

BLOGS, WIKIS, AND E-PORTFOLIOS:  
THE EFFECTIVENESS OF TECHNOLOGY ON ACTUAL LEARNING IN COLLEGE  
COMPOSITION

by

Edith M. Kennedy  
A Dissertation  
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Spring Semester 2010  
George Mason University  
Fairfax, VA

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## **DEDICATION**

To my parents – who through all the years never lost faith in me. Thank you for the encouragement, the belief, and the constancy that you showed me.

Cody, all worthwhile things take time and hard work.

May the velociraptors now rest easy and hunt elsewhere.

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To all of these people I owe a debt of gratitude that can never be repaid. All that I can do is endeavor to teach in a way that creates a legacy for them.

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## **ABSTRACT**

### **BLOGS, WIKIS, AND E-PORTFOLIOS: THE EFFECTIVENESS OF TECHNOLOGY ON ACTUAL LEARNING IN COLLEGE COMPOSITION**

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This study, as the title suggests, examines the effectiveness of using blogs, wikis, and e-portfolios in College Composition classes. The value of these tools was examined in their relationship with actual and real learning where these concepts are defined as the gaining of knowledge that is readily retrievable and is used in an active fashion that shows it has been integrated into the thought processes. The questions examined are whether or not there is a pedagogical underpinning to use these technologies and whether or not these tools really enhance student writing.

Over the course of three semesters, the work of 207 students was examined to determine the effect of assigning work on blogs, wikis, and e-portfolios. The students were enrolled in College Composition I and College Composition II classes at Northern Virginia Community College, Manassas, Virginia. Students ranged from dual-enrolled high school students to traditional students and to those returning to class after an

extended absence. Some students had previous experience with computers and others were novices.

The pedagogical areas examined in this study are Time on Task, Collaboration, Peer Feedback, and Reflection. Using these criteria as indicators of success, the application of blogs, wikis, and e-portfolios did create a learning environment that enhanced the opportunity for student success. In addition, an examination of student writing showed an improvement in the composition of their academic prose across the duration of the courses. While there is a learning curve for students and instructors to master these technologies, they do contribute to actual learning in composition classrooms.

This study will be of interest to teachers contemplating the use of or already utilizing technologies in the composition classroom with any level of student from high school to college graduate students. This document contains a discussion of the elements of each of the technologies under discussion, their application in composition classes, and their effectiveness. Ample use of student work is included to show the results of these assignments.

## **1. INTRODUCTION**

Beginning in the late 1990s with the advent of the World Wide Web, technology was touted as the wave of the future in classrooms. It was to be the panacea for laissez-faire students, boring lectures, and dull assignments. In addition to bringing life to the classroom, it supposedly would enable students to be better informed and more comprehensive in their discussions by giving instantaneous access to needed research. Because technology was fun and innovative, students would look forward to their assignments, and according to Anson (1999), students would move smoothly between electronic downloads of information, e-mails to and from instructors, and electronic submission of assignments. Beyond being the cure for all the ills of higher education, it was predicted that technology in the classroom would quickly become ubiquitous. In its very invasiveness, technology was expected to alter the way that teaching and learning occur, just as the chalkboard forever changed the face of the classroom and the way that information was exchanged between teacher and learner (Krause, 2000).

Many of these early predictions have materialized. Smartboards, DVD players, and computer consoles are prevalent in classrooms. Composition classes are regularly taught in computer labs, allowing students easy access to word processors and research tools on the Internet, all through the presence of computers. Computers have altered the face of teaching and learning more fundamentally than any change since their

technological predecessor the chalkboard. Perhaps one of the most fundamental changes to teaching and learning is the shift of students from consumers to producers. The initial advantage that was seen for technology was the ease with which students would be able to access materials for research. The World Wide Web and electronic databases placed information at the students' fingers tips, allowing them to research and compose without moving away from the computer. The student as consumer eventually changed as students began to create their own digital documents, becoming producers.

These digital documents were initially in the form of text documents. Word processing software made it easy to cut and paste, edit, spell check, and move blocks of text. Outside of the classroom, students became involved in even more digital creations. The advent of Facebook and MySpace allowed for communication between "friends" in disparate places, "overcoming or shifting...geographic boundaries and the construction/deconstruction of space" (Brown, 2006, Community as Metaphor, para. 1). Text messaging and e-mail have replaced telephone and face-to-face conversations. Almost everyone has a personal blog and a Webpage, some of these hosted by social networking sites while others are a product of HTML coding. All of this electronic conversation is affecting how people compose. This has far-reaching effects not only in the public sphere but also in the composition classroom. While "85% of youth ages 12-17 engage at least occasionally in some form of electronic personal communication, . . .60% of teens do not think of these electronic texts as 'writing'" (Pew Internet, 2008, para. 1). In fact, they claim that there is a "fundamental distinction between their electronic social

communication and the more formal writing they do for school” (Pew Internet, 2008, para. 1). While

73% of teens say their personal electronic communications. . . have no impact on the writing they do for school, 64% of teens admit that they incorporate, often accidentally, at least some informal writing styles used in personal electronic communication into their writing for school. (Pew Internet, 2008, para. 2)

Most composition instructors are aware of the growing number of instances in which “text messaging language” creeps into student composition. This is ready evidence of the growing number of students as producers and not just consumers.

It is clear that students are not just consumers; they are producers of electronic media. Technology in the classroom has moved from a new and easier way to gain information to a broader and more comprehensive mode of communication. Techno-savvy composition teachers have capitalized on these new innovations by introducing media such as podcasts, Webpages, video creations, blogs, wikis, and e-portfolios into their classrooms. These methods of communication are being used to teach argumentation in new and fascinating ways, incorporating both traditional word use and adding the extra dimension of visual arguments.

Community colleges have long ascribed to the tenet of being learner-centered institutions. In his seminal work, *A Learning College for the 21<sup>st</sup> Century*, O’Banion (1997) acknowledges that “community colleges have always been student-centered institutions” (p. 26). There has been much debate and discussion as to the relative merits of and distinctions between research and teaching institutions. In this delineation, “the

community college has always taken great pride in its commitment to teaching as its highest calling” rather than research (p. 27). Supporting the belief in a student-centered learning paradigm, Barr and Tagg (1995) state that “the mission of the community college is to produce learning” (p. 15).

A major aspect in determining whether or not learning is occurring depends on understanding learning modalities. Cross (1999) holds that

learning is about making connections—whether the connections are established by firing synapses in the brain, the “ah ha” experience of seeing the connection between two formerly isolated concepts, or the satisfaction of seeing the connection between an abstraction and a “hands-on” concrete application. (p. 5)

This is the basis of active learning, allowing students to experience what they are learning rather than just hearing a lecture about it or reading it in a text. This type of learning leads more readily to a deep rather than a surface understanding of the concepts at hand.

In his discussion of a student-centered approach to learning, O’Banion (1997) addresses the issue of technology in the classroom. He writes that technology is seen as either a broken arrow that “does not always hit the mark” or a “magic bullet” (p. 65). In O’Banion’s opinion, it is not the presence of the technology that matters; it is the wielder who makes the difference. Even in “adept hands” he warns, it may “open a can of worms” (p. 70). It can, however, be a “flexible tool that can enhance and expand learning when it is used to support a potent pedagogy and a content-rich curriculum” (p. 70). If technology is to be part of a community college’s student-centered learning institution, studies need to be done to determine if a learning atmosphere is created and if actual

learning is taking place with the introduction of these new technologies into the classrooms. This study addressed those issues and the findings may be useful to anyone who teaches composition.

## **2. REVIEW OF THE LITERATURE**

Research is rich with knowledge in the areas of technology in the classroom, theories of learning modalities, studies in pedagogy, and methods of assessment. Research into the area of actual learning in technology-based classrooms must begin with a thorough grounding in the relevant and important knowledge in these areas. Because these areas do not always overlap, they are presented here in distinct subsets of literature.

### **Technology in the Classroom**

Technology has become almost ubiquitous in education. It is now standard that many classrooms have computers equipped with the latest software. Grades are entered and checked electronically, eliminating the paper report card. “Green” teachers are eliminating the use of paper handouts. A study of technology in the classroom needs to start with an understanding of the changing role of technology in education and the success or failure of those applications.

In “Technology as a Change Agent for the Teaching Process,” Johnson, Schwab, and Foa (1999), in the vein of research prevalent at that time, focus mostly on using the computer to research topics and then share that information. They do, however, provide an interesting look at the value of group work in research and learning. They advocate that technology can provide this necessary link between students to facilitate group work which fosters better learning. In our divergent society, and especially on commuter



campuses, the ability for students to communicate long-distance via computer technology that allows file exchanges, synchronous and asynchronous discussions, and chat rooms, enhances the opportunity for learning.

In research that moves away from students as merely consumers of information, Richardson (2003) provides a very basic look at blogs in the classroom. He defines what they are and their appeal to students. He provides names and sources of free Web log sites and advice on getting started. In addition, he provides some discussion of his own use of blogs in the classroom. In one instance, he says that “online discussions stimulate debate and motivate students to do close reading of the text” (p. 40). Like Richardson, Weiler (2003) also believes that “blogs have great potential for educational use, both on their own and as extensions of the traditional classroom” (p. 75). They enable students to share and collaborate, providing a forum in which anyone can participate. This type of activity is the active learning that Cross (1999) also advocates.

While Selfe’s (2003) essay, “Techno-Pedagogical Explorations: Toward Sustainable Technology-Rich Instruction” is basically a list of reminders for using technology in the classroom, it does provide valuable advice. He, like Weiler (2003), claims that all technology-rich pedagogy is experimental and warns that teachers should not let the technologies drive the pedagogy. Weiler warns that “using technology for technology’s sake or for its novelty is not best practice” (p. 73). Selfe (2003) stresses that assignments should be sequenced and assessed to enable learning and to determine if learning is occurring. In the essence of the scholarship of teaching and learning, he also

advocates that teachers should seek advice from experts and then share their own knowledge with others.

Although not specifically related to blogs, wikis, and e-portfolios, Yancey's (2003) discussion of teaching with e-mails and listserves adds valuable insight that can be transferred to the use of other technologies. Yancey claims that these options "offer teachers new ways to connect with students" (p. 106) and that these connections offer "opportunities for several kinds of student interactions" (p. 109), thus providing the connections that Cross (1999) mandated for active learning. In addition, Yancey also advises that teachers must know why they are adding these assignments to the syllabus and what they hope to accomplish by using them. She goes on to add that teachers must "stipulate parameters and outline expectations" (p. 113) for the students, and that any type of e-activity must connect to classroom activities. This is an echo of both Selfe's (2003) and Weiler's (2003) admonition that technology must serve a pedagogical purpose in the classroom, that it must not simply be there for no apparent purpose. Not only must the teacher understand this purpose, but it must also be expressed to the students.

Moving from a purely word-based to a more visual experience, George (2002) begins her discussion of the long history of visuals in the classroom, typically films. According to George, these were used mostly for consumption by students, to jump-start a writing assignment. However, George is more interested in using visuals as a form of communication, having students actually create a visual argument. She covers the possibility of accomplishing this and what is needed to do it, comparing the elements of a written argument to those of a visual argument. George posits that "for students who have

grown up in a technology-saturated and image-rich culture, questions of communication and composition absolutely will include the visual, not as attendant to the verbal but as complex communication intricately related to the world around them” (p. 32). The idea of “reading” visuals is not a new concept. It has been applied to commercial advertisements, photographs, and paintings for years. It has long been accepted that visual representations, “like written arguments. . .stake out positions, or offer points of view” (Faigley, George, Palchik, & Selfe, 2004, p. 384). According to Bayer (1977), “‘good’ photographic images intrigue, present a mystery, or demand to be read” (p. 90). Kennedy (1992) writes that

the human eye is an amazing organ, registering and interpreting subliminal messages that help to create an atmosphere from a photograph just as the careful choice of words by an author can create the tone of a story through mental images. (p. 2)

George has simply moved the conversation from photographs to Web-based products. Blythe (2003) also contends that the inclusion of visuals is an important element in student-produced Web products. As student consumers move to more visual-based media, their products are doing the same.

While there is much discussion of the ways that new technologies are affecting and often undermining traditional text-based literacy skills, Gruber (2003), contends that “new communications technologies are not necessarily undermining or replacing ‘traditional’ or text-based literacy skills” (p. 153). Instead she sees them as an extension of skills valued by teachers. She discusses how using the internet can teach students to

explore purpose and audience, to examine authorial intent, and to notice the use of emotion and logic. Web pages, like student essays, have a hierarchical arrangement, forcing the producer to decide what is important. Both products are typically arranged so that the vital information, the thesis or topic, has prime placement: early in the essay or on the first page of the site. These are skills that teachers already try to impress on students through the use of text material.

In addition to producing a written document, either text or Web-based, technology can improve classroom experiences. Fife (2008) finds “online discussions to be an ideal enhancement to face-to-face discussions by involving students who hesitate to participate in classroom discussion and by enhancing the depth and insight reached in the face-to-face-discussion” (p. 37). As class discussions, both large- and small-group, are a major component of the composition classroom, the ability to improve participation and involvement is a decided bonus to students. The additional benefit of providing more reticent students with an easier access to the class is an advantage not to be overlooked.

Parker of Idaho State University and Chao of Bowling Green State University (2007) collaborated on “Wiki as Teaching Tool,” an article that explains wiki usage and examines their use in cooperative/collaborative and constructivist paradigms. They claim that “higher education has only recently begun to explore the potential educational value of wikis as a means to promote deeper learning and integration of learning experiences from both inside the classroom and out” (p. 60). They cite comparative studies using threaded discussions or wikis to support their assertion that wikis outperform other Web

2.0 technologies. According to Parker and Chao, wikis can and will have a major impact on the teaching and learning of future students.

Focusing specifically on the use of wiki technology in the classroom, Notari (2006), a professor at Geneva University, uses this teaching tool as a Collaboration Script. Notari defines a Collaboration Script as a “pedagogical scenario with several distinct phases” that run in a linear sequence but are iterative in nature (p. 131).

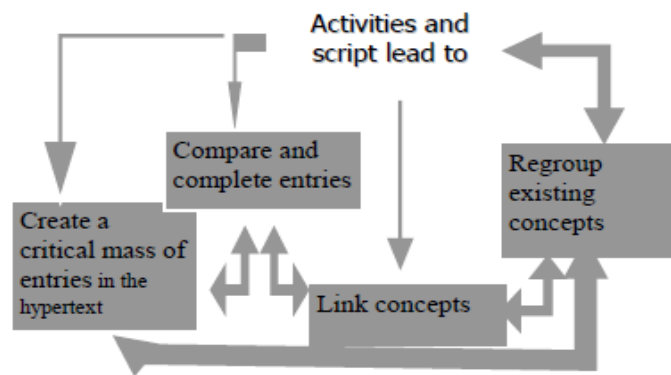


Figure 1. Notari's Activity Cycle. From Notari (2006).

The arrows in Figure 1 illustrate the iterative nature that Notari discusses. As students work within the technology, they are utilizing, manipulating, and linking ideas and concepts through group activities facilitated by the wiki technology.

Lamb (2004), project coordinator with the Office of Learning Technology at the University of British Columbia, writes that “perhaps the most common pedagogical application of wikis in education is to support writing instruction” (44). Wikis encourage collaboration and “ease students into writing for public consumption” (44). Many

freshmen students are struggling to make the rhetorical leap from writing personal narratives or “because it was assigned” to writing with a purpose. Students may display the ability to write well based on their use of grammar and syntax, but they “lack an ability to support an argument” (McClish, as cited in Su, 2009, para. 29). Wikis provide consumers—other than the instructor—to encourage students (producers) to think about their audience. This lends a legitimacy and immediacy to the writing that typical class assignments often lack.

Joe Moxley, a professor of English at the University of South Florida, adds to the pedagogical discussion of wikis with his belief that they “promote close reading, revision, and tracking of drafts (as cited in Lamb, 2004, 44). He continues that wikis “discourage “product oriented writing” while facilitating “writing as a process” (as cited in Lamb, 2004, 44). Writing as a process is that tenuous idea that most composition instructors attempt to impress on students. No piece of writing is ever “done.” Wikis, with their built-in collaboration and tracking system, help students to *see* this.

Perhaps one of the most important aspects of wiki technology is the realization that “we are not developing new ways of teaching; instead, we are investigating ways to use wikis to enhance time-tested pedagogies” (Albert & Kussmaul, 2008, p. 49).

According to Albert and Kussmaul, wikis capitalize on the ideas that writing is not a solitary endeavor, that writers “collaborate with others, seek feedback and integrate it into their work” (p. 50). They go on to say that “wikis have greatly enhanced many of the standard methods for teaching writing that we had already been implementing, including close reading, peer review, and collaboration. Like Moxley (as cited in Lamb, 2004, 44),

Albert and Kussmaul see wikis as a way to utilize Web 2.0 technologies to achieve what composition instructors have been striving to do all along.

One of the least discussed aspects of teaching with wikis is that they “may prove to be invaluable for teaching the rhetoric of emergent technologies” (Lamb, 2004, 44). It has been theorized and discussed in numerous mediums that newspapers as tangible, paper products may soon disappear, replaced by blogs and wiki discussions where participants are expected to do more than consume information. In this emergent field writers and consumers will be expected to collaborate on creating, fact-checking, and disseminating information. If the purpose of rhetoric/composition classes is to enable students to be productive members of the writing/reading community, as instructors we need to look to the future and make sure that we are adequately equipping our students to participate in the technologies that will dominate that future.

The pedagogy underlying the use of wikis in the classroom is presented in Fountain’s “Wiki Pedagogy” (2007). Here he provides a full description of the history and aspects of what a wiki is before moving on to their application in education. The most important discussion that he provides is one of authority, claiming that wikis work “most effectively when students can assert meaningful autonomy over the process” (para. 2). While this autonomy gives students both freedom and responsibility for their own learning and the members of their wiki group, it challenges the traditional role of student to teacher. According to Fountain, for wikis to be a successful learning tool, teachers must be willing to relinquish control over the process and the product.

Turning more specifically to blogs, Vie (2008) writes that incorporating blogs into the composition classroom may not only motivate students to write, but may also persuade them to enjoy writing by drawing connections between the online writing they do for fun, like instant messaging and chatting in social networks, and their academic writing. (p. 81)

Like Lamb's claim about wiki technology, Vie feels that "blogging can also help students develop the critical rhetorical skills necessary for a digital age" (p. 81). Her contention is that the way in which information is disseminated is vastly different than previous methods. This should mean that composition instructors teach students to both receive and create texts in this new format. Blogs are the new wave of writing and therefore need a place in the composition classroom.

Dewitt and Dickson (2003) offer advice for instituting technology into the composition classroom. Like Selfe (2003) and Weiler (2003), they recommend that "technology should be secondary to learning" (p. 69) and that "the use of technology should be balanced with sound teaching practice" (p. 70). After they designed a new composition class with a Webpage as the final paper in addition to some smaller writing assignments, they determined that the final assignment was too technology heavy and was not well-integrated into the class. The assignment did not allow the students to develop their writing skills because of the tech learning curve. Instead they advocate a slower approach to the technology, allowing time for the students to learn a needed technology, not one that was added for the "wow" factor. Echoing O'Banion's (1977)



earlier warning, Eldred and Toner (2003) also add their voices to the call that teachers who use technology to teach must do so responsibly.

### **Learning Modalities**

In order to fulfill the advice of technology advocates (Dewitt & Dickson, 2003; Eldred & Toner, 2008; O'Banion, 1997), it is necessary to look at learning modalities. A basic understanding of how people learn can enable creating assignments that are not designed to showcase the technology, but instead have been developed to enhance learning through using technology. It is only when the pedagogy is reliable that true learning can take place. Pedagogy, in turn, depends on understanding learning modalities to be effective.

The authors of *How People Learn* (National Research Council, 2000) readily admit that “experts’ abilities to think and solve problems depend strongly on a rich body of knowledge about subject matter” (p. 9). Basically, we need to know facts in order to solve problems; yet this leaves us with the question broached by Marchese (2002) of how much is too much. According to Marchese, if information is presented too quickly, there is no time for it to be incorporated into the thinking processes, but if enough information is not given, the students are left stranded without the tools to function. According to *How People Learn*, scientists and mathematicians store information in distinctly arranged “chunks” that are readily accessible for retrieval. Their “knowledge is conditionalized” (National Research Council, 2000, p. 43), stored in contexts in which it is useful, allowing these people to rapidly scan through possible solutions until a resolution is achieved. Marchese (2002) also advocates for deep learning. He writes that students must

internalize knowledge—make it a part of their own psyche—before they are capable of really applying this information. Although necessary, memorizing basic facts and theories is not enough. Students must learn to use that information in viable ways that do not simply require a parroting back facts and data. They need to see the relations between the new information and what they do. This new information needs to follow them out of the classroom and beyond the final exam to infuse their daily lives.

Marchese (2002) discusses the very ideas that Kolb (1984) presented much earlier. Although Kolb wrote about work-related experiences and service learning, he urges the same concepts that Marchese introduced. Students need to actually use the facts that they have gained. In the words of Cross (1999), “students remember what they understand—what they have connected in their own schemata—not necessarily what is said by the teacher” (p. 9). This is the distinctly arranged chunks of information that is referred to in *How People Learn* (National Research Council, 2000). Similar to Kolb, Cross stresses that students must make connections in order for learning to take place. It is through experience, by having the “time to talk, write, reflect, and otherwise engage in activities that help them to make the material their own” (Kolb, 1999, p. 11) that students learn best. Marchese, Kolb, and Cross all advocate that students must make the information their own, integrating it into their own belief system and knowledge base. Only through repeated exposure to and interaction with the knowledge will actual learning take place.

In her presentation “This Little Light of Mind: Using Brain-Friendly Strategies to Help Students Shine,” Elder (2008) focuses on how the brain learns naturally. She

discusses brain-friendly strategies such as engaging student interest and encouraging participation to energize teaching and student learning. She advocates that these strategies are “especially apropos and engaging for the ‘digital natives’ who fill our classrooms.” Smilkstein (2008), in “Increasing Student Motivation, Engagement, Empowerment, and Success with Brain-Compatible Teaching,” presents research about how students learn naturally and the brain’s innate learning process. She claims that these “areas of research converge, providing a classroom-proven guide to help faculty develop and deliver curricula that make it possible for every student to experience engaging, empowering, successful learning.” These two research efforts focus on the ways that people learn, providing the bridge between pedagogy and brain function.

Similar to Smilkstein (2003), Wolfe (2001) challenges teachers to adopt classroom practices that give students *time* to learn. She advises that instructors “must consider. . .[memory as] a process, not a thing” (p. 75). In order for information to get into the brain, there needs to be rehearsal of the input so that it is firmly rooted in long-term memory. Incoming data is first delivered to the receptors of the sensory memory. A minimum amount of processing sends input into the working memory. If this information is not processed further, it is simply forgotten. Input is not transferred along the neural network into long-term memory if there is no elaboration of the processes. Only through rehearsal is the information implanted in long-term memory where it is retrievable for active use.

Halpern and Hakel (2003) concur with Marchese (2002), Kolb (1984), and Cross (1999). However, for a theory to be a useful addition to the repertoire of teachers, it needs

to be applicable across disciplines. While not all advocates of The Scholarship of Teaching and Learning agree, for basic theories to be generalizable, they need to be transferable. Halpern and Hakel move the theory of experiential learning from the science and math classes where it is usually demonstrated to a Developmental English course. They posit three principles. The first is that “information that is frequently retrieved becomes more retrievable” (38). In other words, the more often the material is used, the easier it becomes to remember. Second, they propose that the occurrence of “multiple retrieval cues” (39) will enhance recovery of material. In essence, there need to be different ways in which the material is sought. The third supposition is that students need both “visuospatial information and...auditory-verbal information” (39). This does not reflect the concept that some students are visual learners while others are auditory learners. Instead it affirms that individual people need information presented in multiple modes for Cross’s connections to be formed.

### **Pedagogy**

Pedagogy, the art and science of teaching, must depend on an understanding of the learning modalities mentioned in the previous section to enable creating assignments that both promote and enhance learning. Good teaching is not an accident; it occurs by careful design resulting from an understanding of the subject, the students and how they learn, and the tools to be used. The addition of technologies to this equation only changes the parameters in that an equal understanding of the technologies must be added.

Barr and Tagg (1995) consider that the mission of teachers “is not instruction but rather that of producing learning with every student by whatever means works best” (p.

15). The description they present of the Learning Paradigm that has become central to the beliefs and structure of community colleges provides an admirable aim for teachers. In fulfilling the colleges' mission to "produce learning," the institutions must "create environments and experiences that bring students to discover and construct knowledge for themselves" (p. 12). These environments will enable students to make the connections in their schemata that are necessary for deep learning. Hutchings and Shulman (2000) also "propose that *all* faculty have an obligation to teach well, to engage students, and to foster important forms of student learning" (15). While Barr and Tagg, and Hutchings and Shulman all recognize the responsibility that the professorate has to teach well with the students' best interests foremost, they also recognize that the students must accept some responsibility for their own learning. Teachers must create the atmosphere and the assignments that foster active, deep learning, but students must capitalize on that effort with a matching endeavor of their own.

Hutchings and Shulman (1999) go on to advocate that "a scholarship of teaching is *not* synonymous with excellent teaching" (13). In fact, research is to be done with the ultimate goal of assessing and evaluating techniques that will improve teaching beyond the individual classroom. There is a continuous evaluation and critique of methods by excellent teachers. The answers to the questions that arise add to the teaching arsenal, making excellent teachers even better. There then follows another series of questions and critiques. Hutchings and Shulman also warn against "a seat-of-the-pants operation, with each of us out there making it up as we go" (14). Instead they advise that assignments should undergo rigorous study and peer review. Assignments should be critiqued and

assessed before being implemented and accepted. This helps to create the atmosphere of Barr and Tagg's (1995) Learning Paradigm.

While Barr and Tagg (1995) present a comprehensive overview of what a Learning Paradigm institution will accomplish, they do not explain how this will occur. Chickering and Gamson (1987) provide insight into filling that gap of knowledge. They set forth seven principles that will create the atmosphere of learning that Barr and Tagg propose. Like Cross (1999), they advocate that good teachers encourage active learning and cooperation among students. Time spent on task actually using the information that they have gained will enable students to “make what they learn part of themselves” (Chickering & Gamson, 1987, para. 12). This creates the pathways of retrieval that allow students to utilize their new knowledge in varying settings. Working together with other students “often increases involvement in learning” (para. 9), thereby creating a greater motivation to master new skills. All these attributes create the atmosphere necessary for the Learning Paradigm to become a reality. In *The Learning Paradigm College* (2003), Barr revisited the idea of creating a learner-centered college. He echoed some of Chickering and Gamson's recommendations when he advocated six areas of focus to create this new type of school: goals, activity, information, time, community, and alignment. He insists that administrators and instructors must work together to make the whole a product of the parts.

Thaiss and Zawaki (2006) offer insight into the necessity of self-reflection as a constituent of learning. They claim that students do not appear in class as “a tabula rasa in knowledge of written rhetoric” (p. 142). Students have already experienced teaching and

learning by the time they reach the college composition classroom. As instructors, we are attempting to build on, and sometimes to alter, that existing knowledge. Composition instruction, then, often does not result in huge and immediately recognizable gains in learning and skills. It is not that students do not learn; it is that they sometimes do not recognize that they have gained information. Self-reflection becomes a component that will lead students to “think systematically about how they have changed and matured as writers” (p. 152).

### **Assessment**

The final set of literature that should be considered is that of assessment. Without the ability to accurately assess student learning, there is no way to determine if the assignments and technologies under discussion have actually had a positive influence on the acquisition of knowledge. Without the ability to determine this, the assignments may be nothing more than the “wow” factor decried by Dewitt and Dickson (2003).

Angelo and Cross (1993) have written what is arguably the most definitive text on classroom assessment. Most other work has drawn heavily on the work of these two people. Although their book, *Classroom Assessment Techniques: A Handbook for College Teachers*, is filled with concrete examples and templates for assessment across the curriculum, they also offer a valuable discussion of what constitutes assessment. In accordance with the principles of The Scholarship of Teaching and Learning, they focus their assessment techniques not on *what* students learn but *why* they do or do not learn. The main goal of these Classroom Assessment Techniques (CATs) is not to determine grades for students but to study the effectiveness of the teaching practices. Angelo and

Cross admit that their intention is “to encourage college teachers to become more systematic and sensitive observers of learning as it takes place every day in their classrooms” (p. xiii). Their approach is “learner-centered, teacher-directed, mutually beneficial, formative, context-specific, ongoing, and firmly rooted in good practice” (p. 4).

Angelo and Cross’s (1993) assessment is learner-centered in that it focuses on the students and what they need. While this type of assessment is used to determine what students have learned, it is not used to calculate grades. Instead, the knowledge gained from these techniques is used to guide teachers in restructuring or re-presenting material to the students. In this way the assessment is formative and ongoing. It is not done at the end of the semester as a final exam or evaluation. It is performed throughout the course to enable teacher and student to make adjustments for the benefit of the student, thus supporting the concept of being student-centered. Good assessment must also be mutually beneficial to both student and teacher. In order for this to be accomplished, both participants must be privy to the results and active in changing any undesirable outcomes. Teachers must sincerely and openly examine their own teaching techniques and styles to determine if the lack of student learning is based on faulty teaching. Students must also examine the outcomes to see if they are at fault in the results achieved. According to Angelo and Cross, if both parties are honest in their self-reflection, student participation and teacher practices should improve.

Palomba and Banta (1999) also believe that assessment should be used to evaluate the effectiveness of teaching. Rather than focusing on student outcomes, “the overriding



purpose of assessment is to understand how educational programs are working to determine whether they are contributing to student growth and development” (p. 5). Although the students are the ones taking the test, it is the teachers and the institutions that are being evaluated. The results should then be used to determine what is effective and what is not, what needs to be changed and what can, at least for a time, remain constant. The American Association of Higher Education (1996) also published its version of effective assessment. The authors state unequivocally that “assessment is not an end in itself but a vehicle for educational improvement” (American Association of Higher Education [AAHE], 1996, para. 3). They advocate that successful assessment of students will focus not just on what students know but also on “what they can do with what they know” (para. 4). While outcomes remain a central focus in a student-oriented Learning Paradigm institution, it is also equally important to understand and assess the “experiences that lead to those outcomes” (para. 6). The outcomes are important, “but to improve [those] outcomes we need to know about student experience along the way—about the curricula, teaching, and kind of student effort that lead to particular outcomes” (para. 6). Assessing assignments, student activities, and teaching methodologies can lead to improved student learning, growth, and development—the ultimate goals of a learning institute.

### **3. RESEARCH**

#### **The Problem and its Rationale**

Cross (1999) writes that

course conditions that promote deeper approaches to learning include active learning methods, encouragement of student interest in the subject, opportunities for students to interact with others and new information presented in a logical, integrated format to establish a well-structured knowledge base. (p. 11)

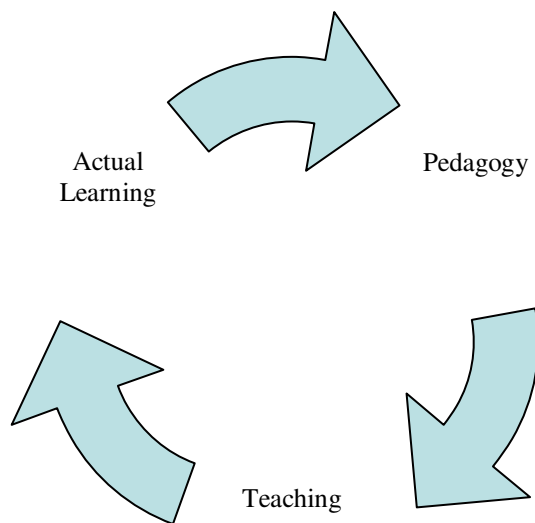
She also argues that “students need time to talk, write, reflect, and otherwise engage in activities that help them make the material their own” (p. 11).

Barr and Tagg (1995) believe that the mission of a learning institute is “not instruction but rather that of producing learning with every student by whatever means work best” (p. 12). This is accomplished by creating “environments and experiences that bring students to discover and construct knowledge for themselves” (p. 12).

Angelo and Cross (1993) assert that “the quality of student learning is directly, although not exclusively, related to the quality of teaching. Therefore, one of the most promising ways to improve learning is to improve teaching” (p. 7).

The relationship between pedagogy, teaching, and actual learning is well established. Without understanding, accepting, and utilizing the connectedness of these concepts, teachers will not move beyond assigning technology-based coursework for any

reason other than that students enjoy them. In order to reach the touted potential of technology in the classroom, instructors need to understand how pedagogy drives the teaching that ultimately affects learning. As illustrated in Figure 2, pedagogy, the art and science of teaching, should guide the act of teaching, which in turn influences learning in the classroom. This learning, when studied, dissected, and evaluated in a cyclic transformation, underpins pedagogy.



*Figure 2.* The cyclic relationship between pedagogy, learning, and teaching.

### **Research Questions**

The first research question was: Does the introduction of wikis, blogs, and e-portfolios into a freshman composition class create the qualities of a learning environment that encourage actual learning where this learning represents the concepts of deep learning that integrates knowledge into the students' way of thinking in such a way

that it becomes activated knowledge rather than inert knowledge (Paul & Elder, 2001)?

This first research question focused on the pedagogical implications of using technology.

In this instance, student outcomes were not the focus of attention. Instead, I looked primarily at the ability of these technologies to influence student learning based on accepted beliefs and understandings of how people learn, gain information, and enhance skills.

- a. Did introducing wikis encourage collaborative work among students to further the acquisition of desired writing skills?
- b. Did introducing blogs motivate students to become more involved in peer editing?
- c. Did introducing e-portfolios promote self-reflection and further exploration that led to a clearer understanding of the writing process?

The second research question was: Did actual learning occur with the implementation of wikis, blogs, and e-portfolios into a freshman composition class? This question, contrary to Research Question 1, did focus on student outcomes. Specifically, I concentrated on whether or not introducing the specified technologies under discussion led to enhanced writing skills that relied on the basic concepts covered in a freshman composition class. This portion of the study was to determine whether, after their exposure to and utilization of the particular technologies, student writing improved based on the principles of “Standard American Academic Prose” where this is understood to be “writing that fulfills a purpose of education in a college or university in the United States” (Thaiss & Zawacki, 2006, p. 4). Three features that “characterize academic

writing. . .[are] disciplined and persistent inquiry, control of sensation and emotion by reason, and an imagined reader who is likewise rational and informed” (p. 8).

- a. Did student writing improve across the semester as students utilized the specific technologies?
- b. Did students, through the use of the specific technologies, recognize problem areas in their own and their peers’ writings, and did they gain the ability to address these issues?
- c. Did students begin to develop their own voice in their writings, showing a maturing level of composition?

### **Research Design and Methodology**

The main modality of research was design and implementation. A course syllabus and assignments were designed and implemented which required students to interact with the course knowledge in non-traditional ways by manipulating texts on wikis, and by creating texts on blogs and e-portfolios. Students utilized these technologies to help them improve their composition skills.

Because this study dealt mostly with human reactions and perceptions, the research was primarily qualitative in structure. It consisted of gathering and studying the sequence of assignments that occurred across the duration of the semester. Assignments were evaluated against a rubric designed for the specific writing prompt. Although the genres of writing changed throughout the semester and from class to class, the basic tenets of writing (clarity, structure, voice, and format) remained the same. These were the focus of semester-long evaluations. In addition to studying the change in writing ability,

the contribution of the specified technologies was evaluated to determine if they did have a real effect on learning in the composition classroom. This was done by observing the writing that took place in these less formal environments to determine if the time on task engendered by these assignments showed an improvement in student writing.

The final assignment of the semester was an electronic portfolio (e-portfolio) which consisted of earlier drafts and final copies of student work. The accumulation of these electronic versions of work from across the semester made it possible to review the progressions in student work over the course of the term. These final formal writings were then compared to the intermediate and less formal stages created on the wikis and blogs to reveal the affects of the technologies under discussion.

Individual rubrics for each assignment were used to assess grades. The use of rubrics standardized the grading to assure that the same attributes were measured and evaluated. These rubrics were made available to the students at the beginning of the semester (see Appendices A and B).

To measure whether or not actual learning was occurring, student work was studied across the spectrum of the semester to determine if writing practices actually improved among individuals. This involved tracking student writing across the semester from the initial essay submitted to the final revisions included in the e-portfolios. Close reading was utilized to observe changes in style, syntax, grammar, and content. The essays of those students who agreed to participate in the study were collected and read to note changes in each author's ability to convey a message based on the genre of the essay

assigned. Students were also encouraged to include a discussion of their impressions of the uses of technology as one section of the e-portfolio's self-reflection portion.

### **Research Population**

The research population was drawn from composition classes that I taught at Northern Virginia Community College from fall semester 2008 to summer semester 2009. The age, life experience, and educational background of these students varied widely. Some were beyond what is generally accepted as the typical age of freshman college students (18-20), some had not been stellar students to this point in their college careers, and many were ESL students. Although they were typically freshman, this was not always true; some students opted to enroll in these freshman courses later in their programs. A small portion of these students were dual-enrolled high school students taking college classes.

While students chose which classes in which they would enroll, they did not know ahead of time that this study would be conducted in the class they chose. Students did, however, have the opportunity to opt out of participating in the study. While they were still required to complete all of the assignments, including the technology-based coursework, they were not forced to submit their work for evaluation within the study. No work other than that designated as part of the course curriculum was required of students participating in this study. The work for these classes was commensurate with other classes of this type that are taught utilizing more traditional assignments and methodologies. All evaluations for this study were done after the posting of final grades.

## **Data Collection**

As is often done in studies of this type that deal with students and their work as subjects (Hutchings, 2002). at some point during the semester, the students in the specified classes were given a letter of consent on which, at their own discretion, they indicated their preference to either grant or withhold permission to utilize their work. It was necessary to conduct this process during the semester as I would not be in contact with the students after final grades were posted. A person other than me delivered and collected these consent forms. The set of forms from each class was sealed in an envelope by the third party. These envelopes were placed in another sealed envelope and then housed in my chair's office until the posting of end-of-semester grades. Only after posting final grades were the forms released and made available to me. Once the consent forms were accessed, I determined which student work was designated as permissible to use in this study.

The only difference in the classes under study and other classes that I taught that semester was the administration of the consent forms. The work required and the assignments given were exactly the same for all students. Students in all of my classes submitted their assignments electronically through Blackboard, a course management tool. The students' original submissions along with the graded and commented versions were stored in the course folder on the Blackboard system. These documents were housed in a password protected environment, and only I had access to them. In addition to these versions, at the end of the semester, I routinely copied all student submissions to a CD that was stored with course materials such as syllabi and attendance sheets in case there



was ever a question about grades. These documents were securely stored in my office. No confidential or personal information such as grades or student identification numbers was stored in any of these files in either location. Student names were attached to the work, but I am the only person who viewed this material. The work of students who declined to participate was separated from the work of those who did agree to participate. Some students who agreed to participate in this study opted to remain anonymous; others wanted their names attached to their work. Only first names are used to protect the identity of the students involved.

Permission from the Human Subjects Review Board at George Mason and permission from Northern Virginia Community College were obtained before beginning this study.

## **4. TOOLS AND USES**

### **Tools**

#### **Wikis**

A wiki is a Web-based page that allows for the collaborative creation of text and graphics. Its intended usage is to allow participants at multiple locations to confer on creating a document without the delay and possible path-crossing of e-mail that may result in different versions of the same document. The word wiki comes from the Hawaiian word meaning quick (Augar, Raitman, & Zhou, 2004; Fountain, 2007). Each wiki participant can make changes and insert comments into the specified document. These changes and comments can be tracked through tagged names or color-keyed text. While the practices of wiki usage are typically similar, “it’s risky to talk about wikis as if they’re all the same” (Lamb, 2004, p. 38). Some wiki sites, such as PMwiki and PhPWiki, require the user to know “wiki syntax,” the language that is used to manipulate data within the wiki. This “wiki syntax” varies from site to site. This requirement can make the technology learning curve too difficult for a freshman composition class. Some wikis also require that the system be downloaded, unpacked, and installed on the user’s computer. PBwiki, the wiki site chosen for use in this study, did not require knowledge of “wiki syntax,” nor was the user required to download the program. Users simply accessed

the site online and registered for an account. All a user needed to use PBwiki was a computer and a Web browser.

While wikis vary in the options they possess, they all offer “read” and “edit” modes. When in the “read” mode, as the name implies, the user simply reads or views the content. This can include comments that have been made or changes that have been added to the text. In the “edit” mode, users can alter the content or layout as they see fit. Moving from read to edit is usually accomplished by clicking on the edit tab. In Wikipedia, a well-known wiki, this tab is located at the top of the page (Figure 3).

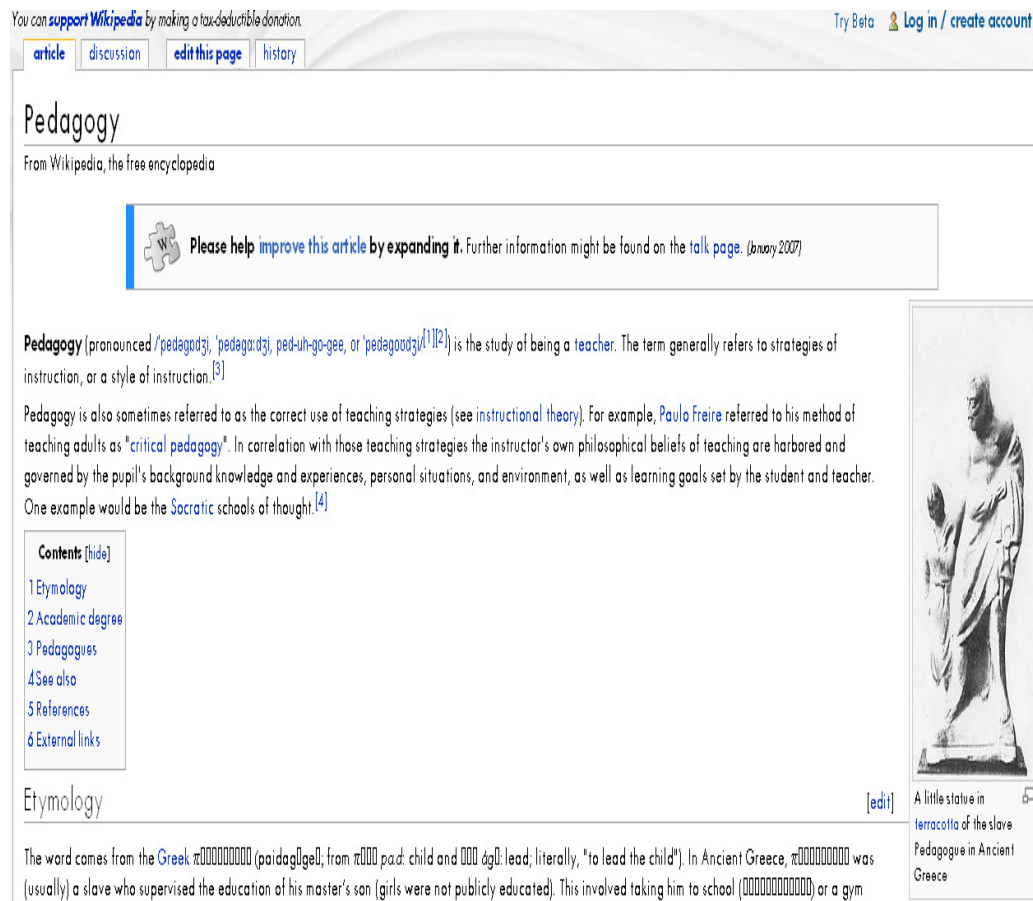


Figure 3. Wikipedia's read mode.

Because all wikis are different, the edit tab may be located in other areas of the page. Additionally, depending on the wiki selected for use, other tabs may be present. Clicking on the edit tab will move the user from read to edit. In edit mode, Wikipedia's "wiki syntax" becomes evident. Figure 4 shows the mark-ups that are necessary to create the readable text differentiated by bold typeface, differing colors and sizes of font, and the arrangement of tables and images.

```
{| class="messagebox standard-talk" style="padding: 6px">
|-
| colspan="3" style="font-size: 150%; text-align: center; height: 2em"
general questions!'''
|-
| [[Image:Emblem-important.svg|80px]]
| <big>This page is '''only''' for discussion of the article "[[Wiki]]

You are '''probably''' looking for one of the following pages:
* '''[[Wikipedia:Starting an article#How to create a page|How to creat
*'''[[Wikipedia:Help desk|Help desk]]''' - For questions about Wikiped
*'''[[Wikipedia:Reference desk|Reference desk]]''' - For questions on :
Please reread [[Wikipedia:Questions]] for more details.
|}
.. ... .
```

*Figure 4. Wikipedia's edit mode.*

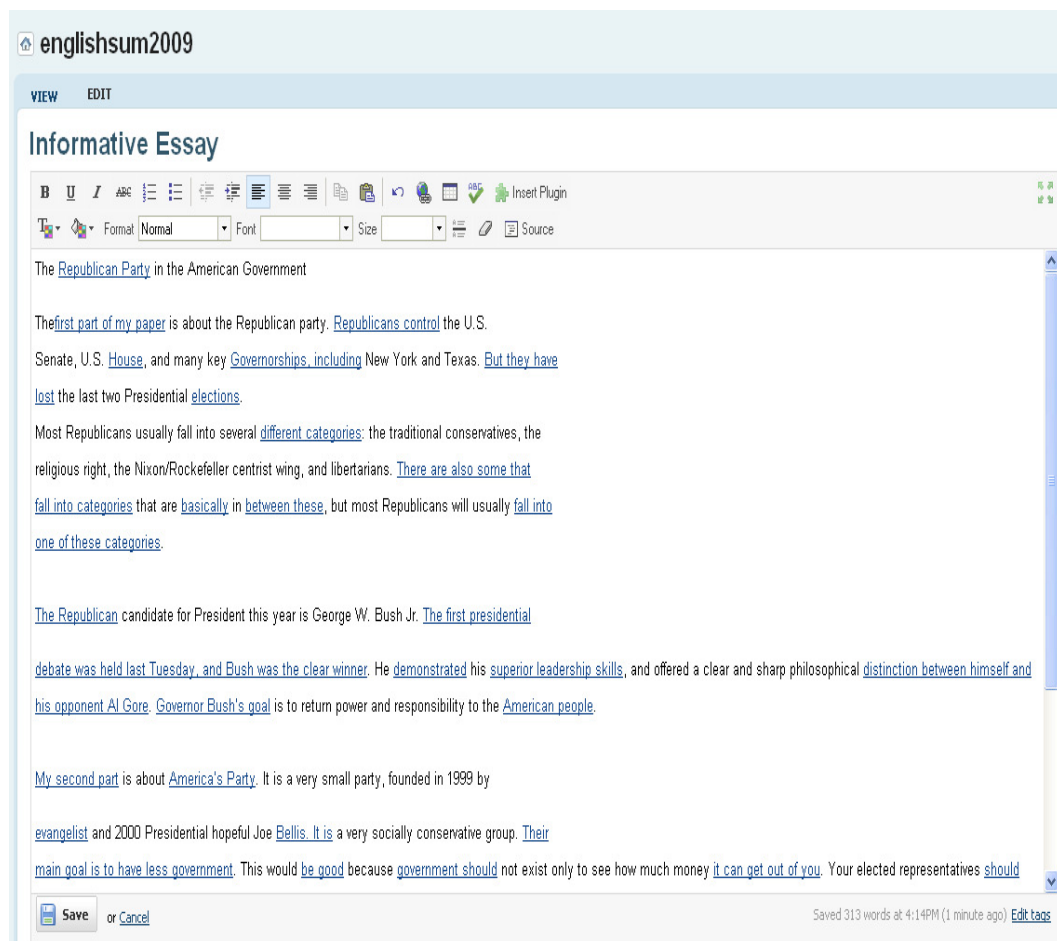
It is necessary to determine what features will be needed and then choose the easiest wiki to operate that possesses the desired traits in order to facilitate student use. PBwiki, the wiki source chosen for this study, does not offer as many choices as some of the other open source wikis. However, this is well offset by the simplicity of use. In Figure 5, note the clarity of choices and the design simplicity of the PBwiki site as

compared to Wikipedia. Although there is no option for “Discussion” on the tabs, PBwiki offers all of the options that were needed for the assignments done in this study.



*Figure 5. PBwiki's read mode.*

Figure 6, showing PBwiki's edit mode, highlights the absence of wiki syntax. The toolbar across the top of the page allows editing bold or italic typeface, differing colors and sizes of font, and arranging tables and images without the necessity of learning the appropriate coding to create the desired effect.

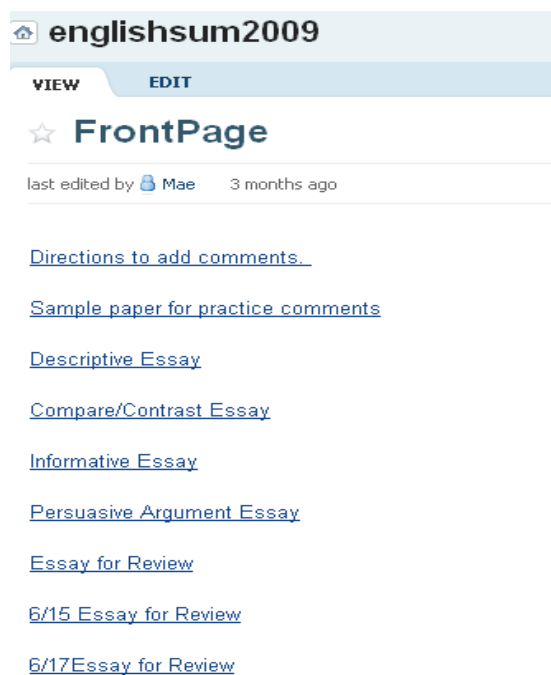


*Figure 6. PBwiki's edit mode.*

The program's simplicity allowed for easier use by students. Instead of learning a new language and a new technology, they only needed to master the new technology. This allowed them to focus more quickly and easily on the assignment's goals rather than acquiring a new technology skill.

To use PBwiki, the instructor simply creates the site using the template provided by the site administrator. It is not necessary to download a program to accomplish this. Although multiple steps are involved, this is not difficult to accomplish. Clear step-by-step instructions are provided that are easy to follow. Once the wiki is created, the

instructor enrolls students in the wiki and generates user IDs and passwords for the students that will allow them to gain access to the site without having to create their own user pages. This is a much easier way to use the site than to ask students to create their own user IDs and logons. Once the site was created, documents were uploaded of the same genres as were being discussed in class.



*Figure 7. PBwiki FrontPage.*

Figure 7 shows a typical PBwiki FrontPage that was used for a College Composition I class in the Summer Semester of 2009. In addition to its simplicity of use, PBwiki's basic package is free. If the other options are desired, they can be added to the package by purchasing an upgrade. For the purposes of my classes, the basic elements

were all that were needed. This maintained the desired ease of use and eliminated the cost of use.

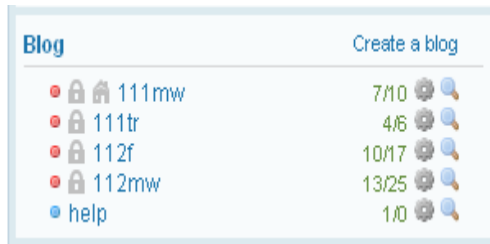
## **Blogs**

Blog is a contraction of the words “Web” and “log.” These sites were originally used as personal electronic journals that were much like diaries. Many blogs of this type still exist, giving information about family vacations, recently read books, and favorite foods. Others have evolved into Web-based discussion forums that encourage collaboration and idea sharing. Many researchers use blogs to discuss the direction of their work with colleagues, allowing for the transmittal of ideas between peers. Like wikis, blogs can be maintained with limited access. Some blogs allow anyone to view and comment. Others allow anyone to view but only invited members to comment. Still others are viewable only by invited members. The blog that I used for my classes was Motime, which navigated to Splinder during the course of the study, and is now accessible at <http://www.us.splinder.com>. Like the PBwiki site, Splinder allows easy access for students, and its basic utilities are free for all users.

To use this site it is again necessary for the instructor, or administrator, to create a blog. This is accomplished by registering, selecting one of the many templates available, and setting the membership parameters. On this site, it is necessary for the students to create their own accounts and then be invited to join the class blog. Because this procedure involves multiple steps and is sometimes confusing for students, it is best to allow at least one week for this process. Instructors should be prepared to answer multiple questions and to walk students through the process. Once the students in this

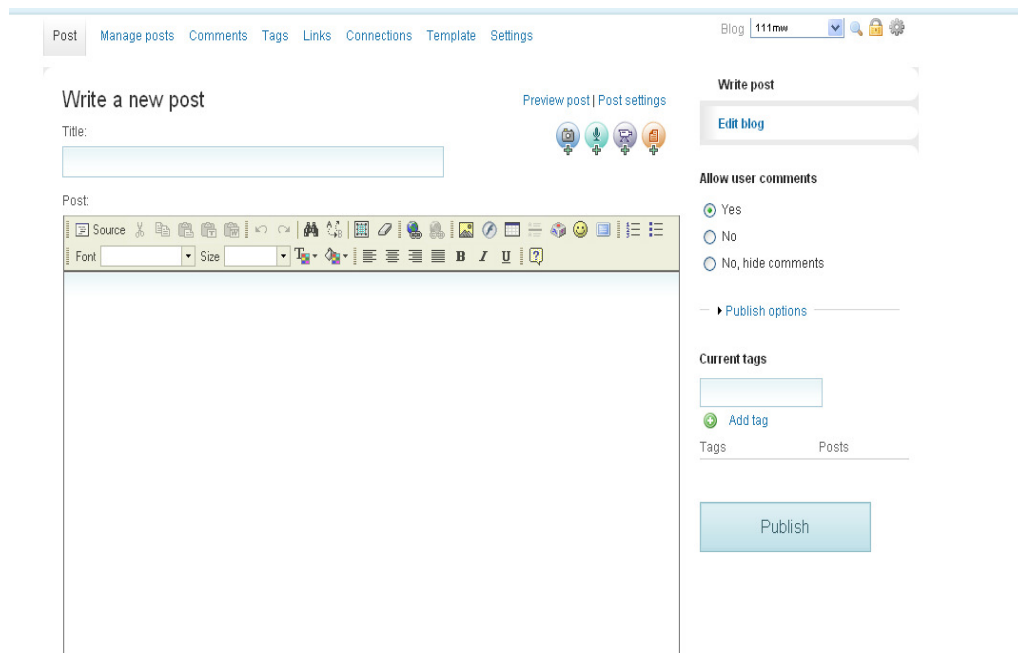


study were enrolled as members of the blog, they posted and commented based on the assigned class readings or genres of writing being discussed.



*Figure 8. Motime/Splinder home page.*

Figure 8 shows the home page of Motime/Splinder with the active blogs listed. The free version of this blog limits participants to four individual blogs. The “help” blog, like the “help” area of other technologies, is an online resource if there are problems or questions. Figure 9 illustrates the page where posts are created and published to the blog. Composing in Motime/Splinder is much like creating a word document. The toolbar at the top of the dialog box offers the standard capabilities of cutting, pasting, and altering font style, size, and color. The large “publish” button to the right of the screen makes it easy for students to place their writing on the blog. To read the blog is slightly more difficult. Students must click on the small magnifying glass icon located on the upper right of the page. This is initially a stumbling block for some students because the icon is small and sometimes difficult to locate. The tool options across the top of the page are available only to those with administrative privileges. This option should be reserved only for the instructor.



*Figure 9. Posting page of Motime/Splinder.*

The initial setup of the individual blogs requires that a name, URL, and access be stipulated. This is done through the Settings page. See Figure 10. Participants are invited to join by accessing the Connections page and sending an invitation to the student's established Motime/Splinder userid. Students must have completed their site registration before this step can be accomplished. Once the invitation has been sent, it is necessary to grant the desired privileges for each participant. See Figure 11. The final step in completing the Motime/Splinder registration is for students to accept the invitation to join the blog. Once this is done, they may read, post, and comment on the blog they have joined. Students will only have access to their class blog and will not see the blogs of other classes.

### General information

Change your basic blog settings here.

Title:

This is the name of your blog.

---

URL: .us.splinder.com

This is the address of your blog.

---

Description:

This is the subtitle of your blog which usually appears near the top of your template.

---

Who can view this blog: ☐ Everyone (this is a public blog)  
☒ Members only (this is a private blog)

Choose 'members only' if you want to restrict viewing to invited members only.

---

Custom message:

This message is shown if the blog is PRIVATE and the user is anonymous or not a member of the blog.

---

Show blog on 'newly updated' menu on the home page: ☐ Yes, show the blog  
☒ No, hide the blog

Choose no if you do not want your updated blog to appear in the list.  
 (Note: if this blog is private, posts will not be shown on newly updated list)

---

Figure 10. Motime/Splinder setup.

## Members

[private blog / Members can comment]

This is a list of your blog's members. Want to invite someone? Click on the "Invite" button, above.

username ▼	joined	last active	can view	can comment	can post	moderator	can admin	delete
student15							<input checked="" type="radio"/>	

\* Higher permissions include the prior ones.

Figure 11. Motime/Splinder privileges.

This is a multistep process in which each phase must be completed before the next can be accomplished. It is imperative that students understand their role in completing the registration process. They should also be advised to check their e-mail's Spam boxes as notices and invitations from sites such as Motime/Splinder are often directed to those areas. Once the registration is completed, Motime/Splinder is an easy site to use. The required steps to post and comment are clearly labeled and readily available. As with PBwiki, the fact that this is a free site makes it a viable option for students.

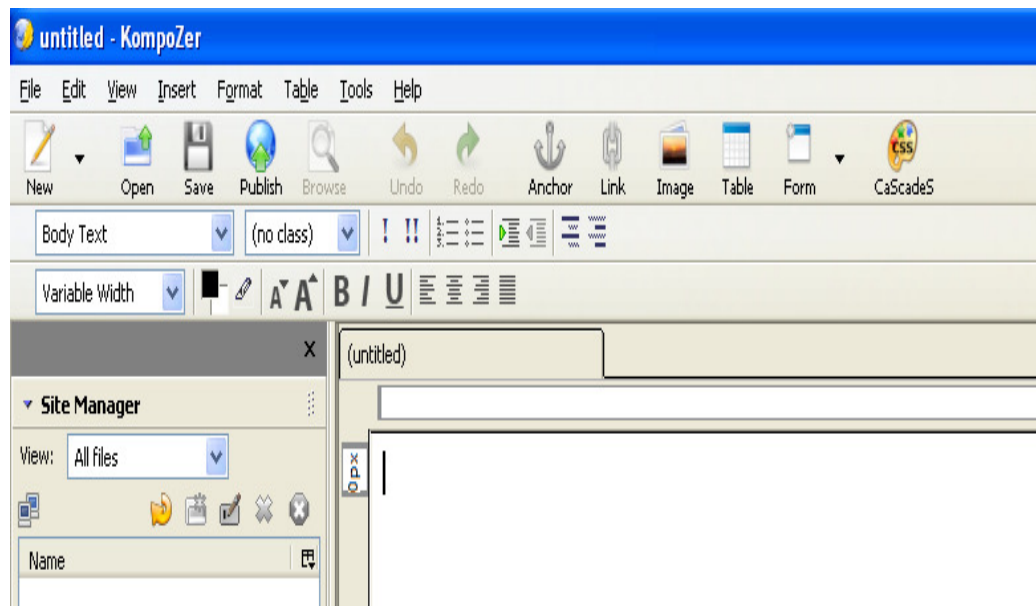
### **E-Portfolios**

Definitions and concepts of e-portfolios, or electronic portfolios, abound. Answers to the fundamental question of what an e-portfolio is “vary as considerably as they do in defining print portfolios because of the many purposes for which portfolios are developed and the multiple technologies available” (Zubizarreta, 2009, p. 56). In the simplest terms, they are a collection of electronic evidence assembled to provide a record of learning and achievements. Like paper portfolios, they can be used to record documentation that shows what a person knows, what they can do, and what they have achieved (Stefani, Mason, & Pegler, 2007). However, e-portfolios go beyond paper collections of artifacts by allowing links between items and to areas outside of the portfolio. Stefani et al. provide a more in-depth learning-based definition. They state that e-portfolios designed for educational purposes are a collection of information that is owned by the learner; they are a sample of what the owner, or creator, of the e-portfolio knows. In addition to the elements proposed by Stefani et al., most proponents of e-

portfolios insist that they must contain an element of self-reflection. It is this reflection on knowledge and skills gained that sets e-portfolios apart from most paper portfolios.

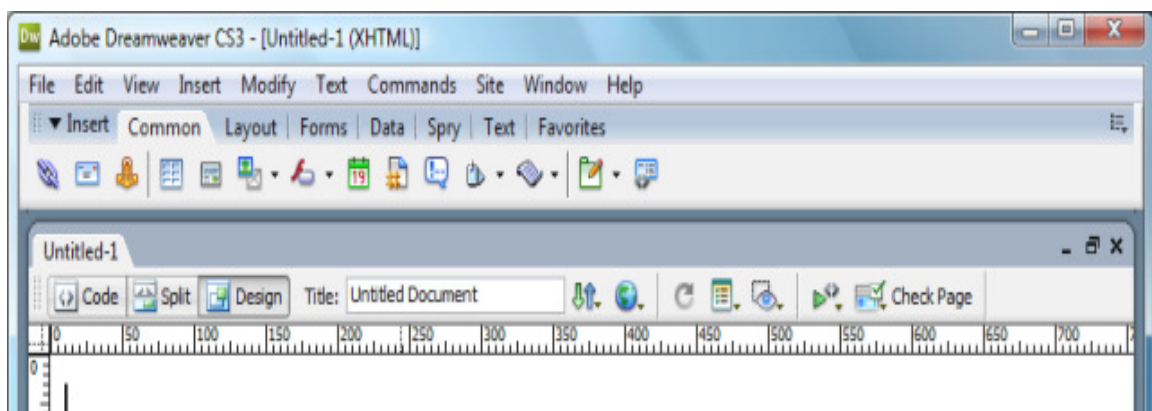
While the data collected is important as evidence, self-reflection is a primary requirement of e-portfolios. Basic paper portfolios typically show a record of a person's best work. E-portfolios can accomplish this same task. However, in today's electronically based culture, they allow incorporating more than text documents or physical representations of work. Using an electronic portfolio allows including images, videos, and audio recordings. A careful selection of artifacts can show the change and growth of learning across a period of time. In addition to the actual objects contained in the portfolio, students are required to reflect on the inclusions, explaining why they were chosen as representative and what they reveal. They are asked to think carefully about their learning experiences for the duration of the course, focusing on what they are now able to do that they could not do at the beginning of the class and on areas that still need improvement.

To create an e-portfolio for this study, students downloaded Kompozer, a free Web-authoring program found at <http://kompozer.net> or at <http://kompozer-portable.en.softonic.com/download> for the portable version. Most students had no problems downloading the program, but they did need help learning to navigate it. The system operates much like Microsoft Word with toolbars across the top of the screen for easy creation and manipulation of materials. As seen in Figure 12, the Kompozer toolbar mirrors Microsoft Word in its wording, arrangement, and icons.



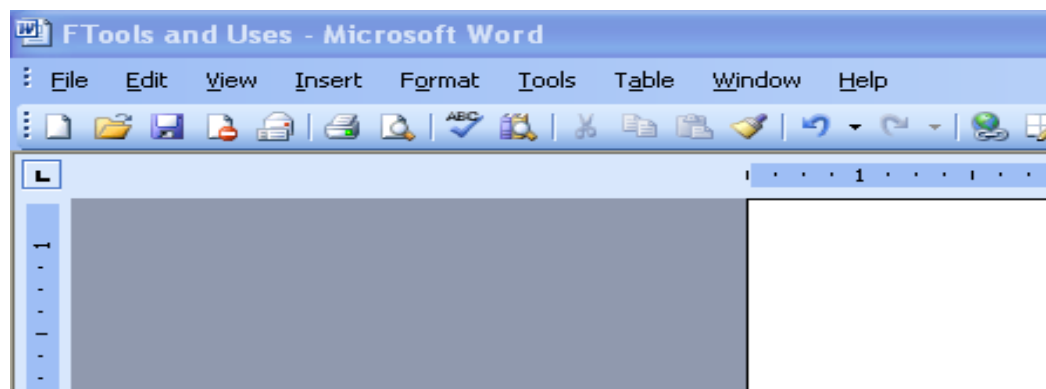
*Figure 12. Kompozer's toolbars.*

Kompozer is advertised as being a free version of Dreamweaver. It is also supposed to be easier to use than the Dreamweaver program. A comparison of the two programs shows some remarkable similarities and differences. See Figure 13 for the Dreamweaver program's toolbars.



*Figure 13. Dreamweaver's toolbars.*

The first four items on the top toolbar are the same in both programs. That is where the similarities between these two programs end, however. Notice, though, the similarities between Kompozer and Microsoft Word. The comparison shown in Figure 14 is made between Kompozer and Word 2003 as that was the version most prevalent when this study was undertaken. The similarities between Word and Kompozer made it easier for students in this study to master the new technology.



*Figure 14.* Microsoft Word's toolbars.

While there are other Web authoring programs available, few are free. Some provide a free demo program that lasts a month, but the assignment used in this study lasted the entire semester. A free demonstration of another program would have ended before the completion of this assignment. While Kompozer was recommended to students, they were not required to use this software. Some students already owned a copy of Dreamweaver and others knew HTML coding. The assignment did not require students to work collaboratively on this project (as they did with the wikis and the blogs) so they did not need to have access to the same software or programs. Because of its ease

of use and the fact that it was available as a free download, this was most students' Web authoring tool of choice for the study.

Students were given the basic assignment, but creating the e-portfolio was left to their individual ideas and preferences. Some universities and colleges have created templates for student use in generating e-portfolios, but Northern Virginia Community College has not yet reached this point. This lack of templates did place an additional burden on the students of actually learning to format the final product as well as selecting the items to include. However, it also gave the students greater freedom to express their individuality by leaving choices of color and placement of artifacts to the individual. This concept coupled with the requirement for self-reflection encouraged students to create a unique and personalized project.

### **Student Assignments**

#### **Wikis**

In Freshman Composition I, wikis were used to expose students to various genres of writing and to provide them with both poor and good examples. Students were first assigned chapters to read in their textbooks that discussed the attributes and requirements for a particular style of writing. Example essays were also assigned in the textbook. The genre was then discussed in class. These class discussions frequently included small group work to create an essay of the specific genre in class. After the class discussions, students were directed to complete the wiki assignment.

For each wiki assignment, a sample essay was placed on the class page of the wiki. Students were to read and make a specified number of comments regarding the



essay's structure and content. Students were free to initiate their own comments or to post replies to other students' comments. This structure provided exposure to the genre of writing for the students in addition to offering collaboration through other comments for students. During the next class period, the comments were discussed in class along with other relevant observations regarding the essay under discussion.

In Freshman Composition II, which focused exclusively on argumentative writing, wiki assignments consisted of reading and evaluating persuasive essays. In the beginning of the semester, as different aspects of argumentative writing were discussed, sample essays were placed on the wiki that highlighted these areas of discussion. Later in the semester, as student writing and knowledge improved, sample persuasive essays were placed on the wiki without regard to specific areas of concern. Students were required to read and evaluate the essays, posting a specified number of comments on the site. Again, students were free to initiate their own comments or respond in-depth to previous posts. The wiki served to give students access to sample essays and the comments of their peers. Following posting comments on the wiki, the comments and the essay were discussed in class. See Appendix C for a sample wiki prompt.

### **Blogs**

In Freshman Composition I, students were required to post a blog entry based on the genre of writing currently under discussion in class. The blog posts for a particular genre followed the assigned readings, class discussions, and wiki assignments of the same style of writing. This ordering of assignments gave students multiple exposures to the writing styles before they were required to create a piece on their own. Students were

sometimes required to post portions of their formal essays on the blog to receive feedback from their peers before submitting the essays for peer review or grading. At other times students were allowed to create a post of their choosing as long as it conformed to the genre of writing currently being discussed in class. Once the initial posts were made, students were required to respond to the other students' posts in order to engage with them in a discussion of the posted writings. As with the wiki assignments, they were instructed to focus on the essay's content and structure rather than simply on the grammar. The blog assignments afforded students additional exposure to multiple examples of the styles of writing being studied. They also provided students with the opportunity to have their work critiqued by their peers.

In Freshman Composition II, the argumentative writing class, the assigned readings were from a literature text. Students were directed to read the text and respond to some aspect of the reading as though the occurrences in the story were real. As this was not a literature class, the students were directed not to write a literary analysis or summary of the text, but rather to choose some aspect of the writing about which they wished to make a claim. One of the most popular writings centered around William Faulkner's "A Rose for Emily" (2007). Students frequently made the claim that Miss Emily was crazy. If this was the argument that they wished to present, they were then required to offer support for that belief. As the claim was the result of an assigned reading, students were required to turn to the text for support.

In addition to the readings, students were occasionally required to post a blog entry regarding some current event. The same parameters were in effect for these posts as

for those based on the readings. The current event posts were not to be simply a recounting of the event, although a brief description was required. The main portion of the post dictated that the students make some claim regarding the event they chose to discuss and then support that claim with reliable evidence.

Once the initial posts were done, students were then required to read the posts of other students and respond to at least two. They were directed to engage with posts with which they disagreed. As this was an argumentative writing class, they were encouraged to evaluate the evidence provided and the logic of the argument. They were then to offer a counterargument in an effort to prove the other point of view.

The posts and comments from students were used to generate the discussion for the next class meeting. The blog entries were used to show examples of claims and support. They were also used to jump-start the in-class discussions that usually took the form of debates concerning the topics elicited from the writings. By selecting topics from the blog writings, it was possible to choose areas of interest to the students in order to elicit more responses. These discussions allowed for further conversation of the effective creation of a reliable argument and the necessary constituents of that genre. See Appendix D for a sample blog prompt.

### **E-Portfolios**

The electronic portfolio was the final project due at the end of the semester. It functioned to focus student attention on the material covered over the duration of the course and to reflect student learning. Students assembled a variety of documents from the work that they completed over the semester. The portfolio consisted of the graded

originals of their submitted work and the revisions of those papers. Including both versions made for easier comparison of the work accomplished.

In addition to the actual essays, students were required to compose self-reflections of the revision process. They were instructed that the revisions and reflections needed to be more than correcting the grammar errors or making comments that they changed something “because Professor Kennedy said it needed to be fixed.” The revisions had to be substantial changes to the content of the essay. Reflections were to focus on what the student learned during the writing process. The self-reflections were not to take the opportunity to vent about the class. The individual student’s writing experience was to be the focus of the exercise. Why a particular topic was chosen was not really relevant. What a student learned and why was to be the focus.

Although the e-portfolios were the final project due at the conclusion of the semester, they were an ongoing activity throughout the term. Students were allowed to rewrite any essay in an effort to improve their grades. As they did this, they were encouraged to write reflections at that time while the task was current. They were also urged to begin compiling the documents early in the semester. This prompted students to focus on what they were learning throughout the semester. However, the final overall reflection was reserved for the end of the semester. It was at this point that students were required to look back at their semester’s work, comparing their early writing to their final projects. See Appendix E for a sample e-portfolio prompt.

## **5. WHY WIKIS, BLOGS, AND E-PORTFOLIOS**

Some students will learn despite an unskilled teacher, an unsound assignment, or an undeveloped pedagogy. However, as teachers, we should seek to provide the best learning opportunities that we can in order to enhance student learning. A “fun” assignment may motivate students to participate, but it does not necessarily lead to learning. A difficult yet appropriate assignment may not stimulate students to take part, even though learning is possible through involvement. The best learning takes place when students are engaged in the learning, the assignments are pedagogically sound, and students understand the goals and objectives of the activities. Used appropriately, wikis, blogs, and e-portfolios can fulfill the promise of pedagogically sound and enjoyable activities that lead to student learning.

Technology must have a pedagogical purpose in order to be a legitimate component of the classroom. Before an assignment is given to students, technologically based or otherwise, the instructor should understand the reason for that task and fully understand the goals and objectives to be achieved. This becomes even more important with the influx of technology in the classroom. There may be a temptation to implement technologies because they are expected or because we believe that students will find them enjoyable. While there is nothing wrong with giving students pleasant assignments, that should not be the only reason for a task. The assignment must satisfy some pedagogical

objective; it must provide a teachable moment. Each of the three technologies under discussion here is underpinned by pedagogy and provides the opportunity for student learning.

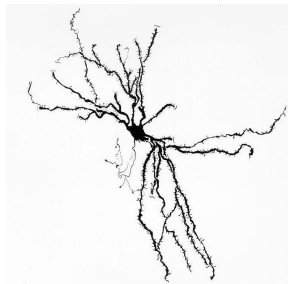
### **Time on Task**

One of the basics of learning is that students need to spend time practicing whatever it is that they are attempting to master. Teachers know this and have developed a myriad of methods to give students the practice they need to effectively learn the task at hand. These methods may take the form of worksheets, quizzes, exams, or essays. Unfortunately, writes McClish, chairman of the Rhetoric and Writing Department at San Diego State University, as “class sizes have gotten larger. . .there are fewer [writing] assignments” (as cited in Su, 2009, para. 28). He goes on to add that if students are “not writing, their writing skills will erode” (para. 28). Albert and Kussmaul (2008) support this belief in their claim that “research shows that students learn to write most effectively when they. . .consistently write a great deal” (p. 50). “Time on Task becomes a major component of how well students learn and retain knowledge.

In her research about The Natural Human Learning Process (NHLP), Smilkstein (2003) conducted tests to determine the steps involved in learning a new skill. Her research, “carried out with more than 5000 people, reveals the common experience human beings have when learning something new” (p. 32). That common experience is practice. Both blogs and wikis require that time be spent on the task to be learned. Smilkstein (2003) also posits that “learning takes time because it requires growing new dendrites, synapses, and neural networks” (p. 63). These are physical structures, and

physical structures ordinarily do not grow instantaneously. Instead they need time and repeated practice to develop.

Much of Smilkstein's (2003) work is scientific evidence of the adage that "practice makes perfect." She gives substantiation that this old wives tale is true. Learning consists of growing and developing dendrites, those tree-like neurons in our brains (see Figure 15).



*Figure 15.* A dendrite from a human brain. From Smilkstein (2003).

Through the development of these dendrites, new neural pathways are formed, allowing for better storage and easier retrieval of information. The increased storage capacity gained through dendrites' expansion allows students to retain and easily access information that is stored through repeated practice. While knowledge that is not practiced may be retained, the pathways needed to easily access that information are not developed. This results in surface learning—information that can be retrieved for only a short period of time, rather than deep learning—the integration of learning into a person's brain in such a way that retrieval is easy, allowing that material to be used in a fluid manner.

Because dendrites only “grow for what is personally, actively, specifically, experienced and practiced” (Smilkstein, 2003, p. 59), it is necessary for teachers to provide adequate occasions for students to rehearse what is being learned. Time on Task is the concept of assigning work that requires students to perform the objective to be learned. In order for learning to truly take place, students must have targeted practice that encourages them to use new skills and information in an active manner. Smilkstein’s (2003) research shows that “it is critical to give every student the opportunity and time to make a personal connection with a new and unfamiliar concept, skill, or body of information” (p. 128). Wolfe’s (2001) Information Processing Model (see Figure 16) illustrates this concept.

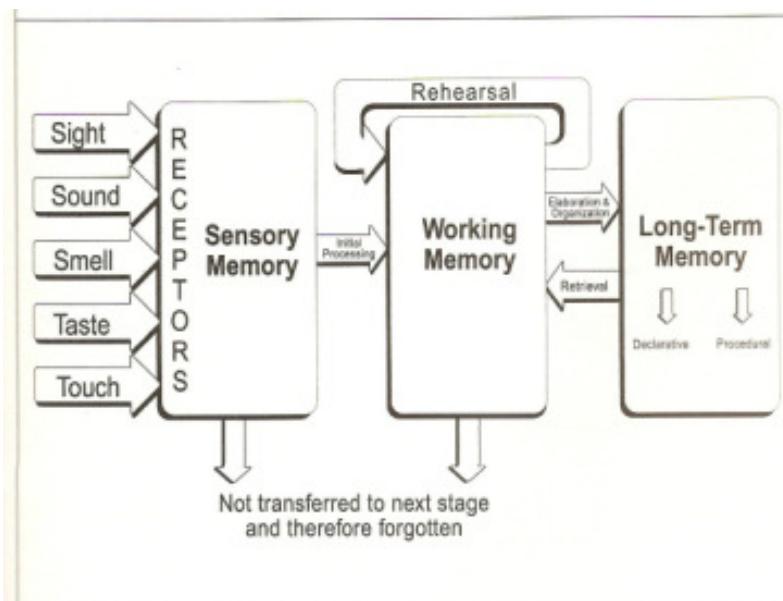


Figure 16. Wolfe’s Information Processing Model. From Wolfe (2001).



Wikis provide the needed Time on Task with a focused activity that will enhance the growth and development of dendrites to ensure long-term, deep learning. The specific assignments that I used in this study required students to use the knowledge that was discussed in class in an interpretive rather than a rote method. They were not simply answering questions about the genre under discussion but utilized the information to engage with and evaluate a text. This provided interaction that is “actively, personally, and specifically experienced and practiced” as Smilkstein (2003) advocates (p. 71).

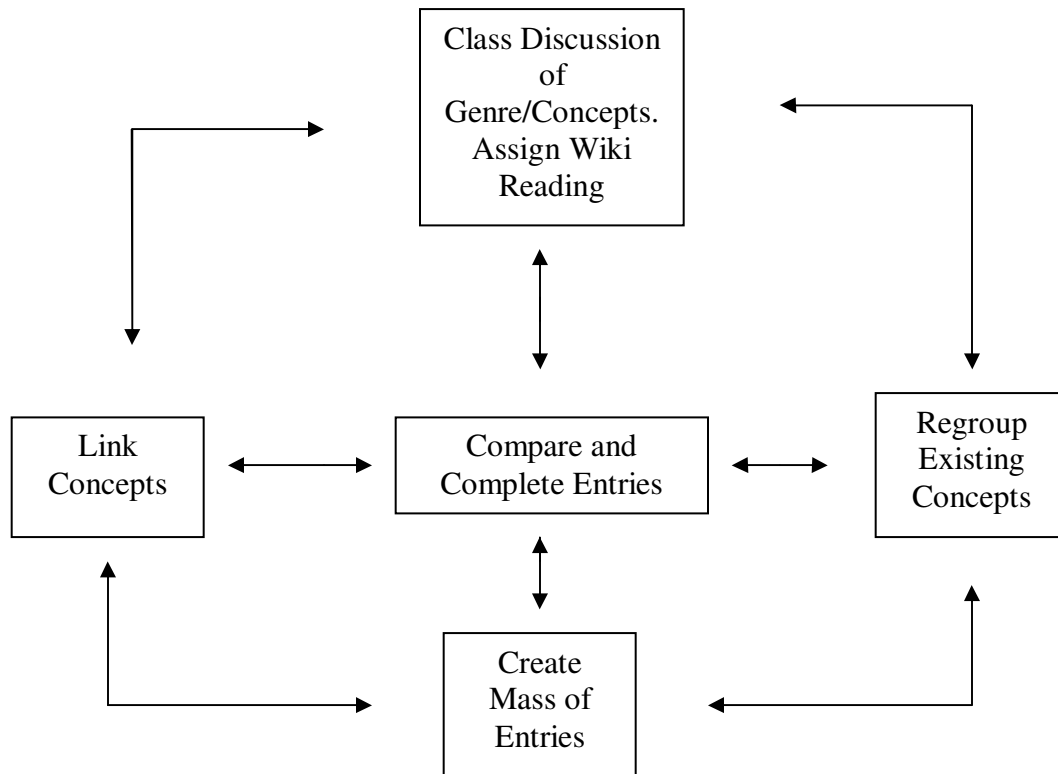
The wiki assignments occurred periodically throughout the semesters so there was no way to accurately estimate the exact time spent with this technology as a whole. However, in general, wiki assignments were given for each of the genres studied in College Composition I. These included descriptive writing, informative essays, compare and contrast papers, process essays, and persuasive/argument essays. For each of the five genres, students were required to read and evaluate at least one document on the wiki. These documents averaged approximately two pages in length. Students spent roughly 15 minutes reading and responding to the document itself. Added to this was the additional time spent reading other students’ comments, evaluating them, and occasionally responding. This totaled at least an additional hour spent engaging with the material outside of class. Added to this was the time spent in class as a follow-up during which we discussed the basics of the essay and student comments. Because students knew that their comments may be used in class, they *thought* a little more about their posts. By the end of the semester, students spent a total of about four extra hours, combining at-home work, in-class discussions, and private conversations with me, actually using the information

they were trying to master. While dendrites may mature slowly, this amount of time should spark a small growth spurt. After all, practice does make perfect.

This Time on Task concept is an example of active learning that “has an important impact on long-term learning and comprehension of difficult concepts” (Notari, 2006, p. 131). As the students spent time manipulating the data they were learning, it became integrated into their memories. Notari’s Collaboration Scripts are a model for this type of wiki activity. New neural pathways are created to make access to information seamless. The linear progression of assignments concealed the iterative practice of class discussion, wiki practice, class discussion. The students were provided the opportunity to practice the desired skills in a repetitive process that led to enhanced learning. The cyclic pattern allowed integration of recently obtained information followed by practice that led to introducing new knowledge that builds on the previous concepts. Students were not overwhelmed by the constant influx of new ideas by using the sequential flow of the cyclic Collaboration Script.

Wikis also create the ideal of the constructivist paradigm by providing learning opportunities that are “active and manipulative, engaging students in interaction and explorations with learning materials and providing opportunities for them to observe the results of their manipulations” (Miers as cited in Parker & Chao, 2007, p. 59). The cyclic pattern of learning created the opportunity for students to post comments to the blog, interact with other student comments, receive feedback from their peers, and hear their comments discussed in class. Students interacted with and manipulated the knowledge by reading texts and commenting in them. They explored new information with fellow

students and observed the reactions to their own comments, thereby creating knowledge themselves. See Figure 17 for a Collaboration Script.



*Figure 17.* Collaboration Script for college composition. Adapted from Notari (2006).

As with wikis, blogs also contribute to the practice period of Time on Task. The blog assignments utilized in my classes in this study required that students complete a weekly writing assignment. Although these were short essays, they were directed writing with a purpose, engendering the practice that is required to improve skills. This was the opportunity for students to “write a great deal” that Albert and Kussmaul (2008) asserted was necessary for students to learn to write effectively (p. 50). Without the blog assignments, students typically complete 3 to 5 text documents over the course of a

semester. The addition of the blogs raised that number to 17 to 19 papers written by each student. This is a significant increase in the amount of writing expected. In addition to the main blog posts, students were also required to respond to two other posts weekly. This assignment engaged students to read actively and think critically about other students' writings. This also increased the Time on Task element, requiring that students read and then provide a written response.

In addition to the longer, more formal papers required in the classes in this study, through the blogs, students engaged in consistent writing on a weekly basis throughout the semester. Although the blogs were viewed as "less formal," they were still graded for content, grammar, syntax, and adherence to the genre. This required that students focus on the content and language of their writing. The language of text messaging was not allowed. This requirement forced students to focus on those skills that are typically stressed in composition classes. The interplay of assigned readings, class discussions, preexisting knowledge and concepts, and the additional practice and input from other students can also be illustrated in a form of Notari's Collaboration Script as was the wiki. Note the pathways that allow students to move back and forth from one area of learning to another, allowing for repeated interaction between existing concepts, the mass of created entries, and new ideas. Blogs facilitate Time on Task by encouraging the flow of information as students actively engage in the writing process. See Figure 18 for a Collaboration Script using blogs.

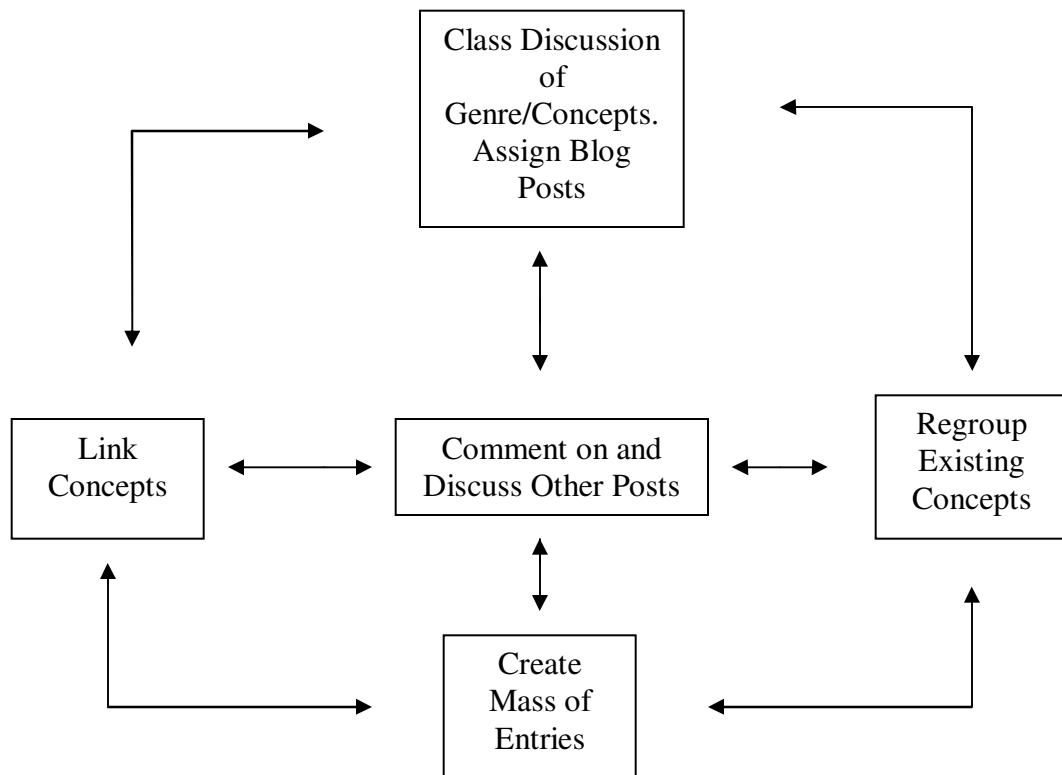


Figure 18. Collaboration Script for College Composition utilizing blogs. Adapted from Notari (2006).

Blogs also contribute to the growth of dendrites that Smilkstein (2003) writes about. By adding the complementary writing assignment of blogs, Time on Task is increased, allowing for the creation of additional neural pathways that increase retention of and access to stored knowledge. Using blogs creates the opportunity for students to grow dendrites through “what is personally, actively, specifically, experienced and practiced” (Smilkstein, 2003, p. 71). While wikis give students the opportunity to interact with the writings of others, blogs provide the chance for students to create their own compositions by *actively* practicing, by *personally* experiencing, and by *specifically*

focusing on the current genre under discussion. This contributes to the slow but sure growth of dendrites that show actual learning.

The use of blogs also moves students from being mere consumers of information to creators of ideas. They are no longer watching and commenting from the sidelines but are actively producing text. This act of creativity can bring a sense of realism to the class. No longer is the teacher the sole audience and judge of the written document. Instead there are multiple eyes and personalities that will read that text. This provides students with a sense of participation and control that lends a sense of legitimacy to their writing. Suddenly, their writing, their opinions, and their ideas extend beyond the classroom; they matter. The idea that they can have an impact as creators allows a sense of power and interest to grow in the students (Richardson, 2003; Weiler, 2003).

Utilizing both wikis and blogs enhances Time on Task, and thus creates different learning environments and tools that enhance the creation of a knowledge base. The extended time and repeated exposure to material in a variety of ways leads students to develop new neural pathways that are indicative of deep learning that impacts future endeavors.

### **Collaboration**

It has long been a tenet that collaboration is an asset to learning. The Scholarship of Teaching and Learning is based on the idea of sharing and discussing information about teaching and learning. Most scholars who write for publication seek some help in reviewing their products before sending them out for publication. Despite the advantages of collaboration that we afford to ourselves, we often place our students in a vacuum,

advising them in the words of so many honor codes that they may “neither give nor receive help” on their work. As an undergraduate, I was required to write that statement on each essay that I composed and then affix my signature to it prior to submission. Yancey and Spooner (1998) explore this dichotomy between expectations for our students and our own actions. Students are warned that all work must be their own with no outside help. However, as I compose this, I am deciding who will read this and when I will send it to them for review before formally submitting it. If we are to lead students to improve as writers, we should want them to emulate those practices that make us, as instructors and scholars, better writers. Collaboration is one of those practices.

According to Haber (1994), the concept of collaborative learning is one with a long history but one that only gained interest in composition instruction in the early 1990s. Yet this long history has provided ample evidence that students in other disciplines learn better when they engage in a dialogue with each other regarding the subject under discussion. This dialogue can also positively affect student writing. Instead of creating a document that needs to satisfy only the author’s ideas and interpretations, a collaborative document must satisfy the judgment and analysis of the group. The dialogue that takes place to create this agreement strengthens the writing of the entire group through collaboration by encouraging “students to verbalize about writing” (Haber, 1994, p. 49).

According to Ede and Lunsford (1985), some assumptions regarding teaching had never been critically examined as of their writing. They note that “one such assumption, which informs such diverse pedagogical activities as making assignments, assessing

students' writing skills, and responding to student writing, is that writing is necessarily and inevitably a solitary activity" (p. 119). Student work is infrequently shared with a group, and instructors are usually loath to reveal comments intended for one student to an entire class. Yet this sharing of accomplishments and mistakes, done carefully and thoughtfully, can help developing writers. While peer editing, which will be discussed in more depth later, is a part of many composition classes, collaboration of ideas, strategies, and theories should occur more frequently. Ede and Lunsford (1985) state that "learning always occurs as part of an interaction, either between the learner and the environment, or, more frequently, between the learner and peers" (p. 120). When students discuss among peers on a regular basis what is effective, what is not, and how to fix it, learning takes place. Weekly writing assignments done on the blogs and wikis provided the opportunity for this collaboration. The blog assignments in this study were structured in such a way as to elicit peer responses to help student writers understand cognitively what was needed to improve their writing. Wiki assignments were designed to encourage students to read and discuss collaboratively a text's merits and weaknesses. This group effort allowed for sharing ideas that created a new knowledge base among students.

Ede and Lunsford (1985) further claim that "important research suggests that the concept of authorship as inherently single or solitary is both theoretically naïve and pedagogically flawed" (p. 120). We innately know that sharing our work leads to improvement; that is why we do it. Yet we all too often follow the dictates of institutional policy and limit collaboration among students. In addition to improving their cognitive understanding of the writing process, "students must experience writing as a meaningful,



purposive activity if they are to improve as writers” (Ede & Lunsford, 1985, p. 120).

Providing an audience through blogging in this study gave a sense of meaning to student writers. They were no longer writing because “it was assigned.” They had an audience of peers whom they had the opportunity to influence. The knowledge that others would read their postings could have led to a feeling of empowerment and purposefulness for students that is often lacking in typical essay assignments that will only be read and graded by an instructor. Sharing information and ideas leads to the creation of knowledge among the group.

Bruffee (1984) also argues that knowledge is constructed by a society of people, that members bring different elements of information that is combined to create a whole idea, that “learning is a social and not an individual process” (p. 646). He states that “the inference writing teachers should make from this line of reasoning is that our task must involve engaging students in conversation among themselves at as many points in both the writing and the reading process as possible” (p. 642). Blog and wiki assignments in this study provided the opportunity for numerous conversations among students outside of the classroom setting. In the blogs, students discussed both issues of interest and the skill set for the class. Wiki writing required a close reading of the text and an ensuing discussion of the reading’s content and structure. This possibility for collaboration helps to build a knowledge base through sharing information and understanding class concepts. Bruffee claims that “collaborative learning provides a social context in which students can experience and practice the kinds of conversation valued by college teachers” (p.

642). The use of blogs and wikis in this study provided the means and tools for students to carry out these conversations that can enhance understanding and learning.

While Ede and Lunsford (1985) and Bruffee (1984) were referring specifically to peer reviewing in their discussion of collaboration, the use of blogs and wikis can provide the same opportunities and more. Both articles were written before the advent of technology in the classroom, and these tools have simplified the process of collaboration. They essentially take collaboration to a new level where there are more in the group and more opportunities for sharing. Collaboration offers value to the tools from a pedagogical standpoint. The technologies of wikis and blogs provide the means for collaborative learning that “provides a social context in which students can experience and practice the kinds of conversation valued by college teachers” (Ede & Lunsford, 1985, p. 642).

Another benefit of the teamwork provided by wikis and blogs in this study was student motivation. This arises from the concept of learning that is “personally, actively, specifically, experienced and practiced: (Smilkstein, 2003, p. 71). Teachers have long struggled with the task of motivating students to read assigned texts and to engage in class activities. Reliance on group dynamics has far more influence than the pleadings of teachers. Knowing that a group of peers is depending on an individual’s participation is a great motivator. Albert and Kussmaul (2008) posit that “students are often more engaged when working collaboratively with their peers, and wikis support this kind of work” (p. 58). It is not just wikis that lead to this participation. Blogs also can result in active involvement. Based on Smilkstein’s studies we know that engagement is a precursor to learning. In addition to the joint discussion of ideas and concepts that help to form

knowledge, the sheer act of collaboration leads to a more active participation that ultimately leads to engaged learners.

The knowledge gained by students through collaboration is often different than the information of students working alone. It more often reaches the long-term memory of the brain through the rehearsal advocated by Wolfe (2001). Although not impossible, it may be difficult for students to adequately process information on their own. The mutual sharing of ideas and discussions of key points built into collaborative work can lead to the rehearsal needed to move information to a higher level of learning in the brain. Studies have shown that “cooperative teams achieve higher levels of thought and retain information longer than students who do their work individually” (Miers, as cited in Parker & Chao, 2007, p. 58). This is the outward evidence that the rehearsal of information has led sensory input to be placed in working memory and ultimately in long-term memory. Computer-supported collaborative learning such as wikis and blogs “enhances peer interaction and group work, and facilitates sharing and distributing knowledge and expertise among a community of learners” (Miers, as cited in Parker & Chao, 2007, p. 58). Technology tools, when used with a sound pedagogical underpinning, can enhance student learning.

These learning theories sound remarkably similar to the concept of Constructivist learning, in which it is believed that people create knowledge from their individual or social experiences and can only understand what they have created. Constructivist learning is “cooperative, collaborative, and conversational, providing students with opportunities to interact with each other to clarify and share ideas, to seek assistance, to

negotiate problems, and discuss solutions” (Miers, as cited in Parker & Chao, 2007, p. 59). This is exactly the experience that is provided through the application of wikis and blogs as collaborative tools. Whether it is Constructivist learning or simply the way that the brain processes information from sensory input to long-term memory storage, the personal and active manipulation of information can lead to fuller understanding and longer retention of data. Collaborative learning exercises are student-centered and enable students to share authority and empower themselves with the responsibility of building on their foundational knowledge (Augar et al., 2004). Notari’s (2006) iterative Collaboration Script that so well demonstrated the benefits of Time on Task also shows the collaborative advantages of using wikis and blogs in the classroom. Notari advocates that “a wiki is a powerful tool for constructivist learning environments because it facilitates collaboration” (131). Both wikis and blogs provide ample opportunity for collaborative discussion to help students make sense of new information, rehearse it, and link it to previous concepts, thus creating the neural pathways to long-term memory. The combination of wikis and blogs is a powerful tool for learning in the classroom. Miers acknowledges that “the collaborative features of wikis make them particularly well suited for cooperative learning environments” (as cited in Parker & Chao, 2007, p. 58). Vie (2008) argues that the “potential [of blogs] to bring individuals together is indisputable” (p. 74). Wendt (2008) advocates that online discussions allow “students to think through difficult issues together and build on one another’s idea” (p. 85). Collaboration, whether through wikis or blogs, is a powerful tool in the teaching and learning arsenal. See Figure 19 for Notari’s Collaboration Script for wikis and blogs.

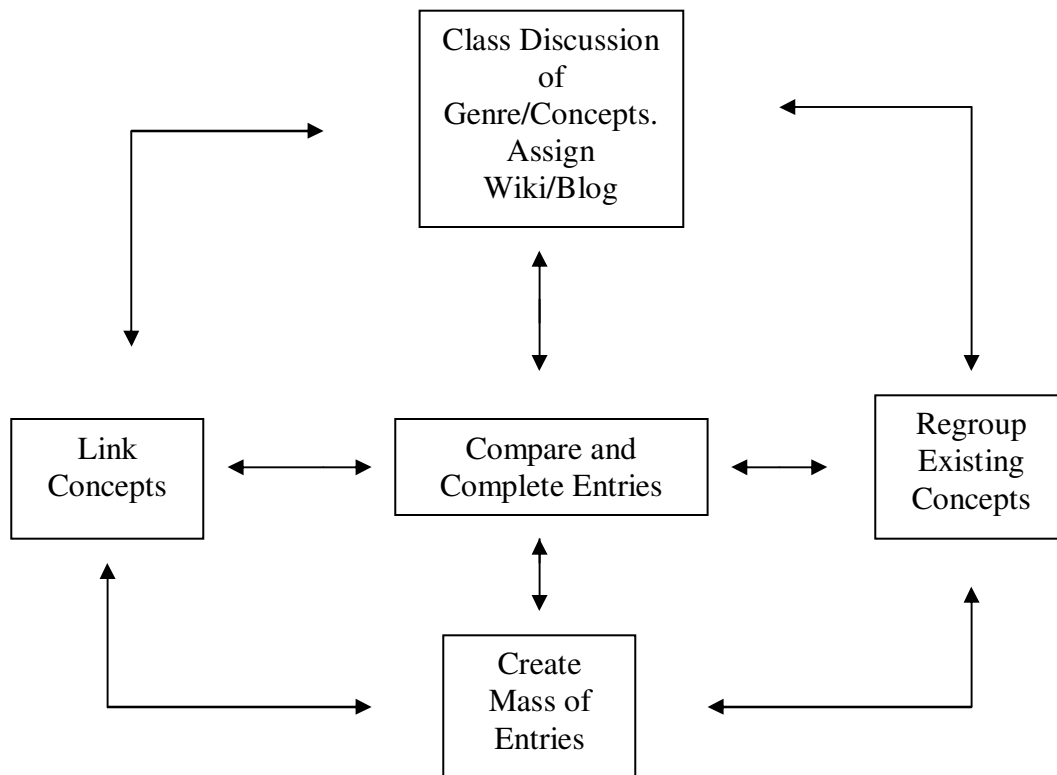


Figure 19. Notari's Collaboration Script for blogs/wikis. Adapted from Notari (2006).

### Peer Feedback (It Is Not Always Me)

Although peer feedback is a type of collaboration, the two are also distinctly different. Collaboration involves the collective formation of knowledge while feedback can take the form of advice, encouragement, and suggestions on writing. It is not limited to a discussion of new information as is collaboration. Students expect teachers to critique and comment on essays, pointing out areas of weakness and sections that need improvement. That is, after all, what teachers do. Many students are not so accustomed to receiving feedback from their peers. This can contribute an added dimension to a composition class, especially if the peer feedback is not limited only to reviews of formal

essays. Ede and Lunsford (1985) state that in peer editing “interest levels are generally high since students are inherently interested in what their peers think” (p. 123). This becomes especially important as students read and carry on a discussion of posted work. The blog and wiki formats allow for students to interact with each others’ comments in a dialogue that allows for free expression of ideas and exchange of thoughts. The informal quality of the wikis and blogs and the frequency of the postings can create an atmosphere that encourages and invokes free exchange of ideas.

Peer feedback gives students the option to “learn from each other and learn to assess their own writing through giving and receiving feedback” (Haber, 1994, p. 49). Although teachers are often seen as the “experts in the classroom,” students still rely on feedback from their peers as a trusted source. Although peers may not be authority figures, their opinions count and do carry weight simply because they *are* peers. Because they share the same experiences and interests, they can be seen as trusted figures who understand the efforts and motivations of their peers. They can be seen as non-judgmental and honest in their opinions. Including peer feedback allows the teacher to become a helper rather than a judge and puts emphasis on revisions rather than products (Ede & Lunsford, 1985). It is no longer the final production of the essay for one judgmental reader that becomes important. Instead students become interested in satisfying their peers through conversation that leads to revisions and improved writing (Walker, 2005).

The very structure of wikis and blogs can enable continued conversation with multiple participants. Incorporating blogs and wikis into the composition classroom “allows the focus to shift away from the instructor as the sole audience” (Vie, 2008, p.

76). Whether open for public view or limited to only class members, wikis and blogs can create an audience of peers who will read and respond. The very nature of the attached comments allows for easy reading and response from participants. There is no lugging around of copies of paper essays and disseminating them to classmates. Even e-mail pales in comparison because responses are not ordered in a chronology. This connection between initial posts and responses allows “later reviewers. . .[to] read and respond not only to the original essay but also to earlier reviewer’s responses. Thus, they might agree, disagree, or expand upon comments in an earlier critique” (Albert & Kussmaul, 2008, p. 54).

Freshman writers, and others as well at times, may have difficulty recognizing and appreciating the opposing side of an argument. Exposure to the views of other students through the commenting capability of wikis and blogs can provide student readers with the opportunity to interact with others of differing beliefs. While this is also a possibility in face-to-face discussions, students with differing views are sometimes hesitant to speak out. Computer-mediated discussions offer enough distance that students may be more willing to voice their views. Students are also accustomed to airing their viewpoints online through modalities such as Facebook and MySpace. While it is not the responsibility of composition instructors to challenge the views of students with the intention of altering those views, it is necessary to understand the opposing view in order to write an effective essay. Through the use of technology in her composition classes, Fife (2008) has discovered that “online discussion forums are wonderful tools for

exploring multiple viewpoints” (p. 64). The commenting features of wikis and blogs provide students with tools to explore diverse ideas and opinions.

### **Self-Reflection**

One might argue that as long as students learn, it does not matter that they know they have gained knowledge. However, the realization that one has learned is empowering and invigorating, often leading to an increased desire to succeed. Self-reflection is the key to the recognition that learning has progressed. The practice of self-reflection is evident in many areas of life, from dieting to sports accomplishments. People who are trying to lose weight record their food intake so that it can be reviewed at later times. Those involved with sports often record workouts and the results of training sessions. These records stand as an example of the accomplishments of these individuals. Yet the idea of self-reflection is an often overlooked area in undergraduate education. Master’s degree students write a thesis, and doctoral students complete comprehensive exams and write a dissertation. All of these activities force students to look back and focus on what has been learned and accomplished. Unfortunately, other than final exams, the act of self-reflection is usually lacking in undergraduate studies. E-portfolios are tool that can be used to promote self-reflection that aids in learning.

Perhaps because adult learners are more intuitively aware of the benefits of self-reflection, it “has long been an important dimension of adult and advanced learning” (Rickards & Guilbault, 2009, p. 17). This is evidenced by the requirement of completing comprehensive exams at the conclusion of a course of study. These tests are not administered to determine what a person knows. That can be assessed by looking at the



transcripts of the student. Final grades and GPAs reflect the performance in classes. Instead, comprehensive exams draw together the knowledge that a student has gained across the succession of classes. Utilizing that information to address the questions of the comprehensive exams should reveal to the student how much he or she has learned and grown over the course of his or her studies. Unfortunately, there are very few examples of this type of requirement for undergraduates.

Including self-reflection in undergraduate studies may lead to a better understanding of what has been learned and a greater appreciation of the application of that information. Thaiss and Zawacki (2006) feel that students need “many more opportunities than they currently have to articulate what it is they understand and why that knowledge matters to their growth as writers” (p. 121). Instructors rarely assign an essay in which students are to write about why they are learning specific schemes. Yet

two important factors in students’ gaining the confidence and ability to write proficiently. . .are opportunities for reflecting on their writing: reflecting on the rhetorical choices they’ve made based on purpose, content, and audience; on the connections they’ve discerned among topics, formats, and styles; and on their discovery that writing can be a means of realizing their own interests and desires as writers. (p. 121)

Students may make the correct rhetorical choice, but they may not understand why they make that choice without self-reflection. Without self-reflection, they may not even realize that they have made a choice. Self-reflection generates a new neural connection

that makes recalling that information more easily accessible in new and different situations.

E-portfolios offer unique options for students to choose specific artifacts, to link them together in meaningful ways, and to reflect on those inclusions and the relationships between them. Scrapbook portfolios that are simply a representation of what a person can do typically do not contain items that would be deemed as failures. However, much learning can be gained through occurrences of “failure.” Through reflection, and written documentation of that thought process, failure can be turned into success if learning can be demonstrated. The use of e-portfolios “can help turn information into knowledge, assessing into an integral part of learning, and failure into occasion for learning” (Cambridge, 2001, p. 3). Everyone, at some point, fails. However, portfolios can be structured to include lack of success as the inevitable and potentially educational experience that it can be” (p. 8). Instead of hiding or ignoring such failures, the act of reflection can reveal knowledge that can be obtained from that occurrence. Reflecting on the lack of success can lead to future accomplishments. Because “portfolios can offer opportunities for selection and self-assessment” (p. 2), they offer distinctive occasions for success. It is only through careful consideration that “the subtle details of student portfolios are revealed as students reflect on selected works” (Burke, Fogarty, & Belgrad, 1994, p. 58). The reasons behind the choices are as important, if not more so, than the choices themselves. This only becomes clear through self-reflection.

One of the early proponents of self-reflection through e-portfolios, Cambridge attests that “reflection is central to learning” (2001, p. 3). She says that it is by “stepping

back from the experience and contemplating and analyzing it that students become knowledgeable about it” (p. 3). Without self-reflection, students may know the correct answer, but they will not know *why* it is the right response. Reflection on what is known deepens understanding and allows greater recall across a wide range of situations.

It is the element of self-reflection that makes e-portfolios a valuable learning tool. Cambridge (2001) wrote that “reflection is identified as crucial to the practice of creating portfolios, [that] a scrapbook of materials is only an accumulation of information” (p. 4). E-portfolios, despite fancy internal and external links, and inclusion of color, graphics, audio and video options, depend on the inclusion of self-reflection to set them apart from a simple compilation of materials. Many people, including freshman composition instructors, are familiar with first-year composition portfolios. While these collections can show student development over time, they lack the engagement of the student in assessing that change. Stefani et al. (2007) note that with e-portfolios, “it is the learner who interacts with content and events and thereby gains understanding of the ideas and events” (p. 11). When the student consciously decides what artifacts to include in a portfolio, thought is given as to *why* they should be included. When documentation of that thought process is required, students engage with the material—both the chosen work and the rhetorical devices illustrated by it—on a deeper level, thus enhancing learning and understanding.

Zubizarreta (2009), writing about learning portfolios, states that “in the portfolio, students ultimately reflect on their reflections, write about their writing, and critically examine the progressive arc of their learning throughout the semester” (p. 9). What he

describes is once again the outward manifestation of the rehearsal of information that Wolfe (2001) explains is necessary to move sensory input into the working and long-term memory. It is the reflection that cements the knowledge in the brain with adequate neural pathways for fluid recall and use. Zubizarreta (2009) further states that

the durable value of portfolios in improving student learning resides in engaging students not just in collecting representative samples of their work for assessment, evaluation, or career preparation but in addressing vital reflective questions that invite “systemic and protracted inquiry.” (p. 11)

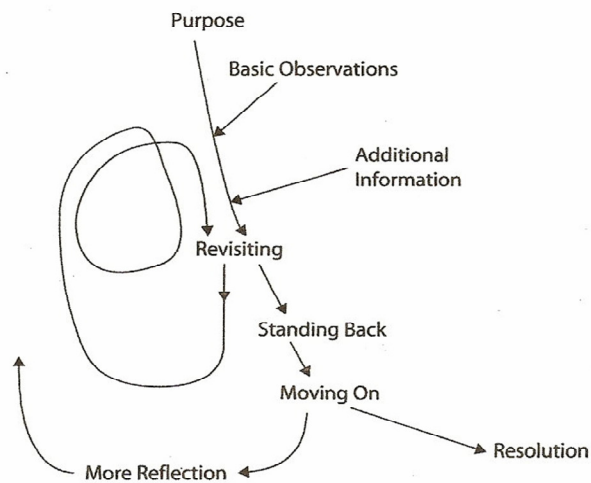
Reflection on knowledge, or rehearsal, is illustrated in Zubizarreta’s reflective learning process (Figure 20). Note that reflection occurs, students move on to more experiences, and then additional reflection occurs. The importance of learning portfolios is to

emphasize that students’ knowledge and, more significantly, their understanding of how and why such knowledge fits into a larger framework of cognitive and emotional development are fundamentally connected to the opportunities that they have to reflect critically on their education. (Zubizarreta, 2009, p. 36)

If we want students to be successful after life in composition classes, to carry forward the information gained there, we need to make time for reflections that will allow students to imbed new knowledge in their memory in useful and retrievable ways.

## Reflective Learning Process

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*Figure 20. Zubizarreta's Reflective Learning Process. From Zubizarreta (2009, p. 27).*

Note here the similarity of concepts between Smilkstein's (2003) practice, Wolfe's (2001) rehearsal, and Notari's (2006) iterative configuration for learning. All of these ideas stress the importance of repeating, practicing, and rehearsing information to make it real knowledge.

It is typical of students to focus on the grades they receive on individual assignments or on final grades; often they do not think about what they have learned or its importance to them. If we want students to be successful in our classes and beyond, we need to lead them to a deeper understanding of the information they are amassing. If the information does not deserve this attention, we should not be teaching it. By engaging in self-reflection,

students make knowledge by articulating connections among portfolio exhibits, learning, and self; reflective activities introduce students to new kinds of self-

assessment, often an outcomes-based self-assessment, that they carry into life outside of and beyond educational settings; and through engaging in reflective activities, students develop the stance and practices of a reflective practitioner who can synthesize multiple sources of evidence and make contingent ethical sense of them. (Yancey, 2009, p.5).

The practices learned through the reflection required in a portfolio can benefit students in making sense of other data, making connections and links to previously held ideas, and the regrouping of existing ideas that Notari (2006) advocates.

While portfolios themselves have long been a standard practice in many classes, from selections of artwork to freshman composition, the advent of technology has dramatically altered our view of portfolios. What was once, and often still is, a mere collection of artifacts, has now become a powerful teaching tool for which “data support the claim that e-portfolio reflection. . .is directly related to student success” (Yancey, 2009, p. 12). Zubizarreta (2009) also stresses that in “the extensive literature about teaching portfolios, critical reflection is cited repeatedly as the main stimulus to improvement of practice” (p. 35). Although it is not simply the technology that makes this possible, “digital technology has enabled new ways of using tools like portfolios to scaffold reflective activities—by storing and making accessible multiple artifacts of student performance and records and by structuring a context for analysis and interpretation” (Rickards & Guilbault, 2009, p. 17).

E-portfolios offer a new opportunity to enhance student learning and retaining information by helping students utilize a form of metacognition. Instead of thinking about

how we think, “reflection is the process by which we think about how we learn” (Cambridge, 2001, p. 17). According to Rickards and Guilbault (2009), “as students are more actively engaged in learning and consciously attend to learning processes and outcomes, they can consolidate their learning and increase the potential for transfer” (p. 18). Once again, the idea of rehearsal is evident in the use of e-portfolios to encourage reflection. It is not just learning that is important. It is not even simply recognizing that learning has occurred. It is the active engagement by students in the *process* of learning that leads to input making its way through new neural networks to long-term memory. E-portfolios help students to realize and focus on the process, a process that ultimately leads to deeper and more lasting learning.

## **6. RESULTS**

The literature supports the belief that the introduction of wikis, blogs, and e-portfolios into freshman composition classes can create the qualities of a learning environment that encourage actual leaning that integrates knowledge into the student's way of thinking in such a way that it is useful and retrievable. The research shows that the leaning requirements of Time on Task, collaboration, peer feedback, and self-reflection supplied by these technologies provide the necessary rehearsal of new information to place it in working and long-term memory.

It is now time to look at genuine student work to see if it supports the theory of the literature. The examples that follow are actual instances of student work as submitted. No changes were made to the writing to either correct their work or to make it appear more supportive of this study. The typos, grammatical errors, and misspelled words were left as they were written by the students. Only a portion of the work submitted during the classes has been included here due to space constraints, as will be evident when the numbers of posts and responses are shown. The examples reproduced here are reflective of the work submitted by the students in general. As is the case in all assignments, some students did not participate fully and some struggled with the concepts of the assignments. The work shown here is, however, reflective of the majority of students who participated in this study.



One of the issues that composition instructors try to impress on students is developing a voice and preparing their writings for an audience other than the instructor. Because this is a concern in composition classes, I felt it was important to allow students participating in this study to have the right to claim their work as their own. Therefore, students were given the opportunity to remain anonymous or to have their names associated with their work. Those students who wished to be identified are named in the following pages. The names have been withheld for those who wished to remain anonymous. In all instances, fairness to the student contributors and discretion with their work has been maintained.

From fall semester 2008 to summer semester 2009, students from 9 classes participated in this study. Of those, 6 were College Composition I classes and 3 were College Composition II classes. A total of 207 students were enrolled in these classes; 103 elected to participate in the study. Some of these students were traditional students, some were dual-enrolled high school students, and others were non-traditional students retuning to school after an absence of some years. Many of the students were native English speakers, but a large number were non-native English speakers. The majority of the students had only basic computer skills when they arrived in my classes. They could compose and save a Word document but had little or no experience with blogs. None of them had ever used a wiki. Although they were excited about the prospect of creating a Web page, only a couple had any experience in this area. As College Composition I and II are general education classes, the presumption was that the majority of the students were enrolled in the classes because they were required classes, not because they enjoyed

writing. Most students expressed interest in the idea of using technology to learn to write. As an interested student is typically more motivated than a non-committal one, I felt this was an advantageous beginning for the classes and for this study.

### **Time on Task**

In the course of this study, 9 classes with a combined enrollment of 207 students participated. These students generated 1,343 blog posts and 2,271 comments for a total of 3,614 writing experiences in addition to the formal essays assigned in the classes. If a simple average was done, the result would be 17.46 writings per student. While this is an impressive number of additional writing experiences per student, this number is not totally accurate. This would be a false accounting as some students did not participate fully while others did more than the average. Nevertheless, this is an impressive number of additional writings for students, even recognizing that some students did not participate as fully as others. This also means that some students posted more than 17.46 additional writings.

Class sizes and postings ranged from a low of an enrollment of 20 with only about half of the class participating and adding 73 posts and 103 comments to a high of an enrollment of 25 with all students actively engaged in the class and contributing 219 posts and 319 comments. The most writings, 192 posts and 408 comments, added a total of 600 writings to the blog for one class with an enrollment of 24 and 18 actively participating. The average for this class was 33.33 additional writings for each student. This easily provides evidence that blogs create the opportunity for students to have Time on Task.

Taken at the face value of freewriting, this would be a respected addition to any composition class. However, not to demean freewriting or its contribution to composition classes, the blog entries were composed with a specific purpose. Additionally, these writings, unlike the typical freewriting or journal assignments, were composed for an audience and critiqued by peers. The comments required that students actively engage with the writing of their peers and the information being discussed in class. This connection provided the opportunity for neural pathways to be laid down and strengthened as students actively participated in and manipulated the data they were receiving in class. The writing then informed the class interactions that followed as the blogs were displayed and discussed in subsequent class meetings. This is the outward manifestation of Notari's (2006) Collaborative Script and Wolfe's (2001) Information Processing Model seen in Figures 16 and 19.

While it is not feasible, due to the structure of a wiki, to count the number of comments made, it is easy to recognize that these technology tools also contributed to Time on Task. On average, each Composition I class was given five essays of varying genres to read and evaluate. Each Composition II class was given three argumentative essays to study and assess. A look at the mass of comments made on representative pages reveals that students were once again actively and personally interacting with class concepts in ways that allowed them to engage with the material in the specific, meaningful, and experiential ways that Smilkstein (2003) advocates. Instead of only listening to a class lecture and then demonstrating that new information once in a formal paper, students were given the opportunity to interact with that information multiple

times, and to practice what they had heard until it became easier for them to recognize and retrieve that knowledge in the preparation and presentation of formal writing in assigned essays. Figure 21 shows the number of comments made on one page of an essay posted for discussion during the fall 2008 semester. This figure is designed to show the number of comments, not the details of the comments, so the words themselves are not distinguishable in this example. Each underlined portion is a link to an attached comment about the specific portion of the essay designated by the link. The lines following the essay are general comments about the entire essay. Figure 22 shows a similar page from the spring 2009 semester. Again, the underlined sections have comments specific to that portion of the essay linked. Figure 23 shows a similar page from summer 2009. No comments addressing the entire essay followed the imbedded links on this page. Each of these wiki pages are representative of the work performed during the three semesters of this study. They reveal the amount of time dedicated by students to a close reading and analysis of essays that allowed them to personally utilize the information that was presented in class. The ensuing discussions during the class meetings that followed the wiki postings provided students the opportunity to rehearse this knowledge once again.

## The [Republican Party in the American Government](#)

The [first part](#) of [my](#) paper is about the Republican party. Republicans control the U.S. Senate, [U.S. House](#), and many key Governorships, including [New York](#) and Texas. [But](#) they have lost the [last](#) two Presidential elections.

[Most Republicans](#) usually fall into several different categories: the traditional conservatives, the religious right, the Nixon/Rockefeller centrist wing, and libertarians. There are also some that fall into categories that are [basically in between these](#), but [most Republicans](#) will usually fall into one of [these categories](#).

The Republican candidate for President [this year](#) is George W. [Bush Jr.](#) The first presidential

debate was held last Tuesday, and Bush was the [clear winner](#). [He demonstrated his superior leadership skills](#), and offered a clear and sharp philosophical distinction between himself and his opponent [Al Gore](#). [Governor](#) Bush's goal is to return power and responsibility to the American people.

[My second part](#) is about America's Party. It is a [very](#) small party, founded in 1999 by

evangelist and [2000 Presidential hopeful](#) Joe Bellis. [It is a very socially conservative group. Their main goal is to have less government.](#) This would be vague. avoid using the word good because [government should not exist only to see how much money it can get out of you.](#) [Your](#) elected representatives should represent you and must be honest, moral and full of integrity. This shows their support of the Religious Rights agenda.

After Joe Bellis went nearly a year on the campaign trail, he unfortunately decided to withdraw from the race and support the Reform party candidate for president, Pat Buchanan, in July of 2000. The party has considered nominating another candidate for the 2000 election, [but no decision](#) has been made yet concerning this issue.

[This has been my paper about the Republican and America's parties. I hope you found it interesting and informative.](#)



**Anonymous said**  
at 12:19 am on Oct 28, 2008  
[Delete](#)

I think the author did make alot of claims that he or she cant really make because they were opinion based. It makes no difference if they thought it made since or not.



**Anonymous said**  
at 12:23 am on Oct 28, 2008  
[Delete](#)

Alot of this is over thought as well these were two kids that acted on emotion and nothing more. They were being dramatic and they went to far. (Chris M)



**Anonymous said**  
at 12:38 am on Oct 28, 2008  
[Delete](#)

The author again says that if the characters were young adults they would have had greater control over the events. I would have to disagree because there are many adults who make things just as dramatic as these two kids did so I doubt young adults would have done any better.



**Anonymous said**  
at 10:06 pm on Oct 28, 2008  
[Delete](#)

(much more important reasons ) The author is being repetitive in the second paragraph. He mentions that there are many events that lead to the death of Romeo and Juliet twice, but in two different ways. I think this is annoying because I'm thinking, 'okay, you said that already, make your point'



**Anonymous said**  
at 10:14 pm on Oct 28, 2008  
[Delete](#)

(Romeo kills Tybalt) Here, I find the author repeating himself again. He mentions this big fight between Romeo and Tybalt as being the main event, twice, but then, he doesn't actually discuss what happens in the fight. He doesn't support it to make the readers believe this is the main event.

Figure 21. Comments on a Wiki page, fall 2008.

"Romeo and Juliet" is a play that really makes the audience wonder if the two young lovers had any chance for a life. In the prologue, Shakespeare states that "From forth the fatal loins of these two foes/ A pair of star-cross'd lovers take their life" ((37). There is a debate in philosophy that applies very much to this play. The debate is concerned with two opposite ideas about human beings, free will and determinism. If you have free will, then you can do something else besides what you did. What happens in the play is important because it could happen to two people today. The thesis of this paper is that Shakespeare set this play in such a way that there is absolutely no way Romeo and Juliet could have done otherwise.

Romeo and Juliet are young teenagers who were born into a very negative situation. Romeo is of the house of Montague and Juliet belongs to the house of Capulet. The worst part of their trouble is caused by the feud between their families. However, there are a number of complicated events and much more confusion that leads to their deaths. One of the most important events in the entire play is just a small one. It is when Friar John is delayed and cannot get the message to Romeo in time. This is actually the main reason that Romeo kills himself. However, there are much more important reasons that lead to the tragedy. The main one is when Romeo kills Tybalt.

The love between Romeo and Juliet is intense. The language that Shakespeare uses makes their love unforgettable. Romeo literally risks his life to see Juliet. When she warns him of the danger, he replies: "With love's light wings did I o'er-perch these walls/ For stony limits cannot hold love out,/ And what love can do that dares love attempt" (65). From the very first words of the prologue, everything in the play is working against their love. Shakespeare manages to make the negative events that much worse by breaking them up. "Before their love can be consummated, the lovers become entangled in the chain of events which leads to their deaths" (Best 3). The main event is when Romeo becomes involved in the duel with Tybalt.

With all the tragic events, Romeo and Juliet have just one night of happiness, and even that is really only a few hours. As Romeo prepares to leave, Juliet mentions that in a few hours they will meet to be married. As she puts it, "It is twenty years till then" (68). Then she speaks the very famous words: "Good night, good night! Parting is such sweet sorrow,/ That I shall say good night till it be morrow" (68). Juliet mentions just before that point that she could kill Romeo with too much cherishing. At another point, she speaks of cutting him into little stars. The passion that they felt for one another was almost violent in its strength. They also seemed to have some idea of what

*Figure 22. Comments on a wiki page, spring 2009.*

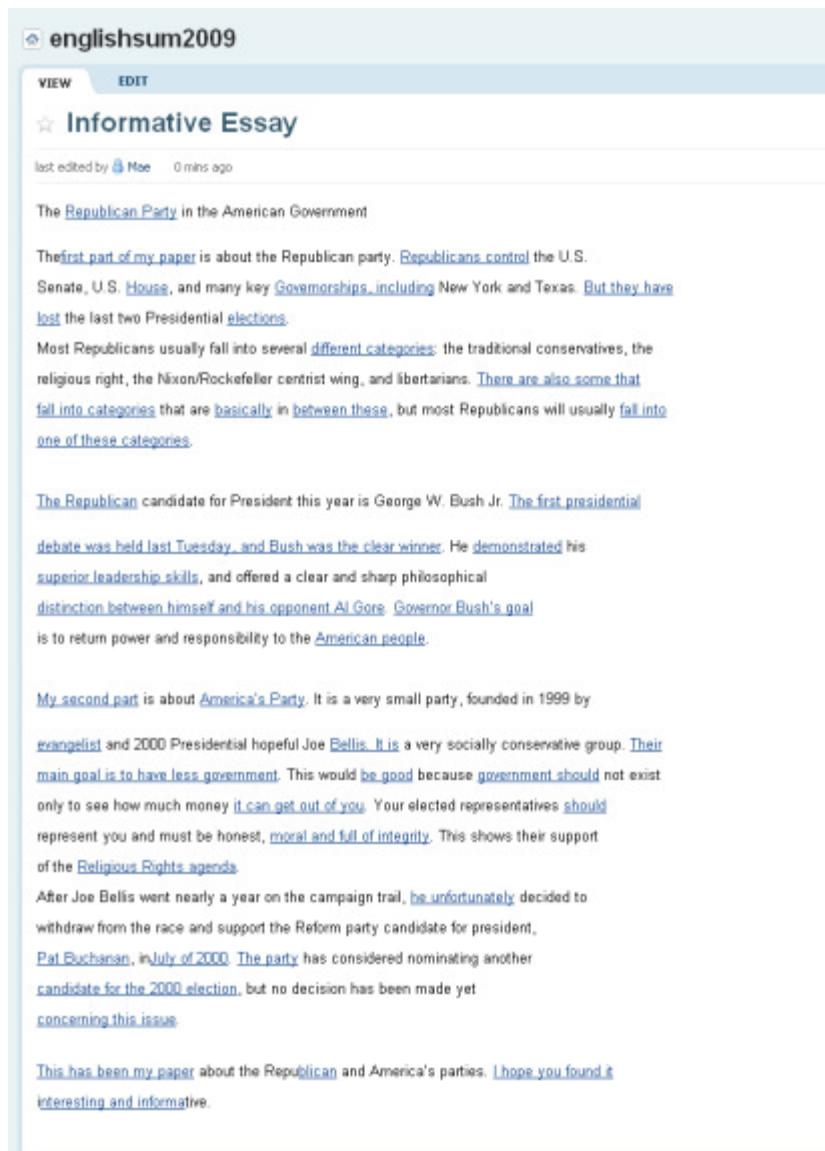


Figure 23. Comments on a wiki page, summer 2009.

In addition to the long-distance view so far presented, a closer study of student comments also reveals the way in which they were interacting with the material presented to them. Following the class discussion of Informative Essays during the fall 2008 semester, a reading was posted on the wiki site for students to analyze. Although the essay was purported to be Informative, it did show bias. The class discussion of

Informative essays had made clear that this type of writing was simply to present information; it was not to persuade or reveal the author's beliefs. After reading the posted essay, one student, who wished to remain anonymous, wrote:

The author is showing biased by saying people should try to...and then what their point was that they were making. There should only be facts about global warming, the good and the bad, not what they think should be done, because that is showing that they are upset by the global warming, and that's not an informing paper.

A second anonymous student wrote:

The paper is not an informative essay. There is only one side to it, which is how bad global warming is. The word/letter I is in there twice, and it comes from the reader telling its audience how they feel about global warming and what they think should be done. There are good facts in the paper but there is still a biased view towards it.

Viet, another student in this class, also wrote:

the writer is taking sides in this entire paragraph instead of informing us about global warming.

The comments by these students indicate that they were engaging with the material covered in class and that they were applying it in their reading analysis.

In another Composition I class during the same semester, students were assigned to analyze a persuasive writing sample. This assignment followed the class discussion of the elements of argument. A student who wished to remain anonymous commented:



Using personal pronouns such as “our”, “we” and “you” are not recommended.

According to the prompt for the argumentative essay, these pronouns are not allowed. I think this leads to a weaker argument.

This student demonstrated her understanding of the concepts presented in class. She then utilized that information to assess the assigned reading. This moved her understanding of the material beyond that of simply being able to answer direct questions about it to the level of being able to utilize that knowledge. Another student, after reading the same essay, commented:

How is a person suffering from insomnia to focus his/her energy to help himself sleep; if the person is already tired, where does the energy come from. More support is also needed this point. Possibly adding statistics on the costs of medications or explaining the process.

This is another example of a student applying knowledge of class discussions, in this case the concept of providing adequate support, to a personal interaction that encourages rehearsal of the data.

Properly using sources in an expository work is rather like riding a bicycle. It is a difficult task to learn because it takes a great deal of practice. Once mastered, however, it is easy and not often forgotten. While there is motivation for people to learn to ride a bike, students often struggle with the proper use of sources in their work. The Time on Task capability of wikis helps to overcome this problem. A persuasive essay that relied heavily on sources was posted for students to review and analyze. Several students

focused on the use of sources, a topic that had recently been discussed in class. Meghan commented:

Out of curiosity. . .who wrote this paper, the “author” or Hellriegel? Because it seems that every other sentence is cited as coming from Hellriegel. I would like to see more of the author’s personal ideas relating to conflict.

Following a quote that was not documented, Cesar added:

The writer needs to give some credit to the author by writing his/her name and the page number at the end of the sentence

Following another incorrect documentation of a quote, Olga wrote:

At the end of this quotation the author inserted a page number in parenthesis, however there is no author’s name. If an reader wanted to do some research on this quote they wouldn’t know which book the author used as his source.

Veronica noted:

This paragraph and the three above it are just listing quotes and paraphrasing. The author needs to weave them into his paper instead of listing.

At the end of the essay, Brooklyn wrote:

The works cited needs to be revised because it is not currently in alphabetical order.

Students were not prompted to evaluate the use of sources in this essay. However, their attention to this aspect of the writing provided Time on Task for a subject that needs practice in order for students to achieve proficiency. The wiki assignment provided that extra time without the necessity of drills.

In another instance of students utilizing the Time on Task aspect of wikis, they were assigned a persuasive argument to read and analyze. This assignment followed the discussion of what constitutes the elements of a good argumentative essay. The first comment, from a student who wished to remain anonymous, focused on the opening paragraph, an area that was discussed in class:

This entire introductory paragraph is almost entirely made up of questions. While it may make the paragraph more interesting, it's definitely not hard to do; anyone can do it. It doesn't show much style or imagination, either. It also makes the paper less coherent, and with fewer complete thoughts. Statements are what the author should be making in this first paragraph.

Another student, Paula, commented on a particular paragraph:

This paragraph is a little confusing. I can't understand if the author is con or pro men lawgiver. He seems to be lost by his own words. He should state his thesis and have a strong decision about his persuassion. He seems weak toward his topic.

Providing a clear argument throughout an essay with plenty of strong support was another aspect of writing that had been discussed in class. Paula was using the wiki to practice that knowledge. This essay also exposed students to writing that lacked sufficient information to make the meaning clear, another element of writing that had been previously discussed in class. Danny remarked about the lack of specifics in the essay:

What law? be more specific while writing your essay. your readers cannot read your thoughts.

Danny's frustration was obvious, as was Meghan's:

Then by whom was it created? The lawgivers? And who, exactly, are they? I judge this author on his complete lack of background support and credibility. And really, with the alternative universe/dimension craziness? What is that about? What exactly is this author trying to say? That men live by moral codes, and there is a right and a wrong. Yes, that's great . . . now support it. It's a tough persuasive argument, because what is he arguing? WHY men chose good over evil, or, THAT men chose good over evil? I need a tylenol now.

It is not unusual for composition instructors to experience this type of frustration when reading student writing. It is unusual to see that reaction *from* students. This rehearsal of what constitutes a good persuasive essay through Time on Task allowed students to experience what they should not do.

The blog assignments and responses also showed that they contributed to Time on Task. One assignment in a Composition I class during fall 2008 was to write a brief persuasive essay. This assignment followed the class discussions of the elements of argument. Responses to the posts were to evaluate the writing, not engage with the argument itself, as was sometimes the assignment. Sydney wrote:

So I'm sure every redskins fan watched the game. They beat the cowboys, but the rivalry is so outrageous that people literally get into fights over it. To me I think that is ludacris. A football game is not worth getting in a verbal or physical fight over. It's just a game. Men get so consumed in sports that they actually think that they some how contribute to the win. They do not, and I think it is just ridiculous.

I see people actually scream at the tv like its really gonna make a difference. It just crazy.

Her classmate Aryan responded:

I also agree with this post. People get way too involved in games. Especially football games, and takes things personally also. The high school that I used to had an undefeated season so far. Recently last Friday they shut out their greatest rivals, Stone Wall Jackson high school. After winning some students from Battlefield high school felt as though they needed to do something dramatic in addition to their win. So they drove to Stone Wall Jackson high school and sprayed graphite on the sacred stone of Stone wall Jackson. They didn't spray anything bad, just BHS, BHS rocks, Stone wall sucks. Never the less it is still vandalism. Anyways, the next day some of Stone Wall's students felt that they needed to come to Battlefield and vandalize our walls and doors by writing SJ all over the school. I am just sitting here thinking shy? Why would you go through all this just because of a football game? Overall, I am agreeing with your statment that people get to rowdy about stupid things such as football games.

Compare these two writings with posts by the same two students later in the semester after they had practiced their knowledge through the wiki and blog assignments. Sydney wrote:

Gracie the boxer is a shade of brindle, she has a loving eye, and a warm heart, and the companionship of a lifelong friend. She missed out on the normal things a dog's life should entail, such as playing fetch or going for long walks, due to the

depressing fact of being held captive at a puppy mill for 5 long years. She was finally rescued from the horrid place by an adoption agency. She was then adopted by a loving family. She had 2 wonderful but short years with them. Her life was cut tragically short due to the horrendous conditions and stressful lifestyle she endured while trapped at a puppy mill. Puppy Mills are terrible to animals and have many setbacks to a dog's health, and should be illegal.

Her classmate Aryan once again responded:

I am assuming that this is your introduction paragraph. It is very good. I like the fact that right off the bat you introduced a cute adorable dog. It is a great way to attract your readers. Just make sure that your conclusion paragraph brings this dog up and tells us how it is doing now.

Notice the improvement in Sydney's writing after practicing her skills through the wiki and blog assignments. The second of her two posts shown here is focused, provides evidence, and although it has an emotional pull, does not simply rant about the topic. Aryan's responses show a similar improvement. His writing is also tighter in its focus and does not simply react to the content of the original post. Instead he evaluates the structure of the writing. Although the puppy mentioned in Sydney's post is clearly dead and Aryan missed this point, he does remind her that she must conclude the story she introduces. There is a clear improvement in the writing of these two students as they engaged with the class content on the wikis and blogs.

While these examples are representative of the work submitted during the course of the semester, not all students achieved this level, nor did most of the students begin the

wiki assignments with this type of focus and close reading. Some of the comments such as this one by an anonymous student did not move beyond the basics of editing:

You have spelled done instead of down in this sentence.

While spelling does matter, the students were instructed to engage with the texts on a deeper level and to utilize the information discussed on class to evaluate the text. A few students continued to make this type of comment throughout the semester, but the majority moved beyond this type of comment to interact more thoroughly with the assigned texts. Still other students noted the spelling errors and grammatical mistakes along with doing a close reading and analyzing the text.

The use of blogs and wikis provided the students with the opportunity to interact with class information outside of the formal class environment. These technologies allowed students to employ new information in ways that allowed them to ponder, consider, and understand the information on a personal level. They were personally interacting with the material rather than simply hearing it discussed. This created the environment that allowed for the necessary Time on Task to grow the neural connections that allowed this knowledge to be implanted in working and long-term memory so that it will be readily available for recall and use in future situations. This rehearsal of information in an iterative fashion helps imbed knowledge in working and long-term memory.

### **Collaboration**

The collaborative aspect of wikis and blogs was also utilized by the students in this study. We have already seen one blog post by Sydney in which she presented her

argument about puppy mills. That blog eventually became Sydney's final essay in Composition I. However, that was not her first blog about puppy mills during the semester. Earlier she had written:

Puppy mills can be a positive and negative source for finding a dog. Some puppy mills are very clean and well ran, however, others are very unsanitary and often inbreed their dogs, causing medical problems later in the dogs life. A puppy mill is an established business that breeds all different kinds of dogs and then sells then to pet stores or directly to customers. A well run puppy mill offers the dogs the correct nutrition and sanitary living conditions for the puppies. They also make sure they are up to date in all of the shots and medical treatments puppy's need. A poorly run puppy mill in breeds their dogs and they spend their days in feces and urine that is often not cleaned up for a long period of time. They do not give the puppys the right nutrition and they receive no medical treatment. They are often abused and made to fight for whatever food they receive, which causes early agression problems with humans and other animals.

Sydney received numerous comments to her post. She was encouraged enough by the interest shown by her classmates that she chose this paper as her final topic. The collaboration with her peers was a helpful impetus to her.

In another post, one student was planning on writing her final paper about homosexual adoptions, but she wanted to hear other opinions and voices about the issue. Tiffanie wrote:



My research paper is going to be on homosexual adoption and I was just wondering where you all stand on the issue? I strongly believe they should have equal rights to the heterosexual counterparts especially considering the enormous amount of adoptable children in the United States and around the world and also the fact the male homosexual couples are the only people with no other alternative to having children.

A student who wished to remain anonymous wrote:

I think that any couple who can provide for a child should be able to adopt. It shouldn't matter if they couple is homosexual or not. If they can take care of the child and give it a good home, then it shouldn't matter.

Another student who wished to remain anonymous added:

Everyone is born with the same rights as everyone else. It shouldn't matter if you are a homosexual or a heterosexual. I agree with you that homosexuals should have the right to adopt a child. One counterpoint would be however is how the child's mind could develop with only one sex as a parent rather than both sex's.

A third comment was made by another student who wished to remain anonymous:

I completely agree with you. People have individual rights, and they should be able to date and marry who they want. Also I do agree that adoption should be allowed with homosexual parents because kids around the world need to be adopted. Children may end up spending their whole life in an adoption center. Isn't it better that they are raised by loving parents then paid people, who have to help them because its their job.

(prof. this is a third comment and its an agreement, but I left it for the person, not for it to count as one of my disagreements)

The student who made the original post was seeking support for her view before venturing to write her paper on this controversial issue. She received enough support from her peers that she did use this topic and advocate this stance for her final paper. In addition, the final comment of this series shows how seriously the students viewed the collaborative aspects of the blog. The blog assignments required that students respond to at least two posts; they were not allowed to simply tag on with another agreement if there were already a number of such comments made. However, the third anonymous student was concerned enough with her classmate's dilemma that she added an extra post beyond what was required, knowing that it would not count toward her requisite work.

Other students also sought collaboration from their peers before venturing to compose essays for the class. Before beginning her work on a persuasive essay, Anne elicited reactions from her classmates regarding her topic:

I want to write about the child beauty pagents and how they are damaging to children and are putting forth a image to even the youngest of our nation that they have to live up to an ideal that they should not have to attain. Also many of these children have to go through grueling lessons even drastic surgeries so that their parents can live vicariously through their "angelic beauty". Never mind that the children wont get a chance to live normal lives free of worry that they don't look cute enough at the age of five. So let me know what you think!

Anne received helpful insight from her classmates as Caroline responded:

This is a really great idea. I don't know if you know this but there is actually a tv show starting January 27 [2009] about child pagents and basiqually how they spray tan their kids and do crazy stuff to them.

Samantha wrote:

I think this is a really interesting topic! This is something that most people normally don't pay any attention to. Can't wait to hear more about it.

Nicole added:

I think this is a great topic. I saw previews for a show coming up about just that, and it was, to put it lightly, disturbing. I'd like to hear opposing sides of the story and I look forward to reading more!

Vanessa contributed:

This topic has always been interesting to me. I don't know how the parents can do this to their children. They even have fake teeth they have to put in to cover up where they lost their baby teeth. They never get a chance to be a kid and they are most likely going to be effected by this in the long term.

Anne not only received encouragement from her classmates to continue with this project, she also gained additional information to help formulate her argument. In addition, Caroline returned to this idea at a later date when she composed an essay about the use of cosmetic surgery to enhance a woman's self-esteem. The collaboration of this group benefited at least two of its members.

The collaborative opportunity presented by the blogs also allowed students to explore ideas of interest to them while practicing their composition skills. One area that is of recurring interest to college students is the legal drinking age in the United States. This topic was broached by a student who wished to remain anonymous:

In the United States the legal age to consume alcohol is 21 years of age. In most other countries the respective consumption age is 16 years of age. American critics in favor of keeping the consumption age at 21 state that it is a responsibility issue; young adults' brains have not sufficiently developed. However, 21 is 4 years short of the actual "maturation" age of an adult brain. The average person's brain does not completely develop until around 25 years of age (each person is different of course), so why 21? . . .

This post, naturally, elicited varying views, again providing the opportunity for collaboration and the airing of diverse views. One student who wished to remain anonymous wrote:

Until today I agreed that the drinking age should be lowered. We can vote and go to war but we can't drink that seemed unfair. Then I met my friend's foreign exchange student. She is from Germany where the drinking age is 16. Although the legal age to receive your license is 18, and it costs a lot more than in America, I believe she said thousands. Also she was upset because today was 1 month since she lost her good friend in a drunk driving accident, and he was only 15. The driver was 18 and barely had his license. So I do believe the drinking age should be 21 and remain 21. After you turn 21, you have your whole life to drink.

This post gave a different perspective on the issue than the one stated by the original author. The personal story gave her something concrete to think about. A second post from another student who wished to remain anonymous also countered the claim of the original post:

I believe the drinking age should remain the same, and not be lowered. Though 18 year olds are dubbed as being adults and are usually burdened with more responsibilities, it doesn't necessarily mean they are mature enough and have more life experience. It is true that a majority of teenagers and young adults drink, but it is their choice to do it illegally and to suffer the consequences. Just because everyone is doing it doesn't mean that the government should give in and lower the age. If the drinking age was lowered in the United States, there would probably be more car accidents as a result.

A third comment from Tiffanie also countered the belief of the original author:

I think the government is well aware that there are many underage drinkers all around the United States and you're exactly right, we will always want what we can't have. I do believe however, that if we were to lower the drinking age, the underage drinking age would lower as well. Instead of our high school students thinking it's cool to party like a college student we would have middle school and elementary students wanting to be like the cool high school kids. This is one thing I would have to say I'm with the government; the legal drinking age should be twenty-one.

This series of posts and comments shows that collaboration does not necessarily mean agreement. It can mean sharing ideas and beliefs. These students certainly did not agree, but they voiced their opinions and offered support for those beliefs as any composition instructor would want.

The collaboration did not always contribute to the essays being written in the class. At times they just helped students to think through issues. This is an important aspect of collaboration as it helps students to understand opposing views, a skill that is necessary to format a good paper. Sometimes it was clear that the online discussions had an impact on the students. One student who wished for her work to remain anonymous wrote:

The normal weekly schedule for an American working full-time is a 5-day, 8 hour schedule. Some people propose the idea of working 4 days a week, but 10 hour shifts instead. Most workers actually reject this idea, saying they already hate their jobs enough as it is. I think this plan would prove to be effective, seeing as it would save gas, and the workers would have a whole day to relax and to things they need to do, such as scheduling their appointments on that specific day, going grocery shopping, spending time with their families, etc.

Her classmate Tiffanie responded:

I really hadn't thought of shorter work weeks with longer hours as being a means of conserving gas and I think that idea is amazing! I for one had always been an advocate of longer days with shorter work weeks because most work days, you don't have enough extra time during the day for anything anyways. Before, it was

just a personal preference but now looking at it from this light, I think it should be seriously considered even just as a means of lowering CO2 emissions.

Although the original post was an attempt on the part of the author to gain more information, she actually supplied Tiffanie, who already agreed with her, with more information to underpin her existing belief. Another student who wished to remain anonymous responded:

I think having a four day week instead of a five day week is a good idea. This would save on gas and you would have a three day weekend to top it off. Working those few extra hours each day to make up for an extra work day is worth the effort.

This student's contribution confirmed and strengthened the belief of the previous student while at the same time adding the additional information of a three-day weekend. The anonymous student who wrote the original post could be comfortable in her belief after receiving support of her ideas from peers despite the fact that, according to her post, "most workers actually reject this idea." She was encouraged by the collaboration to form her own judgment, despite the opinions that she had read.

Another example of collaboration helping students to develop opinions that were not reflected in class essays was Viet's post about the death of his dog:

On Friday, I had to put my 16 year old dog, Shorty, to sleep. When it happened a question came to my head, should the other dog be there or not be there for the death? I know he had his problems and he was in pain, but it really hurts a lot. My companion, my best friend is gone. We brought my other dog Rascal (who has

been with Shorty for the past 15 years) along. After Shorty's death, Rascal laid next to Shorty like he would when Shorty sleeps. As we were exiting the room Rascal did not want to leave. We finally got Rascal back to the house and this past weekend he has been looking for Shorty, waiting and hoping that he would come home. I've heard that it is better if the other dog is there to see the one dog's death so they know what is happening, but Rascal seems to be stubborn and not want to believe that Shorty is gone. So what do you think? Should the dog that is alive be around for the death of the dying dog?

There were three responses to Viet's post, all from students who wished to remain anonymous. Comment one:

To begin, I am very sorry for your loss. I have put several pets down already and it is heart wrenching every time. I think that you made the right choice by letting Rascal be there for the event. Even though, he sensed Shorty's demise, it will take some time for Rascal to get over the shock. Just like us, he still forgets that Shorty is gone and therefore keeps searching for him. I had to put one of my dogs down in February and we were very worried about his brother. For a while he searched for him and did not eat, but with our support he recovered. It just takes time.

Anonymous comment two:

In my opinion I really don't think that the other dog should have been there when you were putting Shorty down, because I think he got mixed signals. I think that Rascal thinks that Shorty was sleeping, and that yes he was sad that Shorty didn't come home too, but it might be that he thinks Shorty was going to come home,



but he had to stay there for a bit. I am very sorry though that you had to put your dog down I know that is hard.

Anonymous comment three:

I think that Rascal should have been there when your other dog was being put down. I think Rascal needed to know what was going on so he didn't get freaked out that his friend had magically gone missing. Even though it hurts Rascal, he needed to see what happened in order to cope with the situation.

None of the preceding comments in this set were designed to help the original writer improve his composition skills. They were not the type of comment that qualified for the requirements of the assignment. They were made to help a fellow student work through a problematic situation. They are evidence that students appreciated the opportunity for collaboration. If this had been a freewriting exercise, Viet would not have received support in the form of comments from his peers.

The wiki assignments also contributed to the collaborative aspect of these technologies. In the spring 2009 semester, students in my College Composition I classes were assigned to read and comment on an informative essay that was ostensibly about two political parties in the United States, the Republican Party and America's Party. The open format of the wiki gave ample opportunity for students to react to the essay and with each other. A student who wished to remain anonymous commented at the end of one paragraph:

This paragraph needs quite a bit of elaboration in which the writer should inform their audience of the difference in ideologies that distinguish these categories of

Republicans from one another. Stating the categories is not enough information to be considered informative.

Knowing that the essay was to be informative and not persuasive, another student commented:

This whole sentence is completely biased. You can clearly tell he is way in favor of Bush just by this sentence.

These students read the same essay and each other's comments. The collaborative experience gave them confidence in the next class when we discussed the attributes and problems of the essay. In general, students are frequently reticent to voice their opinions about someone else's writings. Discussions following a wiki reading and analysis were typically more productive and students referred to their own comments and to the posts of classmates.

During the same semester, College Composition II students were assigned a persuasive paper to read and analyze, posting their comments on the wiki. Their reactions to the writing revealed a similar reaction to the posted essay. Ashley wrote:

The conclusion of this paper doesn't follow the introduction. I believe the writer got lost in his paper. The conclusion is supposed to sum up the entire paper and restate the thesis statement which the writer forgot to do.

While collaborating with her peers in analyzing an essay, this student was also rehearsing class discussions about the format of an essay. By practicing the information discussed in class, she was in the process of transferring that data to her working memory. Another student commented:

The essay begins to stray from the original argument which is determinism.

Instead it begins to question their [Romeo and Juliet] actions.

A third student, Sarah, wrote:

What does this have to do with determinism? This paragraph doesn't really work with the essay.

Another student, Roger, commenting on a quote contained in the original essay, added:

This quote doesn't even have any correlation to the argument stated in the paragraph much less to the main point of the essay. Juliet not being able to marry some guy because she is married to Romeo has not correlation to her choosing to die with Romeo.

Completing the same assignment, Chelsea wrote:

This paper is anything but precise. In this particular paragraph, it begins with the moral dilemma of the play. It goes on to discuss anything but support for the thesis.

This paper is all over the place, there is absolutely no structure.

From yet another student:

I thought the thesis for the paper was weak and very unclear. This made comprehension of the rest of the essay hard. It seemed that the paper had no clear direction and it rambled a lot.

These comments all reflect those ideals that composition instructors want students to employ in their own writing: a clear thesis, clarity of argument, and adherence to topic.

Through collaboration and exposure to practice essays, wikis provided the opportunity

for students to utilize information gleaned in class in a more personal way that led to better comprehension and use.

While it is possible in this type of collaboration that students who post late may be mimicking the comments of those who precede them, this idea is disproved by examining the posts of other students to the same essay. Instead of focusing only on the lack of clarity in the essay, another group of students concentrated on the failure of the author to follow through with a main idea. John wrote:

The introduction to this paper did not “grab” me. I think this is due the tone of voice used and the rather weak way of stating the thesis. My thoughts in the beginning: Ok, so free will and determinism. My thoughts at the end: Ok, so it didnt talk about free will and determinism. This paper seemed to lack focus.

Caitlin added:

I found this paper to bore me, the introduction of the paper is weak, it did not grab my attention. For the body paragraphs I feel they gave a lot of good information but it felt like it was just slapped on the page because it did not keep my attention and it did not stay focused. They did not go in to further detail in the body paragraph about free will and determinism. The conclusion I feel lost focus it did not really sum up everything that was said in the introduction.

It is to be expected, and hoped, that comments among students will be similar. These practice essays were chosen because they had obvious flaws. This made it possible for students to concentrate on those particular areas. The students received additional assurance about their own reaction from reading the posts of other students. This helped

to reinforce class discussions as they heard their peers reaffirming their own ideas. This allows that knowledge to transfer into long-term memory where it can then be employed in their own writings.

In another wiki reading, students worked together to critique the reading, each student focusing on varying aspects of the essay. Students were only instructed to not comment on a portion of the essay already discussed. This created an analysis that involved several different components of writing. In addition to their own writing, students were to read the comments of other students and be prepared to discuss them in a follow-up class. Brooklyn began the discussion with her comment regarding the introduction of the topic:

Forgetting to actually define what exactly your argument is may not see important to the writer, but after spending the last 3 minutes of my life reading about whatever “Reiki” is, I’m actually pretty mad at them. Perhaps everyone else who reads this paper knows what this action is, but I have no clue! By not accurately defining your subject, those that are uneducated about it aren’t going to pay you any attention. It also means that they are more likely to align themselves with whatever you were attempting to persuade them against.

Author credibility and ease of understanding are areas that this student seems to have grasped and passed along to her classmates. In another section of the assigned essay, Paula commented:

I don’t agree with the author that Reiki should be trusted. The author doesn’t explain what Reiki is. He just wants to sell it. The author is persuading the readers

of a method that he even isn't sure about himself. Reiki is used by whom? How Reiki is the side effects of conventional medical treatments? Can the author just give a full picture of how Reiki can really help in our health? I would rather put my trust in proven medical treatments.

Danny added:

Scientifically proven to do what? If there is proof about something it would make sense to mention it, at least finish the sentence proven to work, heal, destroy civilization. . .help me out.

Olga wrote:

The writer should be a little bit more explicit here. What is providing examples?

The medicine? If so which one?

Heather posted:

The author states that medicine is ok to help pain and two sentences later completely contradicts himself. He states that taking things for headaches and backaches to just being addictive drugs to take money. He has too much going on in each paragraph. The piece should defiantly be broken down, put things where they belong, take out what doesn't belong, and rewrite it.

Although each student wrote about a different portion of the essay, they all spotlighted the lack of information provided by the author and the resulting disbelief on the part of the audience.

As with the Time on Task element of wikis and blogs, not all students mastered the idea of analyzing and critiquing another person's writings. They seemed to find this

easier to do on the wikis than on the blogs. This may be attributed to the fact that there was more collaboration among the critiques on the wiki. All students read the same essay and commented on it; seeing the comments of their peers may have emboldened them to make their own critiques. It is also possible that they were less willing to critique their peers than they were an anonymous author. Whatever the reason, a small portion of the blog entries, mostly from early in the semester, took the form of “I agree with you.” The majority of the students, however, quickly moved beyond simply agreeing to providing valuable critiques and insights into the topics.

Collaboration was evident throughout the course of this study as students worked together on the blogs and wikis. It appeared in different formats from discussing possible paper topics to a joint effort to analyze an essay. While there was a similarity of ideas in some instances, this was to be expected. Readings for the wiki were chosen because they had specific errors. These aspects had been discussed in class prior to the wiki assignments. Utilizing themed assignments provided the opportunity for students to collaborate in their new knowledge. The collaboration achieved through the blogs allowed for sharing and discussing disparate views. The dialogic collaboration provided students with the opportunity to practice their writing skills and to explore new ideas with peers.

### **Peer Feedback**

In addition to collaboration—sharing ideas—the class blogs gave students the opportunity for feedback from their peers. As discussed in the Pedagogy section, students like to hear from their peers, both ideas and critiques of their work. They expect such

comments from instructors, but my observation has been that they tend to believe it more readily when it comes from a classmate who is “one of them.”

Some blog assignments were structured to elicit feedback to help students improve their composition skills. These assignments were frequently based on specific genres. The following series of student writings was based on an assignment to post a brief argument. Responses were to be in the form of an analysis of the structure, not the content. The original post was by a student who wished to remain anonymous:

Smoking is a common habit not only in the United States, but all over the world. Each day about 3.000 people light up their finest cigarette and each year a million teenagers become regular smokers. Everyone is affected by the world's growing number of smokers, whether they realize it or not. Smoking is what some consider a victimless crime, because innocent non-smokers are exposed to secondhand smoke. There is no safe level to it, and it contains more than fifty chemicals that are proven to cause cancer. The act of smoking is already banned in public places in many states such as New Yourk, California, and Delaware. Other states are going through the process of banning it. The Virginia state government has yet to consider the bans on smoking, for example. Anti-smoking regulations are good for everyone, and everyone deserves the right to breathe in smoke free air, so it is critical that smoking be banned in public places.

The comments offered helpful advice to this writer. The first comment was from Viet:

Smoking is just one step of the way to a cleaner smoke free air. There are many other pollutants. Er, I think I am doing this wrong. Very strong paragraph and it



seems to be most effective. It gets the point across and you have good facts to back it up.

Viet's hesitation to analyze rather than to engage with the content of the post was typical of students at the beginning of the semester. They did not like to "criticize" their classmates; however, they became more adept at this as the semester progressed. A second comment to the previous post by a student who wished to remain anonymous did not have any hesitation about analyzing. This student drew on material from class discussions to offer suggestions:

Your paragraph is well worked out, but just a reminder, try to avoid using words like All and Everyone (hint, hint). If I remember correctly, she might dock us for using those words. Of course, I'm assuming our teacher will dock us.

This entry followed the class discussion of inferences, assumptions, and opinions. This student not only commented on the use of 100% words but also utilized the recent data regarding assumptions. This is an example that not only had the student heard the class presentation, he was also using that information in a manner that would place it in working and long-term memory.

In response to an assignment to post a compare and contrast on the blog, an anonymous student wrote:

These two very popular cereals [Cheerios and Fruit Loops] are debated among many people. Well maybe not debated as much as I like to thing so. :) To start off, the honey nut cheerios is a classic. These cereals have a honey taste and have minimum sugar. To compete with the honey nut cheerios is Fruit Loops. Fruit

Loops are also circular but do not have a honey flavor. Instead these “o” shaped cereal are made of more sugar. Also, unlike cheerios, fruit loops come in many different colors other than the honey brown of the cheerios.

The first comment from a student who wished to remain anonymous was:

Comparing cereals is probably not the best thing, no one cares about cereals but if you compare brands that would be more exciting. Like who makes more money, or who you favor more. But I disagree I think Fruit loops is better its more colorful and it tastes better. They are better to wake up to then a bland brown color.

A second student added:

I think comparing cereals is a good thing but this paragraph is rather conflicting. In the beginning it seems like you prefer cheerios but your last sentence is a “pro” for fruit loops. You might want to take that sentence out or redo it.

The original writer now had two opinions of his subject. In addition, he had received feedback on his handling of the subject. A third comment was:

Well, this is a very interesting point. I am not really sure what you are arguing against. The last sentence is a pro for Fruit Loops which I thought you didn’t like.

I was just a little confused. Also, just to point out, you misspelled color wrong.

Despite my admonition that the posts must support one item as better than the other, the original author of this series did not succeed with that. His classmates helped him to overcome that issue before writing and submitting a final draft to me for a grade.

In a similar assignment dealing with informative essays that were to show no bias, students were to post a short essay to the blog. Other students were to critique the writing, not necessarily the content. Ryan posted the paragraph that began the following series of comments:

There has always been a large debate over whether genes or the atmosphere influence effects on a person's character, growth, behavior, and intellect. This disagreement is most often acknowledged as the nature verses nurture conflict. Some people consider that it is strictly genes that effect our way of living, others believe that it is the environment that effects us, and some believe that both of these manipulate our behavior. Either way, social scientists have been struggling for centuries deciding whether our personalities are instinctive or made.

Examinations are done frequently on identical twins that were separated to see how they are each influenced by their separate surroundings.

Wes offered both encouragement and constructive criticism:

I think you chose a really good closet topic – something that's really interesting that doesn't get talked about a whole lot outside of psychology classes. I would suggest working on your flow a little bit to really highlight the thesis.

This type of feedback helps students to improve their writing without the teacher always being "intrusive." Brooklyn also offered feedback:

Watch the use of the words affect and effect; a lot of other people also tend to use them incorrectly in their papers. The last sentence: is that actually your thesis? I

read the other comments, but the idea in the last sentence was totally unexpected for me. I'll also be interested in reading your final.

It is worth noting here that Brooklyn read the other comments before posting her own.

Even in an instance where peer feedback was requested, collaboration also occurred.

Both of these students commented on the flow of the paragraph leading to the final thesis sentence. A third comment, from Danny, was posted for Ryan:

I am very interested in your topic. . I would go in to examples of the genes your talking about or what makes them different.

Each student offered feedback in order to help Ryan improve her writing before submitting a final essay for grading. This is another instance of students rehearsing class content in order to grow the dendrites necessary to make that information useful and retrievable.

A similar assignment was given in which students were to post a portion of their persuasive essays. Other students were then to respond with comments to analyze and evaluate the writing. Curtis provided the initial post that, although long to be reproduced here, needs to be read in its entirety because of the discussion it sparked:

Children growing up today in the 21<sup>st</sup> century are not getting the life experiences that will become beneficial later in their lives. The reason for this is the age we live in, you have the internet, Xbox, ipods, cell phones, and an endless amount of reality television garbage that takes control of our lives. It used to be normal to drive through a suburb on a sunny afternoon and see yards and streets filled with kids actually outside playing with their friends. Pick up games of basketball,

throwing the football around, hide and go seek or even just plain “tag” were not only activities for your average American child but also played a big role in helping develop social skills. Nowadays, kids as young as five years old sometimes have more interaction with their friends through “texting” than actual conversation in person. Childhood obesity is a whole other argument but it is getting worse thanks to the parents that are perfectly content with their children playing guitar hero or surfing the web instead of being involved in an organized sport or even just playing in the park.

The over protection that parents exercise on their children is not only keeping kids locked up indoors but is also turning the nations next generation into a bunch of sissies. You learn things on the playground, the ball field or your best friends back yard. Lessons that can’t be taught in school or from the internet. Life lessons such as competitiveness and the desire to win at something rather than just be a participant. Along with wimpy parents some coaches are to blame as well when they don’t even keep the score of a game so “nobody’s feelings get hurt”. This world can be rough, nasty, and most of the time unfair and children need to get a taste of that at a young age so it only makes them stronger and more prepared in life. To all the children of the world; go outside, climb a tree, scrape your knees, hit a ball and play in the woods. The technology age is wonderful in its own ways but lets not let it turn our children into anti-social weaklings who are afraid of a little bit of fresh air.

The first comment for Curtis was from Heather:

I completely believe with your view on this subject yet got kind of confused with the thrown in childhood obesity at the end of the first paragraph. Otherwise for two paragraphs it was catching and I could have read more.

Heather addressed the specific ideas of audience connection and clarity that had previously been discussed in class. The next post, by Brian, began the conversation regarding voice and tone, another class discussion that had preceded this assignment:

You do a good job of establishing a tone in your blog, be careful not to be too sarcastic.

Brooklyn, one of the more vocal students in the class, responded:

I disagree with the previous statement. I would assume this paper is a rough draft because of the few sentence fragments (and yes the obesity line needs to be revised or rephrased and expanded on later in the actual paper). Meaning that after you establish some more concrete support behind your argument you will be able to effectively argue with the sarcastic tone you have been using. Personally, the fact that I strongly believe what you were saying made me much more absorbed in your work because of your tone. Well done.

This elicited one more comment, this time from Meghan:

Love your topic, like Brooklyn, I could not agree more. And I love your tone. It suits the nature of the argument and it shows that the author is not only concerned with what he sees, but feels justified in wanting to see things change. It shows emotion and character which is what an argumentative piece is about.

The dialogue begun here on the blog was continued on the classroom. This was one of the many instances in which I walked into class and the discussion had started without me. Students were so interested in the issues they debated on the blog that they actually began class without me.

The feedback aspects of the blogs differed in the College Composition II classes. These classes are designed to teach argumentative writing and utilized a literature-based text. The blog assignments for this class frequently were to read a selection of literature and then, in the blog, discuss the impact of the meaning of that text. This encouraged students to keep up with the reading and also provided multiple views that added input into the follow up discussions in class. After reading “Five Ways to Kill a Man” by Edwin Brock, one student wrote:

The first poem, 5 Ways to Kill a Man, was very very depressing. Any poem that talks about killing someone and describing the scene in how your going to do it is crazy and gross. The first stanza is clearly about jesus with the whole nailing someone to a wooden cross. The others are crazy and sad as well.

She received a lot of help from her classmates in attempting to understand the significance of this poem. Ashley responded:

I believe the author is describing how the government excuted their criminals in that particular time period and wasn't fully based on a particular person.

This view was refuted by another student, Alec:

I disagree Ashley, its actually talking about the biggest deaths of the era. Jesus was the biggest death in his and the fourth stanza was talking of dropping the

bombs, (i.e. nukes). So its more of the most noted deaths rather than the ways that a government executes people.

Peyton added:

I do agree with alec that the poem was talking about big deaths/wars of an era. I mean, you have Jesus, medeval battles, world war I, and the dropping of nukes in world war II. You dont get much bigger than that.

While this exchange is similar to collaboration, the students were not actually assigned to reach a consensus of belief. They were to state their opinion of the literature and support that view with specific instances from the work. The responses were to take the form of noting perceived errors in discussing the meaning and applying the idea. They were to turn to the assigned text as the source of support for their argument.

In a second series of posts and comments after reading “Thanatopsis” by William Cullen Bryant, “When Death Comes” by Mary Oliver, “Do Not Go Gentle Into That Good Night” by Dylan Thomas, and the anonymous poem “Life Is Not A Journey,” a similar exchange took place. This time the focus of the discussion did focus on what people could learn from reading these poems. This original post was by a student who wished to remain anonymous:

Thanaopsis: I had a hard time with this one. I did not fully understand it. I did however get a negative view of death. It was not a happy-go-lucky kind of poem.

When Death Comes: I like this poem. It had a more happy tone to it. The way death comes is described perfectly. You don’t know the time or day you’ll



die, it just happens and life is over. This poem gave a great example of how we should live life to the fullest and know that even if we we're to die tomorrow, the life we lived was worthwhile.

Do Not Go Gentle into that Good Night: I thought this poem was all right, not my favorite one. I did like the repetition of the title throughout the stanzas. I think the title means to take death seriously, its not something to take lightly and should be treated as such.

Life is not a journey: This one is my favorite. Even though its not a poem it is a great way to look at life. You should not be worrying about how you look but what you are doing with your life. The poem is saying to take risks and do things differently from everyone else, because you have one life to live and you should make it the best you can.

The common idea of death in these 4 poems is for the most part looked at from a different point of view. Each one is different whether it be sad, happy, or a live life to the fullest message. The poems made me think about the life I'm living and how I truly feel about death.

Ashley responded:

I believe the thanatopsis poem wasn't positive or negative. I believe the author tried to show both viewpoints.

Chelsea answered:

I don't think "Thanatopsis" was meant to be a negative poem. It was about not worrrying about death, that Nature will take care of you.

Megan wrote:

I like how each poem had a different outlook on death. One was sad, the other was more upbeat, next was never giving up, and the last was just about enjoying life to the fullest. It was easier to read all of them because they all had a different voice about them.

Alec commented:

How can you not worry about death. Its scary, I mean whats next after death?

Total darkness, heaven, reincarnation, or even worse . . . nothing? That scares me the most. You dont have to worry but Ill be “biting my nails” to the end.

Peyton added:

i have to agree with alec. Whether you believe in an afterlife or not, you are never 100% positive. There is no sure thing of what happens after death or a vast majority of people would believe it. It is a scary thing.

The class discussion following this exchange focused on Alec’s fear of death. Many students employed their argumentative skills to try to convince Alec and Peyton that living the right way would ease the uncertainty. They were not speaking in strictly moral ideals. Rather, they focused on the idea of having goals and working toward them so that death can be faced without regret. Although the purpose of the class activity was to help students to practice argumentative techniques, this class was genuinely concerned about Alec. Their feedback was an effort to provide him with a little hope.

Another exchange on the blog involved the movie *GATTACA*. As with the other assignments of this type, the blog was to be posted prior to the class discussion. Chelsea began the discussion with her post:

To start from the very beginning, it was very witty of the writers to use the letters from a genetic sequence (G, A, T, C) as the title of the movie. I found this movie to be incredibly ironic. Jerome is genetically perfect, yet he is a suicidal alcoholic. The beautiful Irene may be attractive on the outside, but she suffers from a heart condition rendering her unfavorable to most. The “in-valid” pianist with twelve fingers was obviously not perfect, but that piece of music could only be played with twelve.

I found two scenes to be the most moving. When Vincent and Anton are racing in the water as adults, Vincent says that he has “never saved anything for the swim back”. I felt that said so much about his character. The second is the very last scene of the movie. Jerome climbs into the incinerator, leaving his wheelchair behind. His second place medal is hanging around his neck, as he burns himself in the same place Vincent used to go to erase his own imperfections.

Ashley began the responses to this post with:

I felt the ending was really sad when Jerome killed himself because I felt by the end the two men had become very close. I actually thought that when Jerome handed Vincent the letter he was going to travel of go back home. I really didn't

expect for him to kill himself. I though Jerome was going to try to find happiness some how.

I also thought it was ironic that the doctor knew the whole time that Vincet was a in-valid. I think the doctor was really inspired because his son was an in-valid and I believe Vincet gave him hope for his son in the future that he will do great things, and being labeled in-valid will not bring him down.

A student wishing to remain anonymous added:

Thats an interesting point of the title. I dont know if it was just me but I did not pick up on that. It does make the story a bit more ironic.

Ruscel commented:

Was the pianist an in-valid or was he genetically engineered to have twelve fingers so that he would be a better pianist? As Irene said, that beautiful piece could only be played with twelve fingers.

This is another instance of discussions that began on the blog carrying forward into class activities. Blog topics were used to generate the class activities that provided students the opportunity to practice the elements of persuasion that were being discussed throughout the course. Although not all of the student's comments will be correct and not all of them can be resolved, as is the case with the 12-fingered pianist, the blog assignment does provide opportunities for students to discuss ideas.

Implementing the blogs in this way motivated students to read actively, write often, and analyze ideas. They provided the opportunity for peer feedback that students appreciate in the classroom. This peer feedback translated into more active class

discussions in which the students were personally vested because it was their work under discussion. Each of these activities provided the requisite rehearsal time in varied ways that is necessary in order for students to integrate new information and skills into recoverable, useful knowledge.

### **Self-Reflection**

The final element of this study is self-reflection. The other aspects discussed deal with enhancing learning. The literature has clearly demonstrated that Time on Task, collaboration, and peer feedback all contribute to student learning and knowledge retention. Reflection differs from these areas in that it is a method to help students become aware of *what* they have learned by focusing on their growth and change. As in the previous sections, selections of student work will be provided to show the impact of this self-reflection. The following examples are taken from the e-portfolios submitted by participating students as their final projects of the semester.

Self-reflection seems to be a difficult concept for some students to grasp. It requires careful guidance from instructors to focus the view of the students on themselves and their own accountability and growth. While some students handle the task of reflecting on themselves with ease and learn from the process, others never reach beyond the basics. Even the basics, however, can be enlightening. Some of the reflections submitted by students centered only on the issue of why certain topics were chosen for their papers. A few concentrated on why they were disappointed with the class; these usually centered around the teacher and her shortcomings. Others listed the specific proficiencies mastered through the class. A few students gained a new understanding of

themselves as they compiled the e-portfolios. They almost seemed released from the mundane considerations of class assignments to soar in the revelation of their newfound self-knowledge.

The first examples of student work will focus on those basic achievements. These new skills are not to be belittled or demeaned. After all, they are the purpose of composition classes. It is therefore rewarding when a student writes:

I think this class really pushed me to my limits, but at the same time not impossible. In the course of struggling, failing, and succeeding, I have learned a great deal. From knowing how to simply write an essay in the correct manner to “weaving” quotes artfully, I have gained both skills and an overall appreciation for writing.

Any instructor would be delighted to know concretely that a student has learned, but to help a student gain an appreciation for writing is an added benefit. Aryan wrote in his e-portfolio:

I cannot even begin to tell you how much I hated writing essays. The word “essay” by itself scared the life out of me. What helped me overcome my fear of writing was the blogs that we kept writing week by week. The topics were of choice and were interactive with peers. Now I am confident in my writing skills so much that I even offer suggestions to my peers.

This type of admitted progress from a student is what instructors hope for. That the student is aware of his own achievement has given him the confidence to now help others with something that at one time he struggled with.

Another student, who wished to remain anonymous, admitted to the same type of learning in his portfolio:

Throughout my first semester at Northern Virginia Community college, I had to write many papers for my classes. English Composition I helped restructure my writing and expand on new methods and skills to create a very strong paper.

These are admirable skills to take from a composition class. This student is also demonstrating the knowledge that what he learned in College Composition I aided him in other classes. These are not abilities to be laid aside but rather to be utilized in a myriad of other applications. Another anonymous student added more:

If you ask anyone around me, I have come a very long way in writing this past year. There is still much I need to improve on, but there is also a lot I have improved on. I want to focus on a few of those things I have improved on. Mainly I have improved in working with my commas, and I feel as though my vocabulary is much better than what it used to be. I think these things will continue to grow and improve along with some other useful things I have learned throughout my time in this class.

Most composition instructors would be thrilled if one student learned the rules for comma usage! As with the previous example, this student has also gained insight into the realization that learning does not cease when the class ends, nor is the information gained there to be put aside and forgotten.

The benefits of self-reflection were also displayed when Rami discussed her experience in composing the documents for her e-portfolio:

During the time I was writing this paper, I found myself thinking more and wondering what I should right about, it was during this time that I practice my writing techniques and found time efficient was to write a paper.

Although this non-native English-speaking student struggled with the language, her meaning is clear. The act of self-reflection helped her to realize that she *had* learned. It gave her the opportunity to think about that new knowledge and use it as she thought about it. This is a wonderful example of metacognition. Rami was contemplating her new knowledge at the same time that she was wondering how to employ that data in the task currently at hand.

One of the main attributes of e-portfolios is that they are not reliant only on text documents. Some students added photographs of themselves, and others used images to match the topics of the papers they included. Many students utilized visuals to help create a theme or to further the idea of the reflection. Chelsea wrote in her reflection:

Now that this semester has come and gone, I have to say that I did learn a good deal in this class. Before English 111 I couldn't write a bibliography, I couldn't state my thesis clearly.

However, Chelsea went beyond the written text with the image and title she chose for her portfolio (Figure 24).





Figure 24. Chelsea's e-portfolio opening page.

Chelsea was not a dancer. However, she chose the image and the caption to show how she felt about learning. She believed that it was an active pursuit, something that must be personally experienced to be accomplished.

In addition to Chelsea, Stephanie utilized images to support her text. Stephanie had applied to Virginia Commonwealth University while in my class. The opening page of her e-portfolio showed the plans that she had for the future (Figure 25).



*Figure 25.* Stephanie's e-portfolio opening page.

In her reflection, she wrote:

This class really kept me on my feet this semester. I stressed out a lot! but I think it was all for the best in the end. I have a better idea of what it means to have clear thesis and how to group my information in the right order. . . This class also taught me that writing takes a lot of reading and research. . . The steps I learned this semester will help me in the future.

Stephanie expressed her feelings about what she had learned in the class with “before and after” images that she placed in her e-portfolio (Figure 26).

## Original



## Re-write



*Figure 26.* Stephanie's e-portfolio before and after images.

Stephanie included one other image in her portfolio that expresses her thoughts (Figure 27).



*Figure 27. Stephanie's e-portfolio reflection.*

These images clearly reveal how Stephanie felt about herself and her abilities. The “Before and After” images (Figure 26) show a weakling at the beginning of the semester contrasted with a “strong man,” or crab, at the conclusion of the semester. She is expressing a feeling of empowerment and confidence in her new skills. The last image (Figure 27) is a very interesting one. As the kitten stares into the mirror, it sees a lion. Which is the true characteristic? It does not really matter. If Stephanie feels like a lion because of what she learned, she will be stronger for the belief in herself. The ability of students to make use of images in e-portfolios allowed Stephanie to discover new things about herself.

Some students, like Arslan, utilized images and referred to them specifically in their text. Arslan wrote:

I learned a lot from your lectures and somehow made our Dendroids [Dendrites] grow. I can feel that I can think critically now and believe that my writing has been improved a little. I did love how we just go way off subject on just about anything. The cool thing about this was that we would usually turn this

conversation into something that actually went with what we were talking about in class.

To illustrate the dendrites that he grew, Arslan included an image that equated his new neurons as the key to success (Figure 28).



*Figure 28. Arslan's e-portfolio reflection.*

Arslan's image shows his belief that growing new dendrites will lead to success. He wrote in his reflection that he did grow dendrites and that his writing had improved. As a non-native English speaker, this is an important belief. His realization of his improvement will lead to further success.

Another non-native English-speaking student who struggled in the class was Paula. Her long reflection detailed the struggles and fears that she had faced since moving to America from Brazil. She wrote in part:

English 111 has really helped me with my reading, writing, and conversation skills, I hope to continue to grow and fly in English 112. My major accomplishment has been my personal growth as a writer, and I hope that these

pieces show my best. I am still learning and facing bravely this language which I love so much. Taking this course for me has been a wonderful experience.

While her writing shows the influence of her native language, it also indicates that she is moving toward a mastery of English. She acknowledges that she has learned, and she is encouraged enough by her success to continue achieving. Paula's mention of flying is in reference to an earlier portion of her reflective writing in which she compared herself to a bird, having moved from one country and culture to another. This analogy was reflected throughout her e-portfolio by the presence of images of birds (Figure 29).

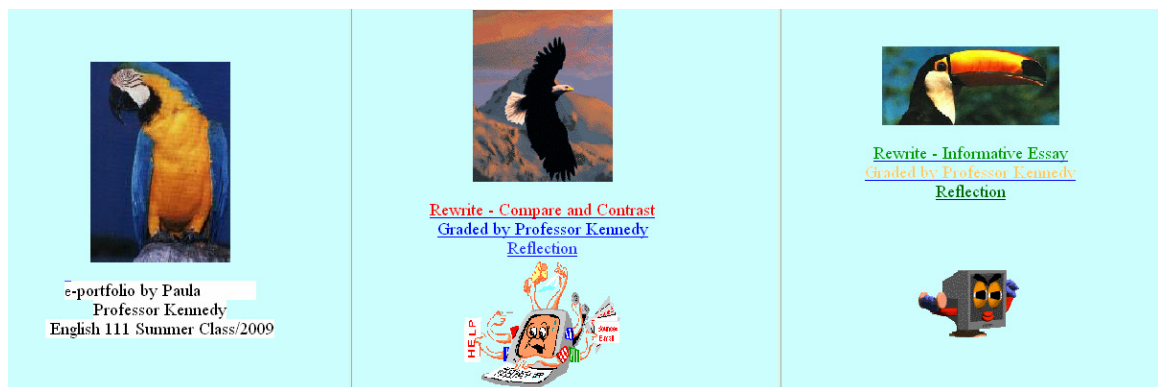


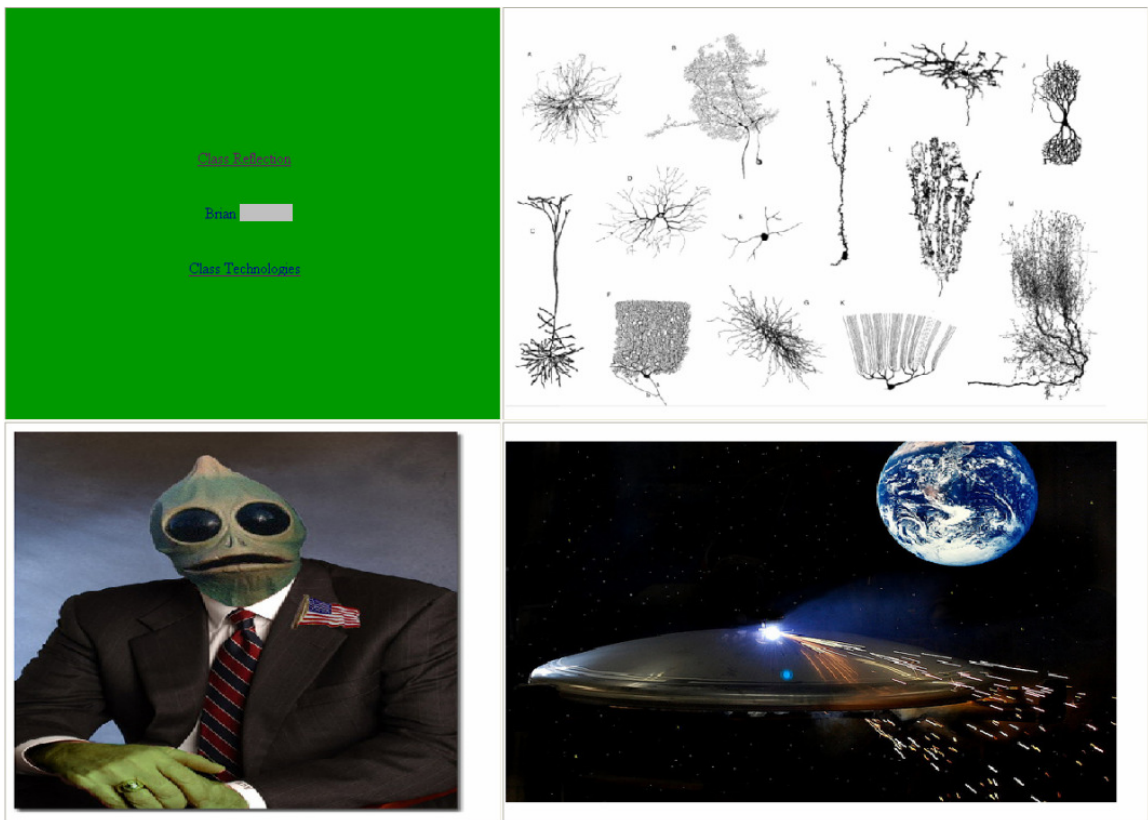
Figure 29. Paula's e-portfolio images.

Once again, the interactive capability of the e-portfolio format enabled a student to reflect in broader terms. Paula's new knowledge has freed her to fly, like the birds she featured in her work.

Brian also combined the use of images and text to express his thoughts about his progress:

As I look back at the last six weeks, I'm very exciting and encouraged about the progress I think I have made. I am much more confident in my abilities in writing and I may have even have grown a few dendrites. I feel that what I have learned in this course will benefit me greatly as I continue my college education.

The images he used, dendrites, aliens, and spaceships furthered the intent of his writing (Figure 30).



*Figure 30.* Brian's e-portfolio reflection.

Brian illustrated the growth of dendrites with the image in the upper right on the illustrated page (Figure 30). The spaceship on the lower right of this figure was the only image on the first page of the portfolio. It represents his journey into the unknown of his

future. Yet he has expressed his confidence that what he learned will help him navigate what comes.

Meghan also relied on images to further illustrate what she wrote in her reflection. Like many other students, her reflection dealt with personal growth as well as knowledge gained in the class:

This class helped me to change some of my bad habits and to regain some of what I had lost in the last several years. I found my will to succeed and to do well. This class helped to refocus my attention on finishing my degree, and subsequently on beginning my future. This class was more to me than a refresher composition course. It was a refresher in life.

Meghan had gone through some traumatic experiences for someone so young. Through those events she had grown rather life-weary. The accomplishments she achieved in College Composition I helped to reawaken a belief in herself that she could accomplish something in her life. The images that she used, unicorns and other mythical creatures of legend and lore, illustrated her belief in achieving what had seemed impossible (Figure 31). While College Composition I does not have as a course objective to awaken the dreams of students, the self-knowledge of personal achievements that can be gained through the reflective practices of e-portfolios can engender this attitude in students.





Figure 31. Meghan's e-portfolio opening page.

Other students used images in a slightly different way. Instead of illustrating the text, they utilized imbedded images to carry the idea and only supplemented those figures with text. One student wishing to remain anonymous posted a photo of a cat (Figure 32), and then explained why she chose that picture:

For my English 111 reflection I put a picture of a kitten that appears to be listening attentively and staring at something or someone, paying attention.

The implication is that those are attributes that she feels are necessary for success, ones that she employed to ensure her own victory in the class.



*Figure 32. Image from anonymous e-portfolio.*

Another student who wished to remain anonymous posted an image on his opening page that seemed to express his feelings about the workload and expectations in the class (Figure 33). In the student's e-portfolio, the figure on the left slowly turns his head from side to side. The title of the image is "Overwhelmed." Despite this student's feeling of being inundated with work, note the title of his self-reflective writing, "Looking Back at the Success of Myself." This student not only survived that mass of papers, he was successful. More importantly, he knows he was successful.



Figure 33. E-portfolio opening page from anonymous student.

A similar affect was created for the opening page of an e-portfolio by another student wishing to remain anonymous (Figure 34). This student photoshopped an image of *The Scream* by Edvard Munch to include his own face. This seems to indicate his feelings of panic about the class. However, there are other notable features on this page. Note the small image depicting evolution in the upper left corner. The student is expressing the idea that he “evolved” over the course of the semester, that his skills grew from primitive to advanced. Also note the mirror in the upper right corner. This is his nod toward the aspect of reflection. Through self-reflection, this student was able to recognize his own growth and evolution.



Figure 34. Joshua's portfolio opening page.

Yet another student, Tiffanie, used the technology of e-portfolios to include her personal beliefs and to express her personality (Figure 35). Each of the words across the bottom of the page, "Heart," "Mind," "Body," and "Soul," linked to a different portion of her e-portfolio that related to those areas of her thoughts and how she felt they were expressed in the class and through her writing. This image and the series of links illustrated how Tiffanie had incorporated the different aspects of the class into her being, how they had become a part of her. This would not have been evident to her if she had not gone through the exercise of creating this project.





Figure 35. Tiffanie's e-portfolio opening page.

A few students accepted the assignment for self-reflection and applied it to their lives and not just to the particular class in which they were enrolled. They noted that they had difficulty separating the class and its requirements from their lives as a whole. This is exactly what the class was designed to do, to so integrate new skills in the students' minds that they could not be separated into individual constituents but instead became a cohesive whole. One student who wished to remain anonymous wrote in her reflection:

In creating my theme for this portfolio I tried to think about this class and how it impacted me. As I was thinking, I found it difficult to think of just this class by itself. . . I began to think of this class as a collective with my other course, story, or a chapter really in an even grander tale. This class and all my other classes her

at NOVA define who I am and my achievements as I enter a new academic atmosphere. I will take the knowledge that I have learned from all of my classes and take it with me. English is very important because I have found that all of my classes require at least one paper on its subject matter . . . This class has been only a chapter along the long road of my academic career.

Through reflection, this student came to the realization that one portion of life, one class, cannot be separated from the whole. It is all an interrelated part of the learning process, of an academic career, of life, of the journey.

Kari was a non-traditional student who enrolled in two of my classes. In her self-reflection at the end of College Composition I, she confessed to being nervous about returning to school after a hiatus of 10 years. Kari was a single mother who worked full-time. She was concerned about her capabilities to learn new things and to keep up in the class. Her reflection at the end of the semester reveals her feelings after all of the struggle:

As the semester ends, a feeling of satisfaction overcomes me. I have completed all the requested assignments on time, and with a passing grade. I attended every class and was rarely late. Most importantly, I feel like I learned something. I feel like all the writing assignments, reading assignments and class discussion has made me a better thinker, which in turn should help me become a better writer. Therefore, I end this class armed with a brain full of bushy dendrites and new outlook on life.

By reflecting on her performance and achievements in the class, Kari came to the realization that she was a capable person. She could take pride in and feel satisfaction at what she has accomplished. Without the enforced reflection of the e-portfolio, it is probable that a person as busy as Kari would never take the time to look back at what she had done in order for it to influence what is before her.

Sometimes it is not the knowledge of comma usage or the proper placement of modifiers that students realize they have gained. Sometimes the knowledge of how much they do not know can spur them to continue studying. In his self-reflection Matthew wrote:

What have I learned in this class called English 111? First I have learned, I have a lot to learn, and that to embrace your fears of new things can strengthen your skills in other areas of life.

Matthew was also a non-traditional student returning to school after a long absence from academia. Although he did not enumerate on them here, he did learn about comma usage, misplaced modifiers, thesis sentences, and concluding paragraphs in this class. His writing improved over the course of the semester. Yet what he chose to deliberate on in his self-reflection was not the class objectives that one might expect. Instead he took a broader look at the learning experience as a whole and embraced it. This knowledge, realized through the practice of self-reflection, can be life-altering.

Perhaps the student writing that most reveals the value of self-reflection was that posted by Samantha. Her writing had improved over the course of the semester and was reflected in her grades. It was surprising, then, to read in her reflective essay:

I did not realize it at first, but I have actually learned a lot about the writing process by taking this class. I think I came into this class with a slight disadvantage from everyone else because I attended a very small private high school and we literally sat there and did nothing in English class. I don't think I learned what I was supposed to learn.

What is surprising in this confession is that Samantha did not realize that she had learned until she looked back on the semester as she created her e-portfolio. She should have seen the improvement in her grades. She should have realized that this development meant she was learning. But she did not. It was only through the mandated assignment of self-reflection that Samantha became conscious of the fact that she had learned.

The realization that they have mastered a skill, or even just embarked on learning the rudiments of that skill, is affirming to students. They may actually know how to do something but sometimes lack the conviction to attempt it. Self-reflective exercises embedded in the technology of e-portfolios can enhance student insight of their own prowess. Once they comprehend that they can do something, it becomes less onerous for them. An awareness that the undertaking is not so hard empowers them to attempt other tasks. The knowledge that they have achieved something in a class can embolden students to try greater things. Success builds success.



## **7. DISCUSSION OF FINDINGS**

The questions have been posed, the literature has been read, and the student work has been considered. Now the question of “so what” must be addressed. It is time to gauge the findings of the study against the questions established at the beginning of this study.

### **Research Question One**

The introduction of wikis, blogs, and e-portfolios into a freshman composition class can create the qualities of a learning environment that encourages actual learning where this learning represents the concepts of deep learning that integrates knowledge into the students’ way of thinking in such a way that it becomes activated knowledge rather than inert knowledge (Paul & Elder, 2001).

**Will introducing wikis encourage collaborative work among students to further the acquisition of desired writing skills?**

The literature is clear that wikis promote collaborative work among students. Reviewing the student work submitted over the year and a half of this study provides concrete evidence that the literature is correct. The wiki submissions in Chapter 6 give ample evidence that students collaborated and discussed the class topics on the wiki site. Their comments were based on writing skills desired by college and university professors as “Standard American Academic Prose” where this is understood to be “writing that

fulfills a purpose of education in a college or university in the United States” (Thaiss & Zawacki, 2006, p. 4).

**Will introducing blogs motivate students to become more involved in peer editing and exploration?**

Once again there is ample discussion in the literature to attest that blogs motivate students to be more involved in peer editing and exploration. The examples of actual student blog posts and comments reproduced in Chapter 6 substantiate the claim that blogs promote student participation in peer editing and exploration. Posts and comments ranged from debates over the presence of one dog at the euthanasia of another dog to varying views of assigned readings and finally to critiques of classmates’ writings.

**Will introducing e-portfolios promote self-reflection that will lead to a clearer understanding of the writing process?**

The literature regarding e-portfolios is expansive. All of these texts make clear the belief that self-exploration is key to e-portfolio work. It is the inclusion of reflection that sets e-portfolios apart from standard portfolios that simply display artifacts of a person’s work. The instances of self-reflection submitted in student e-portfolios and reported on in Chapter 6 validate the assertions made in the literature. E-portfolios promote self-reflection through an analysis of accomplishments. These findings are then presented by the students verbally, pictorially, or in a combination of both.

Wikis and blogs, as they were utilized in the College Composition classes that formed the basis of this study, do provide a learning environment that encourages actual learning. As we have seen, learning takes place through practice, through rehearsal

presented in myriad of ways, of ideas and skills. It is through iterative repetition that information is transferred from short-term memory to working and long-term memory. Wikis and blogs, through Time on Task, collaboration, and peer feedback, provide the impetus for this transfer. Additionally, they do so in a manner that creates interest in the students, motivating them to participate in a way that rote drills, worksheets, and quizzes might not. Motivation combined with the prospect for Time on Task, the collaborative aspect, and the opportunity for peer feedback of wikis and blogs can enhance student learning by creating an environment which promotes that knowledge acquisition.

### **Research Question Two**

Actual learning does occur with the implementation of wikis, blogs, and e-portfolios into a freshman composition class.

#### **Does student writing improve across the semester as students utilize the specific technologies?**

The literature is clear in this area also. Implementing wikis, blogs, and e-portfolios actually does enhance student writing. Although no final grades were included in this study, instances of student improvement were incorporated in Chapter 6. These show a clear and marked improvement in student writing from the beginning of the semester to the end. Student e-portfolios did contain originals of papers composed early in the semester and rewritten at the end of the course. Because of space constraints they were not reproduced here. However, they did show improvement in the areas that utilized the technologies as teaching tools. There were instances indicated in Chapter 6 that demonstrated the improvement of student writing as revealed in their blog posts.

**Do students, through the use of specific technologies, recognize problem areas in their own and their peers' writings, and do they gain the ability to address these issues?**

In addition to the literature that supports the theory that peer editing and collaboration increase student awareness of problem areas in their own and in their peers' writings, we have the evidence presented in Chapter 6. Numerous examples were shown in which students read and commented on others' writing. In the wikis students read the work of an unknown author and offered critiques. The blog work required that students read and comment on the work of their classmates. Although they were at first hesitant to do this, as the semester progressed they became more aware of the benefits of such work and engaged in it more willingly and freely. The result of this participation was seen in the formal essays that they composed. Mistakes committed early in the semester were not repeated throughout.

**Do students begin to develop their own voice in their writings, showing a maturing level of composition?**

This is a more difficult question to answer than the previous because it is heavily dependent on the abilities of the students when they entered the classes. It is easy to show and measure improvement. There is no question that students did improve; some moved from D-level writers to C-level. Some changed from A-level writers to really good A-level writers. Those students who entered the classes on the lower edge of the spectrum were more concerned with learning and mastering the basics of writing a thesis and the placement of commas than they were with developing their voice. However, students

who had previously mastered the basics of composition were free to focus on the elusive concept of voice. That said, all students did deal with and learn to manipulate their voice. The essence of the assignments required that students be aware of their audience and write in an appropriate tone, or voice, for the particular situation. The blogs were informal posts; the essays were formal writing. As can be seen in the student writings reproduced in Chapter 6, there was a familiarity of tone and a feeling of camaraderie in the blog writing. This is as it should be as the students were writing for each other. This familiarity was replaced in their formal essays with a more reserved voice when they knew that their audience was a college professor.

Implementing wikis, blogs, and e-portfolios not only created the necessary environment for learning to take place, learning did occur. Students engaged with the material on numerous levels and through varied modalities. Because the specified technologies provided the needed means for learning to take place, students could capitalize on this occasion. The cyclic formation of the classes and the multiple opportunities for interaction with peers motivated students to actively engage in the class. Because they were motivated, they participated. Because they participated, they practiced. Because they practiced, they learned.

### **Significance of the Study**

Technology is here to stay, and it is pervasive in classrooms. Some institutions, such as Northern Virginia Community College, are pushing the use of technology in classrooms. Some instructors are enamored with technology and want to employ these tools. Whatever the reason behind the implementation may be, for the benefit of students,

teachers must have a specific, pedagogically sound reason to utilize technology in their classes. Because it is fun is not good enough. Because it motivates students, while admirable, is not adequate. It is necessary, then, to study and understand the applications and implications of technology in the classroom. This study contributes to that understanding.

As long ago as John Dewey, who died in 1952, there were challenges to the status quo of education. He stated that “If we teach today like we taught yesterday, we rob our students of tomorrow” (n.d.). Although many years have passed since Dewey challenged the educational system, it is still evolving and the basic premise of this statement still holds true. We live in an era of technological advances. Students enter our classrooms as producers of text through options such as Facebook and MySpace. The challenge for teachers is to know and understand the students’ preexisting knowledge and to attempt to prepare them for their tomorrow. Because technology is so imbedded in our culture, it has also crept, leapt, and inundated classrooms. Instead of just accepting it—as we do smart boards as either a useless tool that covers the wall or as a forced addition that is to be dreaded—we can embrace it and use it to the benefit of our students if we learn what it is capable of adding to the classroom. Studies such as this one will add to that understanding and application.

This study has outlined a correlation between the pedagogy and the assignments. In order for learning to take place, students must practice new skills. It does not necessarily matter how they achieve this practice. It can be done through quizzes that require students to rehearse information. It can be done through discussions that

necessitate that students reiterate the information. Practice can also be accomplished through using technologies such as wikis, blogs, and e-portfolios. New information must be rehearsed in multiple ways in order to transfer it to long-term and working memory and thus evolve into deep learning. The problem arises in obliging students to complete the necessary rehearsals. It is at this juncture that the new technologies excel.

As was evidenced in the presentation of student work involving wikis and the discussion of those results, wikis can not only enhance the learning environment, but students can accomplish deep learning through their judicious application. Wikis can encourage students to practice their skills in a real world application that will help to create Cross's (1999) "ah ha moment," and they provide one method of the rehearsal that Wolfe (2001) maintains is necessary for actual learning to occur. Instead of taking a test or completing a worksheet of random questions, wikis encourage students to read with a purpose and evaluate the text based on the criteria of the class. They expose students to a variety of readings and writings of varying levels of accomplishment. However, successfully utilizing wikis requires that they are integrated iteratively into the curriculum. Information must be presented prior to the wiki assignment. Once the wiki posts are completed, they must then be followed by a discussion of the concepts and posts in class.

Blogs, like wikis, are a useful addition to the classroom when used with pedagogically sound application. For the most part, students in this study enjoyed the interaction and collaboration that took place on the blog. They freely expressed themselves and their views on that open space. This free expression allowed student

voices to come through more clearly in the blogs than they generally do in the more formal assignments; this made the blogs pleasurable to read as the students seemed to be more at ease when expressing themselves. Because blogs are prevalent in the private lives of many students, it is necessary that the instructor monitor the posts and comments to make sure students maintain the scholarly practice that they are purported to give. Looking back at the evidence and discussion provided through this study, blogs also contributed to the deep learning of students through practice and collaboration. Students did not balk at the assignment to compose one paragraph each week. The addition of one extra paper that may only consist of eight paragraphs to their syllabus is considered onerous to most students. When given the choice between a weekly blog entry and an extra paper, all of my students in this study opted for the blog. In addition to student preference, the blogs provided more practice and feedback than a formal essay. Like wikis, blogs create one more opportunity for an additional type of rehearsal that can aid in moving information from short-term memory to long-term memory where it can be easily recalled and utilized. The caveat with blogs, as with wikis, is that they must be used iteratively. The new information is presented in class. It is sometimes followed by a wiki assignment, sometimes not. Only once the data has been dispersed and discussed in class is the blog assignment given. Once the assignment is completed, the class discussion returns to that topic in a later class. Thus the information follows the cyclic pattern necessary for transfer to long-term memory.

E-portfolios utilize a different pattern and goal for student learning. They are not designed to teach but rather to awaken students to the knowledge that they possess. Many



students in this study commented that they did not realize all that they had learned until they began composing their portfolios. Forcing students to compare work from the beginning of the semester to that done at the end of the semester surprised them. This new knowledge of their growth and change was often uplifting and empowering. Once students realized that they really had accomplished something, they might be more inclined to dare things in the future. An awareness of their ability might give them the strength to persevere in other difficult situations. Students, like teachers, often focus too strongly on grades rather than learning. E-portfolios provide the opportunity for both of these groups to remember the true purpose of education. Unlike wikis and blogs, the use of e-portfolios is not one of cyclic repetition in the class. However, there is a pedagogical need to guide students through the purpose of these electronic documents. No class project, including e-portfolios, should be assigned without a full understanding on the part of teacher and student alike as to the purpose and goal of that endeavor.

An understanding of the potential of technology and the pedagogy for its use is key if technology is to be used for the benefit of students and not as a detriment. Overloading students with the acquisition of new technology skills should not be the goal of a composition class. Keeping students entertained should not be the objective of any class. As O'Banion (1997) stated, technology that does not fulfill the pedagogical requirement of student-centered teaching can cause more harm than good. Used properly and for the right reasons, it can be a "flexible tool that can enhance and expand learning when it is used to support a potent pedagogy and a content-rich curriculum" (p. 70). This

study contributes to the literature that will make it easier to achieve the success that technology promises.

### **Recommendations**

Using technology in a classroom requires that the teacher be more than competent with the technologies to be used. It is very important that this competency be assured before the beginning of the class. Once the semester begins there will be no time for the teacher to learn to use the technologies because he or she will be inundated with queries from students. It is a good idea to begin slowly. Start with only one technology tool in one class. This will give the instructor time to grow comfortable with the technology, the assignments, and the students' reactions to them. It also provides the opportunity for instructors to determine if the technology is a good match for their teaching styles and pedagogical beliefs. It is better to be miserable in one class than in four. A gradual implementation also allows time for modifications and changes to the concept before it is utilized in multiple classes. Once one technology is mastered, another can be introduced into classes. While there is a definite benefit to utilizing these technologies together because they provide iterative opportunities for multiple forms of rehearsal, they can be used separately, allowing the teacher to become comfortable with the assignments and the technology at a slower and easier pace. It is important to remember that there is a learning curve for the teacher as well as for the students.

There is also a learning curve for students. Despite the fact that they are members of the Net Generation that is marked by a familiarity with digital technologies, they do not always see these as learning tools. It is important that the technologies are introduced

early in the semester to allow students the time to become conversant and comfortable with them. It is also important that students be given assignments using the technologies immediately following their introduction in class. They need to *practice* in order to become proficient. Delaying the first assignment only postpones the training. On the first day of class students should be introduced to the wiki and blog sites and instructed to create their userids. The second day of class can be used to answer questions. An assignment should be given on the third day of class. While this assignment does not need to relate to a specific aspect of the class, it is important that students begin to familiarize themselves with the technologies early on. These early assignments will help to assure students that they can handle the technology demands of the class. If the introduction of the technologies is delayed until “real” assignments are given, students will be struggling to master the technology and to learn the class concepts at the same time. It is better to learn the technology and then introduce the assignments.

In order to make sure my students begin their learning curve early, they are given five assignments on the first day of classes:

1. To make sure that they can log onto Blackboard.
2. To review the syllabus.
3. To create an account on Splinder and send their userids to me.
4. To make sure that they can log onto the wiki site.
5. To download Kompozer.

This may seem overwhelming on the first day of class, but it does not grow easier just because it is delayed. In fact, if allowed to wait, many students miss the first actual

assignment because they are still attempting to create accounts and learn the systems. Beginning early lessens the severity of the learning curve to a gentle slope rather than a steep incline.

### **Further Study**

Although an old technology in the grand scheme of new media, little research has been done on wikis as a collaborative editing tool. Most of the work with wikis centers around their use as collaborative writing tools. I would like to see more research done in the area of collaborative editing as the wikis were used in my classes. I firmly believed in my adaptation of this tool as I used it, but would like to see others replicate this use. I would personally like to explore the use of wikis in their standard offering of collaborative writing tools. I have used Kompozer in this way, but will, in the near future, assign a collaborative document that utilizes the wiki's ability to track changes made by particular participants.

In the area of peer feedback, online peer reviews of student essays needs to be studied in a comparison with face-to-face reviews. Although not a part of this study, these online peer reviews are utilized in my classes. My intuitive feeling is that they are more beneficial than a face-to-face review. Online reviews allow for more time to complete the review process. Students can read and then think about the essay. They can make comments and then return to the work hours or even days later. Questions and discussion can take place over time rather than being limited to the typical hour-and-fifteen-minute class periods. Online reviews remove the necessity of looking peers in the face as their work is critiqued. The possibility for student embarrassment is limited with the loss of

face-to-face contact. Online reviews also allow students the opportunity to seek assistance from the teacher if it is needed. These are all attributes that I see through my work with online peer reviews. However, the area needs further study to determine if my hypotheses are correct.

None of the readings that I studied dealt with more than one technology in a class. Each author seemed to use only one tool. Research needs to be done to determine if a combined usage of technologies enhances or harms the learning environment. My students must overcome the learning curve of multiple technologies. It needs to be determined if the use of these different technologies enhances learning enough to offset the time it takes to master all of the technologies.

For those who are interested, in addition to the References section, Appendix F contains a list of additional readings that may be helpful to someone considering the use of these technologies in the classroom.

### **Conclusion**

This project allowed me the opportunity to prove what I intuitively believed, that the application of wikis, blogs, and e-portfolios does create a learning environment and does enhance student learning in College Composition. Although this study was done with the assistance of college freshman, the results that were obtained may be applicable to all levels of composition classes. I enjoy technology in its varied formats, so embraced employing it in my classes. I now have the knowledge that assures me that I am doing the right thing for my students. Not only will I continue to utilize these technologies in class,

but I will do so with the knowledge that by doing this, I am helping my students to learn, grow, and develop.

## APPENDIX A: SAMPLE COMPOSITION I RUBRIC

Table A1

*Sample Composition I Rubric*

A papers 92-100 points:	Have a strong, clearly stated thesis.	Demonstrate a command of the English language by engaging the interest of the reader.	Effectively use the format.	Almost no grammatical mistakes.	Draw on good sources that are well integrated into the paper.
B papers 82-91 points:	Have a repetitive thesis and conclusion.	Attempt to engage the reader.	Demonstrate knowledge of and attempts to use the format.	Few grammatical mistakes.	Utilize sources adequately.
C papers 72-81 points:	Have a weak or repetitive thesis and conclusion.	Lack a connection with the audience.	Demonstrate knowledge of format.	Some grammatical mistakes.	Have mistakes in the use of sources.
D papers 62-71 points:	Lack a clearly stated thesis and conclusion.	Becomes argumentative rather than informative.	Weak format.	Multiple grammatical mistakes.	Lack proper documentation.
F papers Below 61 points:	Lack a clearly stated thesis and conclusion.	Argumentative rather than informative.	Poorly constructed format.	Multiple grammatical mistakes.	Lack proper documentation.

## APPENDIX B: SAMPLE COMPOSITION II RUBRIC

Table B1

*Sample Composition II Rubric*

A papers: 138-150 points	Have a strong, clearly stated thesis and provide support and discussion of claims.	Demonstrate a command of the English language by engaging the interest of the reader.	Effectively use the format.	Almost no grammatical mistakes.
B papers: 123-137 points	Have a repetitive thesis and conclusion. Provide some support for claims.	Attempt to engage the reader.	Demonstrate knowledge of and attempt to use the format.	Few grammatical mistakes.
C papers: 108-122 points	Have a weak or repetitive thesis and conclusion. Have little support for argument.	Lack a connection with the audience.	Demonstrate a knowledge of format.	Some grammatical mistakes. Documentation errors.
D papers: 93-107 points	Lack a clearly stated thesis and conclusion. Lack support for argument.	Do little more than simply summarize content without making connections.	Weak format.	Multiple grammatical mistakes. Documentation errors.
F papers: Less than 93 points	Lack a strong, clearly stated thesis and conclusion. Lack support for argument.	Do no more than simply summarize content without making connections.	Poorly constructed format.	Multiple grammatical mistakes. Documentation errors.



## **APPENDIX C: WIKI PROMPT**

You are to log on to our wiki site and make at least two comments on the argument/position paper. One of these comments may be on the structure of the essays (faulty documentation, syntax or grammar). If you choose to comment on grammar, you must explain which grammatical rule is in play. One of the comments **MUST** be, and both may be, on the content of the essay. In order to do this, you must engage with the text. You are to read the text and evaluate what the author is saying. Is the author abiding by the genre style of the paper? Has the author given enough support for the claims made?

A rubric is attached to help you focus your thoughts on the text.

This assignment is worth 4 of your 25 class participation points. There is no partial credit given for this exercise. If you make two comments but they are not truly saying anything about the reading, you will receive no credit. Read carefully and comment thoughtfully. The comments need to be in-depth and fully explained but do not need to be longer than about one paragraph.

## **APPENDIX D: BLOG PROMPTS**

### **Blog Prompt College Composition I**

Based on the assigned readings and class discussions, post a PORTION of your argument/persuasive essay on the blog. This should be at least one paragraph, preferably two. Select a portion of the essay that clearly identifies what you are discussing and provides adequate support. You should not use either the opening or closing paragraphs of your essay for this assignment. You may, however, post those at other times during the semester if you wish.

After reading ALL of the other posts from the class, choose two that you wish to engage with. You are to comment on the CONTENT of the argument. For this assignment, you are not allowed to comment on the grammar or the syntax of the writing. You are looking specifically for weaknesses in the argument or errors in logic and reasoning. Keep in mind our class discussions as you read and comment. It may be helpful for you to refer to the assignment prompt and rubric for the essay. While your blog posts are informal, grammar, syntax, and structure do count, though not as heavily as they do in a formal document. This is your opportunity to practice your paper with an audience.

You may comment on a blog that has already received comments. If one blog receives multiple comments, this one will be chosen to generate our discussion in our next class.

## **Blog Prompt College Composition II**

Over the course of the semester you will post one blog comment for each of the assigned readings. On those days designated as “Current Event,” you will post about something that you have heard in the news. These are not to be a simple summary of the reading or event. You are to choose some aspect of the reading or event and pose a claim about that portion. As this is a class of argumentative writing, you are to compose a brief argument on the topic of your choice, based either on the reading or the current event. Pay attention to the elements of an argument/persuasive essay. This post only needs to be one or two fully developed paragraphs in length. This means that you need to carefully focus the claim that you wish to support.

After reading ALL of the other posts from the class, choose two that you wish to engage with. You are to comment on the CONTENT of the argument. For this assignment, you are not allowed to comment on the grammar or the syntax of the writing. You are looking specifically for weaknesses in the argument or errors in logic and reasoning. Keep in mind our class discussions as you read and comment. It may be helpful for you to refer to the assignment prompt and rubric for the essay.

You may comment on a blog that has already received comments. If one blog receives multiple comments, this one will be chosen to generate our discussion in our next class.

## APPENDIX E: E-PORTFOLIO PROMPT

Like a paper portfolio, an e-portfolio is a collection of artifacts that represent your accomplishments. The advantage of an e-portfolio is that it allows you to create links between the elements of the document. It can also contain a variety of materials, from word documents to videos and images. A major component of learning portfolios is self-reflection. People often learn without realizing that they have done so. Self-reflection causes you to focus on yourself in a diagnostic manner. This allows you to realize and celebrate your accomplishments. It also enables you to recognize those areas that still need attention. The self-reflection, then, is the most valuable aspect of your e-portfolio.

### **Required Elements:**

- A copy of the graded versions of at least two of the essays that you submitted this semester.
- A self-reflection focusing on each individual essay.
- A self-reflection of the blog and wiki assignments.
- A self-reflection of the entire class experience.

### **Optional Elements:**

- Any artifact that helps to illustrate your ability. These may be photographs, images, video or audio recordings.

### **Arrangement:**

- Choose colors and layouts that will add to your project.
- Utilize the linking capability of Kompozer.

### **Thoughts about self-reflection:**

Self-reflection is *not* your opportunity to vent about the class. *You* are the focus of this exercise. *Why* you chose a particular topic is not really relevant. *What* you learned and *why* is important.

To begin your self-reflection, reread the first composition you wrote for our class and write your reaction to this writing. Does the writing reflect your true ability? Why/why not? After writing other papers for this class, compare them to your first writing. Other than genre, how are they different? What has changed for you since the beginning of the semester? Besides grammar, what specifically do you need to work on to improve? As the semester draws to a close, think carefully about your learning experience in the course. In what areas have you improved the most? What has changed the least? Why did you choose to post the essays that you did for this portfolio? You may choose to upload an essay on which you received a poor grade to show what you have learned and to demonstrate your improvement over the semester.

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## CURRICULUM VITAE

Edith Kennedy has been an adjunct professor in the English Department at Northern Virginia Community College since 1998. During that time she also worked for George Mason University for three years. She has specialized in the introduction of technology in the composition classroom. She has been a frequent presenter on technology and composition topics at numerous conferences, including the Virginia Community College System's *New Horizons*, Northern Virginia Community College's *Power Up Your Pedagogy*, and the *Conference on College Composition and Communication*.

Her educational background began with an associate's degree from Northern Virginia Community College. She went on to graduate *summa cum laude* with Final Honors from Mary Washington College and to earn a master's degree from George Mason University.

Though born in Texas and ever loyal to that state, she currently resides in Virginia with four horses, three cats, two peacocks, and one dog.