# BLURRING THE LINES BETEWEEN INSTRUCTOR-LED AND ONLINE LEARNING:

# AN EVALUATION OF AN ONLINE COMPOSITION

### CURRICULUM ON THE BLEEDING EDGE

Brant Deranger, B.A, M.A.

Dissertation Prepared for the Degree of DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2007

### APPROVED:

Kathryn Raign, Dissertation Committee Chair Lynne Cooke, Committee Member Greg Jones, Committee Member David Holdeman, Chair of the Department of English Sandra L. Terrell, Dean of the Robert B. Toulouse School of Graduate Studies Deranger, Brant. Blurring the Lines between Instructor-Led and Online Learning:

A Case Study of an Online Composition Curriculum on the Bleeding Edge. Doctor of

Philosophy (English), August 2007, 102 pp, 2 tables, 27 illustrations, bibliography, 70

titles.

The contemporary classroom currently faces an evolving world of computer based training, online courses, instructor-led learning and several blended approaches in-between. With the increased presence of computers and communication in every facet of students' lives, students have changed to adapt to the continuous presence of technology in their daily lives. These recent rapid developments have changed the relationship between technology and communication. Indeed, communication and technology have become linked to such a degree that it is difficult to differentiate one from the other, thereby altering our rhetorical situation as instructors. Instructors can no longer deny the presence of technology in the contemporary classroom, much less in the contemporary composition classroom.

This case study serves as a post-modern analysis of the technology based blended classroom. A gap exists between what online learning is (being) today and what it is (becoming) tomorrow. This dissertation explores the gap by examining two rich data sources: online visitor navigational patterns and instructor interviews. The fundamental ideas that this text explores are the following:

- Web server logs and PHP logs can be analyzed to yield relevant information that assists in the design, architecture, and administration of online and blended learning courses.
- Technology in the writing classroom does not necessarily solve traditional problems associated with the composition classroom. Technology is a tool, not a solution.

 Technology has changed the rhetorical situation of the composition classroom. As a result, instructors must adapt to the changed rhetorical environment.

Via this study, readers will hopefully gain a better understanding of the relatively unexplored margins between instruction, composition and technology paradigms.

Instructors, trainers, technical writers, pedagogues, industry and academia alike must step forward to research technology-assisted pedagogy so that they can de-privilege the paradigms that position technology itself as a solution, and move forward toward realistic and real-world expectations for instructors in technology mediated learning environments.

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#### **ACKNOWLEDGEMENTS**

This dissertation would not have been possible without, first and foremost, the support of my friends and family. Carl and Kelly Deranger taught me by example that pursuing my dreams requires, above all, hard work and sacrifice. Their own hard work and sacrifice placed me in a position to succeed, and for that I will always be grateful. My little sister, Katie, deserves acknowledgement for pushing me, via her own accomplishments, to succeed. To my loving wife, Alicia, I especially owe my gratitude for encouraging me, making sacrifices on my behalf, and standing by my side throughout the challenging process of simultaneously starting a career, finishing a doctoral degree, and beginning our married life together. Lastly, my dissertation committee, and in particular Dr. Kathryn Raign, deserve thanks for their insight, inspiration, constructive criticism, and encouragement along the way. Thank you!

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#### CHAPTER 1

#### RIGHTING WRITING

The Problem: Writing Needs Righting

The contemporary composition classroom is quite dissimilar from the composition classroom of a decade ago. At the University of North Texas, the difference is not immediately noticeable. The Auditorium Building still stands much as it stood in 1924 when it was built as one of the "core" campus buildings at UNT. When you walk down Hickory Street, it is hard to imagine that the street congested with foreign automobiles, laptop-toting undergraduates, and motorcycles was once populated by trolley cars (UNT Existing Condition Analysis 12). Aside from a bit of wear and tear, the stoutly built Auditorium Building remains guite the same. Even when you walk past the etched bronze 1924 commemorative plaque at the front entrance of the building and through the double glass doors, the change isn't evident. Organ music still meanders down the hallway intermingled with the occasional staccato of Dr. Brenda Sims scolding a graduate student (The Auditorium Building, as its name denotes, was built as a performing arts auditorium, and then later retrofitted for the uses of the English department—the organ is still used frequently, though. Dr Sims hasn't been there nearly as long as the organ, but her presence is nearly as legendary).

The change is not immediately evident until you walk into a classroom. Pick any classroom and you will see the change. They're in every classroom. "They" aren't chalkboards, nor are "they" wooden desks or pencils. They are computers. Their power cords, wireless networks, and Cat-5 cables have snaked their way into every nook, corner, and crawlspace available in the Auditorium Building. They sit there silently in the corners of every classroom. Their blank screens observe. Their barely audible humming reminds us that they're up to something. Some might even say that they've invaded all of the composition classrooms, as did Tharon Howard, for example, in his 2000 CCCC conference presentation titled "Be Careful What You Ask For: When Computers Invade the Writing Classroom" (1). Often, instructors don't even acknowledge their presence in their classroom. Most instructors do their best to ignore them; I see it every day. Even now, as I write, there are instructors turning off computers so that they can focus on teaching their students how to write a five paragraph essay. Perhaps within such instructors still resides the kindred spirit of those who once rode streetcars down Hickory.

That's where we are now, at least within the contemporary composition classroom. UNT is only one small sample of a much larger and far-reaching phenomenon. Most composition teachers have access to technology, but they don't know necessarily how to effectively use the technology as a teaching tool because they have never received any training that teaches them how to employ the technology available as a teaching tool (Santovec 3). As Lee Dollar, an

English 1310 online instructor, states, "I learned most of what I know about using technology in the classroom outside of the classroom." The resulting classroom environment creates a gap and disconnect between students and teachers. Linear content and their accompanying pedagogical techniques just don't work well on screen. Teaching linear content misses the mark in a classroom filled with students who have grown accustomed from an early age to modular, linked content via the Internet. Such sophisticated students, via secondary orality, are more concerned with being the MySpace<sup>™</sup> (MySpace, Inc. Beverly Hills, CA., http://www.myspace.com/)member with the most "friends," or posting the mostwatched video clip on YouTube™ (Google Inc. Mountain View, CA, http://youtube.com/) than they are in listening to an instructor drone on about classical literature or comma placement. This shift in orality, as defined by Walter Ong, is a shift away from the primacy and immediacy of the spoken word and a shift toward the immediacy of the written word transmitted via a computer network, an orality that is "produced by technology" (2).

Along with the cultural transformation to secondary (or perhaps tertiary) orality, a transformation has occurred (and is still occurring) in the way that text is structured and information communicated. Cheryl Geisler points out that text has a 1000 year history, but that IT technologies with text as their core (email, html, text messages) have developed quite recently and rapidly over the past 20 years (281). These recent rapid developments have changed the relationship between information technology and writing. Indeed, the two (writing and information

technology) have become linked to such a degree that it is quite difficult to differentiate one from the other.

The technology paradigm present in the contemporary university composition classroom also provides several dichotomies that require deconstruction (Derrida 99). Currently, the composition classroom faces an evolving world of CBT (computer based training), distance learning, online courses/degree plans, traditional instructor-led learning and plenty of blended approaches in-between. Pape defines blended learning as "the area between the traditional classroom and the online instructional model where course instruction is either delivered over the Internet or through two-way video conferencing" (19). Whether the instructional technique is based on a CBT, blended, or distance learning method, the resulting scenario creates a polar opposition.

The two polar opposite groups are:

Group A: Technology Creators: those who develop CBT / distance learning, and online course technology (primarily software).

Group C: Technology Users: those who use the technology.

Surely you've noticed that I skipped from A to C in the dichotomy above. That's because there's an implied B (and an infinite number of additional symbols/possibilities) in between.

As Clark Aldrich stated in his presentation titled, "Simulations and the Future of Learning," dichotomies often cripple learning—the difference between what you

know and what you do / the difference between theory and practice / the difference between what you learn in the university and what you do in industry. The differences are crippling because they help to establish a division, a schism between knowledge and practice, between theory and reality of online and computer based learning technology (Aldrich). The division is as distinct as the division between those who understand how the inner workings of a combustion engine control the forward movement of an automobile, and those who do not, and as a result, often pay hefty mechanics bills. One would think that bridging the gap between such dichotomies would be quite easy. It is simply a matter of defining the space (the B) between the polar opposites and bridging the gap. It is not a simple matter of definition, though.

Traditionally, teachers have "fit" within the "C" side of the dichotomy. Most composition instructors who employ technology as a teaching aide and medium act as users rather than creators of technology. It is my contention that the teachers are (and should be becoming) the B. Contemporary composition instructors should be the "other" and exist within the gap between dichotomies. Their lack of presence in the current dichotomy between users and creators defines the very need for their presence (Derrida 99). For example, several technical writing instructors and composition researchers (Jay Gordon and Liz Pape, for example) have recently advocated the introduction of hypertext composition and multimedia elements into the traditional composition classroom as a way to make students consider the complexity of design and visual rhetoric,

as well as to give them "tools" for their future careers. Pape suggests that via adaptive instruction, multimedia tools can increase the engagement of students in the *learning* process (19). Gordon asserts that teaching HTML is not just an end, but a means to a deeper theoretical understanding of writing (50).

Pape's and Gordon's suggestions begin to fill the dichotomous gap between the creation and use of technology in the composition classroom. By suggesting that composition instructors should teach hypertext (HTML) and multimedia authoring, Gordon and Pape actually position themselves and their students as creators of technology rather than just users of technology. The realm between the creation and use of technology (the "other" space I refer to as the "B") is precisely where instructors should position themselves if they expect to adapt to the rhetorical situation in the contemporary composition classroom. As Walter Ong notes, "We must have more and more machines in our communications processes, but we must at the same time master them more and more by growth in our interior resources" (67). By growing interior resources as creators of technology rather than users of technology, composition instructors in the computer-based classroom can (and will) bridge the dichotomous gap and thereby adapt to the rhetorical situation present in the contemporary composition classroom (67).

What do these changes mean for composition instructors? It means that instructors' rhetorical situation has changed because both the audience (contemporary students) and the medium (electronic rather than print communication) has changed. With the increased presence of computers in every facet of students' lives (and especially in the composition classroom), students have changed to adapt to the continuous presence of technology in their daily lives (Welch 3). These seemingly simple changes have altered our rhetorical situation as instructors. The audience has mutated. The meaning and relevance of writing has been altered by a new sequence in contemporary media. As Walter Ong noted in his essay regarding such media:

When we speak of a sequence of media, we do not mean that new media of communications annihilate their antecedents. When men learned to write, they continued to talk. When they learned letterpress printing, they continued both to talk and to write. Since they have invented radio and television, they have continued to talk and write and print. But the advent of newer media alters the meaning and relevance of the older. Media overlap, or as Marshall McLuhan has put it, move through one another as do galaxies of stars, even maintaining its own basic integrity, but also bearing the marks of the encounter ever after (314).

How do composition instructors adapt to this "new sequence" mutation? To adapt, instructors must accept the alternate reality of the pixilated matrix as a new media by which one can perform the dual task of delivering content and communicating effectively. Instructors must shift to incorporate the visual and

sound clues provided by an instant gratification media, a Web of understanding outside of their own primary orality. In a reality is now centered by media, our social construct is not nearly as language based as it once was. Then again, perhaps the construct is more language based (if television can be considered language and film literature), but we must say that language isn't now what language was, nor are students now what they once were. Language and students have changed. So has the reality of the writing classroom. The reality of the writing classroom, along with the sense of it that writing used to imply and instate, is no longer fully present. It, if present at all, is marginally present and present only in the fractures that language is not (Ong 314) (Derrida 99).

As a result of this new sequence in media, classrooms, and the realities that they represent, must become hyper-real to suit the oncoming blitz of binary programming. The realness of the composition must be subjected to the pharmakon of the hyper-real (Derrida 99). We (instructors) must adapt to the high-definition 48 inch two dimensional screen, and in order to do so, we must eliminate our own multiplicity of dimensions. We must become the teacher rather than teacher, which is to say that we must embrace our (online) presence rather than search for our defining (physical) essence as instructors. (Plato 172)

Composition instructors must adapt to the screen – to hyper-reality, even if it is fake, for it is more real than real for our students. Our identities must adapt to a world in which one's online identity is a commodity, and indeed more valuable than one's "real world" identity (Adler, Beadle et al.). Furthermore the courses we

create must build learning environments that match the audience of learners at hand, an audience that must necessarily participate in the course creation and development rather than being treated as submissive learners (Armstrong 12).

The Solution: Right Writing

What I'm calling for in this dissertation is a post-modern examination and analysis of the computer-assisted blended learning composition classroom. Several scholars (Jochems, Welch, and Thornton to name a few) have hypothesized that that computers would alter the future teaching environment(s) of the classroom. Thornton suggested that computer modeling using visual metaphors may inform students' perceptions, while Jochems advocates elearning as the way of the future. Welch notes the upcoming rhetorical power of electronic rhetoric, which can be harnessed via computers. The above scholars have all focused on future impacts of technology in the classroom, but few have focused on the day to day impact of technology in the contemporary classroom.

Writing instructors can no longer deny the presence of technology in the contemporary college classroom, much less in the contemporary composition classroom. That's not new news. We know that there are computers in nearly every college classroom these days. The burning question is not whether technology will continue to infiltrate the classroom but how instructors will negotiate this change.

The particular questions that I hope to answer within this case study are the following:

- How can Web server logs and PHP logs be analyzed to yield relevant information that will assist in the design, architecture, and administration of online and blended learning courses?
- Does the medium of an online course solicit better accountability and motivation or "solve" some of the age-old dilemmas that instructors face in a traditional classroom environment?
- How can teachers and instructional designers use the technology available to them to provide educationally-effective instruction in the altered rhetorical environment of the contemporary composition classroom?

By answering these questions, I hope to show that the communication spawned via online pedagogical interaction serves as a discourse of the disembodied present within the fractures of what used to be considered physical reality. Via the absence of presence that we call online technological pedagogy, I hope it will become clear that technical communicators, rhetoricians, professional trainers, and composition scholars alike must step forward to adopt a new skill set, thought process, and rhetorical stance that will help them to adapt to the new medium of technological becoming. This dissertation is not intended to be a speculative text filled with predictions. This dissertation, and the research it embodies, should become a catalyst for more research, more questions, and

more curiosity in the emerging and very volatile fields of learning technology and blended composition pedagogy. I have high hopes that in the process of negotiating this volatility, instructors can de-privilege the paradigms that position technology itself as a solution, and move forward toward realistic and real-world expectations for instructors in computer mediated learning environments.

The data set for this study is derived from English 1310 online, which was the first online composition course created by and for the University of North Texas English Department. Dr Kathryn Raign and I, with the help of a University of North Texas learning enhancement grant, created and developed this course, and we were certainly on the bleeding edge of technology when doing so. The "bleeding edge", a term coined by programmer Peter Barus is defined as "technology that is so new (and thus, presumably, not perfected) that the user is required to risk reductions in stability and productivity in order to use it" (Wikipedia). During the design, development, testing, and administration of English 1310 online, Dr Raign and I dealt with new technology that was far from perfected, and though we didn't physically bleed, we certainly bled and suffered strain psychologically from the toll that the course took on us. We didn't log or track the number of hours, emails, lines of code, and cups of coffee we went through to develop, implement, or deliver English 1310 online, but I'm quite certain that we kept at least one moderate-sized coffee plantation in business, wrote hundreds of lines of code, and sent at least one unfortunate Web server to its early demise while we were creating the University of North Texas' first blended learning course.

The term "blended learning" is a term that will become important within this dissertation, so it is important to define the term "blended learning." Pape defines blended learning as "the area between the traditional classroom and the online instructional model where course instruction is either delivered over the Internet or through two-way video conferencing" (19). Although the course was blended (with peer reviews and student/instructor meetings conducted face-to-face), the course was actually named English 1310 Online, and contained a large online component (approximately 80% online). To avoid confusion within this text, the term "blended" refers to Pape's definition of blended learning, while the term "online" refers to the online component of the course. Lastly, the term "English 1310 Online" refers to the course as a whole. Though the distinctions between these terms are subtle, they are nonetheless important to note.

This dissertation thereby serves as a case study and examination of the bleeding edge process and product that English 1310 online became. By reading this case study, I hope that readers will gain a better understanding of the relatively under-explored and unexplored margins between instruction, composition and technology present (or perhaps absent) within the contemporary online composition paradigm.

#### CHAPTER 2

#### STUDY DESCRIPTION

### Statement of Research Approach

The data set that serves as a foundation for this case study includes all of the text and statistical visitor path data generated by, for, and as a result of the University of North Texas' first blended composition course, which was developed between December 2005 and August 2005, and subsequently hosted and taught via <a href="https://www.decisivewriter.com/between">www.decisivewriter.com/between</a> August 2005 and December 2006. The course was both developed and taught by Dr Kathryn Raign and myself, and has since become the standard blended online introductory composition course at the University of North Texas. The visitor path data for this study was compiled during the fall of 2005 (August 2005—December 2005) with a student population of 54 self-enrolled freshman composition students.

The research methodology for this dissertation adheres primarily to the structure proposed by Spyridakis et al. in their 2004 publication titled, "Internet Based Research: Providing a Foundation for Web-Design Guidelines." Spyridakis et al. suggest that such a research methodology is necessary for technical communicators for the following reasons:

Technical communicators have long known about the value of research as demonstrated by our constant consideration of audience at the beginning of the

design process. It is time that technical communicators take on the new challenge of creating a solid research base for the design guidelines they employ when developing online information. They already understand the strengths such tools as expert evaluations, contextual inquiry, small-scale usability tests, and surveys; they must now apply that understanding to the next generation of research— true experiments conducted remotely within the world of real users who search and browse the web from any location, day or night (255).

This dissertation answers Spyridakis' call to action because the study was (and still is) what would be considered a "true" experiment conducted remotely in a world of real users browsing the course content day and night. The results that are presented in this case study detail the results, including the following types of numerical and textual data.

#### Numerical and Statistical Data

- Log files and numerical data generated by PHP scripting (PPH Logger)
- Log files and numerical data generated by the hosting agency for <u>www.decisivewriter.com</u> (Yahoo!™ Small Business)
- Log files and numerical data generated by the Online Discussion Board (PHP BB)
- Log files and numerical data generated by the Online Calendar (PHP Calendar)
- Numerical data (# of emails/frequency) of email correspondence

#### **Textual Data**

- Text and hypertext generated in the creation of www.decisivewriter.com
- Text generated by email correspondence
- Text generated by bulletin board messages
- Text generated by course assignments (papers/peer reviews/writing exercises/grammar exercises)
- Text generated by MOO sessions (transcripts)

In addition to examining empirical Internet-based data for the purposes of establishing web-based course design principles, this study extends the type of analysis a suggested by Spyridakis a step further to examine both the data and metadata (instructors' commentary about the course, for example) via a deconstructive approach to yield an understanding of how the course is a small microcosm of a new media of technological becoming within the margins between technology and instruction. This study therefore includes and references a series of semi-structured interviews with several instructors and course designers involved in delivering and teaching English 1310 Online. Because English 1310 Online became the standard blended online introductory freshman composition course after the initial pilot that Dr. Raign and I developed and taught during the fall of 2005, these interview provide valuable information about how different instructors negotiated and delivered same course content in a blended online learning environment. In order to develop relevant interview questions, I first conducted one-on-one, semi-structured sessions with the following English 1310 Online instructors:

- Dr. Jennifer Phillips (UNT Assistant Director of Freshman Composition)
- Mr. Lee Dollar (UNT PhD Candidate and UNT Teaching Fellow)

Based on these initial semi-structured sessions, I then developed an email interview that I sent to the following English 1310 Online instructors.

- Dr. Kathryn Raign (UNT Director of Freshman Composition and the University Writing Center)
- Mrs. Ashley Bender (UNT PhD Candidate and Teaching Fellow)
- Mr. Danny M. Hoey Jr. (UNT MA Candidate and Teaching Fellow)
- Mr. Daniel Lancaster (UNT MA Candidate and Teaching Fellow)

With the disparate course-perceptions that these interviews provide, I hope to achieve within this study a well-rounded perspective of what pedagogical techniques are necessary to facilitate the instruction of composition online in the English 1310 Online environment, and more broadly within the field of blended learning pedagogy. By exploring the small microcosm of English 1310 Online via both an analysis of visitor paths and instructor interviews, I hope it will become evident to the reader that a new media of technological becoming exists between the margins of technology and instruction.

### English 1310 Online from the Roots Up, URL Down

The section that follows provides a cursory overview of the course and study structure. Within this section, you will find a site map of the course, a screenshot of each Website page, and a brief explanation below each page. Before jumping into explanations of

individual pages, though, allow me to tell you about the course as a whole and the visual metaphor that we hoped to create with the castle and "cyber school."

## Visual Metaphors and Castles in the Sky

The visual metaphor for English 1310 online was a castle in the sky. Why did we choose such a lofty and seemingly fantastical visual metaphor? Here's why: Far too often in an online environment, the fact that we are disembodied in online space makes one us feel disconnected to the physical world (Welch 138). To foster a sense of community and connection with our course, we attempted to avoid disconnection by creating a visual metaphor for a physical world that the course implied. To foster a sense of connection and community within the online course, we, like true Harry Potter fans, created our own version of a Marauder's Map (Rowling 212). The Marauder's map of which I speak is positioned at the upper left hand corner of each page, and as users move through the course, so too does the human icon move around within the cyber school, thereby giving (in theory) the user a sense of physical presence in an online environment (See figures 1-4).

Figure 1: Courtyard Navigation Frame



Note: The human icon is located in the courtyard

Figure 2: Classroom Navigation Frame



Note: The human icon is located in the classroom

Figure 3: AcadianaMOO Navigation Frame



Note: The human icon is located in AcadianaMOO.

Figure 4: Library Navigation Frame



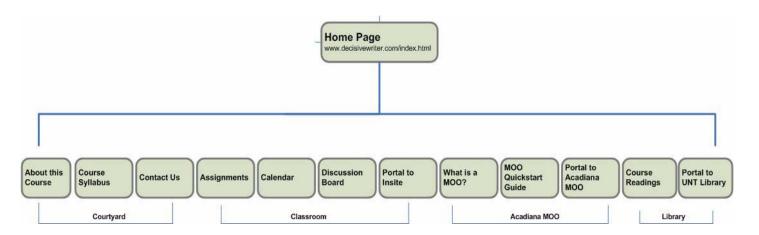
Note: The human icon is located in the library.

### Summary and Site Map

As a high-level summary of Figures 1-4, see the corresponding site map below (Figure 5) to get an idea from a usability and information architecture perspective of how the

course is structured. The course has a very "flat" structure, meaning that there are only two levels of hierarchy, as opposed to a "deep" architecture, which requires additional clicks/navigation to move from one level to the next (Krug 10). What this means for the users of the course is that they have a central navigation available via the static navigation bar on the left side of the screen, and a way to get anywhere from anywhere within the course. Because the course was written in a frameset, the navframe always remained constant, as did the image of the visual metaphor (castle in the sky).

Figure 5: Decisive Writer Site Map



*Note:* The course/Website has a very flat structure.

Although the course structure is fairly flat, as you can see from the site map in Figure 5, the course is actually fairly complex and incorporates several technologies to drive its objective: To provide a "place" that implies physical space in an online learning environment. Although the UNT Library and InSite, for example, are separate URLs, the

content was used via a frameset to simulate a central place that was basically a "mash up" of several hypertext "places."

As the well known usability/Website design expert Jacob Nielson points out, the most user-friendly sites are the ones that are easily navigable and "simple" from a visual/navigational perspective even though the underlying structure and technology of the site may be complex. In a 2006 interview with Mike Elgin, Nielsen sites Google<sup>TM</sup> (Google Inc., Mountain View, CA, http://www.google.com/) search and Yahoo!<sup>TM</sup> (Yahoo! Inc., Sunnyvale, CA, http://www.yahoo.com) as excellent interfaces despite their size (Nielsen Interview). Although I doubt anybody could the claim that <a href="https://www.decisivewriter.com">www.decisivewriter.com</a> is nearly as complex as <a href="https://www.yahoo.com">www.google.com</a>, I hope that the "flat" structure of the site, and the corresponding navigation, allows for users to perceive the site as "simple" from a visual and navigational perspective, even though the underlying technology is not necessarily simple, and is, in fact, a collection of disparate tools linked together to form a composition learning environment.

Figure 6: Decisive Writer Home Page



Figure 6 shows a screen capture of the English 1310 Online home page. The home page is the only page where the visual metaphor appears twice on the same screen. As you can see, the figure in the upper left hand corner is in the courtyard, and the image of the castle, along with a warm welcome, is what greets the user on the home page of the course. The course, as you can see from looking at the navigation bar positioned along the left side of the page, is divided into four sections that correspond with quasiphysical spaces in the cyber school. The four main locations include:

- Courtyard
- Classroom
- AcadianaMOO
- Library

These "locations" serve as both metaphors for a physical space, and as first level headers that "chunk" the course information into relevant sections.

Figure 7: Decisive Writer About this Course Page

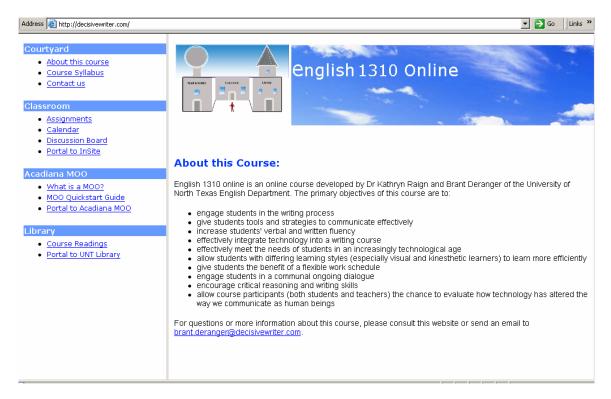


Figure 7 shows a screen capture of the English 1310 Online About this Course page.

This section of the course points out the objectives of the course, which include the following:

- Engage students in the writing process
- Give students tools and strategies to communicate effectively
- Increase students' verbal and written fluency
- Effectively integrate technology into a writing course
- Effectively meet the needs of students in an increasingly technological age

- Allow students with differing learning styles (especially visual and kinesthetic learners) to learn more efficiently
- Give students the benefit of a flexible work schedule
- Engage students in a communal ongoing dialogue
- Encourage critical reasoning and writing skills
- Allow course participants (both students and teachers) the chance to evaluate how technology has altered the way we communicate as human beings

These objectives establish the course as a place, or rather an environment of experimentation where technology and writing meet. Please note that these objectives are intentionally a bit open ended; the course itself was an experiment to an even greater extent than most composition courses are experimental.

Figure 8: Decisive Writer Course Syllabus Page



Figure 8 shows a screen capture of the English 1310 Course Syllabus page. This page of this course is simply an adapted syllabus that outlines our course policies, and provides our office locations and contact information. It complies with university standards, and allowed us to establish our policies from the start.

Figure 9: Decisive Writer Contact Us Page



Figure 9 provides a screen capture of the English 1310 Contact Us page. This page provides additional contact information in case students need to get in touch with the instructors.

Figure 10: Decisive Writer Assignments Page

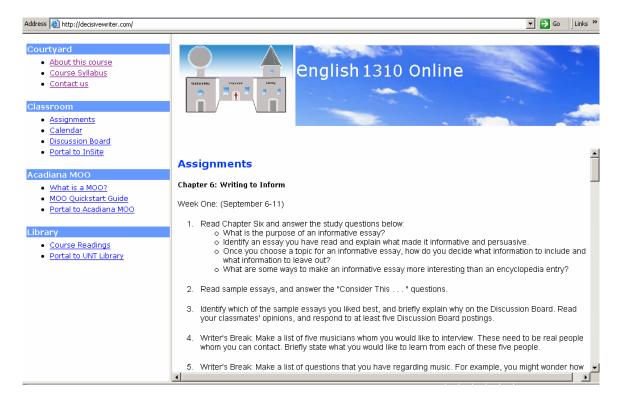


Figure 10 shows a screen capture of the English 1310 Assignments page. The Assignments page provided all of our assignments and instructions for the entire course. It quickly became a page that the course participants referred to fervently. Students were very quick to point out any discrepancies they found between the assignment sheet and the course calendar. The assignments sheet, like most course assignment sheets, was developed as skeletal outline of the major course projects, but we quickly found out that in an online learning environment, a bit more flesh is required on the assignment sheet. Students depended on the assignment page to plan and budget their time, so any "minor" adjustments or changes that would normally have been easy to overcome in a regular classroom environment had a profound impact on students and their schedules.

Figure 11: Decisive Writer Calendar Page



Figure 11 shows a screen capture of the English 1310 Calendar page. This calendar function is an open source PHP calendar with a database on the back end. It is a tool that we integrated into the course late in our development cycle, and we found the tool invaluable for keeping track of the course projects. The tool is very easy to use, and a testament to how open source technology and a communal development project can yield a simple product that is user-friendly and functionally robust.

Figure 12: Decisive Writer Discussion Board Page

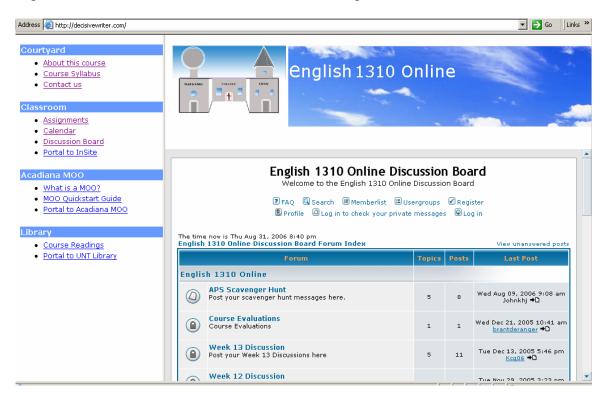


Figure 12 is a screen capture of the English 1310 Discussion Board page. The discussion board was the communication medium that we allowed for a "student" lounge of sorts. It was a place where students could (hopefully) write and speak freely about the course. We had no problem soliciting student feedback on the bulletin board. We, in fact, had students produce so much writing in this environment that it was tough for a staff of two instructors to keep up with and manage the always evolving threads. In this environment, students felt at ease to write and speak up about the course. (Sometimes in a derogatory manner, much to our chagrin as instructors.) What became evident, over time, in this environment, was the fact that the bulletin board became an overwhelmingly popular environment for communal discourse. From a technical perspective, this board is an open source product; it is written primarily in PHP with a database on the back end. If you're familiar with online bulletin boards, you've surely

seen this piece of software; its reach extends far beyond academia. This bulletin board is an excellent example of how open source tools can facilitate learning in an academic environment; the board was incredibly stable from the start, and provided us with a scaleable tool that ended up being the most useful facilitator of community and open discourse.

Figure 13: Decisive Writer InSite Page



Figure 13 provides a screen capture of the English 1310 InSite page. InSite is the tool that we chose to manage student submissions. It is a very useful tool that is proprietary rather than open source, and was available to us due to our affiliation with Wadsworth Publishing, and the official textbook for the course, *The Decisive Writer*, by Dr. Kathryn Raign. This tool was especially useful for peer review, grading, and for checking student papers for originality via Turnitin.com, with which InSite integrates. This software was, in effect, a content management system (CMS) for the course. It provided a place for students to place their assignments, and a place for the instructors to manage and process the assignments.

Figure 14: Decisive Writer What is a MOO Page



Figure 14 is a screen capture of the English 1310 What is a MOO page. MOO isn't just for cows anymore. Those of you in the realm of composition studies are probably familiar with MOOs. Simply stated, MOOs (Multi-User Dimension Object-Oriented) are online learning environments that use text as their very fabric. MOOs were originally designed and used as gaming environments, which create synergies with the freshman composition audience, who are often quite familiar with gaming. As Edward Castronova points out in "Gold from Thin Air: The Economy of Virtual Worlds," nearly fifty percent of the American public are gamers—on a larger scale than golf, and on the same scale as the movie industry. Furthermore, Castronova asserts that approximately ten million people in this world play/game daily in an online environment such as World of Warcrafts (Castronova presentation). Such a large audience, and a potential to create a connection with gaming students, was a hard factor to ignore when designing this

course, hence our decision to use AcadianaMOO as a synchronous learning tool. Dr. Keith Dorwick and Dr. Kevin Moberly graciously allowed us to use AcadianaMOO as a place where students and teachers could meet in a synchronous environment and "chat" (for lack of a better term) real-time via a command-line text-based interface.

Figure 15: Decisive Writer MOO Quickstart Guide Page

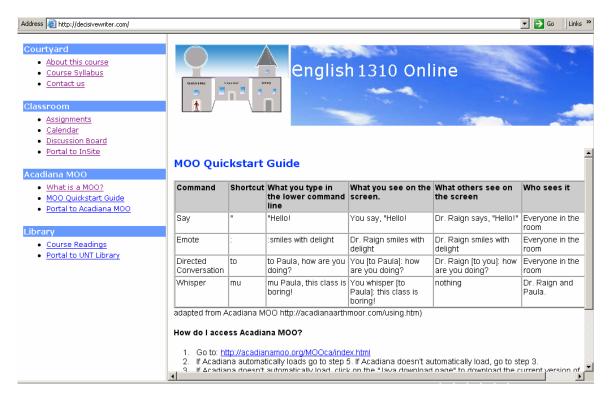


Figure 15 shows a screen capture of the English 1310 MOO Quickstart page. This quick start guide was a way to allow students a "cheat sheet" for navigating the command-line MOO interface. It gives all of the basic commands necessary for navigating, emoting, and communicating within AcadianaMOO. This page also gives instructions about how to access AcadianaMOO, along with a link to proper java download required to run the MOO client.

Figure 16: Decisive Writer Portal to AcadianaMOO Page



Figure 16 provides a screen capture of the English 1310 AcadianaMOO page. This "Portal" is merely a link to AcadianaMOO, and provides a place where students can still feel as if they are within the course although the central frame is actually pulling up a separate URL/ server. The term "portal," because it has become an abbreviated form of "Web portal" has since come to mean something totally different in the world of online communication, so the choice of the term "portal" seems to be a misnomer in retrospect. An adequate definition of "portal" would be a set of data (and content) that is catered to the user's specific needs is a single point of access to information which is linked from various logically related Internet based applications and of interest to various types of users (Wikipedia). The term portal was meant here on this page was meant more in the sense of a doorway into AcadianaMOO rather than the term that it has become within the contemporary technology paradigm.

Figure 17: Decisive Writer Course Readings Page

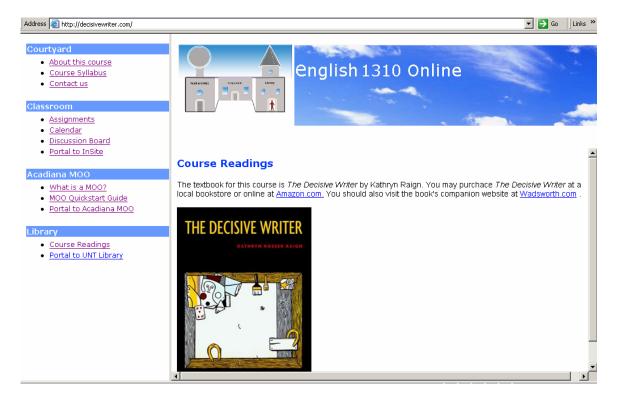


Figure 17 is a screen capture of the English 1310 Course Readings page. This section of the course refers students to the course textbook, *The Decisive Writer*, which was written by Dr. Kathryn Raign, and published by Wadsworth Publishing. The image on the page serves as a visual check to ensure that students purchase the correct text from a bookstore, or alternately, provides a link to the book on the Amazon.com Website.

Figure 18: Decisive Writer Course Portal to UNT Library Page



Figure 18 is a screen capture of the English 1310 Library Portal page. Here you can see yet another "portal" (perhaps another misnomer) that connects users, via the central frame, to the UNT Library. Although the course was focused on expository composition rather than research-based writing, we provided this resource for the students to encourage the course participants to conduct research via the online resources available on the UNT Library Website.

## CHAPTER 3

### STUDY RESULTS

Given that the primary research methodology for this experiment was one suggested by Spyridakis, Wei and others in their 2004 publication titled, "Internet Based Research: Providing a Foundation for Web-Design Guidelines," it seems only appropriate that I present the experiment results in a structure that parallels their proposed experiment structure (250). The following table details the study structure and milestones.

Table 1: Task, Status, and Completion Dates for Experiment Structure

| Task | rack, clatac, and completion b | Status and Completion Date            |
|------|--------------------------------|---------------------------------------|
| 1.   | Review relevant literature and | Complete- August 2005                 |
|      | specify research questions.    |                                       |
| 2.   | Identify a relevant, naturally | Complete- August 2005                 |
|      | occurring Website for study    | See <u>www.decisivewriter.com</u> ,   |
|      | and obtain permission for use  | which was developed in part thanks to |
|      | (if necessary)                 | a University of North Texas Learning  |
|      |                                | Enhancement Grant                     |
| 3.   | Operationalize independent     | Incomplete- outside of project scope. |
|      | and dependent variables.       | The experiment was designed to        |
|      |                                | determine student navigation patterns |

|                                | and content-based page preferences      |
|--------------------------------|---|
|                                | rather than strictly usability-based    |
|                                | variables. For this reason, we did not  |
|                                | alter the navigational features         |
|                                | (dependent variables) of the site.      |
| 4. Identify the relevant       | Complete- August 2005                   |
| population, sample frame, and  | Relevant population= UNT freshman       |
| recruitment methods.           | composition students. recruitment       |
|                                | method = self-enrollment via UNT        |
|                                | registrar's office                      |
| 5. Generate hypothesis         | Complete- August 2005                   |
|                                | Primary Hypothesis= Students will       |
|                                | spend the majority of their time on the |
|                                | course pages that they find most        |
|                                | interesting and engaging such as        |
|                                | AcadianaMOO.                            |
| 6. Secure Internet-based       | Complete- August 2005                   |
| research tools or set aside    | PPH logger used as logging tool (open-  |
| enough time to create multiple | source PHP logging software), paired    |
| Websites and secure data       | with follow-up face-to-face semi-       |
| collection tools (e.g., survey | structured interviews and discourse     |
| tools, log file recording, and | analysis.                               |
| mining tools).                 |   |
|                                |   |

| a. | Standardize a Website       | Complete – August 2005                |
|----|-----------------------------|---------------------------------------|
|    | to a basic experimental     | See <u>www.decisivewriter.com</u>     |
|    | version (e.g. remove        |                                       |
|    | links to external sites, if |                                       |
|    | necessary; standardize      |                                       |
|    | logos, illustrations,       |                                       |
|    | language.                   |                                       |
| b. | Generate variables for      | Incomplete- outside of project scope. |
|    | experimental conditions     | The experiment was designed to        |
|    |                             | determine student navigation patterns |
|    |                             | and content-based page preferences    |
|    |                             | rather than strictly usability-based  |
|    |                             | variables.                            |
| C. | Label Web pages and         | Complete- August 2005                 |
|    | levels of independent       | Web pages labeled to facilitate log   |
|    | variables with              | analysis.                             |
|    | identifying tags to         |                                       |
|    | facilitate log analysis.    |                                       |
| d. | Create survey               | Complete- August 2005.                |
|    | instruments and all         | Survey instruments included open      |
|    | instructional materials.    | source software (PPH logger) and      |
|    |                             | Yahoo!™ (Yahoo! Inc., Sunnyvale, CA,  |
|    |                             | http://www.yahoo.com) Site statistics |

|                                 | tool.                                 |
|---------------------------------|---------------------------------------|
| 7. Obtain permission to conduct | t Complete-August 2005.               |
| human subjects research from    | m                                     |
| the relevant Instructional      |                                       |
| Review Board (IRB).             |                                       |
| 8. Pilot Test                   | Complete- July, 2005. Informal pilot  |
|                                 | testing, prototyping, and usability   |
|                                 | testing conducted with English 1313   |
|                                 | students via task analysis and think- |
|                                 | aloud protocol.                       |
| a. Test Website and             | Complete- July, 2005.                 |
| software to assess              |                                       |
| technical operation of          |                                       |
| experiment.                     |                                       |
| b. Test all study               | Complete- July, 2005.                 |
| instruments and                 |                                       |
| materials with sample           |                                       |
| subjects to verify              |                                       |
| internal validity of the        |                                       |
| study.                          |                                       |
| Conduct the experiment          | Complete- December 2005               |
| a. Recruit participants ar      | d Complete – August 2005.             |
| distribute study URL            |                                       |

| b. Monitor experiment at | Complete – December 2005.       |
|--------------------------|---------------------------------|
| scheduled intervals      |                                 |
| c. Record and analyze    | Complete- May 2007.             |
| data.                    | See results and analysis below. |

#### Introduction

To provide a logging tool for the course, we used PPH logger, which is an open-source IP logging tool available at <a href="http://www.phpee.com/">http://www.phpee.com/</a>. PPH logger employs PHP (Personal Home Page) a server-side scripting language that allows Web developers to track site usage and navigation patterns. By labeling each of the course's pages, the data then reflected the path amount of time that course participants were spending in each place within the course.

The original intention of this study was to determine navigational patterns of use within the Website by analyzing individual log paths and patterns within the Website. For example, in the Visitor Path (Figure 19) image below, each colored icon represents a page within the site, and the succession of icons represents the path that one particular user took through the site.

Figure 19: Visitor Path

```
c-67-187-64-11.hsd1.tx.comcast.net [Srv] REFERRED! Internet Explorer 6.0; WinXP
```

*Note:* Each color above represents a different page within the course.

Figure 20: Visitor Path Key



Note: The key above denotes which colored icon represents which page within the Website. If we are to then analyze the visitor path from the example screen shot above, we can say that the user who accessed the site completed moved in the following manner through the Website:

- 1) Navframe // (3952)
- 2) Classroom /classroombannerframe.htm (7235)
- 3) Assignments // Assignments.htm (1670)
- 4) Banner Frame // bannerframe.htm (2388)
- 5) Contact Us /ContactUs.htm (243)

By viewing the data set on such a granular level (see Figure 20), I was able as a researcher and course designer to model and track how students were accessing the course. Sifting through thousands of user session logs and deciphering individual log paths, however, is a research methodology that does not effectively lend itself to a holistic view of how an online course and/or Website functions, as noted by Spyridakis

et al. (244). To bridge the gap of granularity between individual session paths through logs and determine a holistic view of how the course was functioning, I focused on the overall user trends that emerged over the course of time, and thereby approached the logs with a mentality very similar to the one that Dugdale advocates, namely that what the students are "doing" is just as vital as what the students are "learning" (384). To teach effectively, online teachers must provide activities that are linked to content so that the subject matter is inherent in what the student is doing (Dugdale 385). Therefore, the frequency with which students visited the various pages in the course should determine what they are doing when, and perhaps more importantly, what they were doing the most.

So, although individual user paths through the Website provided fascinating data at first glance, the aggregate results of the paths that the users took will not be the focus of this research-based analysis because they correlate the course content with how the students actually accessed the content over time. The resulting trends are quite fascinating.

As you will recall from Chapter 2, the course was divided into the following html pages:

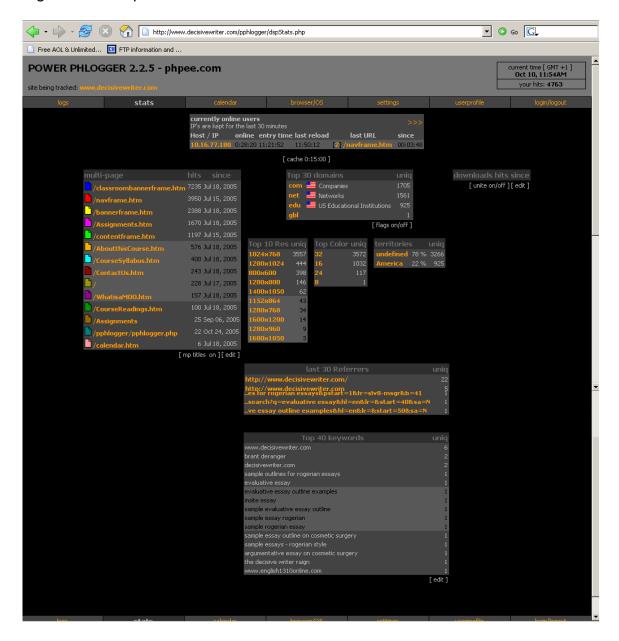
- About this course
- Course Syllabus
- Contact Us
- Assignments
- Calendar

- Discussion Board
- What is a MOO?
- MOO Quick Start Guide
- Portal to AcadianaMOO
- Course Readings

# Composite Visitor Path Data

Note that in Figure 21, the PPH Logger ranks composite results of the page visits, while also tracking other valuable usability and Website statistics. The logging software accomplishes this by using a Java Script call in the <head> tag of each html course page. This data, because it is a composite of several thousand user sessions, provides an overall view of how participants used and navigated the course.

Figure 21: Composite Visitor Path



Note: PPH Logger ranks composite results of the page visits

# Summary of Visitor Path Statistics

The following table (Table 2) summarizes the logging data, and gives a brief description of the corresponding screen shots/statistics.

Table 2: Summary of Visitor Path Statistics

| able 2. Summary of Visitor Path Statistics  |  |
|---|--|
| Summary                                     | Statistic  |
| Decisivewriter.com received 4763 hits       | your hits: 4763  |
| between July 18, 2005 and December 20,      |  |
| 2006  |  |
| Decisivewriter.com was referred primarily   | Top 30 domains uniq<br>cim = Compiles 1705<br>net = Network 1561<br>edu = Network 1561   |
| by .com (company) sites rather than .net    | 1  |
| (network) sites or .edu (educational) sites |  |
| Decisivewriter.com course participants      | Top 10 Rescuring<br>1024x768 3557<br>1200x1024 444<br>900x600 390  |
| primarily had a screen resolution of        | 1200x000 146<br>1400x1050 62   |
| 1024x760                                    |  |
| Decisivewriter.com was searched for on      | Top 40 keywords uniq<br>www.deckhewiter.com 6<br>brank deranger 2<br>deckhewiter.com 2   |
| Web search engines with terms such as       | evaluative essay 1 evaluative essay outline examples 1   |
| decisivewriter.com and evaluative essay.    | inste essay 1 sample evaluative essay outline 1 sample essay roperian 1 sample roperian essay 1 sample roperian essay 1 sample essay outline on cosmetic surgery 1 |
|   | sample essays - rogerian style 1 argumentative essay on cosmetic surgery 1 the decisive writer raign 1 www.english1310online.com 1                                 |
|   |  |

 Decisivewriter.com navigation and individual page hits followed, in aggregate, the following order (in descending order of hits)

- 1. classroombannerframe.htm
- 2. navframe.htm
- 3. bannerframe.htm
- 4. assignments.htm
- 5. contentframe.htm
- 6. aboutthiscourse.htm
- 7. coursesyllabus.htm
- 8. contactus.htm
- 9. whatisaMOO.htm
- 10. CourseReadings.htm
- 11. Assignments (directory)
- 12. pphlogger.php
- 13. calendar.htm

The logging statistics data ranged from July 2005 (when testing and QA began) to December 2005 (when the semester-long course ended), and much of the above data such as screen resolution and top referrers yields very interesting usability data. For the purposes of this study, though, I will focus on the last row of data described above which is the aggregate of individual page hits. The data in Table 2, therefore, reveals

which pages were most relevant (or at least the most visited) by students in the course. By further analyzing the numbered list above, one can determine the following division and ranking between navigational and content-based pages.

# **Navigational Pages**

- Classroombannerframe.htm (#1): This page is primarily navigational and was at the top of every screen, so it is logical that it would end up as the most visited page. The purpose of this page is more navigational than informational.
- Navframe.htm (#2): This page is primarily navigational and was at the left of every screen, so it is logical that it would end up as one of the most visited pages. The purpose of this page is more navigational than informational.
- Bannerframe.htm (#3): This page is primarily navigational and was at the top of most screens, so it is logical that it would end up as one of the most visited pages. The purpose of this page is more navigational than informational.
- Contentframe.htm (#5): This page is navigational, so it is logical that it would end
  up as one of the most visited pages. The purpose of this page is more
  navigational than informational.
- Assignments (directory) (#11): This page is navigational and actually serves as a
   Directory for the Assignments.htm page (Assignments/assignments.htm). The
   purpose of this page is more navigational than informational.
- Pphlogger.php (#12) This page is administrative and was not available to course participants. The purpose of this page is more administrative than informational.

## Content-Based (Informational) Pages

- Assignments.htm (#4): This page (see Figure 10) is primarily informational and was the most visited content-based page, so I will focus a great deal on its ranking as a page that was visited most by students. I will get into the implications of this rank later in this paper, but suffice it to say that among all of the interactive tools and capabilities available within the course, the assignments page was the most visited (and by extension most important) page within the course.
- Aboutthiscourse.htm (#6): This page (see Figure 7) is primarily informational and was the second most visited content-based page, so I will focus a great deal on its ranking as a page that was visited most by students. I will get into the implications of this rank later in this paper, but suffice it to say that among all of the interactive tools and capabilities available within the course, the aboutthiscourse.htm page was the second most visited (and by extension most important) page within the course.
- Coursesyllabus.htm (#7): This page (see Figure 8) is primarily informational and was the third most visited content-based page, so I will focus a great deal on its ranking as a page that was visited quite often by students. I will get into the implications of this rank later in this paper, but suffice it to say that among all of the interactive tools and capabilities available within the course, the coursesyllabus.htm was the one of the most visited (and by extension most important) page within the course.

- Contactus.htm (#8) This page (see Figure 9) is primarily informational and was the fourth most visited content-based page. It is a page that was visited quite often by students. I will get into the implications of this rank later in this paper, but suffice it to say that among all of the interactive tools and capabilities available within the course, the contactus.htm page was the one of the most visited (and by extension most important) page within the course.
- WhatisaMOO.htm (#9) This page (see Figure 14) is primarily informational and was the fifth most visited content-based page. It is a page that was visited quite often by students.
- CourseReadings.htm (#10) This page (see Figure 18) is primarily informational and was the sixth most visited content-based page. It is a page that was visited quite often by students.
- Calendar.htm (#13) This page (see Figure 11) is primarily informational, and was
  the seventh most visited content-based page. It is a page that was visited quite
  often by students.

# Composite Ranking of Content-Based Pages

As you can see from the bulleted list and corresponding screen shot presented in Figure 21, in terms of content-based (rather than navigational) pages, the ranking of course pages followed the below order. (In order of decreasing hits)

- 1. Assignments.htm
- 2. Aboutthiscourse.htm
- 3. Coursesyllabus.htm
- 4. Contactus.htm
- 5. WhatisaMOO.htm
- 6. CourseReadings.htm
- 7. Calendar.htm

What this means, quite simply, is that the "Assignments" page was the page most visited by students, followed by the "About This Course" page, and so on down the list. The implications of this composite ranking were a bit surprising to me as a researcher because it implies that the students were "most" interested in (or at least visited most) was the assignments page.

#### Visitors Per Hour Data

The following screen shot (Figure 22) provides a composite view of visitor volume on an hourly basis. Because the server that housed this data was set to record at GMT + 1, you actually have to subtract 5 hours to gain the local time in Texas when students accessed the site. For example, in the screen shot below, the number 10 represents 5am. To further this comparison, please see Figure 23.

Free Act & Unlimited... 
FIP information and ...

POWER PHLOGGER 2.2.5 - phpee.com

ste being tracked: www.destaveners.com

logs stats calendar browse/OS settings userpolite logn/logout

page impressions per day - Oct 2006

Visitors per hour - all

page impressions per day - Oct 2006

(month) today | all | (reload)

powered by \_\_INVIL | ELLI | ELLI | ELLI | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI | ELLI | ELLI |

powered by \_INVIL | ELLI | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI | ELLI |

powered by \_INVIL | ELLI | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI |

powered by \_\_INVIL | ELLI | ELLI | ELLI |

powered by \_\_INVIL |

Figure 22: Visitors Per Hour

*Note:* There are two peaks in the Visitors per hour screen shot above.

The modified screen shot in Figure 23 adjusts the time difference to yield a view of the local time when students accessed the course. As you might note from below, the peak time for accessing the course was at 5pm, with 349 hits, while the "valley" time for accessing the course was at 8am. Perhaps even more interesting in the chart below is the fact that there is also a significant peak between 12 and 1 am (342 hits and 346 hits, respectively), which is indicative that the students were truly accessing the site at all times of the day (and night).

Visitors per hour - all

April 100

Figure 23: Adjusted Visitors Per Hour

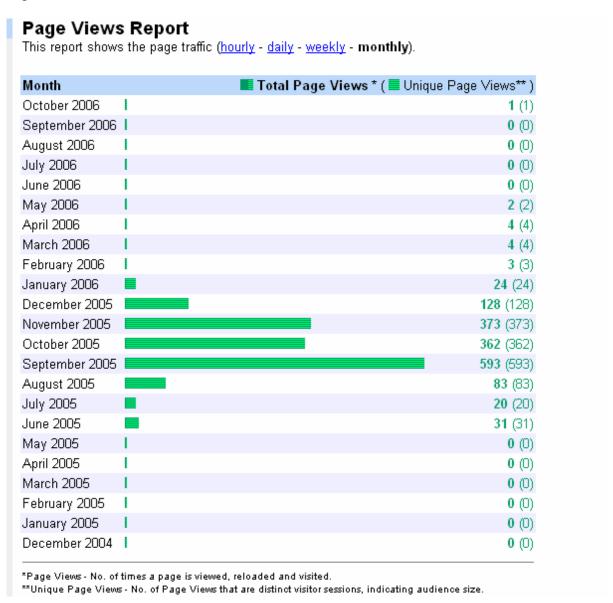
*Note:* There are two peaks in the Visitors per hour screen shot above at 5 pm and 12am.

#### Visitor Per Month Data

The following screen shot (Figure 24) provides a composite view of visitor volume on a monthly basis. As you might note, the graph below is presented in reverse chronological order. The course, which started in September, saw peak volume in the month of September (593 page views), and then decreased monthly until the end of the course in December to 128 page views. This data is also quite interesting; I would have expected for the course volume to grow through December. Instead, the trend was the exact opposite. Later in this study, I will explore and analyze this trend, which I propose can be linked primarily to the following factors:

- Student attrition
- Student motivation

Figure 24: Visitors Per Month



*Note:* The course, which started in September, saw peak volume in the month of September (593 page views), and then decreased monthly until the end of the course in December to 128 page views.

## Browser/Operating System Data

Although Browser and Operating System Data was not within the scope of this study, the data provided in Figure 25 may indeed be of interest to Web and course designers writing to a university-based audience. As you might note from Figure 25, the most common browser used to access the course was Internet Explorer 6.0, and the most common operating system was Windows XP ® operating system. Additionally, Yahoo!™ was the top search engine used to access the course.

Figure 25: Browser/Operating System Data

Note: The most common operating system was Windows XP. Additionally,

Yahoo!™ was the top search engine used to access the course.

#### CHAPTER 4

#### SUMMARY AND ANALYSIS OF EXPERIMENT RESULTS

## Summary of Results

The experiment results presented in Chapter 3 make several emerging data patterns and trends visible. The data that the PHP logging software yielded is quite interesting for a course designer, and serves as a starting point for discussion of the training methodologies that are and are not effective in an online training environment. The following bulleted list summarizes the key results of the data collected:

- The most visited content-based page was the "assignments" page.
- The peak time for accessing the course was at 5pm, with, while the "valley" time
  for accessing the course was at 8am. There was a secondary traffic peak
  between 12 and 1 am, which indicates that the students were accessing the site
  at all times of the day (and night).
- The course traffic (total page views) increased sharply (by 86% from August-September) during the first month, and then decreased monthly until the end of the course in December (by 78.4% from September-December), which means that traffic peaked quickly and then decreased rather than increased over time.

# Analysis of Results

Why was the assignments page the most visited content-based page?

The most visited content-based page was the "assignments" page, and the implications of this composite ranking is quite interesting because it implies that the students were "most" interested in (or at least visited most) was the assignments page (see figure 21). I had theorized that the MOO page or the communal bulletin board would be the most (thereby spawning community discourse), but it is evident from these results that the students were interested primarily in completing the course assignments and getting a passing grade for the work that they had completed.

Many scholars have noted that the grade-based classroom environment is troublesome because it emphasizes course/task completion over the development of an effective writing style. This scholarly idea is not a new one, and was observed as early as 1916 by James Routh, a composition instructor who published the following in *The English Journal*:

Grading themes for classes in composition has been a vexatious problem. In other subjects it is possible to grade with fair accuracy by allotting to each question on a quiz so much per cent, or by taking off so much for every error of fact in an essay. But to estimate the literary value of a student's style is a different matter (344).

Although English 1310 online was not intended to be a course that evaluated the "literary value" of a student's work, its fundamental idea of creating a virtual community of engaged writers ultimately defaulted to the age old product/grade-based paradigm.

Though this trend is not surprising within the historical context of composition studies, the implications for online course designers are quite profound because it suggests that a course, if not properly designed, (or perhaps even if well designed) can become an environment of assignment-based rather than community-based learning. Indeed, although the course design for English 1310 online emphasized community (with 6 content pages focusing on community rather than assignments) students reverted to assignment-based navigational patterns. Although the online environment allows course designers to emphasize community, if the traditional trappings of product-based grading are present due to the underlying structure of university requirements, then students will still resort to assignment and product/grade-based navigational patterns. As Robert Bostrom pointed out in "The Problem of Grading," grading often mediates a system of punishments rather than awards:

They (grades) mediate rewards, but they principally mediate punishments. (...)

Their (high grades) principal value, for freshman and sophomores, is the protection they afford from the disaster of low grades. Some students have genuine desires to attain occupational and learning goals, but the threat of low grades is ever present. When high grades are needed to enter graduate school or law school, even "C's" become punishing because they threaten to deprive the student of his occupation (290)

Although Bostrom published this article nearly 40 years ago, even within an educational medium as advanced as the contemporary blended composition classroom, the same age-old dilemma of grading and the punishment/reward structure that it enforces still exists. Danny Hoey, a composition instructor at UNT, notes the following about the

differences between a traditional English 1310 class and an online version of the same course:

The course load for on-line classes is heavy and in order for (students) to understand what it is that they are to write about they have to complete the assignments. It is like pulling teeth to get my in-class 1310 students to do their homework. (...) My on-line students realize that a large part of the grade is their homework, so they do it (Hoey Interview).

Dr. Kathryn Raign, a Director of Composition at UNT, also notes the differences between a traditional English 1310 class and an online version of the same course:

Online classes are more assignment based in the sense that there isn't the potential to adlib that you have in a face to face class. Deadlines have to be followed. As far as the assignments go, I find my online students discuss their assignments with each other more extensively online than they ever did in class (Raign Interview).

Bostrom, Hoey, and Raign note that course participants tend to focus on completing assignments in order to achieve a passing grade and avoid the corresponding "punishment" of poor academic performance, yet their teaching environments and time frame couldn't be farther removed. (Hoey and Raign were interviewed in 2007 and taught online, while Bostrom published regarding grade-based training in 1968 and taught in a traditional teaching environment.) Hoey's and Raign's observation that their online students seemed to focus more on assignment-based work than those in traditional classroom environments is a seemingly simple shift in the dynamics of a

learning environment. The shift is not necessarily simple, though, because it illustrates the fact that technology in the writing classroom does not solve the dilemma of assignment-based grading and the punishment/reward structure that it enforces.

Indeed, as supported by the research data provided by this experiment, the presence of technology (specifically, tracking software) in the writing classroom serves to make makes this age-old dilemma more visible.

Why was the peak time for accessing the course at 5pm, with, while the "valley" time for accessing the course at 8am? Furthermore, why was there a secondary peak between 12 and 1am?

A partial explanation of this trend can be found via an analysis of the student population at the University of North Texas. The University of North Texas is a public state university with a large population of working students. In fact, more than 80 percent of UNT students work part or full time (UNT Student Employment 1). The peak, therefore, could be attributed to the fact that the normal work day ends at 5pm, which would be the time that students logged into the course. Ashley Bender, a PhD candidate and instructor at the University of North Texas, also notes this trend. She states that "I was really impressed with the many students I had who took online courses in order to keep full-time jobs. Bender further asserts that, "My students definitely accessed the course around the clock. I would see heavier activity in the mid- to late-afternoon, and after 8:00 pm. I also noticed heavy traffic during the two to three hours before assignments were due." (Bender Interview). The above analysis and data certainly helps to explain

the primary peak in course traffic. The secondary peak, however, is a data set that requires a bit more analysis.

Although it would be easy to dismiss the secondary traffic peak (12-1 am) by stating that college students often keep late hours, it is my contention that the secondary peak may be more important than is immediately evident. The secondary peak in course traffic between 12-1 may also be partially linked to the work schedules of the student population at the University of North Texas. Within the employed student population (80% of the total student population) a large percentage of restaurants and service industry businesses employ UNT students (UNT Student Employment 1). Restaurants and service industry positions often require an evening work shift that starts at 6pm and ends at 11pm. The secondary peak between 12 and 1 am may be attributable to the service industry/restaurant sector students logging into the course after an evening shift.

In addition to the fact that several of these students were employed in the service industry, the assignment structure of the course may have also contributed to the secondary peak. Bender notes "heavy traffic" around the assignment deadlines, and this traffic trend may link to the deadline structure established within English 1310 Online. Several of the assignments that Dr. Raign and I planned were due at 12am. Although Dr. Raign and I decided on this deadline fairly arbitrarily (The division between one day and another in a 24x7 environment), the assignment and deadline structure of an online course may be correlated with peak access times. Indeed, the assignment deadline structure may affect the work habits of students. Instructional designers, therefore, must

note that the decisions they make regarding assignment timelines and deadlines have a direct impact on student work (and perhaps sleep) patterns.

With a student population so involved in professional or part-time careers, online, blended, and self-paced learning becomes a topic that is especially relevant. Not all learners are allowed the flexibility necessary in their professional careers to adapt to the limited schedules provided by a university course schedule. At best, if students want to take evening classes, they are forced to select from a limited number of course sections that are offered within a limited time frame. Pershing, in his essay addressing instructional design in the "real world" argues that student learner analysis must be conducted in a manner that treats learners less as submissive learners, but more as participants so that the designer can match the needs of the learners with the design of the course. Custom built learning then finds a solution that matches the audience of learners at hand (Pershing 13).

The data generated by this experiment supports Pershing's contentions. Courses designed for adult learners must match not only educational needs, but other needs such as the need to provide flexibility for employed students. The logging data provided by this study illustrates the need for a flexible online course structure that accommodates not only to the student's learning needs, but also conforms to students' work schedules.

Why did traffic to the site decrease (rather than increase) over time?

This statistic contradicted my initial hypothesis that the course would gain traffic (along with an increased sense of community) with time. The opposite, however, is the outcome that the research data supports. The course traffic (total page views) increased sharply (by 86% from August-September) during the first month, and then decreased monthly until the end of the course in December (by 78.4% from September-December), which means that traffic peaked quickly and then decreased rather than increased over time. The decrease in course traffic may be attributable to course attrition as the course progressed. Researchers and scholars disagree about the correlation between attrition rates and blended/online learning courses. Freshman introductory courses usually have relatively high attrition rates, but the attrition rate for this particular course was higher than the expected attrition rate in my traditional English 1310 classes. Usually, I begin the semester with 27 students in my course, finish the semester with approximately 25 students, and have approximately 5 drops (These "drops" account for both the drops during the drop/add period and during the semester). A simple way to calculate the drop percentage is to divide the number of students who dropped the course by the number of students enrolled in the class. In a class of 27 with 5 drops, the drop rate, therefore, equals 18.5%. In English 1310 online, I started with 27 students, finished with 23 students, and had 17 students drop the course, which is a drop percentage of 62.9%. In the traditional English 1310 course I taught the same semester (fall 2005), I started with 27 students, finished with 23 students, and had 2 students drop the course, which is a 8.6% drop rate. (data from UNT Learning Management System). Again, these numbers account for drops both during the

drop/add period and during the regular semester, but it is important to note that the drop rate for English 1310 online (17/27=62.9%) was eight times higher than the drop rate for the same English 1310 (2/27=8.6%) class taught in a traditional classroom setting.

Via interviews with several other English 1310 Online Instructors, I have found that several other instructors have noted this trend. Lee Dollar, a teaching fellow and doctoral candidate at UNT states that the attrition rate in his English 1310 online classes are "much higher than a regular class." (Dollar interview) Another English 1310 online instructor, Ashley Bender, noted the same trend. Bender stated that, "I wasn't prepared for the large attrition rate. At multiple times throughout the semester I would evaluate myself and wonder what I had done, but it's really just the learning environment (Bender). Although Bender approaches the attrition rate via a qualitative rather than quantitative analysis (she notes that she evaluated her pedagogical techniques), both Bender's and Dollar's observations and data correlate with the available research data provided within this study for English 1310 online.

The above analysis serves as a snap-shot of the varying attrition rates. Although it provides only a sample of a much larger data-set with several variables, the attrition rates for this particular online course were higher than a traditional classroom. The corresponding traffic patterns also support this conclusion. Vaughn, in his research concerning online attrition rates, states the following:

In the United States, the Pew Foundation has sponsored a study to investigate how large enrollment, introductory courses can be effectively redesigned using a

blended format. The program involved 30 institutions and 20 of these institutions reported improved learning outcomes and 10 reported no significant difference (Twigg, 2003b). In addition, 18 of the study institutions demonstrated a decrease in student drop-failure-withdrawal (DFW) rates compared to the face-to-face only sections (out of 24 institutions which measured DFW changes) (83).

Vaughn notes that the difference between attrition rates in online courses versus a traditional class is negligible (no significant difference) (83). Although this may indeed be the case for the data set that he studied, it is nonetheless important to note that composition courses (rather than mathematics of science-based courses) often operate based on differing classroom environments and grading criteria. In such an environment, a sense of community and audience is essential so that students become cognizant of the rhetorical situation at hand. Given such variables, composition course designers should note that the difference in attrition between traditional and online composition courses may not be negligible. In fact, it is my contention that online course designers (and particularly online composition course designers/developers) should be cognizant that attrition rates may be a potential area for concern. I cannot suggest research-based design approach for reducing attrition within such courses. I can suggest, however, that instructional designers should strive for engaging communitybased learning environments that help to reduce attrition rates while simultaneously improving online/blended learning content.

## Summary and Conclusion

The use of technology in the writing classroom does not necessarily solve problems associated with student motivation. Simply put, technology is a tool. Poor student motivation is poor student motivation, whether it occurs in an online or offline course and regardless of the tool used to deliver the course content. Several scholars within the field of online and blended learning pedagogy have noted this trend, and it is important to note that using technology in the classroom cannot be a "cure all" for traditional pedagogical challenges. Concannon, Flynn, and Campbell, who conducted a comprehensive study of blended learning in Irish Universities, concluded the following via their research:

It is clear from this research that to look only at the positive and negative factors of technology, is to miss the wider factors impinging on students' use of it as a support mechanism. Age-old problems of student motivation, peer influence, and study strategy are all as important to the learning process, as are access to technology and computer skills (8).

Concannon, Flynn, and Campbell are not the only contemporary educators and scholars who have noted this trend. Ghaoudi, for example, makes the point that learning doesn't just involve static content; it also involves the interpersonal communication between teachers and students. Jochems advocates e-learning as the way of the future, but pointedly asserts that e-learning doesn't have to equate to distance learning, nor does it necessarily equate to better student participation (i). As a result, Jochems

classifies the current online learning environment as one that requires instructors to learn how to "integrate these new learning methods and embed them in established and existing forms of learning, teaching, or training" (i). By calling for instructors to integrate new learning methods into their pedagogy, Jochems places the ownership and responsibility for making online learning effective on the instructors rather than on the students.

Zhongmin Li argues that courseware development is a bottleneck to effectively using computers for teaching, and he asserts that teachers must match courses with their own approach as teachers (72). MacGregor furthers Li's argument by asserting that technology does not replace the teacher, especially for struggling students:

(. . . ) technology-based intervention programs do not replace the need for teachers to motivate and encourage struggling students to achieve. Teachers also should not use the time spent on tasks as a measure of student progress; instead, educators should focus on the total number of exercises that students have mastered. Software can provide easy access to tools that offer information about students who need additional motivation, when they need this motivation and why. This information is available for both individual students and for groups of students; thus, helping educators teach a variety of students in one classroom (52).

MacGregor obviously positions technology as a tool rather than as a solution in the above quotation, and it is especially important to note that time spent with a tool does not necessarily mean that a tool is effective. A broken screwdriver, for example, would

require more time to complete a simple task such as removing a screw from a wall than would an unbroken screwdriver. In the same manner, an increased amount of time spent in an "online" class versus a traditional instructor-led class does not mean that the learning environment is any more effective. Indeed, such a trend may point to the fact that the online course in question may not be as effective as a similar instructor-led class.

To further examine this concept, one should consider Sharon Dugdale and her related research. Dugdale asserts, "what the student is doing is vital to what the student is learning." To choose (and teach with) effective online tools, teachers must look for a tool that provides activities and a learning environment in which the subject matter is inherent in what the student is doing (384). Educators must note what the student is doing and how exactly the student is using the technology available so that educators can create tools and technology via user-based design (thus eliminating the "faulty screwdriver" I referred to in the analogy above). Krug, a usability expert, has coined such phrases as "Don't make me think," "Make it evident what is clickable," and "Conventions are your friends." Educators would do well to heed Krug's advice by choosing and creating learning technologies that are student-centered and user-friendly rather than tools that are teacher-centered, complicit, and functionally-centered.

The common thread that all of the scholars cited above share is the idea that technology is not a solution in and of itself for age-old pedagogical dilemmas. The media provided by online courses and technology do not necessarily solicit better accountability and motivation, nor can they be expected to "solve" some of the age-old

dilemmas that instructors face in a traditional classroom environment. Technology is simply a tool and medium that educators can, and should, use to teach valuable skills (in addition to content) to their students. The logging data gathered within this dissertation empirically confirms several of the hypotheses presented by Li, MacGregor, Dugdale, and others, thereby firmly positioning learning technology as a tool rather than as a solution. When considering teaching with and through technology, educators should stop looking for solutions, and instead look for tools that will allow and supplement (rather than replace) effective pedagogy. Teaching via technology is not necessarily inherently effective or ineffective. Choosing the correct tools and methodologies determines the effectiveness of teaching with technology. If instructors and course designers are able regard technology as a teaching tool rather than a solution, they will soon begin to realize the rich opportunities available via online learning and blended learning pedagogy. Beyond allowing for more flexibility and distance education opportunities, technology, when used properly can be used to enrich and inform the learning experience for both instructor and students.

## **CHAPTER 5**

## E-COMPOSITION AND THE DIGITAL DIVIDE

The pedagogical implications of emerging technologies that allow students to compose electronic and associative rather than print and linear texts has fundamentally changed the very fabric (quite literally) by which we communicate, teach, and compose. To fully explore all of the implications of the "digital divide" between print-based composition and the emerging field of digital composition, this chapter will address the issue at hand in three parts:

Section 1: Teaching Composition: Where Are We Now?

Section 2: Teaching Composition: Where Are We Going?

Section 3: Teaching E- Composition: How Do We Get There?

# Teaching Composition: Where Are We Now?

Computers are present in the classrooms. As Welch notes, computers are increasingly present in the majority of our contemporary learning environments (12) They've invaded most of our classrooms, and they aren't leaving. Their blank screens observe us. Their barely audible humming reminds us that they're up to something. They sit there almost silently in the corners of most classrooms, and they are far more interesting to students than a composition teacher lecturing about the subtleties of comma placement. Trust me, I know. Just about the time that the difference between an independent clause and

dependent clause becomes crystal clear, students start staring at the computer monitor hoping sullenly that the pixilated screen will save them from the forthcoming misery of coordinating conjunctions.

That's where we are now on the technology front within the contemporary composition classroom. Composition instructors have access to technology, but quite often they don't always have the skills, training, or ability to effectively use the technology as a teaching tool (Li 72). Traditional pedagogical techniques don't work as well on a screen as they do on a chalkboard. Instructors often have limited access to training classes or personnel to guide them through the transition of teaching with technology and online pedagogical techniques (Santovec 3). As Ashley Bender states,

The additional skills a teacher needs (in an online learning environment) are not necessarily traditional "teaching" skills. I would say that the most important skill would be extensive knowledge of the Web-interface system that the teacher will be using. A good WebCT<sup>TM</sup> (WebCT, Inc. Corporation, Washington DC, http://www.webct.com/) (or whatever interface the school uses) training session that especially demonstrates how to use the tools sections. I relied quite heavily on these tools throughout the semester, but I had to teach myself how to use them, etc. It's not that this was difficult, but it would have saved me a ton of time had I spent a good three hours with someone who really knew the system well."

Dr. Kathryn Raign, Director of the UNT composition program, further asserts that both knowing and being able to troubleshoot the software program that one is using to conduct training is quite important, "Someone teaching online needs to know a lot about

the platform he or she will use. For example, if you are working in WebCT, know WebCT. You can't depend on someone to fix everything" (Raign). This phenomenon is not limited to the University of North Texas composition program. As Mary Lou Santovec points out in her article "Training the People who Train the Teachers," "Many of the staff instructional designers who are supposed to train faculty to teach online were hired at their institutions without any previous training or knowledge of online instructional design methods" (3).

In such a scenario as the one that Santovec, Bender, and Raign describe above, composition instructors are often forced into an environment for which they have no formal training, and very limited recourses (if any) from which they can gain an understanding of instructional design or computer-mediated instruction delivery methods. Even if the instructors do receive formal technology training, it is by staff "without any previous training or knowledge of online instructional design methods" (Santovec 3) As a result, instructors are often placed in classroom environment (the computer-assisted/blended/online learning classroom) for which they have no training.

In a classroom environment of instructors with limited instructional technology training, it is not surprising that the instructors are often uncomfortable with the technology present in the classroom. I've observed the resulting classroom environment on several occasions, and have concluded the following: Within such an environment, composition instructors often do their best to de-privilege and marginalize the presence of computers in their classroom (by asking students to turn off their computer-monitors, for example),

and instead privilege their own presence as instructors. The audience in such an environment (contemporary students) then, via secondary literacy, seems to seek out the computers as an alternate text to the classroom environment (Ong 65). Simply put, the students find the computers and their capabilities fascinating, and choose to deprivilege the instructor in favor of the computers that have been marginalized. Within such an environment of shifting privileges and margins, instructors often attempt to ignore the fact that the presence of computers (rather than themselves) are the most fascinating objects to students in the composition classroom (Derrida 324).

What can be done about such a rhetorically charged scenario of shifting privileges?

Perhaps the following is a feasible alternative: Rather than marginalizing the presence of computers in the classroom by forcing students to turn off their monitors and focus their attention on a lecturer, instructors should instead channel and direct the audience's (students') attention toward the technology present. By doing so, instructors will be able to capitalize on the presence of technology in the classroom, and thereby channel themselves through the pixilated matrix to gain (or regain) their audience.

# Teaching Composition: Where Are We Going?

The rhetorical situation of the composition classroom is changing and has changed (via being and becoming) due to the presence of computers in the classroom. The presence of computers has not eliminated the need for instructors, nor has it necessarily improved students' writing, particularly within sentence and paragraph level construction. Danny Hoey, a teaching fellow at the University of North Texas notes the

following about this trend, "I thought that the papers would be different because there is less interaction. But I found that the first paper had the same errors as the class that I teach face to face---thesis statement, sentence level errors, topic sentence construction" (Hoey Interview). This trend that Hoey observes is neither new nor surprising. Composition scholars and instructors have been aware for some time that technology does not necessarily make students better writers. As pointed out by Charles Moran in his 2002 article "Computers and Composition 1983-2002":

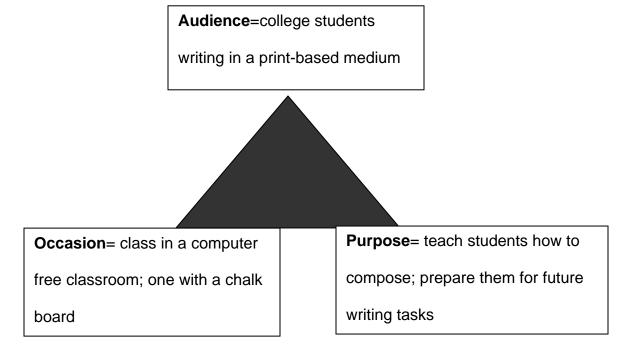
Hopes in the early issues of the journal (Computers and Composition) focused on technology's presumed potential for improved writing, teaching, and learning in the composition classroom; a later and recurrent hope was that by embracing technology, composition teachers would improve their status in the academy. Authors in recent issues looked less *at* the technology and much more *through* the technology, toward a more egalitarian and just society (343).

As Moran notes, most contemporary composition scholars and instructors focus on looking "through" the technology rather than "at" the technology (343). For instructors, scholars, and educators, this means that the technology itself becomes less important than the ability to project themselves through the technology to the appropriate (student) audience. How do instructors effectively project through technology to the student audience? To answer this question, one most first examine the rhetorical situation of the contemporary composition classroom. Composition instructors are mostly, if not completely, familiar with the rhetorical situation (Aristotle 78). They are quite well aware that when one part of the rhetorical situation (triangle) changes, so too must the

writer/communicator adapt to the new rhetorical situation. The figures that follow (Figure 26 and 27) illustrate the difference between the rhetorical situation in 1980 (prior to computers in the classroom) versus the rhetorical situation in 2007:

Rhetorical Situation for a Composition Instructor in 1980

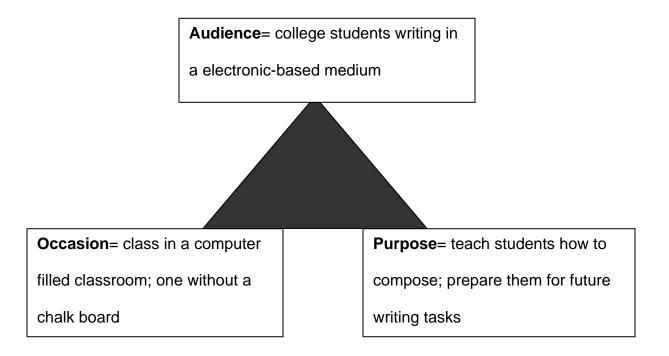
Figure 26: Rhetorical Situation in 1980



*Note:* The audience and occasion for differs from the rhetorical situation presented in Figure 27.

Rhetorical Situation for a Composition Instructor in 2007

Figure 27: Rhetorical Situation in 2007



*Note:* The audience and occasion for the composition instructor has changed as compared to the Rhetorical Situation in 1980 (Figure 26)

As you might note from Figure 27 as compared to Figure 26, both the audience and occasion for the composition instructor has changed, while the purpose has remained the same. What does this shift in the rhetorical situation mean? It means that instructors must adapt to the rhetorical situation in the contemporary classroom (2007 rather than 1980). They must adapt to classrooms filled with tech-savvy students who are quite familiar with screen-based composition. Such students compose electronically every day, whether through email, chat, or while text messaging (Ong 65). Instructors must

adapt to a computer filled classroom. Instructors must use computers as tools to teach students, for the computers are far more interesting than the instructors (Welch 12).

Where are we going? We are moving toward electronic-based composition. We are moving away from linearity and a print-based paradigm, but because we're moving away from such a paradigm does not mean that it will cease to exist (Ong 65). We are only choosing to privilege electronic and linked content rather than print and linear content for "the value of writing will not be itself" (Derrida 76) As Derrida points out the value of language is not necessarily in writing, it is in the communication, the "other" or symbol behind the writing (76). It is in this way that the audience and occasion of the composition classroom has changed (via a changed medium). The rhetorical situation of the composition classroom has, therefore, changed. Instructors, to remain effective instructors and communicators must avoid marginalizing their own presence in the composition classroom. To remain rhetorically effective in the classroom, instructors must adapt to the changed (and changing) rhetorical situation within the contemporary classroom.

## Teaching E Composition: How Do We Get There?

Contemporary instructors and educators, in order to effectively teach to the changing audience via a changed medium, within an altered rhetorical situation, must embrace the new medium so that they may meet their audience's needs. They must teach hyper textual and electronic-based composition, and they must teach via hyper textual and electronic-based composition.

Welch, in her prophetic 1999 text titled *Electric Rhetoric* notes that increasingly, rhetoric is practiced through a new electronic media. Welch asserts that rhetoricians must harness the rhetorical power of the changed medium and audience, thus "redeploying classical sophistry," thereby building a movement in critical pedagogy that encourages teachers to use the new medium (4). Another scholar, Geisler, notes that text has over a 1000 year history, but IT technologies with text as their core are less that 30 years old (email, html etc.) (270).

Yanes, another contemporary scholar, advocates the use of WebCT in addition to "regular" classes to enable constructionist group learning within the classroom (265). Similarly, Liz Pape states that, "With the proper blend, schools and teachers can increase the engagement of students in the *learning* process, accommodate a variety of *learning* styles through the use of multimedia elements, provide students with adaptive instruction and real-time feedback and optimize the lines of communication between schools and parents" (19).

Jay Gordon, who authored "Teaching Hypertext Composition" advocates teaching hypertext composition as a way to make students consider the complexity of design and visual rhetoric, as well as to give them "tools" for their future careers. Gordon further asserts that teaching HTML is not just an end, but a means to a deeper theoretical understanding of writing. Gordon states that:

Markup of any kind, in other words, may be considered an essential component of the "technology" of writing in general, serving a document's rhetorical import by affecting clarity, cohesion, emphasis, navigability, and so forth. Composing HTML-based hypertexts can thus be an especially productive route to understanding the role of markup in all writing (52).

Having personally taught HTML in the composition and technical writing classroom, I can confirm that in addition to providing students with a valuable and marketable skill, hypertext composition opens the doors for students to a deeper theoretical and rhetorical understanding of writing.

How can instructors teach and encourage these technologies, though, if they don't know or understand them themselves? To do so instructors and educators must participate in the changes taking place within the computer assisted classroom. Instructors must adapt to the rhetorical situation at hand. Unfortunately, in the contemporary university setting that Santovec describes (one with minimal instructional technology training available for instructors), instructors are often left with only one viable option: teaching themselves (3). This may seem like a daunting and frustrating task to some, but frustration is often an inherent part of learning, especially when learning to use technology. As Clark Aldrich notes,

Frustration is an inherent part of learning, but most people do not appreciate the role of frustration in learning. (...) An inexperienced learner is thrown by frustration, but a good learner embraces it. A good learner says that frustration

and the resolution of frustration are those moments when I truly rewire my mind a little bit.

To teach oneself technology, one must teach technology. The previous sentence may seem like a typographical error or a contradiction, but it is not. As the saying goes, "If you want to *really* learn something, learn how to teach it." To do so, instructors must experiment, participate, and teach within the ever emerging field of technological becoming. Technology is not going away or slowing down. In fact, according to Moore's law, every year the number of circuits you can put on a microchip doubles. There's no reason to believe that this trend will stop within the next 20 years (Garreau).

What is most important during this time of technological change and becoming is that instructors, via secondary orality (or perhaps tertiary orality) adapt, or at least attempt to adapt, to the ever present changes (Ong 67). Instructors must demand that composition students write electronic-based rather that print-based media, even if the instructors themselves are not well versed within this media. Via this process, instructors will learn along with their very eager audience exactly how the media has changed, is changing, and will change. Composition scholars and technical communicators have not yet bridged the digital divide. It is up to instructors and educators to build the bridge.

#### **CHAPTER 6**

#### DICHOTOMIES AND THE SPACE BETWEEN

#### Teachers Are the Sub-Textual "Other"

We as humans within human language define our world, and the world that surrounds it, as a series of polar opposites. Black has a counterpart in white, left in right, empty has full. We define much of the world around us in such dichotomous terms (Derrida 99). Post modern scholars rightfully state that breaking down these polar opposites is the key to understanding the subtext/other of what is really going on. That thing, that meaning that we derive from the spaces between (the absences) is what yields a better understanding of the always subjective and changing truth (Derrida 99).

The technology paradigm present in the contemporary university composition classroom provides several similar dichotomies. Currently, the composition classroom faces an evolving world of CBT (computer based training), distance learning, online courses/degree plans, traditional instructor-led learning and plenty of blended approaches in-between. Pape defines blended learning as "the area between the traditional classroom and the online instructional model where course instruction is either delivered over the Internet or through two-way video conferencing" (19). Whether the instructional technique is based on a CBT, blended, or distance learning method, the resulting scenario creates a polar opposition.

The two polar opposite groups are:

Group A: Technology Creators: those who develop CBT / distance learning, and online course technology (primarily software).

Group C: Technology Users: those who use the technology.

Surely you've noticed that I skipped from A to C in the dichotomy above. That's because there's an implied B (and an infinite number of additional symbols/possibilities) in between. I'll get to the "B" in a bit, but first let me explain the problem inherent in the dichotomy.

As Clark Aldrich stated in his presentation titled, "Simulations and the Future of Learning," dichotomies often cripple learning—the difference between what you know and what you do / the difference between theory and practice / the difference between what you learn in the university and what you do in industry. The differences are crippling because they help to establish a division, a schism between knowledge and practice, between theory and reality of online and computer based learning technology (Aldrich). The division is as distinct as the division between those who understand how the inner workings of a combustion engine control the forward movement of an automobile, and those who do not, and as a result, often pay hefty mechanics bills. One would think that bridging the gap between such dichotomies would be quite easy. It is simply a matter of defining the space (the B) between the polar opposites and bridging the gap. It is not a simple matter of definition, though.

Traditionally, teachers have "fit" within the "C" side of the dichotomy. Most composition instructors who employ technology as a teaching aide and medium act as users rather than creators of technology. It is my contention that the teachers are (and should be becoming) the B. Contemporary composition instructors should be the "other" and exist within the gap between dichotomies. Their lack of presence in the current dichotomy between users and creators defines the very need for their presence (Derrida 99). For example, several technical writing instructors and composition researchers ( Jay Gordon and Liz Pape, for example) have recently advocated the introduction of hypertext composition and multimedia elements into the traditional composition classroom as a way to make students consider the complexity of design and visual rhetoric, as well as to give them "tools" for their future careers. Pape suggests that via adaptive instruction, multimedia tools can increase the engagement of students in the *learning* process (19). Gordon asserts that teaching HTML is not just an end, but a means to a deeper theoretical understanding of writing (50).

Pape's and Gordon's suggestions, which I explored in-depth in the previous chapter, are ones that begin to fill the dichotomous gap between the creation and use of technology in the composition classroom. By suggesting that composition instructors should teach hypertext (HTML) and multimedia authoring, Gordon and Pape actually position themselves and their students as creators of technology rather than just users of technology. The realm between the creation and use of technology (the "other" space I refer to as the "B") is precisely where instructors should position themselves if they expect to adapt to the rhetorical situation in the contemporary composition classroom.

As Walter Ong notes, "We must have more and more machines in our communications processes, but we must at the same time master them more and more by growth in our interior resources" (67). By growing interior resources as creators of technology rather than users of technology, composition instructors in the computer-based classroom can (and will) bridge the dichotomous gap and thereby adapt to the rhetorical situation present in the contemporary composition classroom (67).

Here's a practical example of how instructors can use to bridge the dichotomous gap:
As part of an exercise and writing assignment, composition instructors may (and often do) require students to analyze and evaluate how the design and language of a Website helps to rhetorically position the site and its corresponding argument / business case.

Some composition instructors (and particularly technical writing instructors) may take this exercise one step further by suggesting that students analyze the usability and effectiveness of the Website's design. Composition and technical writing instructors must necessarily extend this type of assignment an additional step forward in order to bridge the dichotomy. Rather than just analyzing the rhetorical position, design, and usability of the site, instructors should actually give (and require) their students an opportunity to design and develop a Website that (hopefully) positions itself better both from a rhetorical and usability perspective.

Obviously, to complete the above scenario and exercise, instructors would have to be well versed in both the theory and practice of developing rhetorically effective and user-friendly Websites so that they could transfer this knowledge to students. Such an

instructor skill set is a rarity. Indeed, such an instructional skill set may not exist today, and if it exists today, exists only within the margins of the technical writing and composition pedagogical communities. The pedagogue who is able to bridge the dichotomous gap (the B) is the pedagogue who will be able to not only use technology, but will also be able to create the technology that currently defines the marketplace for online learning technology. Such pedagogues (the B) will be able to deconstruct the current dichotomy, thereby arming both themselves and their students with the rhetorical and technological position to match the rhetorical situation of the contemporary composition classroom (Derrida 99).

An example of the opposite side (creator rather than user) of the very same dichotomous gap can be found within the field of computer science. For example, within the university setting, computer science students learn about the latest software development techniques and theories. What these university graduates do in industry involves attempting to take the techniques and applying these theories/practices to the "real" world, a world that often contains business processes, divisions, and cultures that may not embrace (and indeed often limit) the "best practices" methodologies learned in the university setting. The limits imposed by industry are often crippling to developers because they emphasize software that is built based on business parameters rather than user needs (O'Reiley). Both end users and creators (developers) then become "stuck" with the product and a cumbersome process without even realizing that there is an alternate possibility. End users never even consider the possibility that the users could create a new tool that does the job better, nor do creators (developers) realize

that user needs are often more important to users than business parameters (Eslambolchi). For developers, users then become nothing more than fictional characters to which they have little or no access due to the operational structure of the business. Therein lays the problem. There's the gap. Unlike the UK transportation authority and their famous "Mind the gap" mantra, there are only a few instructors and technologists within the growing field of online and blended learning who understand (much less mind) the gap.

The growing field of usability and user-based design has emerged to fill this gap. Within an industry setting usability experts help software developers to design applications based on user expectations and tasks rather than parameters such as database, hardware, or server-side architecture (Nielsen). It is my contention that composition instructors who teach in computer-mediated academic environments must be able to adapt, deconstruct, and navigate the dichotomy between users and creators of technology in way similar to how usability experts have been able to navigate the and deconstruct industry cultural differences. By doing so, instructors will be able to drive user-centered design within academia. End-users (instructors and students) and creators (software developers) must mind the gap, and to do so, they must deconstruct the current paradigm. Creators must become users and users must become creators.

#### **CHAPTER 7**

#### CONCLUDING REMARKS

A synapse exists between what composition is (being) today and what it is (becoming) tomorrow. The textual discourse associated with this dissertation serves as an analysis of the synapse between being and becoming of English 1310 online in particular, and in general analyzes the synapse between being and becoming within the larger and context of online composition pedagogy and online course development. Via this analysis of the online pedagogical interaction present within English 1310 online, I hope that it has become evident to the reader that online composition instruction serves as a discourse present within the fractures of what used to be considered physical reality. Via the technological absence of presence that we call online pedagogy and the altered rhetorical situation of such an environment, I hope it is clear that technical communicators, rhetoricians, composition scholars, and educators must necessarily step forward to adopt a new skill set, thought process, and rhetorical stance that will help them to adapt to the new medium of technological becoming.

By stepping forward to adopt and adapt to the new skill set(s) required to navigate the volatile field of online and blended composition pedagogy, I am hopeful that communicators and educators can de-privilege the paradigms that position technology itself as a solution and move forward toward realistic and real-world expectations for instructors in computer mediated learning environments.

In particular, the questions that I have attempted to explore and address within this case study are the following:

- How can Web server logs and PHP logs be analyzed to yield relevant information that will assist in the design, architecture, and administration of online and blended learning courses?
- Does the medium of an online course solicit better accountability and motivation or "solve" some of the age-old dilemmas that instructors face in a traditional classroom environment?
- How can teachers and instructional designers use the technology available to them to provide educationally-effective instruction in the altered rhetorical environment of the contemporary composition classroom?

The above questions are obviously quite relevant to the field of online and technology-assisted pedagogy, and are also quite contentious. The fundamental "answers" that I have provided in my attempt to address these points of contention among composition scholars and technical communicators are the following:

Web server logs and PHP logs can be analyzed to yield relevant information that
assists in the design, architecture, and administration of online and blended
learning courses. The server log data collected as part of this research project
shows that analyzing access time, content structure (particularly assignment

structure), and traffic patterns can yield a better understanding of the dynamics of online composition pedagogy.

- Technology in the writing classroom does not necessarily solve traditional
  problems associated with the composition classroom. Technology is a tool.

  Traditional "problems" within the composition problem such as motivation, the
  product-based structure of grading and sentence-level construction still exist
  within an online composition course, regardless of whether the medium is
  electronic rather than face-to-face instructor-led.
- Technology has changed the rhetorical situation of the composition classroom. As a result, instructors must adapt to the changed rhetorical environment by demanding that composition students write electronic-based rather that print-based media, even if the instructors themselves are not well versed within this media. Composition scholars and technical communicators have not yet bridged the digital divide. It is up to instructors to build the bridge.

More research and analysis is necessary to bridge the gaps and answer the many questions introduced by the presence of computers in the contemporary composition classroom. Within this dissertation and the deconstructive analysis it presents, I have only addressed a few of these questions, and there is certainly more room for analysis and interpretation. I hope that some of the questions I have raised and the research data I have presented will become a catalyst for more research, more questions, and

more curiosity in the emerging and very volatile field of blended composition pedagogy. Within this volatility lies the gap between what composition is (being) today, and what it is (becoming) tomorrow. Becoming will become being, and the composition classroom will always ever change. Mind the gap.

## Recommendations for Academia and Industry

Minding the gap is particularly important for both academics and industry members who are exploring the field of online and computer assisted pedagogy. As an individual who has worked in both academia and industry in various roles such as instructor, trainer, course developer, technical writer, and in my current role as a training department manager in the software business, I feel as if I can share a unique perspective of online pedagogy in general and online composition pedagogy in particular. English 1310 online was the first online course I developed, and although Dr Raign and I seemingly suffered from being on the bleeding edge of online course development, the experience and lessons we learned were invaluable. I now consider English 1310 online version 1 of what has become version 5 of the online course type and methodology that has been quite successful in the airline, travel, technology, and software industry.

Dr. Raign recently asked me what I would have done differently if I had the opportunity to go back in time to redesign and redevelop English 1310 Online. My initial response was that I would not have done anything differently, for the process and product that the course became was a learning experience that I found quite invaluable. My initial response, however, may be a bit idealistic. In reality, I would say that the best thing I

could have done to make English 1310 Online more successful would have been to rearrange my expectations and skill set as a course instructor, developer, and facilitator to make them more realistic and practical for the learning environment at hand. When we started developing English 1310 Online, we mistakenly assumed that technology would serve as a magic salve that would solve all of the "problems" associated with pedagogy in the contemporary instructor-led classroom. We envisioned the course as one that would tick along at its own pace with minimal maintenance. We mistakenly thought that an online course would be infinitely easier to teach, and we quickly learned that an online course was infinitely more difficult to teach. At the time, we had not anticipated the sheer volume of email, bulletin board posts, and telephone calls that we would receive about the course.

Although it is easy to say in retrospect, English 1310 Online would have been far less challenging for Dr. Raign and I if we had developed the correct skill sets and methodologies as instructors and course developer. I would have personally trained myself to be a better project manager, a better facilitator, a better communicator, and a better instructional developer. These skills, however, were not skills that I had even considered necessary when we developed the course. These skills are skills that I have developed via "trial by fire," and they come into play every time I'm approached by a corporate executive who wants to bring their entire training program online so that they can reduce headcount, drive efficiency, and reduce complexity. I always grin internally when I'm approached with such a proposition. Although all three of the above may be possible via online learning and pedagogy, I always remind executives (and myself) that

technology is not necessarily the salve that solves all woes. Technology is a tool, and it is only effective as a tool when you have the correct skill set and methodologies in place to use the tool. The individuals who are able to develop the appropriate skill set and methodologies will be quite invaluable and marketable within the current demand for technology in academia and industry. The demand for effective online learning technologies and methodologies will continue to increase, and the individuals with the correct methodologies and skill set will be able to shape and determine the direction of online pedagogy. These individuals are currently few and far between, which harkens back to the call for action that this dissertation undertakes. Instructors, trainers, technical writers, pedagogues, industry and academia alike must step forward to research and bridge the gap between the being and becoming of technology-assisted pedagogy so that they can de-privilege the paradigms that position technology itself as a solution, and move forward toward realistic and real-world expectations for instructors in computer mediated learning environments.

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