productive actions that characterize intricate skills that are integral of cognitive functioning in adults. The participant responses were in line with these categories, e.g. all educators use technology to help students with their major writing assignments and coursework. Two of eight participants specifically mentioned helping students outside of class understand how to

use computers with the academic environment. All eight participants referred to teaching students the conventions of the field of English, but also the difference between high-style and low-style. One participant spoke of online management by having students' type essays during a brief period. Lastly, two participants spoke of teaching their students how to use functions in software programs like Microsoft Word's track changes to help with peer review and revision.

Furthermore, CCCC's 2004 statement of composition in digital environments outlines these practices broadly through the ability of students to conceptualize and work within systems that require deductive reasoning. The logic of technology requires users to draw conclusions on how objects will operate given certain stimuli, e.g. a user deducing a left-click of a mouse will provide different results than the right-click of a mouse.

Research Question 3

What difficulties, if any, have you experienced with using technology in a composition classroom?

The major difficulties expressed by all respondents were lack of understanding how to use all the hardware provided by the university, the setup of the computer classrooms and labs, and reliability of hardware and software programs. Most respondents stated frustration with not knowing how to use hardware such as projectors and sound systems or how to connect different hardware together. Four respondents disliked the setup of the computer classrooms and labs saying the computers were too far apart and the acoustics of the rooms did not encourage class discussion. The computers

do not line the walls all classrooms and labs, with the exception of one, that the English Department uses for instruction. Instead, there are computers in the middle of the classroom. Having computer stations in the middle of the room may be the reason that discussion is hindered if instructors prefer having class discussions in a circle. Half of the respondents commented on Blackboard, the university's preferred online class management tool saying that it was less reliable than its processor, WebCT, and as a result did integrate it into their instructional methods.

This information corroborates with DeVoss, Cushman, and Grabill's work with understanding technology infrastructure. Their argument is important to note here as instructors will experience (and the results in this study show this emotion) frustrations with technology especially when it is not understood or information is not provided. For example, a majority of the respondents commented on the lack of reliability of Blackboard, preferring WebCT instead. However, Blackboard purchased WebCT in 2006, assuming its brand and technologies. This information is not to dismiss their claims about reliability, however, merely to suggest that WebCT no longer exists as a company. If this information was provided to the participants, and perhaps, other educators in the field who use Blackboard, it may help alleviate some anxiety over using the Blackboard product by knowing that WebCT technology is incorporated with Blackboard technology.

Research Question 4

What technological resources has the institution made available to faculty, staff, students, and the community?

All participants were able to name technological resources the university provided faculty and students including computer classrooms, labs, laptops, projectors, televisions, DVD players, video recorders, smart classrooms, and software programs. While electronic technology is not available in every classroom on campus, the respondents noted that the university and department provided access to technologies upon request and that the department technology employee was accommodating and helpful for their requests. Only one participant, Serena Abbott, made mention of faculty technology workshops.

Through the analysis of the responses on questions 3 and 4, I concluded that the university and department provide hardware and software, and while it is not available in every writing classroom, instructors can request access to technology, and instructors are predominately unaware of how they can receive basic to advanced training on the operation of hardware and the use of software.

Research Question 5

What are your pedagogical perspectives regarding first-year composition courses in regards to using technology?

An overall pattern emerged among the respondents about teaching philosophies in first-year composition classes: helping students write better. This occurs through teaching new composition and rhetorical concepts such as audience, purpose, medium, and genre. All participants demonstrate or highlight these concepts through technology through either database research, word processing, viewing YouTube videos, creating and editing

blogs, and creating and managing websites. Most respondents used forms of technology to help students develop their critical thinking skills in an effort to cultivate critical writing needed at the university level.

Another emergent pattern was an emphasis on instilling personal accountability among the students. Three out of eight participants specifically addressed this by stating that students must initiate further research or contact with the instructor without the teacher having to prompt them to do so. Two participants shared that they would help students with their major essay assignments only if students would take the lead in making contact with the instructor outside of class either by email or office hours.

Already established is the technology of writing or writing as technology, and the participants in this study want students to write better. If writing may be seen as a technology, then can we take it to mean that instructors in want students to use technology better? This one area can use further research. Do instructors view writing as technology? In what form and how? One participant named technology as anything that makes life easier. Does writing make life easier? Some may argue no, as it does not include nonverbal communication that is present in oral discourse. Some may argue yes in favor of the mode of writing and the mode of image. Combined effectively, both modes can present a strong persuasion^{viii} for a concept or idea.

Research Question 6

How would you describe the political, economic, and sociopolitical landscape of the student population in first-year composition courses, and how do you think these

concepts tie into their experiences with technology?

All participants commented on the economic conditions of the student population within the state of West Virginia and the University of Appalachia saying there is a digital divide present among lower-income groups to moderate- to high-income groups. The respondents were acutely aware of the conditions the students faced in their communities and the low economic state of affairs from poor access to computers in public schools to low Internet connection speeds in rural areas where commuters to the university live. The moderate- and high-income groups, the participants said, had access to technology throughout their K-12 education, and were more adept at using computers than their peers who did not have access. This led me to conclude that the socioeconomic landscape of the student population within West Virginia affects access to technology and technology use in first-year composition classes to varying degrees from little to low access to moderate to high access.

Recommendations

Upon analysis of the responses from the participants in this research, there are six areas recommended for change concerning technology use in a first-year composition program that range from training, professional development, pedagogical support, and spatial layouts of current computer classrooms where this study took place. Stuart Selber argues that continual professional development is key for teachers to build up their digital literacy saying that English departments must move beyond, “Informal conversations, guest speakers, and brown bag lunches” and instead craft a program that yields, “intellectual dividends” (228-29). Such a program, Selber presents, appears as the five

components outlined by Stephen Bernhardt and Carolyn Vickrey in what they call natural learning (qtd. in Selber 228). The five parts provide faculty access to training spaces on campus; technical support; workshops and classes; recognition of accomplishment; and creation of a learning community (qtd. in Selber 228-29). This holistic approach must take place in tandem, where one part is considered in relation to another. Based on the participant responses, mapped out below are such recommendations that broadly make use of this model.

First, the university and department should provide training seminars and or workshops on how to use hardware and software that the university makes available for faculty, and market the seminars so that all faculty are aware of the existence of the program(s). If University of Appalachia were to adopt such a program, then it must first have a training center for all faculty members^{ix}. The University of Appalachia currently has an instructional design program for faculty members; however, when I contacted the program asking for training on how to use Adobe Photoshop to use in my composition classes, I was told the office did not assist with the training and only supported Blackboard technology. The office staff member did not know of any department on campus that provided training for faculty members who wanted to learn such a course and recommended that I take a course offered at the undergraduate level to learn how to use such a program. The university also provides campus wide training programs through the office of informational technology, however, at the time of writing this study, a list of classes and programs were not available. In addition, according to the University of Appalachia's website, there are many professional development programs available to

faculty members, with links to different sites. In contacting one department, one staff member was unaware of the existence of other programs. If the university wants to build a successful professional development program, then the center should be in one location, with all staff members aware of the different departments and programs that the university offers. In addition, the university must market the program and communicate through emails, newsletters, flyers, university-wide announcements the availability of such programs so that all faculty are aware its existence. Another option is to make professional development through the university's program mandatory for all faculty members and make that a part of their annual review.

If the English Department were to develop a technology training program that is specifically geared towards the goals and outcomes of a first-year composition program, then faculty and staff members of the department can do the following: have a department committee evaluate the expected digital literacy levels of a first-year composition program (functional, critical, and or rhetorical), and discuss what technological training faculty will need to accomplish in order to deliver on the expected levels. In addition, it is highly recommended that the department host ongoing seminars on how to operate the hardware that the department provides to its faculty members. These seminars may include demonstrations on how to connect laptops and sound speakers to projectors, how to operate smart classrooms, how to operate video camcorders, and so forth. The lead person of such a project could be the department's technology staff member, who can be a part of the committee's research and development of a program, and who can later lead and implement such an endeavor. If the lead person

requires assistance, then the staff member could recruit^x graduate teaching assistants, in the first year of study, who are not actively teaching, but only tutoring in the university's writing center to help work on the training materials and documentation of the seminars.

If the university and department were to make no changes to the current ways of operation, then at the very least, it is recommended that the university make a stronger effort to communicate broadly its training programs offered to all faculty members, and that the department circulates this information specifically to its staff. If, however, the university and department take into consideration changing its current professional development practices, then faculty members, at least in this study, may experience less frustration with technology as they will know where to receive training and who to ask when they experience difficulties.

Equally important to faculty input about digital literacy goals is the consideration that many faculty members teaching first-year composition courses hold degrees in fields other than composition, and may not be aware of the field's current practices and debates. It has been the practice since the inception of composition classes, for faculty members whose area of expertise is in literature (and more recently, other fields), to teaching composition courses. Within this study, for example, six of the eight participants' specialization areas were outside the field of composition. First-year composition courses, also, are largely seen as service course for the university, with many faculty members teaching three/three or four/four loads each academic year with one or two of those classes being service courses. While it is not foreseeable that the university will discontinue this practice and allow those that specialize in literature teach literature-only

courses, and hire faculty specializing in composition to teach composition courses, there is an area to consider for further professional development. If universities and the University of Appalachia specifically, require faculty members to teach service courses, then what professional development programs do they make available for faculty so they know the current discussions in the field the service course resides? If faculty members whose specializations are outside of first-year composition teach a track of first-year composition courses and are unaware of the discussions and practices in the field about developing and integrating multiple literacies in composition classes, then how will faculty who teach these courses at the University of Appalachia deliver a 21st century education that also integrates the recommendations from the College of Composition and Communication from 1994 concerning technology use, analysis, and production? Most likely, such an education will not occur.

At the time of this study, I am unaware of any programs that the University of Appalachia or the English Department offers to faculty members having to teach first-year composition courses. There must be a change in policy at the department level to ensure that the department is not only providing current field research in the field of composition to its faculty, but also that the department is delivering on the university's mission of providing a 21st century education. If the university and department continues to require faculty outside the field of composition to teach composition courses, then it is recommended that the English Department develop and implement seminars and workshops for *all* faculty members that teach composition courses to share recommendations by CCCCs, and current field discussions. This can begin by forming a

committee to research, analyze, and document relevant recommendations in the field of composition that match to the expected outcomes of a first-year composition program that the English Department and the university outlines. The next step is deciding the frequency of such a meeting; whether it is quarterly, semi-annually, or annually. It is recommended that the meeting occur on an annual basis, before faculty members who teach first-year composition classes design their syllabi for the next academic year. Lastly, to ensure the success of these annual meetings, it will require departmental support, specifically from the writing program director, department chair, and committee members.

In addition to the recommendations for training, policy change, and curricula, restructuring there is one area where participants commented negatively on the use of technology in classrooms that requires discussion and recommendation for change. Many of the participants said technology was a distraction in the classrooms because of the class setup of the computers and or students wanting to conduct their personal business during class time on computers. The first recommendation is to change the layout of the computer classrooms that the English Department uses for its classes. The layout of all the computer classrooms, except one, has computers lining three walls, with three or four rectangular tables configured in an L-shape in the middle of the room. The L-shaped configuration is a barrier to any class discussion as it is hard for the students to move their chairs so that all can see each other and the instructor can see all of the students. It is recommended to remove the L-shaped configuration and place the four or five computers that are on top of these tables on the tables that line the walls. There should be ample

room for the computers to occupy spaces on the other tables. However, it may be that just moving the computers is not a viable solution, as there may not be available outlets within the walls for the additional computers. It is necessary then for additional research.

Participants also commented on technology as a distraction with students using technology during class time to conduct personal business, whether it was texting or using computers to log into social networking websites or search for information that is not part of the class assignment for the period; it is a persistent problem. It is recommended that further research be completed in this area, perhaps drawing on the field of educational psychology to learn how to limit distractions in the classroom.

Limitations of this Research

Several factors limit the general implications of this research. Foremost, the study occurred within one department and one university in West Virginia. It is highly unlikely that this research represents the practices other departments within the University of Appalachia or other English Departments at neighboring institutions. The participants in the study are a small fraction of the number of faculty members within the English Department at the University of Appalachia. At the time of the study, there were 60 members of the English Department including tenure and tenure-track faculty, full- and part-time instructors, and graduate assistants. The results of this study only represent 13% of the teaching members of the department. In no way can this data broadly represent the entire department; instead, it is only a segment. The selection of the participants is limiting, as they were self-selecting. While the participants chose to contribute to this study, it does interject bias on the part of the interviewees because of their interest in the

topic. Next, the questions asked during the interviews provide just enough information to draw conclusions, but does not represent the myriad complexities of a topic that delves into discussions about position, economics, politics, availability, gatekeeping, pedagogy, reliability, and so forth. Because of these limitations, further research is suggested and needed.

Suggestions for Future Research

Researchers should address the limitations of this study. A larger scope, either inclusion of other departments at the University of Appalachia and or including English Departments from neighboring four-year liberal arts institutions would provide a larger data set to make more general conclusions. More interview questions about composition, technology, literacy, and socioeconomics is recommended. The current questions do not delve deeply enough into the attitudes and beliefs about these concepts in Appalachia. The inclusion of first-year composition students is advisable as they may provide data from a perspective not considered within this study.

A four-tier data collection set would be helpful to triangulate data further. While the responses from the interviews are enough to compare to each other and research by other educators, multiple data collections would allow for a more nuanced grasp of the topic. It may also allow participants who may not want to sit through interviews, but may be willing to answer questions through an online survey confidentially. Observations and the collection of materials may offer insight into the practice of technology use in first-year composition classes that are not readily identifiable during interviews or online surveys.

Notes

ⁱ See Ferdinand de Saussure's *Course in General Linguistics* for his theory on the sign, signified, and signifier.

ⁱⁱ By including images in the field of composition that has predominately relied upon alphabetic argumentative writing, i.e. temporal logic, educators are opening the field to include spatial logic. Teachers can use the logic of time and the logic of space to make meaning in communication. Students can design text and images in first-year composition classes that more fully convey the intended message by using multiple modes.

ⁱⁱⁱ I use Selber's literacy terms throughout this document as he has richly defined the characteristics of digital literacy levels.

^{iv} This is not to make an overly broad or limiting definition of digital literacy, merely to call for a generally accepted definition that encapsulates the influences and factors of the concept.

^v The Freirian sense here means developing the intellectual curiosity and transforming their oppressed situations to gain knowledge for freedom.

^{vi} I infer from Clark's commentary that the majority or a portion of her students view teachers as vessels of knowledge, and that the "teacher teaches and the students are taught" (Freire 73). For future research, this concept would be ideal to explore in more depth with Clark.

^{vii} A complete list of the questions appears in the Appendix.

^{viii} Persuasion and argument are two separate concepts. Persuasion relies upon the act or ability of enticing another person to act in some manner whereas argumentation merely allows the other person to be able to understand and see the other point of view. J. Anthony Blair provides further commentary on whether or not visual arguments are possible in his work, the *Actuality and Possibility of Visual Arguments*.

He concludes, from his evidence, that it is not entirely possible, but is probable that visual arguments can exist.

ix Staff members can also use this space. The focus of this study is primarily about educators; however, I do not want to ignore that staff members make valuable contributions to universities and should have access to a technological training space.

x At the time of this study, first-year graduate assistants worked 15 hours in the university's writing center. The graduate college policy for graduate assistant weekly work hours shows graduate assistants may work up to 20 hours. The first-year graduate assistants could be assigned additional research hours outside of the writing center to help complete these tasks.

Appendix A: Interview Questions

1. How do you define technology and how do you see it play in a first-year composition course?
2. Are you currently working with technology in your first-year composition class? To what degree? Are you using word processing, websites, videos, blogs, or another form of technology?
3. What difficulties, if any, have you experienced with using technology in a composition classroom?
4. What technological resources has the institution made available to faculty, staff, students, and the community?
5. What are your pedagogical perspectives regarding first-year composition courses in regards to using technology?
6. How would you describe the political, economic, and sociopolitical landscape of the student population in first-year composition courses, and how do you think these concepts tie into their experiences with technology?

Appendix B: IRB Project and Amendment Approvals



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Office of Research Integrity
Institutional Review Board
401 11th St., Suite 1300
Huntington, WV 25701

FWA 00002704

IRB1 #00002205

IRB2 #00003206

February 23, 2010

Kelli Prejean, Ph.D.
English Department

RE: IRBNet ID# 144059-1
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Prejean:

Protocol Title:	[144059-1] Technology Use in a First-Year Composition Classroom
Expiration Date:	February 22, 2011
Site Location:	MU
Type of Change:	New Project APPROVED
Review Type:	Expedited Review

In accordance with 45CFR46.101(b)(2), the above study and informed consent were granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire February 22, 2011. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Estee Beck.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, CIP at (304) 696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.



Office of Research Integrity
Institutional Review Board
401 11th St., Suite 1300
Huntington, WV 25701

FWA 00002704
IRB1 #00002205
IRB2 #00003206

February 26, 2010

Kelli Prejean, Ph.D.
English Department

RE: IRBNet ID# 144059-2
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Prejean:

Protocol Title: [144059-2] Technology Use in a First-Year Composition Classroom
Expiration Date: February 22, 2011
Site Location: MU
Type of Change: Amendment/Modification APPROVED
Review Type: Expedited Review

Amendment to the above listed study was approved today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair. This amendment is the revision of the informed consent.

This study is for student Estee Beck.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, CIP at (304) 896-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

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