

ABSTRACT

COLEY, TOBY FRANKLIN. *Wikis in the Teaching of Writing: Purposes for Implementation*. (Under the direction of Chris M. Anson).

Throughout the documented history of the teaching of writing, educators have engaged in various methods through which to guide student learning in the textual medium. In recent years, the digital age has provided a plethora of educational opportunities from long-distance learning and virtual courses, to course management systems, blogs, and wikis. The wiki has emerged as a growing technology with the potential to transform the rhetoric of the writing classroom. The present project seeks to further the research available on wikis in the teaching of writing. This study is both definitional and explorational. The questions it seeks to address include: how are wikis being used in educator's classrooms; to what purposes are the wikis being used; in what ways are wikis being used? To answer some of these questions, various instructor survey responses were evaluated and incorporated into this thesis. The six main purposes for which wikis are being used in education that are identified in this study are 1) collaboration, 2) facilitation of work, 3) audience extension, 4) knowledge building/reflecting, 5) effective writing, and 6) multimodal literacy. After gathering data on the above purposes, this research discusses the results of the data and considers future research for integrating wiki technology into the teaching of writing.

**WIKIS IN THE TEACHING OF WRITING: PURPOSES FOR
IMPLEMENTATION**

by

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Dedication

This thesis is dedicated wholeheartedly to my wonderful wife, Christina Coley; without whose dedication and support this thesis would not have been possible.

Biography

Toby Franklin Coley was born in Wilson, North Carolina. He received his Bachelor of Arts degree in English and Biblical Studies with a minor in the History of Ideas from Southeastern College at Wake Forest in 2005. Toby began work on his Master of Arts degree in literature at North Carolina State University in the fall of 2005. During the course of his studies, through a fortuitous independent study in the history of modern composition under the guidance of Dr. Chris Anson, Toby realized his passion for composition and how it would complement his passion for guiding students to becoming effective citizens of their nation. This passion led Toby to focus his concentration on Composition and Rhetoric and received his Master's degree in 2007. Toby will continue his graduate career by pursuing his PhD in Rhetoric and Writing at Bowling Green State University in Ohio in the fall of 2007.

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Introduction - Wikis in Context: Writing in Multimodal Environments

"Wikis are already making their mark in higher education and are being applied to just about any task imaginable. They are popping up like mushrooms, as wikis will, at colleges and universities around the world, sometimes in impromptu ways and more often with thoughtful intent." — Brian Lamb

In 1994 Ward Cunningham, a well known pioneer in the field of design patterns and extreme programming as well as the inventor of CRC-Cards (HyperCard) and the wiki concept, wanted to "create an environment where we [computer programmers] might link together each others' experience to discover the pattern language of programming" (Venners, "Exploring"). From ideas that originated in his creation of HyperCard, a program from Apple for creating applications and storing information that was among the first hypermedia systems, the first wiki (WikiWikiWeb) came into existence in 1995 (Leuf 14).

Wiki comes from the Hawaiian word "wiki wiki," which means "quick," coined by Ward Cunningham. A wiki is a collaborative Web site that allows users to modify content through a web browser. Entered text is translated from a simple mark-up language into HTML through the wiki software. A wiki can be an individual Web page that contains multiple linked wiki pages as part of an individual wiki, or it may contain several separate community wikis.

Since 1994, wikis have grown in popularity in classrooms across the nation. From the university wiki at Texas A&M Corpus Christi (<http://critical.tamucc.edu/wiki>) to non-university related sites such as *Using Wiki in Education* (<http://ikiw.org/>), wikis

are making a mark in education. In the Educause Learning Initiative article, “7 Things You Should Know about Wikis,” the author expresses the growing popularity of wikis by saying that "Educators and students, as well as amateurs and professionals (artists, writers, collectors) . . . have found wikis useful in expanding community involvement and interest in their subjects and activities" (1). Linda Schwartz et al. speak of the booming trend of wiki usage in educational circles when the authors state, “[i]t is difficult to estimate the number of wikis currently used in university settings, and the range of ways in which they are being used” (2). This statement is significant considering the short amount of time (ten years or so) that wikis have been in available.

According to Matt Barton, teachers must be willing to “embrace the wiki way” and adapt new technologies to their ever-changing needs before they are left behind. In other words, "teachers should approach technology with an open mind. By doing so, teachers can take advantage of the tools and language students are already using to build a better, more productive relationship with their students" (Mader). In order to take advantage of the wiki tool and adapt technology to their classroom needs, instructors need an understanding of how teachers implement wikis in the today’s writing classroom.

Current commentary on wikis converges on what functions wikis provide and how those functions facilitate access, collaboration, and utilization of the software. Functions are defined as the operations that wikis enable teachers to carry out that are inherent to the technology, such as editing, creating pages, and linking items. Brian Lamb, in “Wide Open Spaces: Wiki Ready or Not,” provides a brief explanation of wikis and four examples of wikis in the academic environment. Lamb makes various statements in the article such as “wikis promote close reading” and “wikis may prove to

be invaluable for teaching the rhetoric of emerging technologies” and he talks about the security concerns often voiced by administrators, but Lamb does not look for patterns or common uses of wikis in the classroom (44). Susan Garza considers how wikis affect and encourage collaboration in the classroom, but limits her study to collaboration specifically with the conclusion that the shared negotiation of space that takes place in a wiki “can lead to better understanding of the social processes that underlie any collaborative activity (Garza). In “Embrace the Wiki Way,” Barton says that only “true” wikis, ones that provide few or no limitations on user rights are the “ideal” and offer the “very features that make wikis exciting in the first place.” Barton provides five examples of possible wiki assignments and asserts which of these assignments he believes would and would not be viable in a wiki. Although Lamb, Garza, and Barton offer some examples of wiki functionality and possible uses in the classroom, the real issue neglected by many articles is for what common purposes are teachers using wikis in the writing environment.

Educational purposes represent how teachers of writing are using the wiki. While technical functions are operations the technology facilitates, purposes are chosen by the teachers and represent ways in which teachers are enabling the wiki to assist in course goals. Examples of educational purposes range from using a wiki for collaboration, journaling, and electronic portfolios. A few articles have attempted to deal with educational purposes incidentally and with brief and limited conclusions. Ferris and Wilder note a few of the educational possibilities of wikis through the print and oral paradigm, but do not offer any empirical study for their deductions and do not examine these uses from the teachers’ point of view. Wang and Turner present a few problems

that arose in the wiki environment as computer-science department instructors and offer a different look at the paradigm behind wiki use. These articles offer a step in the direction of better understanding wikis in education, but none has provided an in-depth discussion of the purposes of wikis in the writing classroom from the teacher's perspective in an empirically based study. The gap in the research this thesis proposes to address centers on the lack of knowledge about wiki implementation in the writing classroom. Since wikis are free software, teachers have an incentive to search for ways of integrating this multimodal tool in their classrooms to explore collaboration and authoring. Unfortunately, many teachers are unaware of how others in their field have approached wikis and to what purpose wikis are used in those teachers' classrooms.

The research presented here will address questions about the uses of wikis in writing instruction. The first chapter examines the literature developing in the field of wiki technology, focuses specifically on how authors present that literature and what scholarship is saying about wikis in the teaching of writing specifically. This thesis proposes to fill this gap by surveying a sample of writing instructors across the nation concerning the use of wikis in the writing classroom; interviewing several professors who are implementing the technology; and surveying a representative cohort of students in order to examine how wikis are being used and received in composition tasks. Lacking in the existing literature are more contextually-based analyses of wikis and their instructional role. The various data derived from this study are offered in chapter three in order to derive the most common purposes in chapter four for which teachers are implementing wikis in writing instruction. For what purposes are teachers using wikis for writing tasks in education and writing instruction? How can these purposes be

discerned and what is a useful method to use for approaching this type of study? What are instructors of writing saying about wiki usage? The options for wiki use are vast and the research growing, but teachers need answers to immediately pedagogical questions at this point. How can teachers examine current wiki use to implement this technology into the writing classroom? The study concludes by reminding and encouraging readers to continue research in wiki implementation in order to support students in their process of composing and learning, and offer some future avenues for research in this area.

Chapter One - Review of Literature

In recent years, the terms “social software,” “commons-based peer production,” “open-source,” and “web 2.0” have proliferated in the composition community’s journals, books, and conferences. While there exist in the composition and rhetoric field those who have yet to consider the implications of emerging technologies in their writing classrooms, a large and growing subfield known as “computers and composition” has arisen in the last twenty years that considers this very topic. Recently, a core group of individuals is blazing the trails of multimodal technologies with scholarly perspective, some of whom are from disciplines as diverse as computer science and general education. Much of this scholarship centers on collaboration.

In 2001, Bo Leuf enlisted the help of Ward Cunningham to publish *The Wiki Way* with the intent that the book be “an introduction to and analysis of both the tool [wikis] and the culture that has grown up around it” (xv). Since the publication of *The Wiki Way*, scholarship on wiki technology has broadened, including scholarship on the entrance and growth of wikis in general education. Though *The Wiki Way* appeared six years after the first wiki became active, the authors’ treatment of the topic is foundational and the book represents the pivotal text from which all wiki scholarship draws its heritage. Leuf and Cunningham begin by explaining the concept behind wikis: collaboration. *The Wiki Way* defines the term “wiki” and explains how to install, use, and structure content on wikis. In section three of *The Wiki Way*, the authors examine various models of wikis in use today (including educational and corporate environments) and posit future avenues for implementation (such as university and personal applications). Many wiki articles echo

the focus of *The Wiki Way* on collaboration, definition, installation, employment, uses, environments, and future. The acronym DFF (definition, function, and future) is one way to represent the structure of the book. The structure is important for the literature because it reiterates the basic level of scholarship for many years, which focused on explanation, not goal-oriented implementation.

Two recent (2006) examples of the DFF structure appear in Ebersbach et al.'s *Wiki: Web Collaboration* (WWC) and Jane Klobas' *Wiki: Tools for Information Work and Collaboration* (WTIWC). A cursory overview of WWC and WTIWC epitomizes two ideas for the reader, 1) wiki scholarship currently focuses on defining the tool and offering options for choosing a wiki and 2) the rubric of the scholarship focuses on examination of a tool, not the concepts or purposes behind the tool (theoretical and practical underpinnings). Other examples that incorporate the DFF standard include Challborn and Reimann's "Wiki Products: A Comparison," and Educause Learning Initiative's "7 Things You Should Know about Wikis."

After an initial phase of literature dealing exclusively with identification and explanation (though recent articles and books are still being published that undertake this task in new disciplines), a somewhat different focus emerged. This new focus on teacher-centered research was encouraged by the hands-on practical nature of the educational environment. Stuart Glogoff explains how he used a wiki in several information technology courses at his local university by having students contribute to an ongoing "glossary-pedia," a growing glossary of technology terms and projects for information technology majors. Lindsay Grant, on the other hand, completed the study

“Using Wikis in Schools: A Case Study,” based on three ninth-year (age 13-14) courses at a co-educational secondary school. Like Glogoff, the data in Grant’s study regards wikis in fields of education other than writing. Glogoff’s article typifies the single teacher-methodology approach to research, where the teacher is experimenting with new technology in his own classrooms in an attempt to understand personal research questions (Bridwell-Bowles). Grant provides one of the few, yet growing, examples of the case study approach to understanding wikis in education, but does not concentrate on writing instruction. Other articles, like Guy Marieke’s “Wiki or Won’t He? A Tale of Public Sector Wikis,” offer an examination of wikis in the public or corporate world through the lens of publicity. The goal of Marieke’s article is to consider whether “wikimania” has truly hit the public sector through an evaluation of current wikis. He examines library wikis, educational wikis, and government wikis. Marieke only mentions the use of a couple of wikis in each category and what their main goals are, but does not consider ways wikis are being used to facilitate these goals. He provides his critique in several environments, not limiting it to writing instruction.

The single most addressed purpose in all wiki literature to date (be it corporate, individual, or educational) is collaboration, perhaps due to the advocacy of active learning that instructors believe is inherently social. In this environment, the importance for teachers of encouraging collaboration is paramount. Finding ways for students to interact and build upon community knowledge is integral in most writing and general education courses. In 2002, Mark Guzdial et al., undertook an examination of the CoWeb wiki at the Georgia Institute of Technology through various faculty and student surveys which noted problems surrounding the lack of collaboration he found taking

place on what should have been a collaboration intensive technology. Of these problems, the authors found that too much competition, faculty issues, and learned helplessness (defined by the authors as the situation that occurs when students are afraid to admit they are confused and therefore do not seek help) were the most obvious. One important issue this article raises is how collaboration may not work in an environment where collaboration is the fundamental purpose for use. Guzdial does not inquire about other ways in which teachers are using the wiki in their courses and focuses exclusively on collaboration in engineering, mathematics, and computer science courses, neglecting to focus on the social sciences and humanities. Several other articles make collaboration a focal point in other disciplines of education (see Davies for collaboration in information processing; and Fernando for marketing communications).

In 2004, several articles appear examining wiki implementation in the general educational classroom. Many of these articles continue the definition, function, and future (DFF) structure seen in the above book examples (Leuf and Cunningham; Wang; Augar; Schwartz), but one exciting development since that time is the increase in scholarship that considers the rhetorical, as well as physical factors inherent in using wikis in the classroom. Articles during the last few years have examined the emancipatory use of wikis, wiki challenges to pedagogy, wikis as adaptive intelligence community, online publication, and the print and oral paradigmatic uses of wikis (Glaser; Fountain; Andrus; Forte; Ferris and Wilder). The emancipatory use of wikis is important for this research because it recognizes the use of the wiki as a technology tool that offers the opportunity to tear down walls built by privilege, class, and ideology, while making everyone a participant with the potential to voice concern in a collective structure. Other

emancipatory characteristics, according to Glaser and Ebersbach, are the feedback, social control by self-organization, and mass social education offered in a wiki. Glaser and Ebersbach fail to recognize the practical implications of teachers using wikis as emancipatory tools. How are teachers using wikis to provide some of these characteristics, or “constituents?” Jude Higdon continues in the same vein as Glaser and Ebersbach when she offers a critique on the democratic perspective of wiki technology. René Fountain offers the closest overall critique of wikis and their pedagogical concerns, but does not focus on writing courses specifically, and also does not examine the purposes behind teachers’ uses of wikis for specific assignments. While Andrus and Forte and Bruckman, like their predecessors, concentrate on the collaborative possibilities in the wiki, Ferris and Wilder consider the educational potential of the wiki through the print and oral paradigms important in composition theory, yet none of these focus on exploring the common purposes for which teachers are using wikis in writing.

When examining the research on wikis in the teaching of writing specifically, collaboration continues to play a significant role. It is through the composition community that a majority of this research takes place. The recent publication *Computers in the Composition Classroom: A Critical Sourcebook* recognizes pivotal texts in the field of computers and composition throughout its twenty-five year history. Important to note for the purposes of this review is how some of these articles address the issues surrounding digital text and the networked environment in the writing classroom. A guiding influence in the ongoing application of technologies in writing instruction has been the “CCCC Position Statement on Teaching, Learning, and Assessing Writing in Digital Environments.” In this statement, the composition and communication

community offers five features that any digitally enhanced writing course should possess, which bear directly on the application of wikis in that environment:

- a. introduce students to the epistemic (knowledge-constructing) characteristics of information technology, some of which are generic to information technology and some of which are specific to the fields in which the information technology is used;
- b. provide students with opportunities to apply digital technologies to solve substantial problems common to the academic, professional, civic, and/or personal realm of their lives;
- c. include much hands-on use of technologies;
- d. engage students in the critical evaluation of information (see American Library Association, “Information Literacy”); and
- e. prepare students to be reflective practitioners. (16)

Each of these features of the electronic writing classroom is essential to the successful integration of wikis.

Several recent contributions to the scholarship on wikis in writing instruction provide analyses of some of the social, collaborative, and constructivist dimensions of the technology. Garza, for example, studies the collaborative effects and purposes of wikis to discuss the social implications of using wikis in writing. The three fundamental assumptions of Garza’s text are that a) writing is messy, b) writing is a socially collaborative act, and c) wiki technology is a tool that enables writers to get into the mess and the social nature of writing. The required collaboration inherent in wikis provides a

better understanding of the social forces that underlie the collaborative activity. Garza adds to the growing research on wiki collaboration by uniquely situating herself in the teaching of writing, but she does not address any other purposes for wiki implementation, nor does she consider the purposes other teachers consider important in that implementation.

Recently, the scholarship on wikis by the composition community has begun to take a more practical approach. While still focusing on collaboration, the classroom-centered research has begun to take the forefront. Barton offers some “innovative uses for wikis in the composition classroom” (“Embrace”). As is the case in most of the current scholarship, Barton’s article offers a beginning for exploration by presenting a few examples of assignments that Barton himself has carried out (many of which entail collaboration), but teachers need more depth and more sources if they are to understand the uses of wikis in the classroom. Another example along the same lines is Lamb’s “Wide Open Spaces: Wikis Ready or Not.” Lamb contributes to the research on wikis in writing instruction by offering examples of why teachers should use wikis in the classroom and counters some common objections to wiki use (44). In addition, Lamb briefly notes a few common pedagogical applications and challenges, but the article’s breadth limits the conclusions that teachers may draw from the text and does not undertake an empirical study that will ask teachers about the purposes that direct their use of wikis.

Robert Cummings dissertation, published in 2006, provides the most recent substantial study on the collaborative aspect of wikis in the teaching of writing.

Cummings examines how the concept of commons-based peer production (CBPP) influences the writing classroom through the lens of the economic productivity theory of Yochai Benkler. His dissertation examines the concept of collaboration through Benkler's theory and determines the viability of the technology for collaboration. Cummings suggests that "current composition pedagogy should expand to include CBPP, since a diverse audience can read and assess student writing rather than an instructor acting on behalf of an imagined audience" (1). For Cummings, CBPP extends the audience and enhances student productivity. Again, Cummings extends the collaboration research in the wiki environment, but one thing missing from his work is an examination of the practical reasons for which teachers use wikis in the first place and how those reasons accomplish course goals. Cummings methodology also continues in the teacher-researcher pattern.

As Dennis Baron demonstrated the stages of literacy technologies to the composition community in his important article, wikis scholarship (as a form of literacy technology) has also undergone various stages. The driving force behind early wiki scholarship was simple: identification and explanation. The direction that recent research has taken is harder to follow. As the academic setting integrates and accepts the wiki, the analysis and exploration of wiki potential drives new research questions in ever-changing digital classrooms. The extension and adaptation of wiki use in recent years may lead to a pivotal moment in the shape of future wiki integration. If recent, 2002-2007, scholarship in wikis is to be understood in the light of our current purposes as a community, it is important to note that the fragmentary nature of modern wiki research demonstrates the personalized teacher-specific explorations taking place. New research

focuses on how individual teachers have begun to use wikis for their coursework, but not on how the wiki can accomplish specific course goals in the writing classroom. Teachers have previously asked and answered the question what is a wiki and how is a wiki created and implemented? Now it is time for teachers to ask how to direct the use of a wiki to accomplish the goals set for writing instruction and use this tool to its maximum potential. Wiki technology offers many potential educational uses, including student collaboration, discussion boards, and multiple-source linkings (see Lamb; Ferris and Wilder; Barton; Andrus; Garza). However, little knowledge exists concerning how teachers and students are adapting wikis to realize specific composition objectives discerned by empirically examining teacher responses in the composition classroom. The next chapter examines the methodology behind that examination.

Chapter Two: Methodology

The goal of this study is to describe some of the common purposes for which wikis are being used in writing instruction. The research questions addressed here are threefold. First, how are teachers using wikis for writing tasks in education and writing instruction? Second, how can these purposes be discerned? Finally, what are instructors of writing saying about wiki usage and how are they implementing the technology into their pedagogy and praxis? This research fills the gap surrounding the examination of purposes mentioned in Chapter One by offering an evaluation of a set of current educational wikis, an empirical survey, and interviews of the purposes for which teachers are using wikis in the writing classroom, looking for trends and patterns in that usage.

2.1 Research Methodology

To answer the research questions, a method was needed to access instructors using wikis in the teaching of writing and education in general so that these instructors could provide feedback on how they were using wikis in coursework. First, a sample of instructors using wikis was obtained by sending a survey (see Appendix B) through the WPA-L and techrhet listservs and interview participants at a large southeastern land-grant university (hereafter called LU for Large University).

The methods of interview and instructor survey were chosen because they allowed for direct access to instructors and provided observable data. One of the major benefits of this type of study is the close access to individuals at the LU. The combination of interviews and survey data provided multiple sources of information from which to derive conclusions about the functions of wikis.

The subjects in the study were chosen as representatives of instructors using wikis in educational courses that contained a core writing component (where writing played a large part of the coursework). At the time of this study, there were no composition courses using wikis available at LU, where the study took place. Thus, the interview subjects were chosen from the closest possible population sample to composition courses (those with a large writing component or focus as a demonstration of students' final competence). The chief disadvantage of the study, due to the nature of qualitative studies, is the "lack of generalizability" that can be drawn from the data (Bridwell 107). In order to counteract this perceived lack of generalizability, a survey was composed and offered to instructors across the nation who had access to the WPA-L and techrhet listservs.

Survey Population

Instructors

For this study to be specific to the teaching of writing, a survey was needed of writing instructors using wikis. The researcher gathered a sampling of an instructor community from members of two professional listservs who have used or were currently using wikis in one or more of their courses. Postings to listservs were used to attract respondents for the survey. A request for the instructor survey (see Appendix B) was sent out over the two listservs where composition teachers represent a large part of the community population (WPA-L and techrhet). These listservs were chosen because the WPA-L is comprised mostly of current or previous writing instructors (many with a great deal of experience—some in the area of technology) and techrhet offers a community comprised of writing/rhetoric instructors familiar with technology and therefore would

have a significant probability of using wikis in their coursework. The listservs provided access to various professors who used wikis from universities that included Texas A&M, University of Texas at Austin, Bemidji State University, University of Alaska at Anchorage, University of Illinois at Urbana-Champaign, University of Illinois, North Carolina State University, University of Miami, Miami University of Ohio, Iowa State University and others.

The majority of these instructors were writing instructors, but the surveys were not limited to these teachers alone. Of the seventeen total responses to the instructor survey (one of the interviewees did not respond), some were from fields as diverse as middle grades education, technical writing, professional writing, rhetoric, information technology, literature, and first-year composition, all of which possessed a large writing component in their course objectives. The sample from the above populations provided research representing 14 universities in 14 states, 18 writing instructors using at least 16 wikis in over 20 separate courses.

Interview Population

Along with the WIS, three instructors were interviewed regarding their implementation of wikis in the classroom. The professors have been provided with the pseudonyms Dr. Charles Jarod, Dr. Joseph Moore, and Dr. Chad Cross. The interview population was chosen from instructors whose courses had a writing component that fulfilled a core course objective, meaning that the students were required to complete a writing assignment several times over the course of the semester and a final project at the end that required substantial writing. As mentioned above, these courses did not focus on

the teaching of writing, but instead used writing as a fundamental tool for incorporating knowledge and entering the academic community conversation. The two professors of education shared the same wiki to create a dual-course wiki for classes instructing teachers of middle school grades in Language Arts and Social Studies. All interview subjects were contacted at the outset of the study and each agreed to assist in the wiki research. Each of the instructors that form the third data set teach at LU.

Evaluating Current Wikis in Writing

The wikis evaluated were available on the Web in English from September 2006 through February 2007. The list was compiled by examining wikis with a stated purpose or goal section. The purpose section would note that a majority of the wiki content focused on writing instruction. The number of wikis was limited to those with university affiliation or specifically interested in the teaching of writing. A list of educational wikis is found in Appendix I. Unlike Schwartz et al. (2004), the selection criteria for this study revolved around the uses of wikis instead of the features offered. On 6 November 2006, an online wiki was created in order to contain the research presented here. It provides a reliable base of knowledge for the composition community regarding this study (http://wikis.lib.ncsu.edu/index.php/Wikis_in_Writing_Education_Research).

The list of purposes used to evaluate the various wikis is found in Appendix J and was compiled using the survey data, the wikis themselves, and interviews. The list is classified based on purpose, including uses such as collaboration, communally constructed knowledge base, challenges to authorship and audience, enhancing teaching

and learning, facilitating coursework and research, and various others. All data was completed by 1 February 2007.

2.2 Data Collection

The major data for this survey come from the following sources: 1) responses to online surveys, 2) examination of various educational wikis, including educational wikis in the general sense and writing specific wikis, 3) interviews with three professors, and 4) email responses to various research questions to specific instructors.

The first data set included all survey responses. The survey was chosen to be the vehicle for questions regarding wiki implementation because it could be distributed widely and quickly, while providing a simple device for data collection. To answer the research questions, the survey asked instructors about their use of a wiki in coursework.

When examining the wikis that provide the second data source, the sections evaluated included the 1) purpose of the course, 2) course syllabi, and 3) course wiki assignments. Through the data provided in course wiki assignments, various teachers explained wiki assignments, teacher expectations, and assignment goals. Questions that arose from the examination of the assignments were written down and eventually determined questions in the survey.

The third data set examined specific questions regarding the implementation of wikis in coursework. These interviews were conducted in January 2007. Each course ran from August of 2006 and ended in December 2006, thus providing the instructors with sufficient time to reflect on the implementation, viability, and usefulness of the wiki in

their individual courses. All Interviews were recorded and have been transcribed in Appendices D, E, and F respectively.

The fourth data set included email responses from various professors asked to answer questions of clarification regarding wikis based on original survey responses.

Instrument

The goal of the WIS was to determine how wikis are being used in education. The WIS focused on how instructors were using wikis, what they felt could be better about wikis, how they felt they could be better served using a wiki, and what implications using a wiki played in their pedagogy. An experienced instructor in the field of composition and rhetoric and LU's Institutional Review Board reviewed the WIS before initialization.

For the wiki instructor survey (WIS) there were five parts and some open-ended questions explained below. The first part consisted of open-ended questions identifying the instructor, his or her class, class size, and purpose behind using the wiki. After this, the survey provided four sections with radio-button choices as in the student survey. The second section (the first radio-button section), contained 12 questions asking instructors about teaching goals with the wiki in addition to a final question allowing instructors to write and answer their own question under the title of "other." In this section, instructors were asked about five functions regarding enhancing teaching and learning. The functions surveyed were if the wiki enhanced student ability to 1) think creatively, 2) think critically, 3) improve reading, 4) understand technology, and 5) facilitate the notion

of the teacher as guide. Along with these questions, instructors were asked about the wiki and course goals for students developing analytical, writing, and study skills, as well as organization and content exploration. The third section contained six questions regarding time management and an “other” option, while the fourth section had 7 questions that focus on study strategies of students using the wiki and the same final miscellaneous “other” option. The study strategies section asked which improvements were needed in the course wiki to make it more successful with students. The next radio-button section about learning-centered teaching and contained eight questions in relation to how teachers could make the wiki more effective to students and an “other” box, totaling 37 possible multiple choice questions. The final section contained three open-ended questions, providing for a total of 48 questions. The final open-ended questions asked instructors if they believed wikis would be around for the long run, if they encountered specific problems, and any other comments the instructor wanted to make about wikis in writing, wikis as a tool for improving student composing process and writing products, or wikis as a way to enact instructor ideology of theory of teaching and learning. The WIS is located in Appendix C.

2.3 Analysis

Surveys

A request was made to complete the WIS on WPA-L and techrhet. All open-ended responses were evaluated and categorized according to the uses instructors specified. After the data were analyzed inductively, a coding system was developed that provided a letter symbol for each purpose of a wiki in writing instruction. All data were

examined for patterns that were found to repeat over five instructors uses of wikis and were then categorized to comprise the six purposes in chapter three and four.

Interviews

The interviews were conducted individually in the offices of each of the three professors at separate times during the course of ten days. Each interview was recorded and transcribed; transcriptions were then sent to the relevant professor for accuracy. These transcriptions can be found in Appendices D-F. Once transcribed, the interviews offered further support for the above survey categories after which various quotes were copied and placed in a growing file that represented all data regarding the specific categories above

(http://wikis.lib.ncsu.edu/index.php/Quotes_Supporting_Purposes_of_Wikis_in_Writing_Instruction). The file provided a repository for organizing the major themes regarding wiki use identified during the course of this research.

Conclusion

Interviews and surveys provide several advantages for the kind of research undertaken in this study including 1) the clarity with which the data can be understood by the research community, 2) the statistical nature of the data, and 3) the allowance of describable patterns within the data (see Bridwell-Bowles, 1991). Other advantages include ease of access to subjects, highly contextualized research, and immediate applicability. The disadvantages of this research revolve around reliance on controlled conditions, inattention to contextual evidence, and the lack of generalizability inherent in

the context-dependent study (106-107). These research methods were chosen because they capitalized on the benefits of the individual studies. The qualitative research allows for contextual consideration and ease of access and control of subject groups. Some of the key characteristics of this research methodology include careful selection of constituent subject population, multiple sources of data, and careful documentation of research within the study. The study is different from previous research because it uses combined methods of empirical survey and interview to triangulate data that asks teachers directly about how they are using wikis in their courses. The next chapter will provide the data gathered through this methodology.

Chapter Three: Results of Data

In this chapter, I will report the data from the Wiki Instructor Survey (WIS) and use these data to draw six purposes for using wikis in the writing classroom. The open-ended questions in part one of the WIS offer the most compelling information from which the majority of these purposes are drawn and the survey provides support for these generalizations.

3.1 Wiki Instructor Survey Results

Part one of the WIS consisted of eight open-ended questions beginning with identification questions such as name, email, class in which the wiki was used, and primary reason for using the wiki. This last question proved extremely useful for determining the purposes for which teachers are using wikis in writing instruction. As noted previously, the courses for this survey included courses such as ENG101 (First Year Composition –FYC), Advanced Composition, Composition for ESL students, History of Rhetoric, Information Technology, Weblogs and Wikis, College Writing I and II, and Principals of Technical Communication. Each of these courses focused on the teaching of writing specifically, or the transmission of writing principles to technical literacy.

Six purposes were found in at least five separate instructor responses, representing a third of the responses. Table 3.5 presents these six common purposes and the teachers who included each purpose in their survey responses. The six purposes are:

1. Collaboration
2. Facilitation of Work
3. Audience Extension
4. Knowledge Building and Reflection
5. Effective Writing
6. Multimodal (and Technological) Literacy

Table 3.1 - Reasons Instructors Are Using Wikis

Purposes for Wiki Use	1	2	3	4	5	6
Anonymous		X				X
Maranto	X		X			
Dyer	X	X	X			
Dilger		X				
Young	X			X	X	X
Nelson	X			X		
Lee	X	X				
Morris	X			X	X	
Barndollar		X				
Morgan	X				X	X
McKee	X	X	X			
Hartberg				X	X	
Veltsos	X		X			X
Garrett	X	X	X			X
Mullin	X		X	X		
Grohens	X	X	X		X	
Unger		X				
Total Number of Responses	12	9	7	5	5	5

I will illustrate each of these purposes with selected comments from the surveys. The first purpose is to promote collaboration among students. Greg Dyer organized his courses so that he was able to “ensure that we have at least one collaborative project in advanced composition” and for his wiki use, the goal was that the wiki would be used “to enable and encourage such collaboration.” Gina Maranto stated in her response to question four that her goal for using a wiki was “to expand the audience for student writing; to facilitate collaboration and exchange.”

Carl Young responded that his purpose for using a wiki in class was “to determine [the wikis] utility and potential for enhancing teaching and learning; to provide a space for collaborative knowledge making—creating knowledge, reflecting on it, and revising and reshaping our understandings.” For question five, Young responded that students “can collaborate on class assignments or directives for the good of the community.” Perhaps one of the most persuasive responses that directs readers to the concept of collaboration comes from Heidi McKee at Miami University.

The wiki fosters collaborative writing and group projects because all have equal access to the composing and revising spaces. It also enables people to collaboratively write without hassling with multiple files and/or having to meet face-to-face. I believe all writing and communication are collaborative processes and that it is in conversation with others that our ideas are most fully developed, pushed, and refined.

McKee demonstrates how the wiki fosters a constructivist theory of teaching and learning by allowing teachers to focus on the social aspect of communication and collaboration

that takes place during the writing process. The overall response regarding collaboration from all the professors who stated this purpose can be summarized in general by the nature of the above comments.

John Lee stated that the wiki can “facilitate students’ work on specific assignments” as a “space to complete course work that might have otherwise been completed using word processing.” The “primary benefits” of the wiki for Lee, are that “1) Students are able to complete their work over time in a consistently available place. 2) Students can work collaboratively on projects.” Joe Grohens responded that the “wiki makes revision easy and frequent, and fosters student willingness in the writing process. They can start without pain, they can work on their assignment anytime they are on the internet, they can get feedback from others and make changes easily.”

Another important concept for using a wiki is how it challenges and fosters audience extension. Audience extension means that the wiki broadens the audience of a given work. The audience is potentially larger than what it may have been without the medium provided by the wiki. Gina Maranto responded that student writing is no longer “an opaque transaction between [students] and their instructor, a piece of writing is a public interaction with their peers, their instructor, and a larger audience.” Dyer responded that one of his goals “in advanced composition is to extend the audience for our [classroom] writing beyond merely the instructor” by publishing texts on the wiki.

Part of extending the audience for students is helping them to realize how members of an audience can construct knowledge through writing. Carl Young stated that the wiki “allows for enacting a constructivist vision and practice of teaching and

learning—it provides a space for students to construct and reconstruct knowledge—to do this individually and collaboratively.” Kerri Morris said that the wiki helps “students wrap their minds around the concept of open source software and to become open at some level to the concept of knowledge as a shared and constructed thing rather than a found and owned thing.” Yasha Hartberg said that an “important part of my philosophy of teaching and learning is that students must construct knowledge for themselves. The wiki seems almost uniquely suited to this task.” As seen from tenor of the above statements, wikis are being used to support a constructivist vision of knowledge, also noted by Nelson and Mullin.

Effective writing in the survey represents purposes for which teachers have specifically noted the wiki helps (or is supposed to help) students become better writers in some way. Kerri Morris said that the wiki encourages effective writing by making students “confront issues of style and choices about organization” in their writing. Hartberg was more confident in her belief that wikis could help increase the effectiveness of student writing, though she clarified her statement with a stipulation that “while I have not yet done any sort of detailed analysis to verify this, my impression is that their writing has improved and that students are becoming better at reading critically.” Grohens commented that “an important goal for me is to make [students] confident and comfortable with their writing. The wiki supports this by enabling them to write frequently and without too much fuss and judgment. They see that their writing can be reviewed and changed and that it then gets better.”

The last purpose was multimodal (and technological) literacy. Young described one of his teaching goals as “developing multimodal literacy, including technology resources, and looking for ways to implement and apply technology resources in the classroom.” MC Morgan used a wiki in his College Writing I and II, Intermediate Writing, and Weblogs and Wikis course.

These courses include writing in new modes, but I find that the wiki raises rhetorical issues and choices that that are typically hidden in print-prose. That is, writing with a wiki makes rhetoric visible wikis lower the technical barrier to writing in new modes (hypertext, text-visual hybrids).

Morgan stated that writing in new modes was important and the wiki facilitated this multimodal literacy for his courses. Jennifer Veltsos said that in using the wiki students “must also think about how the information they've written for one format (oral presentation) must be rewritten for a textual document and what their audience (both their classmates and the strangers in the other section) need from the article.”

Part two of the WIS asked instructors to “please **rate the importance** of each goal to what you aim to have students accomplish by using a wiki in your course” based on their teaching goals. Tables 3.2 and 3.3 present the instructors’ responses.

Table 3.2 - Part 2 Answers from WIS

Part 2: Teaching Goals	Not Important	Important	Essential	No Answer	Total
Develop analytical skills	2	4	11	0	17
Synthesize information and ideas	0	3	14	0	17
Develop ability to think creatively	2	6	6	3	17
Develop ability to think critically	1	4	12	0	17
Improve reading skills	1	10	6	0	17
Improve writing skills	1	5	11	0	17
Develop appropriate study skills and habits	6	7	4	0	17
Learn about and explore course content	2	7	8	0	17
Understand role of collaboration through technology	1	8	8	0	17
Develop technological literacy	2	10	5	0	17
Develop skills to organize time efficiently	8	7	2	0	17
Gain self-esteem	4	6	7	0	17
Other Goal: Gain authority/ethos in their chosen discipline	N/A	N/A	1	N/A	1
Other Goal: Distributed Work	N/A	N/A	1	N/A	1
Other Goal: develop ability to reflect critically	N/A	1	N/A	N/A	1
Other Goal: understand human factors for reading texts online	N/A	N/A	1	N/A	1

Table 3.3 - Part 2 Percentages from WIS

Part 2: Teaching Goals	Not Important	Important	Essential	No Answer	Total
Develop analytical skills	12%	24%	64%	0%	100%
Synthesize information and ideas	0%	18%	82%	0%	100%
Develop ability to think creatively	12.00%	35.50%	35.50%	17%	100%
Develop ability to think critically	6%	24%	70.00%	0%	100%
Improve reading skills	6%	58.00%	36.00%	0%	100%
Improve writing skills	6%	30.00%	64%	0%	100%
Develop appropriate study skills and habits	36.00%	40%	24%	0%	100%
Learn about and explore course content	12%	40%	48%	0%	100%
Understand role of collaboration through technology	6%	47%	47%	0%	100%
Develop technological literacy	12%	58.00%	30.00%	0%	100%
Develop skills to organize time efficiently	48%	40%	12%	0%	100%
Gain self-esteem	24%	36.00%	40%	0%	100%
Other Goal: Gain authority/ethos in their chosen discipline	N/A	N/A	1	N/A	100%
Other Goal: Distributed Work	N/A	N/A	1	N/A	100%
Other Goal: develop ability to reflect critically	N/A	1	N/A	N/A	100%
Other Goal: understand human factors for reading texts online	N/A	N/A	1	N/A	100%

In this section, the data represents how the wiki affects various teaching goals for instructors. One important question instructors were asked about considered developing an understanding of the role of collaboration through technology and developing

technological literacy. The high number of instructors rating collaboration through technology as either important or essential goes to support the notion that collaboration is a common purpose for which teachers are using wikis in the teaching of writing. Based on the data, technological (in terms of a wiki, thus multimodal) literacy is one of the key purposes for wikis in the teaching of writing. Two instructor answers in the final “other goal” box were also reflected in the six common purposes (6CP) above: distributed work (facilitation of work) and reflecting critically (knowledge building and reflection).

Part three of the WIS asked instructors to “estimate how much time you spend on the following processes concerning your wiki.” Responses to this part of the survey were helpful because they showed how the wiki interacted with other classroom activities in terms of time, resources, and ease of use. Teachers’ responses are presented in tables 3.4 and 3.5.

Table 3.4 - Part 3 Answers from WIS

Part 3 Class Time Management	Rarely	A Little	A Lot	No Answer	Total
Lecturing about the wiki	9	8	0	0	17
Addressing questions from students concerning wiki	3	11	3	0	17
Responding to posts students make to the wiki	4	7	6	0	17
Group work on the wiki during class	5	9	3	0	17
Guided class discussions concerning the wiki	4	12	1	0	17
Hands-on demonstration of wiki use	3	11	3	0	17
Other Processes: posting resources for class reference and use	N/A	1	N/A	0	1
Other Processes: reading what students write	N/A	N/A	1	0	1

Table 3.5 - Part 3 Percentages from WIS

Part 3 Class Time Management	Rarely	A Little	A Lot	No Answer	Total
Lecture on wiki	52%	48%	0%	0%	100%
Address questions	18%	64%	18%	0%	100%
Respond to posts	24.00%	40.00%	36.00%	0%	100%
Group work	30%	52%	18%	0%	100%
Class discussions	24%	70.00%	6.00%	0%	100%
Hands-on demo	18%	64%	18%	0%	100%
Other Processes: posting resources for class reference and use	N/A	100%	N/A	0	100%
Other Processes: reading what students write	N/A	N/A	100%	0	100%

Part four of the WIS asked instructors “based on your observations, what improvements in your current wiki would make students more successful with their use of the wiki?” Part five asked instructors about learning-centered teaching through the question “What do you think you could do that would make the wiki more helpful to your students?” These parts of the survey did not play a significant role in the development of purposes.

3.3 Interview Data

The final data set is based on the interviews with instructors. The current section will address these interviews in terms of the support they provided in guiding the development of the six common purposes.

Dr. Charles Jarod offered two comments during his interview that directly related to collaboration.

I think the advantage of the wiki is that students can go there and refine, revise, and add to the text world that the wiki is holding. They can add to it if they want, but they can also change things. So if you think of a class project, or maybe several wikis where students are working in groups, it becomes entirely collaborative.

I think what wikis do is add a potentially collaborative, revision-based dimension to what is often a solitary activity.

Chad Cross noted the difference between using a blog and a wiki in his course stating that his students “definitely felt one was more effective than the other. I think part of that was what we had them doing in those spaces, but I also think the wiki lends itself better to collaboration, and some of the things we used it for, like sharing, having the students posts drafts and having the students provide feedback to each other.”

In response to a question about the ability of wikis to change students’ perceptions of the nature of writing, Cross answered that:

I think not only of writing, but also of thinking. Part of it is the idea of collaboration and immediate feedback you can get. Even going in when your contributing to ideas like journaling and the reading and writing workshop and going in with your ideas of what you are going to contribute as your doing that, seeing what’s there and that maybe influencing your ideas and shaping them so your contribution is affected as you’re about to do it. That is a little different mind-set that occurs, or a way of thinking that is going on.

Cross responds that wikis are collaborative and they may help students become more effective writers because of the knowledge shaping capacity of wiki interaction. Part of collaboration lends itself to the facilitation of work.

Cross, when talking about the wiki and his course goals, said that “I think a goal for me became a way for students to support the course objectives and work on specific activities.” Dr Jarod remarked that one of the ways his students were expected to use the wiki was to facilitate journal reading.

One of the requirements of the course was that they be in charge of some of the readings that they chose and the only way I could see doing that . . . was to have a

wiki, because it is open and people can go and work on it themselves. So theoretically students could then choose an article, add it to the wiki, if necessary . . . So that is one way we used the wiki, where students were actual contributors to the wiki.

Moore said that “the way I envisioned [the wiki] was as a tool that would facilitate students in a *process* of completing one or more of their assignments.” As the above quotations demonstrate, the interviewees noted that the wiki was intended for facilitating student work through process and activity completion.

In terms of extending students audience perception, Cross states that “in terms of audience I see that [the wiki] helps make an audience more immediate and more accessible.” Much of the support for audience extension comes from the survey responses.

Audience extension leads students to consider how knowledge is constructed by that audience. Charles Jarod responded to this idea with the following

The nice thing about wikis . . . is that you have information with terms that link to other information and you can see what terms are not yet defined; they are usually in red. Contributors can say, “I know something about that,” and can add to it. It is an exponentially growing base of information that, if it changes people’s conceptions of writing at all, makes them understand that knowledge is communally created and shaped.

Joseph Moore considers the construction of knowledge a rhetorical issue that wikis challenge since for him “the big question I have is the way in which the construction of knowledge can be democratized in a wiki.” Cross said that wiki technology is a great

tool for “thinking about how knowledge is created. Not all the knowledge has to come from a textbook, or a book, or the teacher, that it is something that can be generated and dwelt upon as a class and the wiki is a tool for helping facilitate that, extending it, and making it public.” Students are able to consider the validity of knowledge claims and knowledge origins.

Effective writing is the next purpose of wikis in the classroom. Moore noted, “the [wiki] enabled [students] to go in and edit an existing document in a really meaningful way.” Cross considered writing as an integral part of his course and remarked that the wiki enhances this writing.

A lot of the writing in an English class can be about the reading that is going on and really gets them to see writing as a tool for thinking, for generating ideas, as a way to brainstorm and give feedback to each other Specifically, the wiki gave us a place to take ideas and progress we generated in class and firm them up and take them through the writing process. It allowed students to share ideas and get feedback from each other in a very efficient way, to get multiple perspectives on their writing.

Appropriately, concerns for Cross in this quote range from the process of writing, the ideas (knowledge) constructed by the process, and how those ideas can be assisted in the wiki.

One question specifically asked of interviewees was the importance of multimodal literacy in their courses using the wiki. Charles Jarod believes teachers are obligated to research multimodal literacies and implement these types of technology into the classroom in order to be effective.

[Teachers] are not keeping up if they are not reading the literature on multimodal communication and not thinking about how it fits into their own lives. If we are preparing students in higher education to go across to courses in other curriculums, they are going to rapidly come into areas where they contact other modalities If we are preparing students for those settings, then we have a lot more to do than having them write essays.

Clearly, teachers should be aware of the implications of multimodal technology use in their classrooms. Cross comments that while the term needs definition, the concept behind it is important.

To me [multimodal literacy] really means giving students the skills and literacies to be able to express themselves in many different ways; traditional ways such as reading, writing, speaking, but also in less traditional ways like drama, dance, performance, and also with technology and emerging technologies. Part of it is that they are developing the critical mindset that they can learn to adapt and engage these literacies. We must give them opportunities to do this because the nature of the literacy is changing so fast with the emerging technologies that are out there. More important than the idea that they learn this software or this tool, is that they get the experience and skill set that they are open to approaching new tools with an open mind and the critical thinking needed to determine how effective it is and for what purposes.

The sixth common purpose of wikis is important for understanding wiki technology as a multimodal tool and how it affects students' technological literacy. As the data has shown, there is precedent for the place of multimodal tools in the writing classroom.

In this chapter, the data from the WIS and the interviews has been gathered. Out of the data, six common purposes for wiki implementation can be concluded for teachers of writing. These purposes are collaboration, facilitation of work, audience extension, knowledge building and reflection, effective writing, and multimodal literacy. The next chapter will discuss the implications of the data regarding these purposes.

Chapter Four: Discussion

In the following sections, the 6CP (six common purposes) will be discussed in the order in which they were provided in chapter three. The data from the research are discussed in terms of how they related specifically to these purposes and will be substantiated by outside sources found in the literature represented in Chapter One.

4.1 Collaboration

Collaboration is loosely defined as people working together with others (students, teachers, outsiders) to achieve a common goal, which in turn makes those collaborating responsible for both their own, and others' learning. Collaboration will represent the use of small and large groups working together in the educational setting (in and out of the classroom).

The fact that collaboration happens at all is intriguing considering modern notions of the individual text and individual author; yet it is even more interesting that students are often working on a single collaborative text, and not individual texts being collaboratively "edited," as Jarod notes in his interview.

If you imagine you have a class of twenty students and you have groups of four and you set up five different wikis where each group has a project they are working on together and the product will be at this wiki as an information source with links, it becomes a completely seamless collaboration in terms of people actually going in and changing people's work and adding content. It is still a single text. It is not layers of text and it's not one text added to another. (interview).

Wikis can facilitate collaboration for both single and multiple texts. Heidi McKee believes that wikis take away the hassle associated with face-to-face meeting and multiple file sharing. For McKee, writing and communication “are collaborative processes” that facilitate developing and refining our ideas (survey). Wikis can enable inter-classroom collaboration, cross-classroom collaboration, and even world-wide inter-university collaboration (with the right securities in place). Whether a teacher wants groups to work on a single project (text) or individual students to work on texts in which other students edit, make suggestions, and revise, the wiki provides the options. One way wikis provide this avenue is by affording a central location for work and collaboration.

If a group is to collaborate, there must be a central location from which work is gathered and to which work is distributed and finalized. The wiki gives teachers a way to centralize student group work and define the cooperation mechanism. Stuart Mader, institutional technologist at Brown University and author of the Web site “Using Wikis in Education,” recognizes that, “Now, rather than ‘pushing’ separate copies of the document to each person, all collaborators are ‘pulled’ into a central place where everyone sees the same text” (Mader, *Four Letter Words*, online). This is significant for writing teachers because they no longer need to encourage peer review between students by having them (or the instructor) send those drafts “out” to classmates. Instead, the writing is located centrally and students are drawn to that location through investment in the knowledge contained on the wiki, decreasing the amount of effort required of teachers in the process and enabling something that students “do” themselves by going to the wiki and not having something “done” for or to them—such as having documents sent to them. Wikis

enable teachers to reduce the time it takes in older forms of collaboration, even email, by providing a space for central data storage.

Collaboration also enables a unique challenge to traditional notions of authorship. Matt Barton, in his article “The Future of Rational-Critical Debate,” responds that “wikis . . . offer a radical approach to authorship. Simply put, wikis are Web sites that anyone can edit; communities rather than individual authors author them” and therefore “seem to offer the most to writers interested in collaboration and consensus-building” (178). The first challenge to the notion of authorship is that of individual versus community text.

Like the US Constitution (Barton’s analogy), a wiki is the center for a collaboratively authored, complete with discourse-specific borrowed language, value-laden text (“Future of Rational Critical Debate,” 187). Unlike the US Constitution, the authors rarely sign their John Hancocks at the bottom (or anywhere in the document once it has entered document mode). Barton notes that “Wikis are democratic in that the apparent status of individual users is not observed, but also in a more profound way: Wikis emphasize a progressive, democratic aspect of writing that is mostly ignored by the commercial press, where only the finished product is represented” (187). Thus, every individual participates and is responsible for the work as it happens. For Anja Ebersbach, the democracy of the wiki is important because it exemplifies a “decentralized use of media” (4). She goes on to say that “[i]n most cases, however, wikis are administered by a group of people with equal rights who control each other and whose work and decisions are subject to all users’ discussion” (4). Ebersbach is writing from a computing background where users represent programmer and designers. Though her comments are valid, they are not representative of the educational realm as it pertains to the humanities,

because of the role teachers play as grade-dispensers. Wikipedia, the wiki with which most people are familiar, has constructed a unique hierarchical system of value in which some user's comments are more valuable than others' comments. This aspect of structure has implications that play out in many educational settings where there is a "grader figure," allowing for a hierarchical structure that gives more warrant to the authority figures comments. Barton's constitutional analogy is apt here and underscores the democratic writing process involved in using a wiki. The wiki challenges the notion of authority by vesting users with the ability to edit, revise, and create documents by multiple authors. The traditional notion of authorship, one of the individual writing a private piece to be made public upon completion, is exploded into a new concept of an always public, never single textual representation of the community's collective knowledge, a knowledge which is then available to a new public audience.

In order to fully adapt a wiki to the collaborative needs of any classroom, teachers must be prepared to use the technology, understand the implications of that technology, and know how others are using it. Along with these factors, teachers understand that collaboration is a community activity, and wikis facilitate the work of that community.

4.2 Facilitation of Work

In order for wikis to be applicable to the writing classroom, they must facilitate the completion of the writing tasks that teachers assign. Dr. Jarod wanted his graduate students to be able to accomplish the facilitation of work as well as learn course content. He remarks that his desire was for the "wiki to be really interactive because one of [his] goals was to use a constructivist approach to learning where part of what [they] were doing (it was a very small class) was making decisions about what [they] were going to

read” (interview). In order to accomplish this task of interacting and responding to the course readings, Jarod chose the wiki to be the access point for the readings and allowed students to choose some of the readings themselves, also requiring students to reflect on those readings collaboratively with the other students in the class. Students then became responsible for their own readings and the explanation of those readings to other students, collaborating in the learning process with the students in the course (interview).

Responding to readings is one common way wikis are used in educational settings to facilitate work, for students to respond to readings.

Many wikis being used in literature classes like Robin Farabaugh’s ENG250 (Shakespeare) in the fall of 2006, are perfect examples of this process of reading response throughout a course. In Figure 4.1 two students in Farabaugh’s class respond to Sonnets 5 and 12. The figure also demonstrates that other students have posted responses to the sonnets, some of which link phrases and words in the sonnet to comments found elsewhere in the wiki.

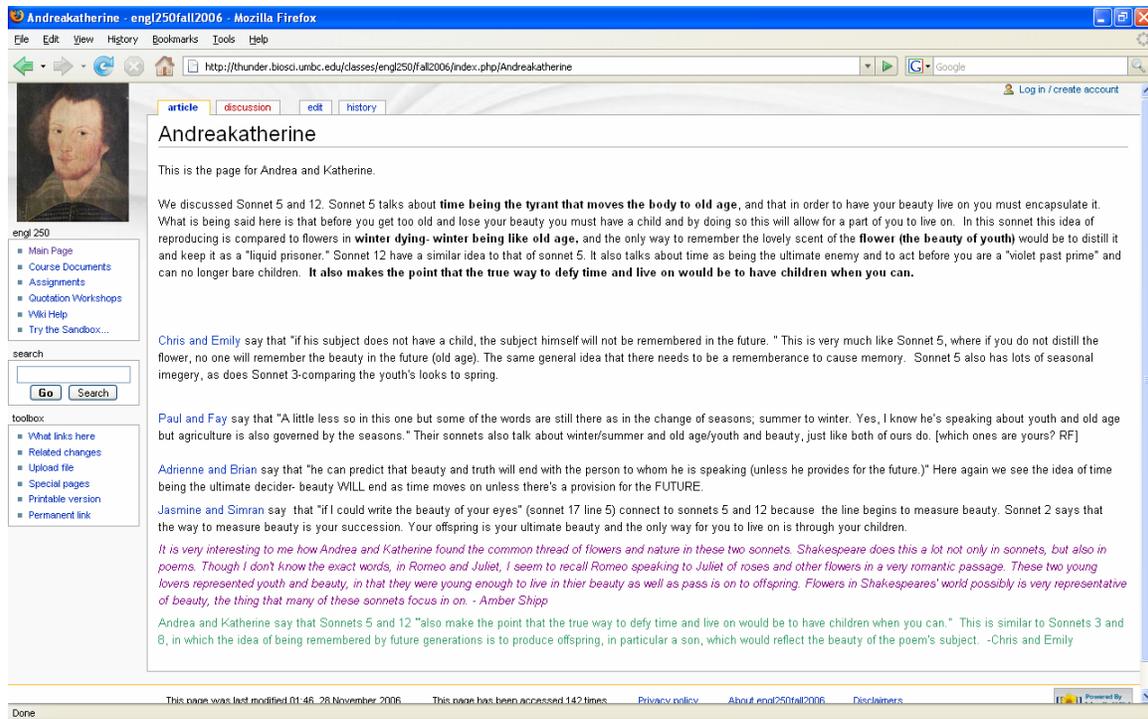


Figure 4.1

Wikis allow students to complete class assignments in a single location and thus limit the trouble of negotiation through multiple mediums for separate assignments while providing an excellent avenue for collaboration, student work, and reading response.

4.3 Audience Extension

Wikis encourage student awareness of audience through 1) peer-review, 2) social space created, and 3) the facilitation of community within a wiki, based upon the data from the open-ended section of the WIS. In the words of Bob Cummings, “. . . one of the main benefits of teaching writing in a large scale wiki environment is that it replaces the writing teacher with a real audience and allows the teacher to truly coach the writers to create more effective prose . . .” (WPA-L). Wikis challenge students to explore the concept of audience by making the audience concrete. Wikis also change the teacher’s role by limiting the authority of the teacher as audience, making writing more public, and

thus enlarging the audience. Explaining the implications of this widening audience to students is important for every teacher. Joe Grohens used a wiki for his Principles of Technical Communication course and determined that the students' "sense of audience is enhanced and made more concrete and realistic because the wiki makes it easy for classmates to read each others' work and leave comments (WIS). Therefore, one way the wiki challenges audience is that it makes the students' sense of audience more concrete and thus immediate. For example, when a student gets a response from another classmate or another professor from a separate department, their concept of audience intensifies and substantiates. As Commons-Based Peer Production (CBPP) technologies, such as the wiki, grow in popularity, audience needs must be re-addressed and student conceptions must be re-evaluated.

Wikis challenge authority in unique ways. According to Bob Cummings, CBPP does not transform identity in the wiki by "erasing the identity of authorship by obfuscating identity through collaboration" (140). Instead, CBPP "fundamentally transforms identity by clarifying the audience's access to the text. When the roles of author and audience become interchangeable and fluctuate rapidly, then control over a text requires a consensus between authors and audience" (140).

Cummings goes on to say that "CBPP supplies an audience-specific context for topic selection, material development, presentation, and reader response, improving the development of each by reducing the writers' transaction costs and, in effect, their proximity to an audience" (105). For Cummings the gap between Ede and Lunsford's audience addressed and audience invoked is "considerably diminished" (141). Part of the

reason for a diminishment of audience roles is that the knowledge base is centralized in one social space that is shared through cooperative creation.

MC Morgan explains that his use of a wiki in composition courses at Bemidji State University is in part because it “becomes the students' workspace, in large part, their collective - if not collaborative – workspace” (email). The social aspect of the wiki space creates a sense of community ownership and facilitates the creation of community identity. Wikis create a social space for students to interact and in that space students can “complete course work that might have otherwise been completed using word processing” (survey). As noted previously, for Dr. Lee, the wiki provides two primary benefits, 1) student completion of work “over time in a consistently available place” and 2) student collaboration.” Thus, the space provided by a wiki overlaps collaboration and facilitation of work. Lastly, this space facilitates community within the wiki.

The community of the wiki is made up of the students and teacher of any given course. Carl Young noted this function in the survey when he responded that the wiki “Helps facilitate community between and among students, especially in terms of professional development for pre-service teachers” (survey). The teacher attempts to build community in the standard non-technology-assisted classroom by various methods of group work, peer interaction, etc. In a wiki, these concepts are natural and necessitated by the technology, thus facilitating community in ways that traditional classroom pedagogies do not.

4.4 Knowledge Building and Reflection

One facet of the emergence of a wiki community is the notion of how the community constructs knowledge and critically reflects upon that knowledge in order to

sustain discourse and growth. Within this function lay the topics of critical knowledge reflection and the raising of rhetorical issues.

The wiki, through its central location, allows users to create a storage point for the community's knowledge and it is at this point that users have democratic access to make changes and reflect on the community knowledge. Many of the teachers surveyed felt that an "important part," of their philosophy of teaching and learning was that students must construct knowledge for themselves (WIS). The wiki "seems almost uniquely suited to this task" (Hartberg, survey). This task is not limited to one course but also "across courses, or by students within a course" (Anson, WPA-L). An important part of understanding the communal quality of knowledge is the open source origin of the wiki software, as noted by Kerri Morris in her survey response. Wikis are open source, meaning anyone can change or edit anything in the original code to better suit his or her needs. Since wikis are open source, the way in which they are constructed plays into how the software engineer views knowledge and learning. Theories of writing may affect how the designer constructs the space offered by a wiki. Students' understanding of open source may also play into how they view the freedom of knowledge and access to that knowledge in the wiki environment.

Cummings notes that the "importance of explaining the pedagogical and epistemological validity of wikis to students before implementing them in the classroom" cannot be overestimated because "there is such a sizeable difference between working in a massive wiki such as Wikipedia and a PbWiki within a classroom" (WPA-L). Due to this difference, "student writers often have strong opinions about participating in collaborative electronic writing formats, even if they don't express them upfront, which

often break along the lines of foundational/anti-foundational knowledge producing schemes” (Cummings, WPA-L). The knowledge base in a wiki can be collaboratively built, but it also can be collaboratively destroyed through personal ideologies of epistemology. Teachers have the opportunity, through wiki technology, to challenge foundational knowledge schemes, i.e. Cummings, and help students understand socially constructed knowledge and community in the wiki, one of the goals of the CCCC Position Statement on Digital Environments. For Jarod, this knowledge base is extremely important rhetorically because it “is an exponentially growing base of information and if it changes people’s conceptions of writing at all, it makes them understand that knowledge is communally created and shaped” (interview).

4.5 Effective Writing

The categories explored, through the WIS concerning effective writing are whether the wiki improved writing; accommodated writing as a process; was able to get students writing online; enabled students to write multiple drafts; allowed for transparency in writing; and possibly changed the students’ understanding of the nature of writing. Joe Grohens, in the WIS, states that one important goal in his classroom was to “make [students] confident and comfortable with their writing. The wiki supports this by enabling them to write frequently and without too much fuss and judgment. They see that their writing can be reviewed and changed and that it then gets better.” An integral part of improving student writing is the revision cycle and therefore centers on the actual process of writing.

Technology, such as a wiki, changes the way students perceive the process of writing and the way they create and store knowledge. MC Morgan agrees with this when

he says that the wiki “gives students a chance to see that changing the technology of writing changes the way we write, and the way we think about things” (email). The problem is that “Some users don't pick up on the new process; they use the wiki like a word processor, to produce static, one-off, unlinked documents” (email). The wiki allows for the hyper-linking of documents to each other, to references, to notes, to bibliographies, to internet Web sites, and more. The dynamic and organic nature of the wiki facilitates the process of writing by providing students with the tools to explore that process. As demonstrated in the results, Carl Young believes the wiki affords the tool for enacting process theory. Simultaneously, he thinks that process theory is only part of the tool. Young claims that though “Process is key in terms of writing” it is “also important in thinking about the development of ideas, theories, and practices. It is important to the notion of developing critical reflection and becoming a reflective practitioner,” another CCCC position statement goal (WIS). In view of these statements, wikis appear to achieve a realization in student writing of the process and rational thinking behind writing itself. Part of this rationalizing comes through revision.

When evaluating the actual improvement of student writing, teachers must have some criteria from which to measure this improvement. Often, these criteria stem from previous student coursework and are evaluated nearer the end of the term. In a wiki, evaluation is more immediate as the teacher can witness various student iterations of a project (text, etc.) over the course of hours, days, or weeks, instead of an entire semester course, if the teacher is evaluating the various versions of the text. Wikis enhance the process of student writing by allowing students to post as much, and as often as needed, without the worry of being “graded” on each iteration. Again, this applies if the teacher

is viewing each version/revision, but only “grading” specific iterations. The preservation of all iterations is important for evaluating student progress. The way wikis enable teachers to view drafts that normally they might never see, contributes to the guiding process and effectively assessing student development in writing. Teachers in many traditional classrooms set up assignments so that they are able to read a draft before the final project is due. Traditionally, teachers are reading one or two drafts, and then read a final copy. The wiki initiates a cycle of revision that teachers are then able to view throughout the process of writing. The writing that takes place on a wiki is generally of a type that is not academic essay, but instead a form of low-stakes writing. While academic drafts will show up from time to time in various wiki assignments, the majority of the work in which students take part is different. Due to this difference, many of the assumptions made in this section refer to the iterative quality of low-stakes writing, but may be transferable to academic essays.

Multiple drafts are beneficial to student writing because they enable students to learn about and use the process of writing, see gradual improvements in their writing, have teachers comment and provide feedback, increase student-teacher relations, and build confidence in the student’s ability to write effectively. In the wiki, multiple drafts are natural because of the way multiple authors comment and change texts and these drafts can be easily viewed through the revision cycle in the page history. The page history provides a guide to changes the student made and therefore saves time for the teacher and lends itself to providing a record of the process of writing that students undertook. Product and process are both important to writing for instructors as evidenced by the data. The process is important for creating and challenging ideas and words, while

the product is important for delivering a final product of text to communicate ideas to the reader. In the context of the wiki, the setting provided is one that is multimodal and thereby enhances student literacy by combining the process with the product. While multiple drafts and enhanced writing may not seem inherent to wikis at first, but only to the way teachers set up assignments on a wiki, it is important to note that the wiki provides a space (and a place) to perform and enhance these factors in student writing.

Frequent revision is important and student willingness guides the process. The revision and editing that wiki use makes possible, for Dr. Moore, enables “them [students] to go in and edit an existing document in a really meaningful way. . .” (interview). If students are “meaningfully” editing a document, changing not just grammar and form, but considering style and content while experimenting with the implications of the text, then revision takes place on a deeper, more substantial level, the level suggested by David Bartholomae in much of his work on error in student writing, basic writers in particular. Teacher pedagogy itself also changes like the writing process. Dr. Moore sees “pedagogy as a process and the wiki can help us in that process and help students see their own process” (interview). If teachers can provide students with the wiki tool, then perhaps students will take advantage of the web environment as never before and write more while being guided through process-oriented development. To accomplish this task, students must be willing to write online.

Grohens says that wikis provide an “Easy way to get students' writing online so as to work with webby information design and to do peer-review” (WIS). The wiki “allows distributed work, gets students writing online, allows integration with the work of others (intrawiki and on Web pages), is usable without extra software, and has a very shallow

learning curve,” according to Bradley Dilger (WIS). The shallow learning curve mentioned here and the ease of use mentioned earlier in the chapter each provide components of the wikis capacity to reach students quickly and effectively. Part of this effectiveness is the similarity wikis share with word processors. According to Dr. Jarod, word processing is one of the essential skills students come into college with and it is through this familiarity that technology has an advantage of growing quickly.

Probably, the closer [wiki technology] gets to word processing, and this is true for any technology, the easier it is going to be for people to use because that is what they are used to and have learned from. They learn how to produce texts and now learn how to navigate the web. If you are going to learn how to create something, a simple text editor knowledge is something students seem to bring in to college. What you are being asked to do with a wiki is to learn a new, fairly simple (nothing like HTML), method There will be a learning curve for people and there will be mistakes. I think that in the future as it gets easier to use, it will be used more. (interview)

Jarod’s point of view notes that word processors are the tool with which students are most familiar upon entering college. Other scholars, such as Marc Prensky argue that today’s students are actually digital natives and enter teacher’s classrooms with technological savvy. Simultaneously, there are those such as Timothy VanSlyke who believe, along with Jarod, that students are not as technologically adept as authors like Prensky would believe (though Jarod is not referring to Prensky, simply Jarod’s interaction with students). The question remains, will wikis become more affective and

useful for students if they approach the functionality of word processing, or something more multimodal?

Writing in a wiki, unlike that in a word processor, facilitates the transparency of writing by making revisions obvious in the page history. Gina Maranto stated in her survey that “Wikis enable students to publish work and thereby increase transparency and alter their understanding of the nature of writing. Instead of being an opaque transaction between themselves and their instructor, a piece of writing is a public interaction with their peers, their instructor, and a larger audience” (WIS). Transparency of writing allows teachers to evaluate student writing throughout the process of revising. Maranto notes that wikis can also alter the students’ understanding of the nature of writing. Dr. Jarod and Chad Cross have similar viewpoints in their interviews when asked about the possibility of the wiki changing students’ conceptions of the nature of writing. Jarod goes on to say that:

The nice thing about wikis, especially when you look at Wikipedia, is that you have information with terms that link to other information and you can see what terms are not yet defined, they are usually in red. So you, as a contributor can say, “I know something about that,” and you can add to it. It is an exponentially growing base of information that if it changes people’s conceptions of writing at all, it makes them understand that knowledge is communally created and shaped. It might push them a little in that direction. It might also help them to learn about revision but I think you have to use it in specific ways to do that. (interview)

The process of writing and thinking (knowledge construction) is changed through the wiki. During the process itself students can learn and adapt fluidly, perhaps because of

the nature of the technology to be multimodal and itself adapt to many challenges and tasks.

4.6 Multimodal Literacy

Multimodal literacy has recently attracted a great deal of attention. Since the publication of work by the New London Group, Gunther Kress, Theodor Leeuwen, and the NCTE Multimodal Literacies Statement (2000; 2001; 2003; 2005; 2006;), many researchers have taken up the topic and explored what it means to be multimodal, multimedia, etc. As Chad Cross defines it, multimodal literacy means “giving students the skills and literacies to be able to express themselves in many different ways” and “developing the critical mindset that they can learn to adapt and engage these literacies” (interview). For the National Council of Teachers of English, multimodal literacy, in its broadest terms, represents the “integration of multiple modes of communication and expression” that “can enhance or transform the meaning of the work beyond illustration or decoration.” Wikis offer one form of multimodal literacy because they cross the boundaries of simple print text and offer links, and media (such as images and audio) in tandem with other options like blogs and portfolios. Carl Young does not hesitate to say that multimodal literacy is an important goal for his course by, “including technology resources, and looking for ways to implement and apply technology resources in the classroom” (survey). When asked how important multimodal literacy was for teachers to understand, Dr. Jarod replied that it was “crucial” (interview). For Jarod, teachers must investigate, experiment with, and research multimodal technologies in order to be effective educators with students who are already engaging in multimodal technologies outside of the classroom. One way that wikis provide multimodal literacy development is

through an intricate series of linking possibilities. This iterative and continuing process of link building provides a horizontal network of references and documents that accelerate research and writing. Wiki are multimodal because they incorporate various modalities (text, images, audio, video, etc.) into one space. Students interact with this space and thus interact with different modes in which competence becomes important.

The “interplay of meaning” across modes is important for teachers to understand and produce in the classroom (according to the NCTE Statement). In the wiki, as in any multimodal medium, the forms “of communication are codependent,” thus affecting each other in relation to the content and “rhetorical impact of the communication event itself” (NCTE). For digital proponents, the championing of digital literacies does not exclude other literacies. In the wiki, teachers are able to combine traditional text (print-based) literacy with newer, interactive modes of communication, allowing teachers to integrate different communication spaces for students. One of the goals of the NCTE statement for multimodal literacy is that teachers’ “use of different modes of expression in student work should be integrated into the overall literacy goals of the curriculum and appropriate for time and resources invested.” According to Bob Cummings’ study on collaboration in Commons-Based Peer Production (CBPP) through economic productivity theory, wikis reduce the “resources invested” by teachers through the collaborative activity and thus reduce the time spent on activities other than those preciously created for accomplishing literacy goals of the curriculum. For Cummings, the idea of reduced resources appears in the term “transaction costs.” He states that, “In economic terms, CBPP reduces transaction costs and allows for greater and more diverse contributions from individuals” (137). Cummings also notes that CBPP lowers

transaction costs in terms of audience and invention because the wiki (the form of CBPP Cummings examines first hand) makes the audience immediate.

While Cummings cites Peter Elbow in cautioning readers against the idea that an immediate audience automatically entails a beneficial aspect to the composition process, Cummings says that the lesson teachers should draw from this caution is the idea that “writers will need a safe place to develop text before placing it before an audience or sharing it with co-editors” (142). Because teachers are expected to prepare students to write functionally in any medium, exposing students to the multiple modes present in the wiki environment is helpful to future student functionality in these environments. The ease at which wikis allow for the combination of different modes (audible, tactile, and visual) is a defining characteristic of the way modern, digitally literate generations perceive these modes. Therefore, the means of acquiring and constructing such knowledge, then organizing and evaluating it will become paramount as these technologies increasingly appear in the classroom.

In the wiki, the writer “loses control over the work and its potential audience in a way that wasn’t true in print publishing” (NCTE Statement). This loss of control brings up issues of ethics, authorship, plagiarism, and authenticity (NCTE). Kress has noted that the audience constructed by the author in multimodal environments is one that plays the role of a visitor more often than an audience (“Gains”). In other words, the audience in traditional print-based mediums (books, articles, etc.) follow the author’s organization by reading the sentences, pages, chapters in a given order. In multimodal mediums such as the wiki and Web pages, the visitors may skip around, enter and leave at different access points, and read or not read as much or as little as they want. This raises rhetorical

issues that teachers should consider surrounding space and meaning making (semiotic linguistics) in a mode-rich environment. Ultimately, when applying wiki technology to teaching goals, teachers need to be aware of the technological and multimodal literacy of their students while finding ways to incorporate advanced practitioners knowledge “guided by the wisdom and sophisticated curricular knowledge of their teachers” (NCTE).

Some believe that wikis are currently limited in their modality, but perhaps the future will provided more options. Dr. Jarod believes that wikis are currently limited to mainly textual variants.

It is a different kind of multimodality than a Web page that would have both images and text. I have seen it primarily as a textual medium with a secondary set of links to other things that open up. Maybe that will change and wikis will become more multimodal. That is an easy way for students to begin experimenting with multimedia. (interview)

There is no doubt that wikis are multimodal, but the limits of that modality are being explored and only future research will tell if the boundaries will change or if the wiki has a limited capacity for offering different mediums for knowledge transmission.

Section 4.7 Future Areas of Wiki Research

This study has offered six common purposes for which teachers are using wikis in the teaching of writing. Some limitations of this research should be noted for effective assessment of the data provided. First, the study is limited in scope and the population sizes are small (through representative). Perhaps a future study could examine a larger

population size for a longer period of time without the constraints inherent in this research. Second, the conclusions offered regarding writing classes specifically can only be drawn from the survey data. Though the study did survey instructors directly involved in writing courses, the interview portion of the data did not come from courses where writing instruction was the focus, though these courses contained a major writing component. Thirdly, due to the nature of the data, the information is limited in how it can be made generally applicable to other areas of education. It is likely that future research may offer other common purposes and may look at writing courses specifically as case study examples as well, thus allowing for a more detailed understanding of the nature of wiki integration in writing instruction.

Research on wikis in the teaching of writing is now beginning to focus on teachers' specific goals. While this thesis has offered a step in the direction of making wikis more applicable by examining the purpose for which teachers are using wikis in the classroom, research has many avenues in which it can grow. Some questions for future study can focus on student's ability to use and interact competently with the wiki:

1. What keeps students from initially posting to the wiki? How can teachers motivate students to initially contribute to the wiki, then collaborate and write effectively, and contribute to each others' work?
2. How does the democratic nature of wikis affect student interaction and participation in the wiki community?
3. Will further research demonstrate a difference in the way graduate students and undergraduate students accept the wiki over previous notions and systems?

Other questions might approach pedagogical considerations for teachers of writing instruction.

4. When and why do people consult a wiki? Where do they go and for how long do they spend exploring an article and its links?
5. How can wikis support pedagogical knowledge acquisition and creation?
6. How can wikis support the writing process?
7. What writing assignments are truly appropriate for the wiki?
8. How do teachers evaluate improvements in student writing (on what assessment basis and what is the outcome), and how can we best develop the wiki to accomplish this task?
9. How do wikis affect and change student ethos and how does the ability to publish content affect student notions of authorship?

The concept of how authority and security develops in the wiki community is another consideration for teachers interested in the future of wikis.

10. How does the authority hierarchy develop in large wiki communities?
11. If security on a wiki is increased to limit audience, are the students experiencing the true nature of a fully editable and viewable wiki with all the implications it implies concerning audience, author, and publishing?

A final category for research might be the multimodal and rhetorical implications of implementing wiki in composition.

12. How could multimodal technology contribute to student learning? Does the fast-paced nature of multimodal technology lead to a less contemplative student mind?

13. How does technological literacy affect student assessment and how does this literacy drive administrative outcomes?
14. How is rhetoric perceived in a wiki, including the rhetoric of audience, author, time, space, knowledge, ideology, power, change, and culture?

Dr. Jarod, when asked what research he would like to see in the future, offered this comment:

It would be interesting to see how developing writers would interact with each other on a wiki, studies of collaborative revision. What do they do and why when they're changing it. In terms of pedagogy, it would be interesting to study, when people consult a wiki, what are they consulting it for, where do they go, how long do they spend exploring the article and links. (interview)

Jarod is asking two specific questions, one about developing writers and one about pedagogical research on a wiki. For Dr. Moore, there are two types of questions wiki research could answer for him. Moore refers to questions that are particular for his coursework as "small" questions like those relating to the writing process and wikis assistance in pedagogical knowledge. "Big" questions are those related to the democratization of wikis, the naturally evolving authority structure of large wiki communities, and the usefulness of Wikipedia as a tool for research (interview). The possibilities of research are virtually limitless due to the changing nature of wikis and the questions this technology presents.

This study offers a step in the direction of further research on wikis in the teaching of writing. Ultimately, the integration of wikis into writing pedagogies will be

up to the goals of individual teachers. The future of wiki research appears bright and challenging.

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Appendix A: Wiki Clones and Selection Criteria

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3. Challborn, Carl and Teresa Reimann. "Wiki Products: A Comparison." *The International Review of Research in Open and Distance Learning* 6.2 (July 2005) ISSN: 1492-3831.
~ Product trials and brief information on the following wiki clones:
 - i. EditMe
 - ii. MediaWiki
 - iii. Seedwiki
 - iv. Socialtext
 - v. Swiki.net
 - vi. WikkiTikkiTavi
 - vii. InterWiki
 - The conclusion from this article is:
"The wiki has clear potential in distance education, allowing users to brainstorm ideas with an unlimited number of people around the world, and to collaborate with them in exchanging files and developing Web pages. The evaluation team has been particularly impressed by the comprehensive features of Seedwiki, and has used it to good effect in distance education situations. EditMe and Swiki.net are good alternatives. MediaWiki and WikkiTikkiTavi are comprehensive products enabling users to host their own wikis, while InterWiki provides a useful distribution service across multiple servers. Socialtext is a more costly option designed for collaborative project work in the corporate environment. It is hoped that an increasing number of educators will encourage their students to develop the simple online editing and sharing skills that make wikis useful."
4. Schwartz, Linda, Sharon Clark, Mary Cossarin, and Jim Rudolph, "Educational Wikis: Features and Selection Criteria" *International Review of Research in Open and Distance Learning* 5, no. 1 (April 2004).
~ Includes Wiki selection criteria in Appendix two of this thesis.
5. Very long list of wiki clones from WikiWikiWeb:
<http://c2.com/w4/wikibase/?LongListOfWikiClones>

Quoted directly from: Schwartz, Linda, Sharon Clark, Mary Cossarin, and Jim Rudolph, "Educational Wikis: Features and Selection Criteria" *International Review of Research in Open and Distance Learning* 5, no. 1 (April 2004).

Wiki Selection Criteria

The following list outlines criteria for consideration when selecting a wiki for educational use. (These are consistent with the criteria adopted earlier in this Report series.)

1. Cost:

- o Open source software vs. financial outlay required
- o Licence fees (scaled per user)
- o Supportable programming language

2. Complexity:

- o Online technical support (documentation, manual, FAQs)
- o Plug-in or scripting exchange
- o Sandbox
- o User community
- o Web-hosted or download required

3. Control:

- o User registration
- o Password protection of core pages
- o Levels of user rights to edit
- o Active user list
- o Participants online
- o Easy to restore damaged or deleted pages

4. Clarity:

- o Index/ site map
- o Interwiki – format that facilitates linking content between different wikis; two common formats are *CamelCase*, and [free links]
- o Back-linking
- o Page hierarchy
- o History of all versions (revision tracking)
- o Archiving of all pages
- o New page creation
- o Page deletion
- o New content identified (version compare)

- o Email notification of changes

5. Common Technical Framework (CTF):

- o Editable by anyone with a forms-compatible browser
- o Cross-platform
- o Internet and Intranet installation
- o Resolution of simultaneous editing conflicts
- o Plain ASCII text storage

6. Features:

- o Editable by major browsers (Internet Explorer, Netscape)
- o WYSIWYG editing
- o HTML support
- o Text editing (italics, font size, colour)
- o Image insertion
- o Hyperlink insertion
- o Tables
- o Lists (numbered, bulleted, hierarchical)
- o Media insertion (streaming audio/ video)
- o Search
- o Spell-check
- o Emoticons
- o Blogging
- o Polling
- o Calendar
- o RSS
- o Link checking
- o Drawing tools
- o Equation editor
- o Synchronous text messaging

Appendix B: Wiki Instructor Survey

Thank you for taking the time to respond to my survey. My wiki research study is designed to provide teachers of writing with helpful information regarding implementing wikis in the teaching of writing. Your responses to this survey will allow me to learn more about how wikis can be useful in composition and pedagogy. Your responses will remain anonymous unless I specifically request to cite something you contribute per your permission.

PART ONE: INTRODUCTORY QUESTIONS:

What is your name and job title?

What is your contact email?

Which class are you teaching in which you are using a wiki?

What is the primarily reason you are using a wiki in this class?

For research purposes, it would be helpful if you could provide a URL to your course. Your course will not be identified specifically unless I request permission from you to do so.

On average, how many students are in the class you indicated above?

How does your use of the wiki achieve your goals for your course? How does the wiki reinforce your theory of teaching and learning?

How did you first become interested in wikis?

PART TWO: YOUR TEACHING GOALS

Please **rate the importance** of each goal to what you aim to have students accomplish by using a wiki in your course:

<p>I want my students to . . . (use the following scale as appropriate for each question)-----></p>	<p>not im- portant</p>	<p>impor- tant</p>	<p>essen- tial</p>
--	--------------------------------	------------------------	------------------------

develop analytical skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop ability to synthesize and integrate information and ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop ability to think creatively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop ability to think critically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
improve reading skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
improve writing skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop appropriate study skills, strategies, and habits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
learn about or explore the content of the course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop an understanding of the role of collaboration through technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop technological literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
develop skills to organize and use time effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gain self-esteem/self-confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other goal of the wiki you would like to rate: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART THREE: CLASS TIME MANAGEMENT

On average, estimate how much time you spend on the following processes concerning your wiki:

Use the following scale as appropriate for each question----- ----->	rarely	a little	a lot
lecturing about the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
addressing questions from students concerning the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
responding to entries or posts the students make to the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
group work on the wiki during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

guided class discussions concerning the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hands-on demonstrations of wiki use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other processes: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART FOUR: STUDY STRATEGIES OF STUDENTS USING WIKIS

Based on your observations, what improvements in your current wiki would make students more successful with their use of the wiki?

Use the following scale as appropriate for each question----->	un- important	somewhat desireable	extremely desireable
easier-to-use interface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
more faculty-to-student interaction on the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
more engagement in wiki-related activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
less wiki use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
extended utilization of current wiki capabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
more open access to the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
more security on the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other improvements: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART FIVE: LEARNING-CENTERED TEACHING:

What do you think you could do that would make the wiki more helpful to your students?

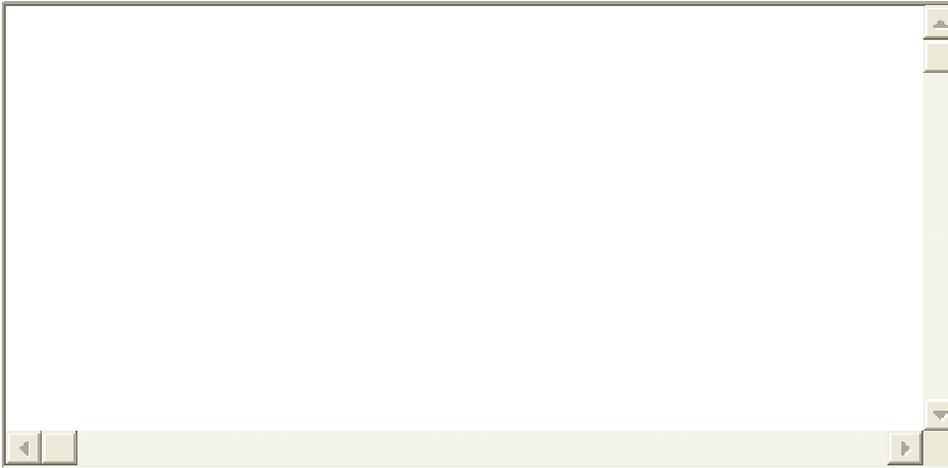
Use the following scale as appropriate for each question----->	unhelpful/ negative effect	somewhat helpful	extremely helpful
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

if I got formal training in effective integration of technology-enhanced teaching methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I spent more time on how the wiki can address student needs/concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I collaborated with writing teachers in my use of the wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I engaged in team projects integrating different courses (learning communities, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I set up group work or projects in my class that would contribute to a class wiki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I used more Web-based teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I incorporated more active hands-on learning in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if I got more training in learning strategies for wikis in education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other things I could do: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you think wikis will be around for the long run, or simply fade away as the next fad (or transform into something different)?

Do you have any specific problems/concerns with using a wiki in a writing course?

Please add below any other comments you would like to make about wikis in writing, wikis as a tool for improving student composing process and writing products, or wikis as a way to enact your particular ideology of theory of teaching and learning.



This is the end of the survey. Thank you very much for helping me in my research project.

Please click on "submit" below. You will receive an immediate record of your response, which you can print if you wish.

Appendix C: Interview with Dr. Charles Jarod

Interview with Dr. Charles Jarod, director of a writing program at a large R1 university, conducted by Toby Coley for his master's thesis research project.

1. "Could you tell me the name and purpose of the course you used this last semester (fall 2006) in which you used the wiki?"

This particular course is part of a core which all of the students are required to take and then supplement those courses with electives. This course focuses on the relationship between pedagogy in the communication arts. That is, in mostly writing and speaking in higher education and the relationship between pedagogy in that area and new emerging technologies. So it is a course that focuses on theories, practices, and research in technology-enhanced writing or speaking.

2. "Could you provide me with a brief overview of how you became interested in wikis and what guided you to use wikis in education?"

I am trying to think of the first time I used a wiki. It may have been in the context of something like Wikipedia. I think many people learned about wikis in the public realm, rather than the educational realm. That seems to be the case in higher education . . . that wikis began to get popular in other worlds and crept into, or were drawn into, educational circles. Then I started hearing the term a lot more. I had been to Hawaii a couple times and had gone from one part of the airport to another and had seen this term, so when the first time I heard it I thought, "Well, now isn't that the same term the Hawaiians use for fast?" There were these little busses that shuttle you between the terminals and so I think I got drawn to wonder, "What are these about?" I think probably when I got really interested educationally, is when I began working on a book on digital technologies and teaching and it is focused on teachers at the college and K-12 level. I've been working on that with an ex-colleague of mine and he was the one who pushed me to start looking at wikis because he had done a lot of work with them. So I started poking around the internet and started looking at ways that they were being used in education, so I think that they gradually emerged and in a similar way that I got interested in blogging a little earlier than wikis.

3. "How has your view of wikis changed since your initial encounter?"

Well, I think it probably changed as I used it, because at first, and again with the advice of my colleague who had been using wikis, he said, "If you want to start a wiki go to PbWiki and you will be able to do that for free." PbWiki is a simple public wiki platform that has different levels like silver and gold and you can pay money for more and more features. So I went to PbWiki as I was designing this course, because the course itself needed a lot of high tech stuff in it. One of the things that we did in the course was to both try out and use different technologies, so I made sure I had a wiki in the course. We tried wikis, blogging, and some other things so that the students could then research and reflect on their use of it. PbWiki's system, I found, was really cumbersome and partly it

is because what I wanted to do with the wiki was have a course tool (I was using the local university system here for some specific purposes) but I wanted the wiki to be really interactive because one of my goals was to use a constructivist approach to learning where part of what we were doing (it was a very small class) was making decisions about what we were going to read. I chose a handful of readings each week, usually between four to seven readings, almost all professional journals, and I would place those at our class wiki and then I would load PDF versions to the local course management system here and students could then click on the links and with their password it would open up the article. One of the requirements of the course was that they be in charge of some of the readings that they chose and the only way I could see doing that, because the local CMS wouldn't allow me to do that, was to have a wiki, because it is open and people can go and work on it themselves. So theoretically students could then choose an article, add it to the wiki, if necessary. If they didn't already have a link to it where it was just in the public domain, they would send it to me and I would place it online. So that is one way we used the wiki, where students were actual contributors to the wiki.

The other ways that we used it was that I had set up a personal wiki space where they would theoretically put a lot of information about their course projects and that would be the holding place, the brainstorming or archiving place, where they would keep anything and everything that they found. References, links, brainstorm notes, they would all go there. My idea was that the students would be able to look at each other's ongoing project, into the workshop of someone building their project. That was the second way I used it, for the students to have a space. Another way I wanted to use it was for it to be a repository of information for this course, which was taught for the first time, that would carry over from section to section in the future and other people are going to teach it and that part of the wiki would stay behind after the course was over and every student would contribute references, links, etc., to this growing archive of information that would keep building over time. It would be this really robust space where people could go for resources and materials. Now you asked me how my conception changed from when I first learned about wikis. More flexibility than I thought. I thought they were really the place for people to . . . I guess I knew they were a place for people to put information and that function did not change much, that you are essentially putting information into a space. I didn't know how I might use that information and with my three different ways I learned about some flexibility of wikis.

4. "How did the wiki help you achieve some of the previous goals you mentioned for your course? "

I mentioned that PbWiki was really cumbersome because I couldn't get it to do what I wanted. I wanted in tables my course schedule and I couldn't get it to stay where I wanted. I got really frustrated and right at the moment that I was reaching the point of frustration where I was going to abandon the wiki methodology and go back to web stuff, there was an announcement at the university here about having created a wiki system. So I went immediately there to see if it was better and I found that it was much better and easier to use and a slightly different set of code. I could set up tables and stuff was stable, it just worked a lot better. I ended up leaving the PbWiki and I think the wiki I created there is still up. I started building the system on the library's wiki. That

particular wiki I found more usable. The issue is how usable something is, if you have different platforms for wikis, there may be ones that better suit certain tasks. In terms of how it fulfilled my goals, there are two levels of goals, and this is a little difficult because the course is about using technology, so one level was the three mentioned above and secondly how students interact with the technology. Anytime you experiment with a technology, whether it fails or not, if that is your goal, to experiment with it, you succeed. And because we used the wiki, tried it out and talked about what worked and didn't, that goal was met. It was one of many technologies we tried out.

In terms of the other three functions, that's varied because the schedule function worked very well. Students placed information in the schedule; there were a few small glitches in terms of adding to it. The one proviso I would add to that, and this is actually a global response to the whole wiki, is that they seemed reluctant to go in and change things. I think they were ok at the level of adding an article. They didn't want to mess with the structure of the wiki. I told them to go in and play with the structure if it needs work, because I had it arranged bibliographically. Halfway through the course we realized that we shouldn't have books and articles separated but they still didn't mess with that system, even though they knew it needed work. So there is a very big issue here of the power dynamics of the teacher relative to the students and presumably the way a wiki works, which is to encourage anyone to go in and contribute to it. They feel it is like a course syllabus, you would never change a professor's course syllabus. It would be like taking too much control and authority. I kept telling them repeatedly that the wiki is our wiki, here is the theory behind it, it is supposed to be a place where we add things and change things and then if we don't like something we can change it back collectively. Even as graduate students they had a hard time there I think. When you think of the way it is when students set up personal blog spaces, because they have set it up and they feel like they own it, they are willing to do stuff to them. There is a weird sense of ownership, like "who's wiki is this" and "can I mess with it"? It was very hard to get across to the class that this is *our* wiki, it is not *my* wiki. I would like to do research on that, on how people construct spaces on the internet that are set up by a teacher.

I don't think they did nearly as much as I wanted with the archive. With the third function, their own space, they really started using it at the end of the course. I wanted them to use it throughout. Two of the students said that they had their own methods of archiving and keeping track of their projects on their computers and I was asking them to use a space that felt different than what they were used to and they were not willing to do that. They were comfortable with their system and they did not want to use the wiki. I don't think they cared whether other people saw it in the class; actually it is a public wiki so anyone can read it. So I don't think it was the publicness of the wiki, just this is not how I normally do things. So maybe it will be counter-productive to put stuff there.

"That brings up interesting concerns about how graduate students encounter wikis versus freshman composition students. Are the grad students going to have a harder time relinquishing those familiar structures versus the freshman?"

It could be that if I had said to a class of freshman, "this is our wiki, go for it," that they would have all been in to it. This is a puzzle. These are people who I continually admonished to use the wiki. We had a blog and they used it much more often. They

really felt the blog was a place they could interact. So it is something I think we need to find out more about. How do people feel about this as a space for storing, adding, and changing information?

5. “In terms of this wiki, what do you see as the benefits of this technology, in terms of course-management systems you have used and the way that the wiki affects or enables the way that you teach?”

Well, I don't think it is a good course-management system. I think it is an ancillary kind of system and I think the greatest advantage it has, if you think about what is already available for students, is the ability to interact and add information. A lot of times because of the way it is organized, content gets lost. There is an additive function to things like blogs, and other technology where students are placing information, it is not a replacement or revising system, it is an additive system which goes down linearly, sometimes it goes down hierarchically and it is hard for students to navigate through the kind where, for example in an message board or blog system where you are adding content to somebody else's post versus starting a new post, that is very complicated. The comment added to someone's previous comments gets buried within that structure, so it's cumbersome. And it is also additive, which means you have to keep on scrolling down to read another message. I think the advantage of the wiki is that students can go there and refine, revise, and add to the text world that the wiki is holding. They can add to it if they want, but they can also change things. And so if you think of a class project, or maybe several wikis where students are working in groups, it becomes entirely collaborative. If you imagine you have a class of twenty students and you have groups of four and you set up five different wikis and each group has a project they are working on together and the product will be at this wiki as an information thing with maybe links, it becomes completely seamless collaboration in terms of people actually going in and changing people's work and adding content. It is still a single text. It is not layers of text and it's not one text added to another. That part of the technology really intrigues me. I love the notion of revision. A personal wiki where you're just using it to store information in your field, its amazing because you can keep changing things. You can update things. You have categories, you have a special index you can create that helps you navigate. So it is a great way to keep a compendium of material as long as you're good at code.

6. “In retrospect, now that you have completed the course and know what you had planned for the wiki and what it turned out being used for, were there any particular goals that you can say were not appropriate for the wiki, but these other goals were appropriate?”

I think the goal of having students use the wiki as a repository of knowledge for their ongoing research was misguided. Just because, and in another class I might not have found this to be the case, but these folks dealt a lot with technology and they have found ways, different types of storage systems of their own that they prefer. So my asking them, my setting up a space and expecting them to use it for that function was misguided. I would say that was, among the three main functions, the one that failed the most. I thought the schedule worked well so I would use that again in retrospect. It was easy to

go in and edit it. I am teaching a course now, a sophomore through senior level course in which I am not using a wiki. And partly it is because there isn't that function in it. I think that if I had set up a wiki, it would have been for students to place terms and concepts and I would have assigned those. My concern about the wiki with this group is that I didn't think they would be able to figure it out fast enough. I thought there would be lots of misunderstandings and frustrations with people messing the wiki up and my having to go back and fix it. It is real easy to mess it all up if you put in the wrong code. Even though it has that view and save function, I worried. I have two students in my course right now, and I have a standard Web site that is no more complicated than any good Web site. These two students do not know how to navigate it and they are lost. It is clearly organized with links and headings, but they do not have enough experience with more than a Web page to be able to do this. Based on that, I think my prediction was good. I would have had to do whole class sections on how to do the wiki without a great pay off. So now I am getting students to give me the terms and I am putting them on a Web site myself. I think the time it takes me to do that is less than dealing with the struggle of the wiki.

7. What kind of role does writing play in this course and how did you envision wikis supporting that writing role?

It's not a writing course per say, but about writing with technology. The students had a big project where they wrote. They also did frequent informal writing, low-stakes writing. The way we did that actually took more than just the form of writing because we also did vid-casting and pod-casting. But we used a blog primarily with low stakes writing as a way of responding to readings. There was a lot of reading in the course and we only met once a week for three hours and I wanted people to be able to carry on conversations in between those class sessions. So we used a blog for that and a third of the way through the semester we switched to pod-casting. They had to write a longer reflection about each technology for low stakes writing. We went from written to oral, which was interesting. And another third of the way through we switched to vid-cast. Then we tried to reflect on the differences between a reflective written text that people would read, a reflective spoken text with no visuals that other people would hear and then the little video-cast of the person speaking. There were some interesting results and we felt differently about each method, though the pod-cast and vid-cast are similar, the presence of the camera made a huge difference. So that was the role of writing. The students had to lead us also, in a presentation several times and that was primarily oral communication.

8. "Do you think that wikis have the ability or the potential to change student's understanding of the nature of writing?"

That's a good question and my answer is possibly. I think what wikis do is add a potentially collaborative, revision-based dimension to what is often a solitary activity. In typical courses in higher education, students write papers outside of class, they do them alone, they turn them in and get graded. The wiki compels people to be able to add information to an existing growing context or change the information already there. So if

you have someone working on a project on gun control, people can go in and edit, add, or change information. The nice thing about wikis, especially when you look at Wikipedia, is that you have information with terms that link to other information and you can see what terms are not yet defined, they are usually in red. So you, as a contributor can say, “I know something about that,” and you can add to it. It is an exponentially growing base of information that if it changes people’s conceptions of writing at all, it makes them understand that knowledge is communally created and shaped. It might push them a little in that direction. It might also help them to learn about revision but I think you have to use it in specific ways to do that.

9. “After using wikis, do you see any major limitations of the software and how would you like to see wikis grow?”

Probably the closer it gets to word processing, and this is true for any technology, the easier it is going to be for people to use because that is what they are used to and have learned from. They learn how to produce texts and now learn how to navigate the web. If you are going to learn how to create something, a simple text editor knowledge is something students seem to bring in to college. What you are being asked to do with a wiki is to learn a new, fairly simple (nothing like HTML), method. There is a percentage of stuff you can do with just knowing something like five different codes, like adding texts and bold face. You can learn a handful of those codes to do a majority of the things you want to do, but there is still a system behind it you need to learn. There will be a learning curve for people and there will be mistakes. I think that in the future as it gets easier to use, it will be used more.

10. “What do you see as some of the rhetorical concerns surrounding use of wikis in the classroom?”

That’s a great question. Students are used to things like blogging where you have a real relationship to the voice and persona in the stuff they are writing. A lot of the blogging people have grown up with is personal opinion and a lot of political discussion and opinion. I think the wiki got established more as an information portal where people could go and get stuff. We hope the accuracy is there. One of the rhetorical issues is that the wiki is simply a system and it could admit to personal things, but I think it has found a niche in the options for technology for an information base. It is identified with that maybe because of Wikipedia. So I think students can have a hard time negotiating rhetorically, that distance you have when writing. You don’t see a lot of “I” in wikis. You don’t have any idea who is behind the stuff. It has been collectively created. The personal voice is not typical. It is flexible enough to use it for that but why not use something else for that like a blog. It is partly the way we socially construct the systems and how that becomes entrenched. We say, “well we know what a wiki is, what a blog is,” but they can be anything. We construct the functions in a way that they are opposed to one another. Rhetorically, in terms of process, there are things that can go wrong. Like people adding things to a wiki wrong. Information people feel is good gets changed and they are upset. Information is always slanted and biased, so someone might put information that in its very selection seems to lean toward one perspective or ideology.

Then someone else comes along and says, “wait a minute, this is too conservative a view,” or something. I think that complexity could be interesting to talk about with students.

11. “Do you have a theory of multimodality and how do wikis play into that?”

It seems we are moving in that direction. Some of the neatest research subjects I’ve seen, even in the public schools have been multimedia projects where students have still photos, video clips, different kinds of images in an artful web design. I think we are going quickly in that direction and writing courses need to get out of the middle ages and start teaching students what it means to produce things in more than one mode. So my theory is yes, we are going there and we need to be attentive to it. I am still very much interested in text, I think text is still a primary means of communication that is being combined with other types of media.

From what I have seen with wiki, the main wiki tends to be pretty textual. Because there are links, you can link to other Web pages that might not be. I just have not seen any wikis that are . . . the difference to me between the encyclopedia Britannica and Wikipedia, which is replacing it, is that I have not seen the level of visual imagery in wikis. They just don’t allow more than primarily text links. It supports multimedia in a good way in that you start with a primarily textual representation that allows you to secondarily find other media.

12. “How critical do you think it is for a teacher to have an understanding of multimodality in their teaching of writing and can wikis contribute to a student’s multimodal literacy?”

I think it is crucial. They are not keeping up if they are not reading the literature on multimodal communication and not thinking about how it fits into their own lives. If we are preparing students in higher education to go across to courses in other curriculums, they are going to rapidly come into areas where they contact other modalities, in presentation. Now in the sciences we see sessions where there are two computers and people have to know how to navigate this stuff as they are moving past the posters. Oral presentations that are increasingly supplemented by visuals that are no longer just power-points are also growing. There are little clips or pictures. If we are preparing students for those settings, then we have a lot more to do than having them right essays. The question is how much and what does it look like. So that’s one. Do teachers have an obligation? Yes, that is how writing is working now.

If students do not know how to create a Web site, then wikis are easier. It is easy to create links; the question is whether they know how to create links. It is a different kind of multimodality than a Web page that would have both images and text. I have seen it primarily as a textual medium with a secondary set of links to other things that open up. Maybe that will change and wikis will become more multimodal. That is an easy way for students to begin experimenting with multimedia.

13. “What are some of the questions you would be interested in exploring? In other words, what kind of research would you like to see?”

It would be interesting to see how developing writers would interact with each other work on a wiki, studies of collaborative revision. What do they do and why when they're changing it. In terms of pedagogy, it would be interesting to study, when people consult a wiki, what are they consulting it for, where do they go, how long do they spend exploring the article and links.

Appendix D: Interview with Dr. Joseph Moore

Interview with Dr. Joseph Moore, associate professor of Social Studies at a large R1 University, conducted by Toby Coley for his master's thesis research project.

1. "Could you tell me the purpose of the course you used this last semester (fall 2006) in which you used the wiki?"

This is a senior-level course that is taken by students majoring in middle grades education. Their emphasis is social studies and language arts. They take this course fall of their senior year and follow it up with teaching experience in the spring. I co-taught the experience with another professor, who taught the language arts portions of the course. We had the same students. We met on separate days but we had some occasions where we met in each other's classroom. We had two major assignments that overlapped both courses and the assignments were completed for credit in both classes. One assignment was a project on conducting an inquiry into a self-selected topic; we called it the inquiry project. The second major assignment was a curriculum project developed around a self-selected subject area.

2. "Remind me of how you got started in wikis and what made you decide to use wikis in education?"

I'm going to say I have actively known about it for maybe two or three years, following the development of the Wikipedia project. I started using wikis in my teaching, I believe, in the fall semester of 2005 at another large R1 University. It was a graduate-level course in social studies education and I had the students create a story and use a wiki to compile the story. I played around with Wikipedia before that, but I would not say I am an active contributor.

3. "How has your view of wikis changed since your initial encounter?"

My initial view was that the tool was really interesting and that there were a lot of applications for the construction of temporary knowledge in a way that was more permanent or more lasting, and certainly more public than what would be done on paper. I like the dynamic nature of the text in which users can contribute from anywhere, but I think, like a lot of people who come to it, I had questions about the veracity of the truthness of it. I felt comfortable that I could make my own critical decisions about what to believe and what not to believe. But when dealing with a middle-school or high-school environment, I certainly had some concerns about that. But I have to say, that over the last few years, I feel a lot more comfortable about it as an authoritative resource, particularly Wikipedia and all the projects surrounding it, due to what seems to be the energy generated from mass users, kind of an emerging culture of "getting it right" surrounding the articles. You do have to remain critical about what resources you use, but I feel a lot more comfortable with the end product.

4. “How did the wiki help you achieve some of the previous goals you mentioned for your course? “

When I started the discussion about using the wiki before the semester, the way I envisioned it was as a tool that would facilitate students in a *process* of completing one or more of their assignments. I wasn't sure which assignments we were going to use, but I felt like the inquiry project was a good candidate for the wiki. We wanted students to work on the inquiry over a long period of time. We had a process laid out to identify a topic, and then they were to narrow the topic and get secondary sources and hopefully with primary resources write a report on the topic. What I envisioned on that project with the wiki was that they start with, literally, a sentence and they would add to that and go in at any time they want and make not only those big period revisions but also to go back and edit their work at any time, and their peers would be able to take a look at it and offer suggestions. For the most part that is how we ended up using it but it wasn't all that we had planned.

“Good. We will get to that question later. This is a great start.”

And we used it for a few other things that were unforeseen at the beginning of the semester.

5. “I am sure you are familiar with various course management software programs from your experience with them in the past, do you think wikis do a better job at some particular uses than those programs or visa versa?”

Yes, I think there are some differences. The tool that I have used is WebCT. I didn't like WebCT. I felt like I was in a box and with my students and I could not really create much of anything. There are a couple of tools in WebCT that were really nice, the ability to automatically generate an email list to communicate to students and a synchronous chat feature I have used, not here, but at my original R1 university. The rest of it I thought was very clumsy and not very useful. The course I talked about that I did a couple of years ago, I used a content management system that I managed to stumble my way through, called Droople, that you might be familiar with. You can just download it as a package, unpack it all, and install it on a server and have access to the server. I really bumbled my way through it but managed to get the site up and going and it did include some wiki-like functions, blogs, etc. I went out and downloaded a wiki tool and put it on a server and I created one. I really haven't used it too much, but I have it out there. So I have my own wiki, it is sort-of devoted to social studies, but I have not got around to getting users, that is the key to this kind of technology. It is not an individual project; it needs to be a large community.

6. “In retrospect, now that you have completed the course and know what you had planned for the wiki and what it turned out being used for, were there any particular goals that you can say were not appropriate for the wiki, but these other goals were appropriate?”

That's good. I'm looking right now on the wiki to see remind myself what we did. We had nine specific things that we constructed on the wiki and of those nine things the one that ended up being the most *unexpectedly* useful was a list of lesson ideas. The students were constructing lessons for their unit. We took them, almost spur of the moment, into the lab (we had a lab right next to our classroom here in this building) and told them that "today we are going to talk about your lesson topics. You already have them written out, but instead of turning them in to me on paper, I want you to go on the wiki and put it on there. And they put it on there and what we were able to do was go back to that site and have them add material to it and that seemed to be very effective. Now, these were individual students working on their own page, and there wasn't a lot of collaborative work on that, they were just adding to it. But the tool enabled them to go in and edit and existing document in a really meaningful way. . . I'm clicking on a couple of things here . . . and one that we didn't get to deal with North Carolina Native Americans. The group brainstormed some things they wanted to know. Well, what they did is they brainstormed what they already knew, and then we talked about what they wanted to know, and then we set about the process of learning new information. This is a pedagogical strategy called KWL. What you Know, what you Want to know, and what you want to Learn. And so we wrote stuff on the chalk board and took notes on it and I took it and put it on the wiki and created a portion of our front wiki page that contained this information. I had intended us to go back and edit this, and we never did. Now, I don't know if it was because I put it on there and *I* never went back and edited it or exactly what happened on that one.

8. "Do you find that students seem to be more willing to contribute on the wiki when they have created the information versus when you (as teacher) create a document, an ownership issue?"

I think that's true. If the student sees some purpose for it, then the wiki will be much more useful. And the reality is that some students used it a lot more comfortably than others. You may have found this out in your survey, but our reflection is that it is was a positive experience as a whole to our students.

9. "Do you have an overall feeling of why some students did not react as well to wikis as others?"

It is at least two things. One is the general tendency for the student to be better, to commit to a higher level of work. We tend to emphasize this process in wanting to perform to our expectations. Students tend to be different in that regard. If everybody has the same abilities but some are intrinsically motivated more to do something different then this will make a difference. There was another element that related to the use of the technology and going on the computer. At some level there were some differences there. Not everybody had the same access, though I am not going to say that access was an issue, because I don't know that for sure. You know, no one said to us, "I don't have an internet connection, I can't use the computer," but that could have been something. I did have to help some more than others. There was a pattern that whenever we made a wiki

assignment, or technology assignment (we also had a blog), there were a couple of students that went out and did it immediately and they were just much more comfortable with it. There were other students that didn't, in fact we had a couple who didn't do the work at all until the end. Those people said they had some difficulties with it. You might have some questions about this later, but there were some complications with multiple users on the wiki page at the same time, what happens when more than one person is trying to edit the same page.

10. "We'll talk a little more about problems you found later, so let's hold that thought. In terms of writing, how do you use writing in your course work and what is your pedagogy behind writing?"

I tend toward more analytical writing in my classes. Though I see the value in a more creative style, the writing in my classes tends to express knowledge more directly, almost technical writing, if you will. I have my students create lesson plans and things like that. I have used a narrative style of writing before where students research something historical and write a narrative report but not in the particular course we have been talking about. You could call it a narrative pedagogy where the student tells their story or research, including how and what they found, and how that relates to pedagogy. The wiki enables personal writing and make the process of writing mobile, it can be done anywhere at anytime. It makes editing very simple and essentially de-centers the typical linear structure of writing for things like journal entries.

11. "Any problems you have seen with wikis?"

Yes, I wanted to provide feedback for my students through commenting functions that the wiki does not currently have. I found that trying to look at the tracked changes of the various iterations was too complicated for the student (and teacher) to find intuitive. Second, when multiple users try to edit a page simultaneously, the first user to submit information wins and the second loses the edit they were working on when they attempt to submit. I had to get students, when working in the lab, to wait for their turn in order to make a change to a particular page. Thirdly, the formatting is hard for students who do not have experience with HTML code. If students created in Microsoft Word and copy and pasted information, the formatting would be lost. Formatting in writing is part of expression and I would put that in this category of problems. When I had to become the formatter, it was like I was taking over that part of the writing for students.

12. "In what ways do you want to see the software grow?"

I'd like to see the ability to track the posts, attributed. I want to see the differences or changes in the article in the context of the article instead of separated out as they are now. For looking at the process, I would like to be able to see this in context. This is a minor issue, but on the toolbar, when you click on main menu you are taken back to the wikis first page, not necessarily the page you are looking for as your home page. There is a little bit of the old "lost in hyperspace" for students because of this. If you didn't know what you were doing this would have been hard.

13. “What are some of the questions you would be interested in seeing explored in the future of wiki research?”

There are kind of big questions and small questions. Small questions would be those that are particular to Carl and me for our course. Those might relate to the manner in which the writing process can aid in the development of pedagogical knowledge. I see pedagogy as a process and the wiki can help us in that process and help students see their own process.

The big question I have is the way in which the construction of knowledge can be democratized in a wiki, particularly in something like Wikipedia. It has become a real resource all across the world. You have a lot of people who doubt the usefulness of Wikipedia, but I think you are seeing an emergence, and I am going to put myself in this category, that see it as a very useful tool and last year’s publication in Nature about the Wikipedia and Britannica has helped a lot of academics re-evaluate the usefulness of Wikipedia. Another thing, and this is kind of juvenile but I am going to mentioned it because I love it. Another colleague and I want to test the ability of Wikipedia to police itself. We want to see, again it is very juvenile, but we want to go in and add something very small to a big collection (and we would have to get some manpower to do this), like a thousand biographical entries and insert somewhere in there that that person likes pie . . . and see how many of them are taken out, so the “I like pie project.” I did one to Hugo Shavez and it took seven seconds to be corrected and it wasn’t caught by the bot, but by a person. And I have found some that have stuck. So there are limits of veracity that can be tested.

Appendix E: Interview with Dr. Chad Cross

Interview with Dr. Chad Cross, assistant professor of in English Education and Middle Grades Education at a large R1 University, conducted by Toby Coley for his master's thesis research project

1. Remind me of how you got started in wikis and what made you decide to use wikis in education?"

The first time I heard of wikis was probably a couple of years ago being introduced to Wikipedia by a colleague, maybe two or three years ago. In terms of using it as a resource, I had the opportunity this year to use it in a class and I think that came about in really two ways. One was working with an associate and his seeing it as something we could use and two, the easy access and availability of having one that the university library system makes available.

2. "Could you tell me the purpose of the course you used this last semester (fall 2006) in which you used the wiki?"

In relation to the wiki itself or in general?

"In general and in relation to the class."

I taught the class in conjunction with my associate's social studies methods class and the purpose of both classes is, it's kind of the capstone for students that are going to be certified to teach English and Social Studies in the middle grades and it's a way for them to pull together what they have learned so far in the program and build on that with various specific methods and strategies for teaching English and social studies. The goal is to leave that class with a toolbox of strategies they can use in the field that includes technology and runs the spectrum of being able to plan well and being able to incorporate standards, national and state standards, create effective lesson plans and units for teaching. They also have a field-based component while they are taking the methods class. In terms of the wiki, I think that we were not real sure, initially, what maybe some of the goals were. I think a goal for me became a way for students to support the course objectives and work on specific activities. The way I feel it became most effective for my class was for them to be able to create content. One example I will give, actually I will give two. One dealt with the notion of journaling. How they could use journaling in the class, different ways to do that, and the wiki became a way to extend class conversation and for them to define looking at journals and journaling in different ways, referencing some of the reading we had done and also posting very specific ideas about using journaling effectively, either in their own experience or in the field with cooperating teachers. Then we did something similar to that with the reading and writing workshop, building on reading we had done in class discussion and creating a framework of defining it from our own perspective as well as referencing leaders in the field and their perceptions of it and what different facets of that would look like.

3. How has your perception of wikis changed since your initial encounter?

I think, I don't feel any hesitancy. I didn't really know what to expect going into it. It was interesting because we used the blog as well and the students' perceptions of the two were different. They definitely felt one was more effective than the other. I think part of that was what we had them doing in those spaces, but I also think the wiki lends itself better to collaboration, and some of the things we used it for, like sharing, having the students posts drafts and have the students provide feedback to each other.

4. Have you used other software to accomplish your course goals and which did you like better, the wiki or the other tools?

When I was doing my doctorate, I developed a web-based electronic portfolio tool that was open-source and I used that at my graduate university and also at another R1 university. I had a colleague there I developed it with. I liked the fact that it is open-source and I think that in some ways it is similar to BlackBoard, but I have never felt really comfortable with using a university-wide tool. I think typically, they are not responsive to individual needs. I think that is one of the things I like about the wiki here. You can code, it was very simple, very few restrictions and still a pretty robust tool. That's what I have used in the past and I have used that for course work, for students to post work and provide feedback to each other, to do field journals and respond to each other in that way. I have also used it to post multimedia presentations and that one is called the Q-folio. I miss not having that, and there was just no way I could really get it up and going at the beginning of the fall semester, but I am trying to use it this semester (and it is housed at my graduate school), but I don't feel like there is a really good course support tool here at the university where I work. I do like the use of the blog and the wiki that I have used and I am using it now again in a course. One of the things I think that the course in the fall helped me with was to come up with better ways to define it and design ways to use it better.

5. "In retrospect, now that you have completed the course and know what you had planned for the wiki and what it turned out being used for, were there any particular goals that you can say were not appropriate for the wiki, but these other goals were appropriate?"

Like I said, we kind of jumped in, so I don't think we had strong articulated goals at the outset. What I think it did better than I anticipated was that it was a great tool for creating content, for students to, not only process, but create ideas, and to do it collaboratively. And to make that knowledge that they create immediate and accessible to each other. When they have created this knowledge base, they can draw from it, adapt it, revise it, or change it. I think that two of the projects it was particularly helpful with were an inquiry-based, small research project. So they were able to post some of their ideas there, and some of the process that they did as well as the draft and then be able to

get some feedback. And then they did that for a thematic unit, and get ideas for the unit, so they did that as well, and then actual unit plans. As a part of that feel, to be able to get feedback from their peers and also look at the revisions they were making. I think that is one of the neat things about wikis, they allow you to look at the changes that have been made through the process.

6. In terms of writing, how do you use writing in your course work and what is your pedagogy behind writing?"

Writing is fundamental to the course. From creating ideas, doing guided freewrites in class, to using graphic organizers to build ideas, to doing research in which they were tracking their progress and process, to writing the research paper, writing lesson plans. I'd say it pretty much covers the spectrum.

7. Did you have any specific writing goals that you wanted accomplished and how did you do that with the wiki?

I think one of the things I try to do in a methods course is open them up to the idea of what English is and what studies are, that it is not just literature, it is not just about reading great works, but to try to incorporate the language arts; reading, writing, speaking, drama, listening, critical thinking. Writing is an integral part of that. A lot of the writing in an English class can be about the reading that is going on so building on what they probably do in their teaching writing course, really get them to see writing as a tool for thinking, for generating ideas, as a way to brainstorm and give feedback to each other. One aspect I think is really important that often gets left out is creative writing. So throughout the semester I do some poetry writing activities. I don't initially identify them as that, but part of what they realize through the word play and some of the activities we do is that is gets students to look at the poems.

Specifically, the wiki gave us a place to take ideas and progress we generated in class and firm them up and take them through the writing process. It allowed students to share ideas and get feedback from each other in a very efficient way, to get multiple perspectives on their writing.

8. "Do you think wikis have the ability to change students' views on the nature of writing?"

I think not only of writing, but also of thinking. Part of it is the idea of collaboration and immediate feedback you can get. Even going in when your contributing to ideas like journaling and the reading and writing workshop and going in with your ideas of what you are going to contribute and as your doing that, seeing what's their and that maybe influencing your ideas and shaping that so your contribution is affected as your about to do it. That is a little different mind-set that occurs, or a way of thinking that is going on.

9. "Do you see any limitations to this technology?"

I think a challenge would be if the library system did not provide it. Since I have been here, some of the messages coming from the university are that any of the work going on-line should be through a university-sponsored Web site; rather than going out to a commercial site, and I think there is controversy associated with that everywhere, with you tube, my space, or whatever. I think that is a challenge that academia faces and it is a question to ponder. Social networking tools were not created for academia and do we need them? I don't know. In some ways that probably plays into why the blog was less effective than the wiki, for us. I think it is an interesting question and it will be interesting to see how this nature to avoid commercial tools and sites will play out. In terms of the wiki as a tool in and of itself, I don't see many limitations, I see a lot of possibilities and that is something I am excited about, including in classes from here on out.

10. "You mentioned that that wikis were more affective than the blogs, how so?"

Participation was part of it, but I think in part it was what they were doing there. I don't think John and I really had a good sense of what to do with the blog and John did something very specific with the blog that the student's didn't like that much. It was related to the state-wide election and they were doing a little responding to the current event. I think part of it was our fault in terms of what we were structuring them to do. I think the nature was different from the wiki. It was really not about creating content so much as commenting on something. Part of that was that there was not as much interaction as with the wiki. Whereas the wiki provided opportunities, not only to respond, but to create and then not just to respond on the surface level, but in meaningful ways. The wiki was able to provide specific feedback that would change content that was posted there. It was more purposeful.

11. "Have you found any rhetorical concerns the wiki brought up for you or your students?"

Some things in terms of audience that I haven't explored are how long the wiki will last? How long will they keep it up? It will be interesting for future students to be able to access an archived version of this wiki. So that's one thing I think interests me. In terms of audience I see that it helps make an audience more immediate and more accessible. The interactivity and interaction between class members and the ability to create content is much more efficient. Another thing that interests me is being able to post final products that will be accessible to class members, but also to teachers in the field possibly. One of the interesting things that came up over the course was that someone from outside the class responded to a student's work. This was an adjunct faculty member in chemistry that provided feedback for a student's unit on the holocaust. It makes me wonder who is looking and what they are thinking. It threw the student. The comments were not inappropriate in any way, but the perception was that the wiki was *our* thing. But it does not have to be. It would be easy to involve some of the teachers in the field, because that is an explicit and implicit connection that we already have. Part of the class is cooperating with teachers, so there might be a way to involve them in the knowledge there.

12. You mentioned in your survey that one of the goals for the wiki is the importance of developing multimodal literacy, including technology resources and looking for ways to apply those resources in the classroom effectively. How are you defining multimodality and how crucial is that for these future teachers?

That's a big issue in English education right now. One, the idea of multimodal literacies and I don't think it is being defined very well. To me that really means giving students the skills and literacies to be able to express themselves in many different ways; traditional ways such as reading, writing, speaking, but also in less traditional ways like drama, dance, performance, and also with technology and emerging technologies. Part of it is that they are developing the critical mindset that they can learn to adapt and engage these literacies. We must give them opportunities to do this because the nature of the literacy is changing so fast with the emerging technologies that are out there. More important than the idea that they learn this software or this tool, is that they get the experience and skill set that they are open to approaching new tools with an open mind and the critical thinking needed to determine how affective it is and for what purposes. What will it get me and in what situation is it best to use it and how to use it?

13. "Do you think the wiki contributed to that understanding of multimodal literacy?"

Definitely. It helped make our thinking more visible to each other, which I think is really important. I think it is a way they can take that experience and think about ways that they can make their students thinking more visible to each other, not only as the teacher, but the students as resources for each other and an efficient way to do that. Also in terms of thinking about how knowledge is created. Not all the knowledge has to come from a textbook, or a book, or the teacher, that it is something that can be generated and dwelt upon as a class and the wiki is a tool for helping facilitate that, extending it, and making it public.

14. What are some of the questions you would be interested in seeing explored in the future of wiki research?"

I am interested in seeing what teachers are doing with it and teachers' perceptions of what they are using it for and how effective they see it in accomplishing what they are trying to do and also students' perceptions. My colleague and I collected a little data from students in terms of their perceptions of the wiki and blog and it was great to have in terms of seeing my intuitions reaffirmed by their feedback and to know that when you are taking a risk with something new, that some of it is going well. Also, what are the obstacles to doing this? I feel like it was a real gift to have the university library providing the infrastructure to let it happen and I don't imagine that this is true everywhere. If teachers do want to do this, what are the obstacles and how can they get beyond those? I would like to know what teachers are using them for in their class in terms of their pedagogy with their students, to teach their content and getting students to interact with the content.

Appendix F: Sample Wiki Assignments

Wiki in Service Learning:

- Adding to Wikipedia:
 - <http://www.mattbarton.net/tikiwiki/tiki-index.php?page=Rhetoric+Wikipedia+Project>
 - <http://www.mattbarton.net/tikiwiki/tiki-index.php?page=Free+Composition+Wiki+Text+Project>
 - <http://thuicc.wordpress.com/2006/10/19/this-afternoons-class/>
 - <http://mason.gmu.edu/~dtaciuch/2006/fall06/302/wiki.html>
- Suggested Exercises from Wikipedia:
 - http://en.wikipedia.org/wiki/Wikipedia:School_and_university_projects/Suggested_exercises
- School and University Projects on Wikipedia:
 - http://en.wikipedia.org/wiki/Wikipedia:School_and_university_projects

Wiki in Rhetorical Analysis:

- Analysis of Rhetorical Issues: <http://www.mattbarton.net/tikiwiki/tiki-index.php?page=Rhetorical+Issues+Wiki>
- Analysis on Writing on the Web: http://www.rpi.edu/~fernjh/WWWWf06/wiki_ongoing.html
- Analyzing a genre of Media: <http://ccit300-f06.wikispaces.com/Wiki+Assignment>

Responding to Assigned Readings on a Wiki:

- http://alexreid.typepad.com/digital_living/2006/10/inclass_wiki_as.html

Appendix H: Common Wiki Components

- Easily editable (Both)
 - Simple text markup language (Both)
 - Users can edit with plain Web browser. (Both)
 - Anyone can change anything. (Both)
- Wikis are not carefully crafted sites (Traditional)
 - CSS (Clones)
 - WYSIWYG (Clones)
- Hyperlinks (Both)
 - Page linking is intuitive (Both)
 - CamelCase (Traditional)
 - Interwiki (Both)
 - Page to page (Both)
 - Hyperlink to other WWW sites (Both)
- Page History (Both)
 - Content is ego-less, time-less, and never finished. (Traditional more than Clones)
 - Revision (Both)
 - Deletion (Both)
 - Creation (Both)
- Various Pages to Encourage Use (Both)
 - Sandbox (Both)
 - Tutorials/Help Pages (Both)
 - Special Pages (Both)
 - Most Visited (Clones)
 - Most Wanted (Clones)
 - Most Popular (Clones)
 - Most Edited (Clones)
- Administrator Review (Both)
 - Public administrators (by community users) (Both)
 - Appointed admins (Clones)
 - Creator admins (Clones)
- NPOV (Clones)
- Community Copyright (Both)
 - Creative Commons (Both)
 - GNU GPL (Both)
 - Cloning is acceptable (Both)

KEY:

Both = Characteristic common to traditional and clone wikis.

Traditional = Characteristic common mainly to traditional wikis.

Clones = Characteristic common mainly to clone wikis

Appendix H: Wikis Being Used in Education

- **Educational – Generic**
 - CRD 704 Technology and Pedagogy in the Communication Arts - http://wikis.lib.ncsu.edu/index.php/CRD_704
 - This is a wiki developed for the above-named course in the Ph.D. program in Communication, Rhetoric, and Digital Media at NC State University. It is designed to provide a resource within the course, across multiple sections of the course over time, and across the program. CRD 704 students are expected to contribute to the wiki, based on their research projects, but others may contribute as they wish. The wiki focuses on the relationship between technology and pedagogy specifically as related to the teaching of **communication** (writing, public speaking, etc.) in all **higher-education** disciplines.
 - Design Patterns for EduWiki - http://edwiki.org/mw/index.php/Design_Patterns_for_EduWikis
 - Teaching Hacks - <http://www.teachinghacks.com/wiki/index.php?title=Wikis>
 - Wiki in Education Book - <http://www.wikiineducation.com/display/ikiw/Home>
 - This book is a deep extension of the focus and content on my blog, [Using Wiki in Education](#). It contains 10 case studies written by teachers that describe how they're using the wiki to transform courses and engage today's students in a range of environments including high school, small college, major research university, online/distance learning and research lab.
 - Awakened Voice Wiki - http://wiki.awakenedvoice.com/index.php?title=Main_Page
 - The goal of this wiki project is to provide a repository for information related to social media.
 - BioBioWiki - http://bbwiki.tamu.edu/index.php?title=Main_Page
 - EducationalWikisWiki - <http://educationalwikis.wikispaces.com/Examples+of+educational+wikis>
 - Provides a list of K-12 Educational Wikis
- **Writing Specific**
 - CompFAQs - <http://comppile.tamucc.edu/wiki/CompFAQs/Home>
 - Teaching Wiki - <http://teachingwiki.org/default.aspx/TeachingWiki/MyHomePage.html>
 - Welcome . . . Teaching Wiki aspires to be a community for college-level faculty, particularly faculty teaching rhetoric and composition. However, as we invoke the wiki way here, we invite all college faculty and instructors to be wikiteachers with us. Feel free to use this site to reflect on teaching practices, cite resources and provide lesson plans.

- Bemidji State Wiki - <http://ferret.bemidjistate.edu/~morgan/cgi-bin/blogsAndWiki.pl>
 - MC Morgan offers many writing courses here that utilize the wiki.
- TAMUCC Wiki - <http://critical.tamucc.edu/wiki>
 - Wiki at Texas A& M Corpus Christi.
- Design Playground - <http://uniwikis.la.psu.edu/englishcomp/designplayground/HomePage>
 - Participants in the Summer 2005 first-term section of Technical Writing and Editing at Penn State are using this Wiki to facilitate collaboration on world-wide web writing and design projects, to post news and information about design, and to experiment with their own evolving conceptions of design.
- Matt Barton's Tikiwiki - <http://www.mattbarton.net/tikiwiki/tiki-index.php>
 - Barton teaches a St. Cloud University in Minnesota and uses the wiki in all of his courses. On the wiki, Barton places his previous and current courses which use the wiki as well as his assignments and schedule.
- Miami English Wiki by one professor - http://www.as.miami.edu/english/wiki105/index.php?title=Main_Page
- English 360 – Advanced Composition - <http://ac07.pbwiki.com/>
- Computers and Writing course, fall 2006 - <http://faculty.wiu.edu/CB-Dilger/f06/480/>
- STS 319: Information Technology and Social Life - <http://www.cwrl.utexas.edu/~barndollar/courses/fall06/sts319/>
- College Writing Course Wiki - <http://biro.bemidjistate.edu/cgi/en1101f03.pl>
- Intermediate Writing Course Wiki - <http://biro.bemidjistate.edu/cgi/en2101wiki.pl>
- English 111-OC: College Composition Wiki - <http://www.users.muohio.edu/mckeeha/eng111-06/>
- English 112: College Composition and Literature Wiki - <http://www.users.muohio.edu/mckeeha/english112/>

Appendix I: Summary of Common Wiki Uses and Problems in Pedagogy
Codes to the side were used to categorize each component in thesis.

Uses:

- Collaboration (COL)
 - Centered location (CL)
- Facilitation of work (FOW)
 - Analytical skills (ANA) and Synthesize Info (SI)
 - Direct interaction with primary materials (DIM)
 - Respond to reading (RTR)
 - Ease of use (EOU)
- Authorship/ownership (AUT/OWN)
 - Student ethos (SE)
 - Publish content (PUB)
- Audience extension (AU)
 - Peer-review (PR)
 - Social space (SP)
- Enhancing teaching and learning (ETL)
 - Think creatively (TCRE)
 - Think critically (TCRI)
 - Improve reading (IR)
 - Increase study skills (SSK)
 - Learn content (LC)
 - Understand technology (UT)
 - Technological literacy (TL)
 - Time management (TM)
 - Increase self-esteem (SELF)
 - Teacher as guide (TAG)
 - <http://biro.bemidjstate.edu/~morgan/wiki/wiki.php/NoteBook/VirtuesOfWiki>
- Knowledge Building/Reflection (KBR)
 - Collaborative/critical/communal knowledge building (CKB)
 - Critical knowledge reflection (CKR)
 - Raises rhetoric issues (RHET)
- Course management software (CMS)
- Effective writing (EW)
 - Improve writing (IW)
 - Writing as process (WAP)
 - Gets students writing online (SWO)
 - Multiple drafts (MD)
 - Transparency of writing (TRAN)
 - Changes understanding of nature of writing (NOW)
- Facilitates community (FC)
- Facilitates research (FR)
- Multimodal literacy (ML)
 - Linking (LINK)

Problems:

- Initial student interaction (ISI)
- Unclear role/definition of topic (UDT)
- Comments (COM)
- Privacy/security (SEC/PRI)
- Experience with software (EXP)
- Freezing content (FC)
- Track individual changes/contributions (TIC)
- Easier Interface (EI)
- Faculty-to-student interaction (FTSI)
- More engagement w/wiki activities (WACT)
- Less Wiki use (LESSW)
- More capabilities (MCAP)
- More Access (MACC)
- Better Commenting (COMMENT)
- Veracity/Truth of Content (TRUE)
- IT Support (ITSUP)

Things needed for a successful wiki:

- Clear Topic
- Understood Rhetoric
- Clear assignments
- Good Communication skills
- NPOV (understanding that POV is a good thing)
- Strong and clear pedagogy
- Technical Considerations

Possible Assignments

- Students post assignment for revision
- Portfolio
- Journal
- Web site
- Notepad
- Agenda
- Teacher can post new assignments for students to submit
- Teacher can create organic (naturally evolving) syllabus:
 - Assignment posts
 - Calendar (Due Dates, Holidays, etc.)
 - Grading Scale
 - Required Texts
 - Posting Grades (anonymously through social security number of come random class number assignment)
- Discussion Board