

Written Communication in an Online Learning Environment

A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at George Mason University

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Spring Semester 2009  
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## DEDICATION

This is dedicated to my parents, Ruth and Edward Moore, who made education a priority for my brother and me. This is also dedicated to my husband Christian Schmidt and my children Anna, Thomas, and Christian Joseph who have encouraged and supported me on this journey.

## ACKNOWLEDGEMENTS

I would like to thank my dissertation advisor Dr. Priscilla Norton, who has been an invaluable friend and mentor. Her gift for conceptualization, her enduring encouragement, and her practical advice have been an inestimable source of support for me during this process. I would also like to thank Dr. Joseph Maxwell and Dr. Elizabeth Sturtevant for their advice and feedback. Their varied perspectives have helped me to strengthen my work.

Thank you to Chonda Sanders and Robin Smith who shared this journey with me. I appreciate the help of Anne Little and Barbara Daniels in locating mentors and students for the study. Thank you to Dave Arbogast for your feedback and comments.

Finally, thank you to all of the students and mentors who gave their time and provided me with insight into their experience with The Online Academy.

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## ABSTRACT

### WRITTEN COMMUNICATION IN AN ONLINE LEARNING ENVIRONMENT

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Students are entering a workforce that demands competency in writing both for explicit communication through e-mail as well as in products in the company's day-to-day dealings. Strategies for teaching students to communicate in writing have been evaluated extensively in a face-to-face environment. Many of those successful strategies have been included in the development of online learning environments. However, given that the primary mode of communication in online learning contexts is in writing, online learning environments may provide an additional element that may bolster students' writing performance and communication ability.

The impact of the online learning environment on writing ability has not been studied extensively. This study investigated how students' written performance and communication abilities evolved while they were learning in an online environment. Four students and three mentors participated in the study. Using a multiple case study methodology, email correspondence and assignments were evaluated to describe changes

that occurred in students' communication, written products, writing process, and self-efficacy as a writer.

Students showed the ability to communicate about a variety of needs and problems via email correspondence. The syntax of that correspondence contained many of the conventions of text messaging at the beginning of the course, and these conventions were maintained until the end of the course. Students showed better control in composing, written expression, usage and mechanics when writing for assignments. For most students, their abilities increased in one or all of these writing domains over the duration of the course. Students' writing processes varied. The student taking an English course improved his writing process over time. For students taking the World History II course, their writing process did not evolve. No students changed their perception of themselves as writers during the duration of the course.

## 1. Introduction

In the 1870s in the burgeoning industrial age, writing skill was seen as a social grace, a way of highlighting one's power and social status (Nystand 2006). Rather than being a social grace, today strong writing skills are keys to entering the workforce and high paying positions. Today, strong writing skills are a necessity not a luxury.

According to the National Commission on Writing's report *Writing: a ticket to work...or a ticket out: A survey of business leaders* (2004), writing is an essential skill to gain entrance to salaried positions as well as to support promotion in these positions. "People who cannot write and communicate clearly will not be hired and are unlikely to last long enough to be considered for a promotion," (National Commission on Writing, 2004). In addition, American firms spend about 3.1 billion annually to retrain workers with writing deficiencies (National Commission on Writing, 2004).

In addition to the findings by the National Commission on Writing, the Partnership for 21<sup>st</sup> Century Skills et al. reported deficiencies for high school and college graduates in basic skills of written communication as well as applied skills of written communication, critical thinking, and problem solving (2006). Seventy-two percent of high school graduates were reported to be deficient in basic writing skills and 81% in written communications (Partnership for 21<sup>st</sup> Century Skills et al., 2006).

The National Assessment of Educational Progress (NAEP) writing exam administered in 2002 found that only 24 percent of 12th graders passed at a proficient level and only two percent at an advanced level (Persky, Daane, & Jin, 2003). These findings point not only to a deficit in writing skills but also in the 21<sup>st</sup> century skills of problem solving and critical thinking in today's high school graduates. These results demonstrate that many of America's students are not prepared to enter the workforce.

Research shows that the following elements help students to improve their achievement in writing (Graham & Perin, 2007).

- Writing strategies
- Summarization
- Collaborative writing
- Specific product goals
- Word processing
- Sentence combining
- Prewriting
- Inquiry Activities
- Process Writing Approach
- Study of Models

What kinds of learning environments might help to support these elements and bolster students' writing performance and communication abilities?

One new context for learning that is becoming more and more prevalent is online instruction. "In the United States, there were more than 500,000 enrollments in online

courses in grades K-12 and more than one-third of public school districts offered some type of eLearning during the 2005-2006 school year,” (Powell & Patrick, 2006). In a survey conducted with 210,000 K-12 students by NetDay, a non-profit organization, researchers found that students feel they are technology savvy and feel positively about the value of technology in their lives (US Department of Education, 2004). Virtual high schools around the country have tapped into students’ technology savvy attitudes and offered courses in this new context. The Florida Virtual School has over 21,000 students (US Department of Education, 2004). Its original focus was on lowering class size for Florida schools and providing opportunities for high need courses.

Similarly, the West Virginia Virtual School was designed to meet the needs of many rural students who do not have access to some advanced courses. George Mason University in conjunction with three Virginia school districts offers online courses in English, math, social science, and science at grade levels 9-12, providing flexibility in scheduling and instruction for many area students.

In each of these online learning environments, the primary means of communication is writing, whether through email or synchronous discussion. In looking at an online learning environment, we can discover what impact this context has on students’ writing performance and ability in written communication. We may find that new and innovative learning contexts coupled with research based writing instruction strategies may help to bolster proficiency of students’ writing skills.

## Statement of Problem

Students are entering a workforce that demands competency in writing both for explicit communication through e-mail as well as in products in the company's day-to-day dealings. Strategies for teaching students to communicate in writing have been evaluated extensively in a face-to-face environment. Many of those successful strategies have been included in the development of online learning environments. However, given that the primary mode of communication in online learning contexts is in writing, online learning environments may provide an additional element that may bolster students writing performance and communication ability. The impact of the online learning environment on writing ability has not been studied extensively. This study investigated how students' written performance and communication abilities evolved while they were learning in an online environment.

## Research Questions

In order to learn more about the influence of learning in a primarily text-based learning environment, the following research questions were addressed.

- How do these students' abilities to communicate in writing change while learning in this online environment?
- How do these students' performances on writing products change while learning in this online environment?
- How do these students' writing processes change while learning in this an online environment?

- How do these students' self-efficacy in their written expression change while learning in an online environment?

### Definition of Terms

*Community of Practice* : A social cultural group, who share similar skills and knowledge support the move of a novice to an expert through interaction and feedback. Often, a group of people with similar professions, for instance, writers, historians, or journalists can form a community of practice.

*Legitimate peripheral participation theory*: Lave and Wenger theorize that learners are apprentices endeavoring to be masters in a particular community of practice. In order to fully participate in a particular community of practice, they must acquire knowledge and skills. As apprentices gain skills, they move toward full participation in the social cultural practices of the community of practice. Learning is a byproduct of the goal of becoming a master (Lave & Wenger, 1991).

*Mentor*: This is the term used by The Online Academy to identify the teacher. The mentor acts as a coach and helps the student through the course, scaffolding knowledge and providing extension questions.

*Process writing theory*: Writers engage in a recursive process when writing. This process is regulated by distinct thinking processes that writers manipulate in their writing (Flower & Hayes, 1981).

*Situated learning*: Knowledge is best learned and retained in an authentic context. Elements of situated learning include authentic contexts, expert performances, and the collaborative construction of knowledge (Herrington & Oliver, 2000)

*The Online Academy:* The Online Academy is a virtual high school developed in collaboration by researchers at George Mason University and teachers from three Virginia school districts.



## 2. Review of Literature

### Introduction

Only 25% of 12<sup>th</sup> graders who took The National Assessment of Educational Progress (NAEP) writing exam in 2002 were found to be proficient in writing (Persky, Daane, & Jin, 2003). In addition, employers spend about \$3.1 billion annually to retrain workers with poor writing skills (National Commission on Writing, 2004). In the business world, students are engaged daily in many writing tasks to include filling out forms and constructing professional e-mails as well as writing articles and reports. In order to prepare students for the work world, given the above statistics, students need more practice in developing their writing skills within the context of authentic real world related tasks.

From investigations on writing instruction, researchers know that students benefit from instruction that promotes a writing process, has authentic product goals, scaffolds the writing tasks, and promotes students' self-efficacy as a writer. From investigation on situated learning, researchers know that students understand and retain knowledge that is introduced and used within a specific context. Online learning is becoming a more ubiquitous part of students' educational experiences. Communication in an online learning environment is primarily written. By leveraging this text driven learning

environment, educators can provide students with an opportunity to have repeated practice of their writing skills in an authentic real world context.

This study takes a look at the research that supports growth in written communication skills. In addition, it takes a closer look at how that research could manifest itself in the design of an online learning environment.

Research about writing process theory, the use of scaffolded writing tasks, the use of authentic product goals, the building of student self-efficacy, and situated learning and their effects on students' written communication is reviewed. Then, how these components taken together in the design of an online learning environment could promote written communication skills of students is described.

#### Writing Research Shows Strategies That Support Students in Writing

Writing instruction that helps to improve students' written communication has been shown to lead to better writing skills and products when the following components are present:

- process writing theory
- scaffolded writing tasks
- authentic product goals
- high student self-efficacy (National Commission on Writing, 2004).

This study takes a closer look at the research that supports each of these components.

## Process Writing Theory

The emphasis on writing process began in the 1971 with Janet Emig's research study "The Composing Processes of Twelfth graders." Emig's study, for the first time, focused on the process of writing versus writing products. Emig studied the thought processes that her 12<sup>th</sup> grade students took as they were composing their essays. She concluded that the process was not linear and that students made multiple decisions as they were developing their writing.

A decade later, Flower and Hayes (1981) expanded this study and developed a theory of what happens cognitively during the writing process. Flower and Hayes's theory proposes that the writing process is a set of distinctive thinking processes that writers manipulate as they are writing. The writing process is not linear but recursive. Their theory is based on a think-aloud protocols they analyzed over a five-year period. The think aloud protocols asked participants to speak aloud, in the presence of a recorder, all of the thoughts they were having as they wrote.

According to Flowers and Hayes, the act of writing is dependent upon the task environment, the writer's long-term memory, and the writing process (planning, translating, and reviewing). The task environment is the rhetorical problem the writer is addressing coupled with the text the writer has produced at any given time. For instance, the rhetorical problem may be "Write an essay on the effects of greenhouse gases on the environment." As the writer composes the first paragraph of his work, he has imposed a limit in the direction that work will go. As the writer uses the planning, translating, and reviewing parts of the process coupled with the writer's long term memory, the text

changes and is shaped. All of these components are monitored like a constant background hum of a machine giving the green light to one process or another as it is needed.

Another valuable aspect of Flower and Hayes model is the idea that writing is a goal directed process. In the act of composing, writers create a hierarchical network of goals and these in turn guide the writing process. Writers have many goals that guide their work; process goals are instructions that writers give themselves as they compose. Strong writers give multiple process goals to themselves in comparison to weak writers. Goals are constantly revised as the writer progresses. Flower and Hayes' theory on the writing process has been the anchor for subsequent research on students' written communication and ways in which educators can help to improve it.

An aspect of Flower and Hayes' model that is often studied is the cognitive process of revision. Revision is not emphasized as an end stage of composing but rather as an ongoing cognitive process that occurs in the mind and on paper. Stephanie Dix (2006) studied the revision processes of three 10-year old students. She collected her data from interviews, observations of the writing program, and students' written scripts. She found that students varied in the number of meaning making changes they made in their work.

Participants Wiremu and Anna, both thought to be fluent writers, made substantive changes in their papers throughout their writing process. They focused not only on surface changes, but they also revised the meaning of their writing projects over time. The intrinsic goals they had for their writing helped them to make revisions that

improved their text. For instance, Wiremu was concerned with his audience of younger children and whether they would understand the story he was telling. Anna was concerned with translating the images she could see in her head accurately on her paper. Jon's focus was on getting it right for his teacher. In contrast, he made more surface changes rather than the meaning making changes that his intrinsically motivated peers made. This study provided more evidence that students who were able to set intrinsic goals during the writing process revise their writing projects in more meaning making ways than students who did not.

The theory of the writing process that was begun by Emig and expanded by Hayes and Flowers has become an anchor for further writing research. In focusing on what strong writers do, researchers looked for ways to support the thinking processes of developing writers. The writing process is recursive and consists of ongoing revisions in planning, composing, translating, and pruning of ideas and words. In recognizing that writing is a dynamic cognitive process, researchers can look for ways to influence different aspects of that process for developing writers. One way that researchers are looking to support struggling writers is in scaffolding writing tasks.

### Scaffolding Writing Tasks

Building on Flower and Hayes' idea that strong writers are continually developing specific goals in their writing during the writing process, Graham, Schwartz, and MacArthur (1995) looked at ways that goal setting can affect students' performance in revising. This study looked at the effect of providing a specific writing goal for revision versus providing the general goal to "make the paper better." Sixty-seven fourth, fifth,

and sixth grade students with learning disabilities were assigned personal narrative writing prompts. Participants were divided into three groups: those who received the revision direction to “make the paper better,” those who received the revision direction to “add at least three things” to their paper, and those who were asked to add three things to their paper as well as given a procedural facilitator to aid in this addition. Results showed that the attention to a specific goal helped students to revise their papers better than those who had the general goal to “make the paper better.”

Ferretti, MacArthur, and Dowdy (2000) continue the work of scaffolding goal setting for developing writers. Their study looked at how providing specific goals and sub goals in the writing process can help developing writers with these cognitive processes. One hundred twenty four participants were randomly assigned to a treatment or control group. Those in the treatment group received guidance on the general goal (write a persuasive paper) and sub goals (state your belief, provide a reason to support this point, next point etc.). Those in the control group only received the general goal of writing a letter to persuade an audience. Those in the treatment group showed greater elements of an argumentative essay in their products than those in the control group. This further supports the idea of that scaffolding students’ cognitive processes of goal setting can help them in their writing tasks.

Another way that researchers have applied the writing process model to aid developing writers is in the employment of procedural facilitators. Procedural facilitators take the form of graphic organizers or specific strategy plans for writing. Studies show that providing sentence-by-sentence and global revision protocols for students to follow

aid students in their revision process (De la Paz & Graham, 1998; Graham, 1997). Students were given step-by-step instructions on how to revise their papers. In subsequent studies, strategy protocols like PLAN and WRITE were used to support students' cognitive processes as they developed, wrote, and continually revised their papers. Students engaging in the PLAN and WRITE protocols produced more in depth essays with more mature vocabulary than those not using the protocols (De la Paz & Graham, 2002).

In addition to strategies that scaffold a particular cognitive activity in the writing process, researchers have found that teaching multiple strategies makes a difference. Students are given instruction in planning strategies along with prompts to aid in revising and self-regulation. Studies have found that providing strategies and prompts is beneficial in a face to face environment as well as in a computer-aided environment (Monroe & Troia, 2006; Englert et al., 2007). Scaffolding thinking tasks necessary for writing has been shown to help developing writers.

#### Authentic Product Goals

Researchers have also found that providing authentic rhetorical problems influences the quality of student work. In essence, authentic product goals provide an overarching goal to guide the multitude of process goals students develop and revise as they write. Mansfield (1993) found that in her "Writing for the Public" class in which students engaged in interviews and made recommendations to the college senate committee, students were more engaged and expanded their view of what writers do. Students found that they had to think of multiple audiences for their writing. They were

not just writing for themselves or their teachers, but they had an outside audience. In addition, collaboration, which had been a taboo for many of the students in other academic settings, turned out to be a source of inventiveness and creativity. Lastly, students re-classified their ideas about what “real writing is.” They looked past the traditional essays and novels and had a greater appreciation for the effort and creativity that goes into the development of memos and questionnaires. Mansfield concluded, “We might involve our students in defining with how many people write for a living or as part of a living, what sorts of writing they do and how they write.” This call for an authentic context for writing may prove to be helpful for high school students as well.

Another study examined the effects of repeated practice coupled with career specific goals. Researchers looked at whether engaging in career specific writing tasks had an effect on students’ writing skills. The study was a field experiment involving 279 students who engaged in career specific writing tasks and another group of 385 students who practiced writing general writing tasks. The former group took on the role of accounting professionals as they engaged in each of the tasks. The latter group was not assigned any particular role. The researchers found that students who had repeated practice in writing improved their writing skills. However, those students who had repeated practice in career specific writing tasks outperformed those who engaged only in general writing tasks (Johnstone, Ashbaugh & Warfield, 2002).

Providing students with authentic goals to guide their writing mimics what professional writers do on a daily basis. These overarching authentic goals provide a foundation on which to build process goals essential to writing success.



## Building Self-Efficacy

Bringing all of these scaffolding strategies together helps to build the self-efficacy of developing writers as well as helps to build their self-regulatory skills. As they begin to internalize the strategies, developing writers begin to evolve and raise their self-efficacy. In a 2005 study, researchers found that students who were taught writing and historical reasoning strategies produced more historically accurate and persuasive essays (De la Paz, 2005). Students received simultaneously in their history and English classes instruction on historical reasoning and the use of primary sources as well as the procedure and structure of an argumentative/persuasive essay. On a criterion referenced test, students who showed that they had mastered these skills were compared with the control group. The treatment group wrote historically more accurate and more persuasive essays than the control group.

There are large differences in the way experts and novices write about history. Experts are able to incorporate multiple primary sources in developing a hypothesis about a historical event. Novices tend to rely on one source without synthesizing and comparing sources. In giving explicit instruction on self-regulatory strategies in both the historian and writer professions, students are able to adopt some of the habits of expert historians and writers. Situated learning environments build on the idea of providing authentic product goals by providing an authentic context. Students not only learn to take on the habits of professionals, but they are put in the context professionals may find themselves.

## Situated Learning: Putting Knowledge in Context

Situated learning is framed by the idea that knowledge is best learned and retained in an authentic context. Knowledge learned by rote memorization is difficult to retain because it is not connected to any particular context. Retrieval of information from the brain's long-term memory is based on association. Without a viable association, knowledge becomes inert and unusable.

Elements of a situated learning environment are described as having authentic context, expert performances and modeling, coaching and scaffolding, multiple roles or perspectives, collaborative construction of knowledge, reflection, articulation of learning, and authentic assessment (Herrington & Oliver, 2000).

Situated learning environments can take many forms. Herrington and Oliver's research (2000) builds on Vygotskian ideas that the mind emerges through interactions with others and the environment, mediated by artifacts, signs, and language. It is through the internalization of external activity that learning occurs. Herrington and Oliver's work established a situated learning environment in which multimedia elements played a significant role. Students were provided with artifacts in the forms of video clips and text descriptions. In addition, they were able to internalize the knowledge through reflection in an electronic notebook used to record their thoughts.

Participants in this study (Herrington & Oliver, 2000) felt that the learning environment framed by an authentic task provided a link between theory and practice that was absent in some of their other learning experiences. In addition, it provided a context that the students might actually encounter as they moved toward their professional lives.

The role of collaboration seemed to have a larger role in helping students to reflect, articulate, and think through their ideas and hypotheses. The ill-defined problem and authentic activities helped the participants to automatically think through to the next step. Students applied the knowledge they learned to help to resolve the problem. Overall, this study supported the idea that it is possible to build an effective situated learning environment in an electronic multimedia world.

Herrington and Oliver's research focused on the artifacts, collaboration, and reflection essential to a situated learning environment. Brown, Collins & Duguid's research (1989) focused on the role of the environment and authentic activities students engage in. "They [students] need to be exposed to the use of a domains' conceptual tools in authentic activity—to teachers acting as practitioners and using these tools in wrestling with problems of the world," (Brown et al., 1989). Brown et al. look at learning as a process of enculturation into a community. Learners obtain knowledge and skills by taking part in activities that expert members of the community would do. For instance, students would engage in solving ill-defined problems using the methods and strategies of a mathematician, historian, engineer, or writer. The teacher would model and provide the environment and authentic activities to foster the enculturation into the cognitive community.

Lave and Wenger (1991) further the concept of enculturation in their theory of legitimate peripheral participation. Lave and Wenger theorize that learners are apprentices endeavoring to be masters in a particular community of practice. In order to fully participate in a particular community of practice, they must acquire knowledge and

skills. As apprentices gain skills, they move toward full participation in the social cultural practices of the community of practice. Learning is a byproduct of the goal of becoming a master. The theory of Lave and Wenger also takes into consideration the identity of the apprentice and how it changes as he or she moves toward expert status.

Handley, Clark, Fincham, and Sturdy (2007) build on Lave and Wenger's theory and apply it to a community of management consultants. Junior consultants, much like the apprentice tailors in Lave and Wenger's example, took on mundane tasks that were designed to help them develop their skills. They spent many client meetings in the background observing the actions of senior consultants. As they moved to proficiency, they were allowed to interact with a long standing client with whom there was little chance of "something going wrong." As each of the junior consultants progressed, they gained the confidence and identity as a mature research analyst.

The ideas of situated cognition have great implications for teaching and learning. Based on the research, one could say that a learning environment that promotes authentic activities of a specific community of practice provides engaging opportunities for students to build knowledge in context (Brown et al., 1989). By providing this learning environment with authentic artifacts and time for collaboration and reflection, educators bridge the connection between theory and practice for students (Herrington & Oliver 2000). Lastly, in providing opportunities for students to be apprentices acculturated into a community of practice, educators enable students to develop the identity of a profession (Lave & Wenger, 1991; Handley et al. 2007).

## Theoretical Framework

### *Authentic Fields of Practice: Online Learning Environments*

Online learning instruction is a novel environment that is becoming more prevalent (Powell & Patrick, 2006). There were an estimated 600,000 K-12 enrollments in 2005, up from an estimated 450,000 enrollments in 2004. English and language arts curriculum accounts for 19 percent of the enrollments.

Twenty or more states operate their own virtual school (Smith, Clark & Blomeyer, 2005).

Online learning environments can provide a situated learning environment where through text-based communication students are continually practicing their writing skills under the scaffolding provided by their online instructor. Opportunities for authentic activities involving written communication embedded in this environment can provide learners with repeated practice of their writing skills.

Based on the research outlined in previous sections, one can propose that students' writing performance and communication ability will progress over time when they are engaged in existing sound writing pedagogy in the context of an online learning environment that supports situated cognition. Specifically, students would be engaging in the writing process, (Flower & Hayes, 1981; Elbow 1973; Atwell, 1998) analyzing models for their writing, (Knudson, 1991; Atwell, 1987) having conversations about their writing, (Atwell, 1998; Englert, Mariage & Dunsmore, 2006), and engaging in authentic inquiry activities with specific product goals within a community of practice (Bruning & Horn, 2000; Englert, Mariage & Dunsmore, 2006).

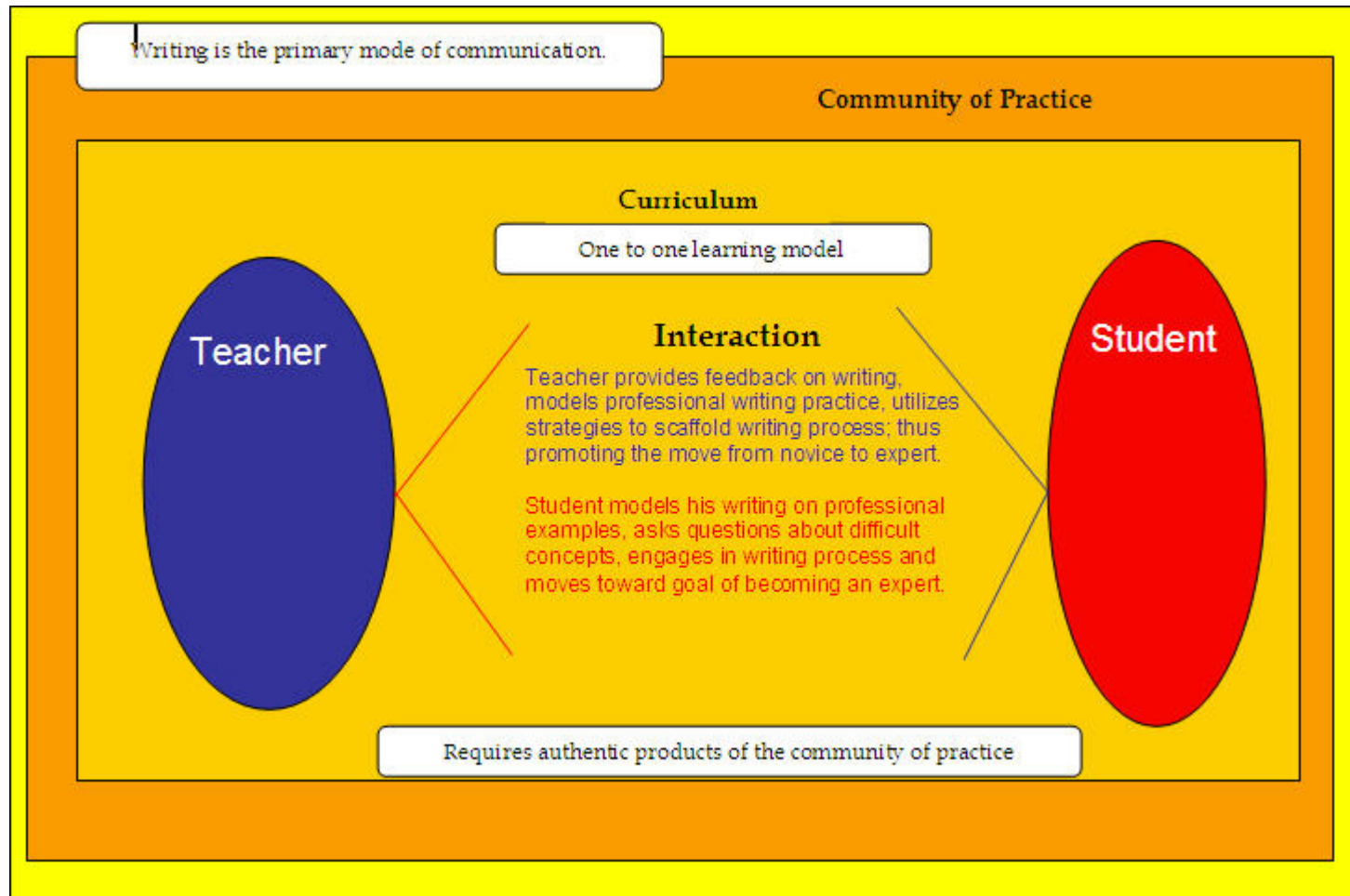


Figure 1. Online learning context that supports written communication.

The model in figure 1 on improving written communication skills for students in an online learning environment is based on Lave and Wenger's conception of legitimate peripheral participation (1991) as well as Norton's community of practice learning system (COPLS) (2003). Lave and Wenger theorize that learners are apprentices endeavoring to be masters in a particular community of practice. In order to fully participate in a particular community of practice, they must acquire knowledge and skills. As apprentices gain skills, they move toward full participation in the social cultural practices of the community of practice. Learning is a byproduct of the goal of becoming a master (Lave & Wenger, 1991).

Within the school environment, teachers and students work together in an expert/novice relationship (Norton, 2003). The teacher's role is to educate the novice on the practices and understandings of the community of practice. An English teacher may represent a community of writers; whereas a history teacher may represent a community of historians. For instance, an English teacher will educate her students on how to write effectively, like many of the great authors. A history teacher will educate her students on how to analyze artifacts like many great historians. Within each of these specialties, there is a common skill of communication that must be mastered by students in order to move toward becoming an expert. Students must learn in both of these vocations to be effective communicators. Specifically, they must master written communication skills.

The online learning environment provides a practice field for professional writing communication, a skill that according to many business leaders is tantamount to performing well in a career (National Commission on Writing, 2004). Online learning

environments can provide a venue in which to practice written communication skills. Since the primary mode of communication in an online learning environment is writing, students must learn to communicate effectively in writing in order to succeed. Teachers and students who interact in some online learning environments work with a one-to-one model versus the one to many model in a classroom. As a result, a teacher may have more time to dedicate to the fostering of a relationship with a student. In addition, they have more time to give specific feedback to a student.

To promote effective written communication within the online learning environment, the teacher and student must be working with a curriculum that supports written communication development. This curriculum should provide authentic problems and opportunities for students to prepare authentic products (Bruning & Horn, 2000; Englert, Mariage & Dunsmore, 2006). In addition, the assignments should scaffold the writing process (Flower & Hayes, 1981; Elbow 1973; Atwell, 1998). Also, the student should be engaged in analyzing models of professional writing (Knudson 1991; Atwell, 1998).

Further development of students' written communication skills is supported in the interaction of the teacher and the student. The interactions between the teacher and student are supported by the social cultural theoretical ideas that writing is a social process. Writing from a social cultural context promotes the collaborative, authentic, and dialogical aspects of writing (Hidi & Boscolo, 2006).

The teacher guided by the curriculum scaffolds the writing process of students by providing procedural facilitators (i.e. graphic organizers) to help facilitate the pre-writing



and rough draft stages of writing (Englert, Mariage & Dunsmore, 2006). In addition, the teacher suggests writing and revision strategies specific to the writing product. During the course of the interaction with the student, the teacher is a model of how to communicate professionally via e-mail communications. Each of these actions is taken in an effort to help the student improve written communication and to move from novice to an expert and thus full participation in the community of discourse.

The student, as novice, models written communications on the communications of the teacher. In addition, the student uses the models provided by the curriculum to guide his or her written products. The student asks questions of the teacher to clarify difficult concepts and writing problems. The student creates multiple drafts of his or her writing, revising at first based solely on feedback from the teacher, but as the student moves toward becoming an expert he or she is able to revise more and more independently. Like the management consultants in the study by Handley et al. (2007), as the student moves toward becoming an expert he or she also perceives himself or herself as a member of the community of practice (i.e. his or her level of self-efficacy as a communicator increases).

### 3. Method

#### Researcher Perspective

As I approached the design of my study, I took into consideration my perspective or the lens through which I wished to conduct the study. As the principal instrument of the study, all data was coded, categorized, and analyzed through the lens of my perspective. I approached this study from an interpretive and social constructivist point of view. In this, I mean that meaning is socially constructed by interactions that individuals have with one another. For example, I am writing this report; however, the meaning and message has been constructed and based on my interactions with various texts and conversations with my advisors. In addition, how I interpreted actions taken by participants is based on these interactions as well as past experiences I have had with research, writing, and learning in online environments. In this study I interpreted and constructed meaning based on the participants' communications and written products. In addition, interactions I had with the participants through interviews helped me to build my interpretation and description of their experiences in an online learning environment in each case and across cases.

More specifically, what brought me to an interest in the role of an online learning environment in students' development of self-efficacy, performance, and written communication stemmed from my experiences as a face-to-face and online English

teacher, as a developer of English courses for a virtual high school, and as an online learner.

As an English teacher in a face-to-face environment for the past 9 years, I found that opportunities for conferencing with students about their writing when you have 120 students were limited to once per writing assignment. In addition, although I got to know all of my students on some level, the opportunity to know all my students well was hindered by time for interaction and limited mostly to class time and some resource periods. Nevertheless, teaching was a positive experience. To provide more feedback opportunities for students, I focused on building the capacity of the students' peer editing skills.

As a teacher of students in English in an online learning environment for the past 5 years, I found that I built strong relationships with each of my students. In addition, I had an understanding of their life outside of school. I could pinpoint some of the motivating and hindering factors to their success based on what was occurring in their lives inside and outside of the English course. In teaching English online, I was able to give targeted feedback more often to students before they submitted the final draft. I believe the relationship that we developed online in combination with the increased feedback I was able to give contributed to the students' development as a writer.

In developing English courses for The Online Academy, I took into consideration all the writing pedagogy I knew worked well in a face-to-face environment. I thought that there were many aspects of the model on which the virtual high school was based that supported writing instruction. Built into the curriculum were authentic problems for

the students to solve. There were opportunities for repeated feedback on writing products, and there were professional models for writing. In addition, the goal of interaction between the student and mentor, as the teacher is called, is to promote critical thinking and deeper understanding for the student. This goal fit in well with the necessity of providing targeted feedback to students on their writing. Lastly, since all of the interaction was occurring via e-mail, I thought perhaps that the online learning environment itself could play a role in helping students with their written communication. This led me to develop this study that looked at students' written communication in an online learning environment that was developed to support the pedagogy of effective writing instruction.

### Research Design

I chose to use qualitative methods for this study because I wanted to be able to describe the experiences of the students. A qualitative interpretive multiple case study design would allow me to obtain "rich data" in the form of interview, writing product, and e-mail correspondence analysis. (Maxwell 2005). In each case, an individual student was the representative unit of analysis.

A case study design allows the researcher to "investigate a contemporary phenomenon within its real-life context," (Yin 2003). In this study that context was an online learning environment. The phenomenon was the growth of the novice writer. In contrast to an experimental study seeking causal effects, the goal of this study was to describe the experience of the students and to describe how their writing and communication skills evolved in an online environment. In addition, a case study

approach was chosen over a survey because a case study can provide “rich thick description” of what is happening more so than a survey (Merriam, 1998). A case study provides a more detailed picture of what is happening in the environment.

A multiple case study approach was chosen to increase the analytic generalization of the study. If similar conclusions were found in multiple cases, there is more evidence to support the theory that a text-based online learning environment can be a vehicle to develop the communication abilities of students (Yin 2003). In essence, each case study becomes a test of the theoretical explanation of how students’ writing and communication skills develop in an online learning environment.

The purpose of this study was to answer the following questions:

- How do these students’ abilities to communicate in writing change while learning in this online environment?
- How do these students’ performances on writing products change while learning in this online environment?
- How do these students’ writing processes change while learning in this online environment?
- How do these students’ self-efficacy in their writing expression change while learning in this online environment?

These questions were answered through the voices of the students taking an online course in the summer of 2007 at The Online Academy. By describing students’ experiences in an online course specifically focusing on their experiences with written communication, I have gained a better understanding of how learning in an online environment influences

the development of a student's written communication skills as well as a student's perceptions of himself or herself as a competent writer.

### Participants

Purposive or theoretical sampling was used to choose the students for this case study (Mason, 2004). The participants were chosen because they were taking courses in The Online Academy. I chose The Online Academy, a virtual high school based in Northern Virginia, as the site for this study because of its unique model for learning that inherently supports many aspects of writing development. There are four aspects of The Online Academy that support writing development:

- one to one and frequent interaction with a mentor (teacher)
- authentic writing activities
- specific product goals
- emphasis on the process approach to writing

Since the pedagogical structure of The Online Academy reflects and supports the theoretical model of interaction I was interested in studying, choosing participants that were engaging in learning at The Online Academy provided the specific context necessary to possibly illustrate the theoretical framework of interaction and student growth described in chapter two. The Online Academy was also a convenient site since I have access to the students in this particular virtual high school.

The study was set up to take place during the summer session offered by The Online Academy. Summer is the timeframe in which there is the largest enrollment in The Online Academy. This is the time of the year that would yield the most possible

participants. In the summer of 2007, The Online Academy offered courses in history, English, science, and math. Of these four subject areas, English and history seemed most suited to studying written products and communication. The science and math courses had fewer opportunities for formal written discourse. Looking more closely at the specific courses offered in these subject areas, the study was then limited to students who were taking World History II, American Literature, or British Literature.

These three courses were chosen because they required at least one major written product, such as an essay or research paper, and multiple smaller written products. Of the seven students taking one of these courses, four students agreed to participate in the study. Although four was a small number taken on its own, it was 57% of the possible participants in the study. Having a limited number of participants allowed me to draw a descriptive picture. Participants in this study all began taking one of these courses in the beginning of the summer of 2007. Three of the participants attended public school, and one of the participants attended private school. Three of the participants were taking the course for the first time. This was a repeat of course material from a face-to-face environment for one of the participants. In the case when the participant was taking the course for a second time, this was the first time taking the course in an online environment. Students took the course over a summer term and had between eight to twelve weeks to complete the course. One participant completed the course in this timeframe. Two of the participants took longer. One participant did not complete the course. All participants were students who had elected to take an English or history course in The Online Academy.

Each of the students met the following criteria:

- enrolled in an English or history course in The Online Academy
- has not completed this particular course online
- is a high school student
- may have completed this course in a face-to-face environment but needed or wanted to retake the course

Prior to the beginning of the study, consent was gained from the Human Subjects Review Board at George Mason University, the host of The Online Academy. The administrators of The Online Academy notified me when an English or history student had enrolled in The Online Academy for the summer term. There were seven students who were enrolled in either World History II or an English class during the summer of 2007. Using the Parent Phone Script, I contacted potential participants' parent(s) and asked for permission for their son or daughter to participate in the study (Appendix A). If consent was given, I contacted the student to see if he or she would be interested in participating. For each student who consented, the initial interview time was made. All consent forms were signed by the parent and student at the first interview (Appendix A). Of the seven students contacted, four consented to be a part of the study.



Table 1

<i>Student Participant Descriptions</i>			
Participant	Gender	Mentor	Reason for taking online course
James	Male	Mrs. K and Mr. L	James transferred to a new school district and needed an American Literature course to graduate.
Zora	Female	Mr. A	Zora transferred to a new school district and needed World History II to graduate.
Richard	Male	Mrs. S	Richard wanted to take World History II in the summer so that he could take a music elective during the school year.
Georgi	Female	Mrs. S	Georgi had previously taken AP World History, but did not do well. She was taking World History II to increase her GPA and to qualify for an Advanced Diploma.

Using the Mentor Phone Script, I contacted the mentors of each of the students who were participating (Appendix A). I asked if they would save the students' correspondence and assignments as well as participate in an interview once the student had finished the course. All mentors agreed to be a part of the study. One mentor was mentoring two of the students participating in the study. One student had two mentors since he did not finish the course during the summer, and his first mentor was no longer available. As a result, there were four students and four mentors participating in the study. Each mentor signed a consent form at his or her interview. The mentor served

mainly as a member check of my interpretations and descriptions of the student's experience.

Table 2

*Mentor Participant Descriptions*

Participant	Assigned Student	Experience as an online mentor
Mrs. K	James	This was Mrs. K's first online mentoring experience with The Online Academy.
Mr. L	James	Mr. L was one of the designers of the English courses. He had also mentored several students in The Online Academy.
Mr. A	Zora	Mr. A was one of the designers of the history courses. He had also mentored several students in The Online Academy.
Mrs. S	Richard and Georgi	Mrs. S was one of the designers of the history courses. She had also mentored several students in The Online Academy.

Using the Student Interview Guide (Appendix B), I interviewed each student participant toward the beginning of the course. The interview centered on the topics related to the student's background in English, their perceptions of online learning, their perceptions of writing, and their self-efficacy as a writer.

Table 3

*Student Interview One*

Participant	Date	Location	Duration (min.)
James	July 2007	Student's home	21:58
Zora	July 2007	Student's home	53:14
Richard	July 2007	Student's home	13:25
Georgi	August 2007	Student's home	11:35

Each participant received an email account that was used exclusively for work pertaining to the course he or she was taking. All of the email correspondence between the student and his or her mentor was collected from the mentors and when necessary the administrators of The Online Academy once a student had completed or abandoned the course. In addition, each student and mentor participated in an exit interview that covered topics pertaining to written communication, writing process, and self-efficacy. The purpose of this interview was to gain information about changes students may have shown in self-efficacy and writing process. The interview guide for the student exit interviews can be found in Appendix B. The mentor interview served as a member check to my description and interpretation of the student's experience (Appendix B).

Table 4

*Student Interview Two*

Participant	Date	Location	Duration
James	December 2007	Student's home	20:15
Zora	December 2007	Student's home	46:44
Richard	August 2007	Student's home	16:49
Georgi	January 2008	Student's home	12:49

Table 5

*Mentor Interview*

Participant	Date	Location	Duration
Mrs. K	-	-	-
Mr. L	December 2007	Mentor's work	30:13
Mr. A	December 2007	Mentor's home	14:53
Mrs. S	December 2007	GMU classroom	40:46

Note. Mrs. K was not available for interview.

## Setting

The participants were engaged in learning at The Online Academy (TOA), a virtual high school based at George Mason University. This virtual high school was developed as a collaborative endeavor between George Mason University, Loudoun County Public Schools, Frederick County Public Schools, and Stafford County Public Schools. Each school district supported Virginia certified teachers to develop the course content and to align the content with the Virginia Standards of Learning. George Mason University, in turn, offered graduate level instruction in the best practices in specific content areas and in online instruction.

In TOA, each course is divided into 12-15 modules. Each module addresses key concepts in the curriculum. The concepts in each module are anchored with an authentic real world challenge. The challenge asks the student to solve a problem. In order to solve the problem, the student must gain background knowledge and skills. Through activities and assignments, students gain the tools that they need to meet the challenge. The primary mode of communication between the student and the mentor is text-based communication via email.

This setting was chosen for two reasons. For one reason, I have access to this online learning environment. The other reason this setting was chosen is that its pedagogical design supports many of the best practices of writing instruction. In addition, the design of the online learning experience is influenced by Lave and Wenger's theory of legitimate peripheral participation. The Online Academy is based on a constructivist model. It supports the idea of students constructing their own knowledge

through activities structured to scaffold their understanding. TOA is designed around the Community of Practice Learning System (COPLS) (Norton, 2003). In this model, there are multiple components: the learner, the mentor, the community of practice, the representative problem, instructional resources, and performances of understanding. The mentor guides the student through the solution of a problem found generally in a particular community of practice. A community of practice in this case is occupation bound. So for instance, it might be a community of theater critics or community of documentary producers. The student takes on a role in each representative problem. A representative problem is a scenario that might be usual for people engaged in a particular occupation.

For instance, in an American Literature course, the students may take on the role of a journalist in the Romanticism module. In their role as a journalist, the students are developing knowledge about the Romantic period in American literature. In addition, they are gaining skills and vocabulary as writers and as journalists. The mentor takes on the role of the editor in this module. Mentors have access to instructional materials that will help them to guide, prompt, and challenge students to develop a solution to the representative problem. The pairing of a student with an expert mentor in English courses supports strong writing instruction. In support of the use of communities of practice, researchers state, “A third pedagogical principle [of writing instruction] is the establishment of communities of practice that emphasize knowledge construction and knowledge dissemination,” (Englert et al. 2006). As a result of knowledge and skills gained from assignments and collaborative discourse with mentors, students demonstrate

their solutions to the problem in the performance of understanding.

The performance of understanding is a product that shows that the student has acquired the knowledge and skills addressed in that module. It falls in line with two of the elements considered to improve achievement in writing—‘a specific product goal’ and “process approach to writing” (Graham & Perin, 2007). In the example of the Romantics module, students create a series of articles for a magazine spread that demonstrate their knowledge of Romantic literature and various literary devices as well as skills needed in developing and writing a news article. Throughout this module, students create writing products that contribute to the finished magazine spread for the fictional Rolling Stones magazine. The structure of the curriculum allows for frequent interaction between the online mentor and each student about his or her writing.

Researchers state that

Students who showed the greatest level of participation and appropriation of the social discourse in a collaborative activity with the teacher also showed the greatest gains on a writing measure that required independent problem solving to revise problematic texts. Joint involvement with adults in situated activity appeared to be responsible for improvements in performance levels, (Englert et al. 2006).

This particular online setting was chosen because it supports writing instruction and the concepts of an expert helping a novice obtain skills of a community of practice.

### Data Collection Procedures

Data were collected from email correspondence, written products of students, and separate interviews with students and their mentors. Figure 2 shows the data sources used to answer the research questions.



Research Questions	Data sources and methods	Justification
How do these students' abilities to communicate in writing change while learning in this online environment?	<p>Data Source: E-mail correspondence between the teacher and the student.</p> <p>Data Method: Indicators of writing development over time were monitored in e-mail correspondence. Indicators of growth in written communication changes in syntax, the ability to communicate and solve problems, and the ability to analyze text.</p>	E-mail correspondence provided a picture of the development of a student's thought processes and writing over time.
How do these students' performances on writing products change while learning in this online environment?	<p>Data Source: Writing assignments from the online course.</p> <p>Data Method: Writing products from a beginning and end modules were analyzed based on the Virginia SOL Writing Rubric. Two independent readers scored the products. A third reader would have been introduced if the initial scores were not adjacent.</p>	Writing assignments provided a picture of a student's writing performance. The Virginia SOL Writing Rubric is a standardized rubric that assesses the domains of composing, written expression and usage and mechanics.
How do these students' writing processes change while learning in this online environment?	<p>Data Source: Student entrance and exit interviews.</p> <p>Data Method: Students were asked questions about how they developed a written piece in the first and second interviews. In addition, they were asked about their writing process and whether they thought it had changed during the course.</p>	The interview helped to describe how students envision their writing process before and after they have engaged in learning in an online learning environment.
How do these students' self-efficacy in their writing expression change while learning in this online environment?	<p>Data Source: Student entrance and exit interviews.</p> <p>Data Method: Students were asked about their view of themselves as authors or writers.</p>	The students' perception of themselves as writers at the end of the course versus the beginning would show their growth in self-efficacy.

Figure 2. Data sources and methods in relation to research questions.

Data was collected from three sources:

- email correspondence
- interviews with the mentors and students
- assignments and score summaries

#### *Email Correspondence*

Mentors were asked to keep all outgoing and ingoing emails and assignments from students. In cases where the mentor did not have all of the email correspondence, I received access from the administrators of The Online Academy to student email accounts once students had completed or abandoned the course. From these accounts, I was able to use the inbox and sent box folders to cull the data. All email correspondence was printed.

#### *Interviews with Mentors and Students*

Interviews were conducted with students at the beginning of their course and after they had completed the course. Interviews with mentors took place after the course had been completed. Interview guides for these interviews are found in Appendix B. I used a digital voice recorder to capture the interviews. The recordings were transferred to iTunes and converted to mp3 files. The files were then transcribed.

#### *Assignments and Score Summaries*

For the English course, I chose the two major research papers of the course for analysis. The first research paper on transportation in the early 20<sup>th</sup> century is located in

the middle of the course. The second research paper on the American dream is located at the end of the course. These papers were chosen because they were significant in length. For the world history course, four assignments were chosen for review from module one, three, ten, and fourteen. One student completed all four assignments. Two students completed three of the four assignments, and one student completed two of the three assignments. Using the four assignments that spanned the length of the course helped to provide a timeline for student growth.

A colleague and I rated these assignments. He was provided with the context for the assignment, the assignment, the Virginia Standards of Learning End of Course Writing Rubric (Virginia Department of Education, 2005), and a sheet to record comments. I also used this scoring rubric and comment sheet to record my observations. Data analysis did not begin until both rating sheets were completed separately. Both raters have at least ten years experience in reviewing student work. Both have a background in English education, and are familiar with the Virginia Standards of Learning Assessments End-of-Course Writing Rubric (VA SOL EOC Writing Rubric).

This rubric was created to rate papers written in response to a prompt for the Virginia Standards of Learning Assessments in writing. Similar to the challenges provided in each module, prompts for the SOL EOC Writing Assessment provide a context for students' writing. This rubric is the standard to which students in the state of Virginia are held for their writing. Teachers in face-to-face classrooms use this rubric to help students to evaluate their writing in the domains of composing, written expression, and usage and mechanics. This rubric has been in place since 2005.

Since this rubric is used widely across the state of Virginia for evaluation of student writing regardless of subject area, it was also be a valid measure of the writing in each of the online courses in this study. One drawback of the rubric is that it only rated the product and not the revision process that students used in completing assignments. It showed a snapshot rather than a film of students' progress. In addition to the score, each of the rating sheets provided space for comments on the students' writing in the domains of composing, written expression, and usage and mechanics. This provided a snapshot of the students' writing over the duration of their online course.

### Data Analysis

To develop a narrative synthesis of James' data, I reviewed the transcripts for the interviews with James and his mentor. In the beginning of the review, I began with the general categories of self-efficacy, communication with mentor, and writing process. After reviewing James' transcripts, I was able to add additional categories and subcategories. These categories would later help in cross case analysis. The categories were below.

- Self-efficacy
  - I am a writer
  - I am not a writer
- Communication with mentor
  - Communication with mentor, personal

- Communication with mentor, work
- Mentor role in scaffolding writing
- Writing Process
  - Revision
  - Process for gathering information
  - Change
- Online vs. face-to-face
  - Mentor desire to help struggling students face-to-face
  - Student view of face-to-face versus online

Excerpts from the interviews as they pertained to the research were entered into a spreadsheet in Microsoft Excel. They were labeled by participant name, related question, where they were found in the transcript, and category or subcategory. Next, I analyzed all of the email correspondence between James and his mentor. Most email correspondence related to question one: How do these students' abilities to communicate in writing change while learning in this online environment? Additional categories that emerged from the email included the following:

- Study skills
- Seeking technology assistance
- Making connection with mentor

- Motivation
- Showing independence in resolving issues
- Time management
- Parent as helper
- Literary analysis skills
- Mentor role in scaffolding writing
- Usage and mechanics

Additional data to answer question two (How do these students' performances on writing products change while learning in this online environment?) was gathered from the comments and scores of two raters for each assignment taken from the middle and end of the course. Once the emails and interviews were coded and the raters' narrative and scores reviewed, the following overarching themes shaped the narrative of James' data.

- Scaffolding James' thinking and writing
- Need to communicate effectively to meet learning needs
- Changes in writing products
- Changes in writing process
- Lack of change in self-efficacy

*Nora*

To develop a narrative synthesis of Zora's data, I reviewed the transcripts of interviews for Zora and her mentor. I began with the general categories of self-efficacy, communication with mentor, and writing process along with the categories and subcategories established by the review of James' data. After the initial review of Zora's transcripts, I was able to add additional categories and subcategories. These categories would later help in cross case analysis.

- Technology savvy
- Informal versus formal writing
- Writing Process
  - Gathering information for writing
- History teacher view of writing
- Upfront planning vs writing

Additional categories that emerged from the email correspondence included:

- Complications—outside influences
- Seeking clarification

Once the emails and interviews were coded, and the raters' comments and scores reviewed, the following overarching themes shaped the narrative of Zora's data.

- Expectation for formal and informal writing

- Complications
- Communicating learning needs
- Changes in writing products
- Changes in writing process
- Lack of change in self-efficacy

After I wrote a narrative of Zora's data, I analyzed the narrative to pinpoint themes that showed relevance across research questions. In analyzing Zora's story across the different questions, I made the following connections some of which were shown in James' narrative as well.

- Student understanding of context and audience influences tone and style
- Communication of learning needs is essential for completion of an online course
- Interaction between mentor and student helps the student to develop time management skills.
- Student motivation plays a key role in completion of course

#### *Richard*

To develop a narrative synthesis of Richard's data, I reviewed the transcripts of interviews for Richard and his mentor. I began with the general categories of self-efficacy, communication with mentor, and writing process along with the categories and subcategories established by the review of James' and Zora's data. There were no new



categories added to Richard's data after the review of email and transcript sources. Once the emails and interviews were coded and the raters' comments and scores reviewed, the following overarching themes shaped the narrative of Richard's data.

- Building a relationship with the mentor
- Communicating learning needs
- Time management
- Informal vs formal writing
- Changes in writing products
- Changes in writing process
- Lack of change in self-efficacy

After I wrote a narrative of Richard's data, I analyzed the narrative to pinpoint themes that showed relevance across research questions. In analyzing Richard's story across the different questions, I made the following connections some of which were shown in James' and Zora's narrative as well.

- Student understanding of context and audience influences tone and style
- Interaction between mentor and student helps the student to develop time management skills.
- Student motivation plays a key role in completion of course

## *Georgi*

To develop a narrative synthesis of Georgi's data, I reviewed the transcripts of interviews for Georgi and her mentor. I began with the general categories of self-efficacy, communication with mentor, and writing process along with the categories and subcategories established by the review of James' and Zora's data. There were no new categories added to Georgi's data after the review of email and transcript sources. Once I coded the emails and interviews and I had reviewed the raters' comments and scores, I found the following overarching themes shaped the narrative of Georgi's data.

- Time management
- Informal vs formal writing
- Changes in writing products
- Changes in writing process
- Lack of change in self-efficacy

After I wrote a narrative of Georgi's data, I analyzed the narrative to pinpoint themes that showed relevance across research questions. In analyzing Georgi's story across the different questions, I made the following connections some of which were shown in James', Zora's, and Richard's narrative as well.

- Interaction between mentor and student helps the student to develop time management skills.
- Student understanding of context and audience influences tone and style

- Student motivation plays a key role in completion of course

The data from all four narratives were analyzed for common themes. Analyzing the research questions across cases highlighted some key similarities and differences for each of the participants. The following themes emerged across cases during the analysis:

- Use of texting conventions in email to mentor
- Changes in writing domains over time
- Stream of consciousness writing versus up front planning
- Differences in subject area for scaffolding writing and thinking
- Self-efficacy remains constant
- Emerging theme—Ability to manage time may be shown in two factors — messages about time and first time taking the course

### Validity Issues

#### *Researcher Bias*

My researcher bias was two fold. One, I have a specific theoretical framework as described in chapter two that I believe describes the process of students' development of written communication skills. As I analyzed data, I needed to be cognizant of this framework, but at the same time I was not bounded by it. I had to be open to alternate descriptions and interpretations of the data.

One way that I exposed myself to other interpretations of the data as well as checked my interpretations was in using the exit interviews as a member check with the mentor. By being open to their interpretations, I was able to shape the analysis with their interpretations as well as my own.

My second bias stemmed from my involvement with The Online Academy. I have been a designer and teacher/mentor in The Online Academy. I have taught other mentors how to mentor students in The Online Academy. I needed to remain cognizant of my close association with this setting.

### *Reactivity*

Since the participants cannot physically see or hear me accessing their emails there is little chance of participant reactivity during their progress through the course. However, the questions I asked during the initial and exit interview may have influenced how students viewed their coursework. Most of the questions in the initial interview guide relate to the students' past experiences (Appendix B). It is possible through our conversation and reflection that the students might have changed how they behaved when taking the course, but given the time constraints, I do not think this was the case.

In addition, since I was one of the raters of the written products, there could have been a bias introduced into the research. However, the ratings of my colleague were similar to mine. If there had been a discrepancy of two or more ratings on the scale, a third rater would have been introduced. This was not the case.

#### 4. Results

In analyzing the data, I came to know the story of four students and their relationships with writing and language in an online environment. All good stories begin with the characters and their motivations. In the following pages, I will share with you each of their individual stories and the themes that emerged as I compared their stories to each other. For each of the students, I will try to answer the four core research questions. How does their self-efficacy about writing, their writing process, their ability to communicate, and quality of writing products evolve as they complete their online course? In answering these questions, I hope to show a picture of who they are and what their experiences were during their online course.

##### James

James is a polite, soft-spoken African American young man who attends a private Christian high school. James' family moved not too long ago to the tidy newly constructed duplex in his affluent suburban neighborhood. Over the summer, James took an American Literature class with The Online Academy. He took American Literature because it was not offered at his former school, and he needed the course to graduate from his current school. James has always liked his English class, especially last year when his teacher really helped him to make the connection between music and writing.

So we did different stuff, like write music...And he was like, 'Write me a one-page summary telling me what did you think about it. What do you think the writer is going through? What were their goals to tell their fans about it?' It was a pretty good class (Interview James July 2007).

James does not consider himself to be a writer, but he does like writing music and poetry. He finds that most of the writing he does outside of school is either writing songs or writing for his online class. "If it's something like writing a song, that is it. And, of course, I'm taking the online course, so that writing part as well." (Interview James July 2007).

James began his online American Literature course in the summer of 2007 and finished it right before the winter break. He had two mentors, Mrs K and Mr. L. Mrs. K was a new mentor who had a passion for the theatre arts. James was her first online student. She had a supervising teacher, named Mr. G, to guide her through any rough spots. She mentored James throughout the summer. Mr. L picked up mentoring James in the fall. He was an experienced mentor who had been part of the team who designed the American Literature course. When not teaching online, he teaches English 11 to struggling students at a suburban high school. Communication between James and his mentors would shape James' ability to communicate effectively via e-mail and in written assignments.

The primary mode of communication in The Online Academy is via e-mail. Relationships between the student and the mentor are built via e-mail. Over the course of the class, James got to know Mrs. K and then Mr. L through their e-mail correspondence.

It was through e-mail that James sought answers to his questions about the module, asked where he was supposed to go next, inquired how he was supposed to navigate technical difficulties, and explained his thinking. It was through this e-mail correspondence that Mrs. K and then Mr. L asked probing questions to strengthen James' thinking, provided technical assistance, supported James in developing study skills for online learning, reinforced James' motivation for completing the course, and scaffolded James' writing and thinking skills.

*Research Question One: How Do These Students' Written Communication Skills Change While Learning in This Online Environment?*

Over the course of his experience, James was able to practice his communication skills as a byproduct of the everyday interaction with his mentor. The reasons for communication varied; however, James gained with each correspondence feedback that would help to shape his writing and his study skills in an online environment. James was asked to clarify his thinking while navigating in an uncharted sea of online learning. As he traveled on his journey, he found himself seeking technical advice, learning new study strategies, and building relationships with his mentors.

*Scaffolding James' thinking in email correspondence.* Writing is often analogous to the act of thinking. A person's writing is a window to a person's thinking. It is a window to the logic a person uses when analyzing a problem or describing a process or event. In many of the assignments that James encountered in the American Literature course he was taking, he was asked to explain his understanding. Much like the six facets of understanding as described by Wiggins and McTighe (2005) and the levels of

knowledge described in Bloom's Taxonomy, James' mentors asked him to show his understanding at varying levels. James was asked to show his understanding through explanation, interpretation, empathy, perspective, and application. In turn his mentors tried to scaffold his ability to communicate his thoughts using each of these aspects of understanding.

Courses in The Online Academy are organized into modules. Each module focuses on a specific unit of study. Each module begins with a challenge, a scenario in which the student takes on an authentic role in order to solve a problem. The first step to meeting the challenge is building background knowledge on the subject. Students complete activities and assignments that allow them to do this, but completing the assignments is just the first step in building the background knowledge. The designers of each module built in probing and extending questions in the teacher's resource toolbox for mentors to use to help students scaffold their thinking to another level. Based on the student's performance and situation, the teacher or mentor, as they are called in The Online Academy, can develop his or her own extending questions or use the ones provided. If a student shows understanding of an assignment, sometimes no questions are used. If there are time constraints for completion of a course, as is the case with many summer school students, limited questions are asked.

The first module in the American Literature course is the study of Native American literature. The challenge or overarching scenario that shapes the module is that the students are taking on the role of a new intern at the National Museum of the Native American. In their roles as interns, they are to develop a proposal for an exhibit at the



museum that focuses on Native American culture and literature. Prior to the development of the proposal, James was required to complete background building activities that helped him to gain an understanding of the literature and culture. James was being asked to explain how the Iroquois Constitution might have influenced the building of the American Constitution. In order to complete this assignment he needed to understand the perspective of Jefferson and his compatriots and needed to be able to interpret the meaning of the Iroquois Constitution in relation to the American Constitution.

James' response to the assignment is below.

The Native American's government was very similar to that of the Americans.

The first Indian government was formed in 1820 and was based off a republican system. Seven years later they received a constitution that was called, "Cherokee Nation". Their end results for following the Americans form of government, has helped Native American's make some important decisions, throughout history.

When trade came along, the government system played a major role also. (Email James July 6, 2007 3:54 PM).

In James' response, he did not answer the question; he inverted the realm of influence. He attempted to show how the Cherokee not the Iroquois have been influenced by the American Constitution. In addition, his response was somewhat vague. He referred to the Native Americans being able to make important decisions but did not really tell what decisions, how or why. James' mentor, Mrs. K. asked him to be more specific in her next correspondence below.

James,

While you do say that the Native American's government was similar and that it played a major role, you need to go into more detail explaining HOW this was so.

I need you to take the time to develop your answer, making specific statements that list exactly how the Iroquois Constitution might have influenced Jefferson.

Of course I'm interested in whether you got the information from the documents, but I am much more interested in what you think about what you're reading.

Have you studied Native Americans before? Do you think we as Americans appreciate what native tribes contributed to our culture? Why or why not?

☺ Mrs. K (Email Mrs. K July 8, 2007 5:00 PM).

James elaborated as a result of Mrs. K's prompting. Although he did not answer her first question quite specifically as she asked, he did make the attempt to use the example of the republican system as common point between Native American and American government systems. At this point James' explanation lacked the evidence and specificity to support his claims.

I'll use the republican system for example. They have a board of elected officials that are over different parts of the government. It played a major role, by helping them learn different aspects of politics. You would be surprised at the amount of, successful people in North America, that are apart of the Native American race. I was watching a special on comcast talking about, how the Native Americans are building up all these casino's, and taking over fortune 500 company's. I've studied the history of Native American, when I was in middle school. My

personal opinion. I don't think American's appreciate, Native Americans as much as they should(what I mean by that is. It seems like every once in a while you run into a newsperer article, or here on the news, about how there is a fued between the American's, and native American's over who has ownership over certain land, and etc. (Email James July 2007)

In his response, James provided an example of how the Republican system was important. He also made a connection to modern day times. Mrs. K chose to accept James' example of the republican system and decided to make the most of the connection that James had made to modern day. Mrs. K overlooks the spelling, comma, homonym, and possessive errors in James' response and focuses on the content of the email. This allowed Mrs. K to make a personal connection with James since she had seen that same Comcast special. She responded to James' email below.

Great answer to my questions! I am so excited to hear that you were watching the special on comcast about the Native Americans and their casinos. I love watching things on the History Channel and Discovery Channel. :) Actually, I am from Oklahoma originally and the issue of the casinos is a real hot topic there. Native American tribes are separate nations - they have their own elected officials, their own taxes, and their own votes. So while gambling is illegal in Oklahoma, in the Seminole Nation (for example) they have legalized it. So on Seminole Nation lands and in Seminole Nation-owned buildings, they can have gambling. They truly are revitalizing their economy.

Please try to get the Intro module completed by Wednesday. It has some really important information in it that I will need to know in order to be the most effective mentor I can be. Work on it before you continue with the Native American module.

Have a great week!

Mrs. K (Email Mrs. K July 9, 2007 9:27 PM)

By using prompting questions she was able to help James develop a specific example to support the point he was trying to make. In addition, she was able to help him to make a connection between the government of modern day Native American's and Native Americans in the 17<sup>th</sup> century. This exchange also had a reminder for James to complete the introductory module that precedes the American Literature course. This introductory module is a way for the students to gain an understanding of the structure of the courses in The Online Academy. It also provides assignments that allow the mentors to learn a little more about the background and interests of the students.

Mrs. K took another opportunity to prompt James' thinking. In module one on Native American literature, James was asked to read an article from the 1973 *New York Times* about Adam Nordwall, the chief of the Chippewa tribe, who stepped off a jumbo jetliner onto Italian soil and claimed Italy by "Right of Discovery." The assignment asked whether Nordwall was successful in making his point. Below is James' answer.

Do you think that Adam Nordwall was successful in making his point?

Personally, I think Mr. Nordwall was very successful in making his point. The reason why I say that is, because Columbus didn't discover America, there were

people already on that land way before his time. Maybe from Columbus's point of view he felt compelled to claim America. Another reason he takes the credit for discovering America is, probably since he was the first European over their, he figured he was the first to discover the new land. I also like how Mr. Nordwall compared, that he was claiming Italy like Columbus claimed America. Last but not least, I want to point out the difference Mr. Nordwall brought up concerning Columbus, and himself. Maybe it's just me, but it seems like Columbus intentions were once he claimed America he could become the slavemaster over all the Indians in that area. On the other hand, Mr. Nordwall is just trying to establish peace, and goodwill. (Email James July 16, 2007 12:38 AM)

James' answer to this prompt was better articulated than in the previous assignment. He was able to explain why Mr. Nordwall is successful in making his point as well as take into consideration the point of view of Mr. Nordwall and the point of view of Columbus. His interpretation of the actions of Columbus versus Mr. Nordwall was also a way of making meaning of the differences of the two "discoveries." Again, Mrs. K did not respond to the grammar errors in James' response, but focused on the thinking and the content. She complimented him for comparison of Nordwall and Columbus and asked for more specific information.

Hi James,

This is a very nice answer. I like your comparison between Columbus and Nordwall at the end. What I would like to know is whether you agree with Mr. Nordwall on any of his points, or whether you can agree with any of Columbus'

actions. Why or why not? Please respond with your personal opinion on this topic. (I also received your Activity 4 - view a powerpoint. Hopefully the computer glitches have worked themselves out.) ☺

Mrs. K (Email Mrs. K July 16, 2007 11:33 AM)

James' answer is short and did not really elaborate on the points he had made previously. On the next assignment Mrs. K tries to scaffold his writing as well as his thinking. She would like to see him express himself more succinctly. Instead of asking him general questions, she felt that James needed more specific instructions in order for him to express a deeper analysis of the topic. For his next assignment James watched a PowerPoint about Native American Literature. Here is his response.

I watched the powerpoint in module #1 on, Native American literature. The following powerpoint gave me a better understanding on the importance, and impact that this particular literature has on not just a people, but a nation.

Personally, I've been to some Native American Indian museums, and have heard the story's the tell. The stories are so well written, and acted out, it's almost as if you were their, when the event, or scenario was happening. There's a lot of information that I can incorporate with my exhibit, just from this power point alone. Last, but not least I'd like to commend Mr. Carlton on, the excellent job he did on this power point. (Email James July 16, 2007 12:11 AM)

Although James critiqued the PowerPoint, this was not the focus of the assignment. He was not specific about what he could include in his exhibit. James' e-mails thus far showed that his thinking lacks specificity. Mrs. K continued to probe. She asked what

specific impact the literature had made. When James responded with a one sentence answer, she probed further and showed James specifically how he should support his thoughts and elaborate them.

James,

I liked the part about how stories - if well written and acted out can make you feel like you're there. I think that's very important to try to do in any good museum. :)

A couple of questions to answer: 1. What specific impact has the literature made? (List a couple of examples.) 2. What specific information from this powerpoint do you want to incorporate into your exhibit? Again, try to be more specific in your answers - list a few examples and/or elaborate on your thoughts. A good rule of thumb is to aim for 2 or 3 sentences of explanation for each 1 sentence of opinion. Mrs. K (Email Mrs. K. July 16, 2007 11:40 AM).

By giving James guidelines or a procedural facilitator to guide his writing, he has a greater chance of supporting his opinions with facts (De la Paz & Graham, 1998; Graham, 1997). James' revised response is below.

What specific impact has the literature made? The literature has made a great impact on the Native American culture, by showing other nations that they're not just known for being fierce warriors, but actors, and storytellers also.

I want to incorporate the true meaning behind all of their stories. For example, the coote, or the raven. They're almost like a parable.

(Email James July 16, 2007 4:10 PM)

Although James did not elaborate with two or three sentences, he does tell **why** the literature made a great impact on the Native American culture. Also he gave an example to illustrate his thoughts in answer to the question about what he will incorporate into his exhibit proposal. As a result of Mrs. K's continued prompting, James made some progress in expressing his thinking. He still lacked the ability to show deep analysis of a situation.

Mr. L began working with James in September. James was supposed to have finished the course before the new school year, but he had received an extension to December. He must reach his deadline. As a result Mr. L modified the modules so that James got to the heart of what he needs to know. Mr. L also noticed that James had difficulty analyzing text and expressing his thoughts.

“Sometimes his analysis of poems and things like that would be sort of off track.

I didn't spend a great deal of time trying to say, 'No, no, no, this is the way the poem really went,' because in the end I felt like there really wasn't time.”

(Interview Mr. L December 2007)

Both Mr. L and James faced a difficult dilemma. They had to complete the course in the next three months. Mr. L weighed the need for James to finish his course with his need for additional prompting for deeper analysis. He struggled with the The Online Academy's philosophy of learning for mastery in the time constraints in which James had to learn the material. He agreed that James must master the skill of analysis, but felt that it will take more than this course to bring about that mastery. He hoped that in the next few years James would grow as a writer and a thinker.



Well, again, if he turns in something that's terrible and I say, 'Got to make these changes, resubmit, Got to make these changes, resubmit. Got to make these changes, resubmit,' I think it's probably the healthiest way for The Online Academy work: to say, 'You will not move on until you demonstrate mastery of this.' And I think that's like teaching for mastery and all that stuff, but real life doesn't work that way. Real life says, 'Okay, now you turn it in and I assess it, and then there's no redo and there's no revision. This was your work.' I think what I was saying through my interaction with him in this course, without overtly saying it, was, "That day hasn't come yet." (Interview Mr. L December 2007)

The day had not come for James to have total mastery of literary analysis; however, he did take steps to having a better understanding. Below is his assignment on modern poetry. He was asked to list the three important qualities of modern poetry, compare the style, language, tone, length, and content of Longfellow's poem from the Romantic era with Pound's modern poem and explain how Pound's "Salutation" is representative of the modern era. His response is as follows:

Three important qualities of modern poetry are, suggestion- which is the calling up in the mind of one idea by virtue of some association, or of some natural connection between the ideas; next you have vividness- presenting the appearance, freshness, spirit, of life; The final important quality is, concentration- which is exclusive attention to one object, close mental application.

Comparing "The Cumberland," and "In the Station at the Metro," they have similarities, one would be both styles are modernistic. The language used in the

poems is poetic English. My view of the tone is moderate with a mysterious feel to it. I would have to say the length of “In the Station at the Metro” is short, but very detailed, and “The Cumberland” is long. Both poems’ content are depressing, and “The Cumberland” emphasizes a lot on the war.

The content and themes of Modern literature are represented in the poem.

‘Salutation’ was powerful in a poetic sense, just like the majority of modern literature. Both poems tie in some characteristics of the romantic era. ‘Salutation’ poem talks a great deal about the unbalanced events that occurred during the modern literature time period. (Assignment James September 2007).

Mr. L. gives him feedback on an assignment on modern poetry.

You did a pretty good job with this assignment. I thought you got to the heart of modern writing in your first response. I was a little disappointed that you found Longfellow’s poem to be an example of Modern poetry. He actually was from a different era or period in American literary history. I had hoped you would notice the differences in the styles of the two poems in areas such as: length, formality of language, (and) subject matter. Your examination of “Salutation” lacked specifics and depth. Some comments were also vague (“unbalanced events,” “powerful in a poetic sense.” (Email Mr. L September 12, 2007).

By giving James specific examples of how his analysis could be improved, James was able to use the feedback and try to use it in his next assignment. James received 8 out of 10 points for that assignment. Below is his analysis of Poem “280”

### Analysis of Poem "280"

The poem is about Emily Dickinson going through mental trauma in her mind. She feels like she has given up on the world. The poet deals with her subject by describing it as a funeral, and talking about how she feels useless in the world, to the extent that she wonders what's her point of even living on the earth. She appears to be hopeless and neglected at the same time by the world.

The poem has a rhyme scheme, and almost half the poem rhymes. Alliteration, assonance, consonance are present from the middle to the end of the poem. Meter was not present in the poem. The previous literature terms are what help the poem rhyme, and once you blend the author's skill with these literature terms you have a powerful poem.

There are a total of twenty lines, and nine stanzas. The title of the poem is, "280", and the poem does contain a caesura in a couple lines. I would definitely have to say that imagery is strongly represented in this particular poem. The personification is what gave the poem more drive, and the similes are expressed throughout the poem, because Ms. Dickinson went from being in a funeral, to drumbeating, and falling on top of the world. All of which reflect sadness, uncertainty and hopelessness. (Assignment James September 2007)

In James' analysis of Emily Dickinson's poem, he was able to provide his interpretation of the meaning of the poem. He told us what he thought the author was trying to convey based on his experience. When he must analyze the poem evaluating how literary devices influence the poem, he did not give specific examples. He did not show evidence

of his understanding of the literary terms and how they might affect the meaning and rhetoric of the poem. Mr. L. responds to James.

Overall you did a nice job. The only area where I think you could have made real improvements would be in your analysis of ‘Poem 280.’ When you referred to the various literary terms or poetic devices in the poem, this was part of the assignment; you did so without offering specific examples to support your statements. Most of what you said was accurate, but you could have done a better job explaining your findings. I do feel that you had a clear understanding of the poem. (Email Mr. L September 17 5:53 AM)

Although James is still having trouble with literary analysis, he is doing better than on the previous assignment. For this assignment he earned a 9.3 out of 10. His grade went from a C to an A. Mrs. K and Mr. L took different approaches when trying to scaffold James’ learning. Mrs. K took the approach of asking probing questions and providing specific guidelines for responses. James responded somewhat to these prompts. He seemed to add information, but still lacked the specificity needed in supporting his thought’s with evidence. Mr. L used the approach given time constraints of giving James feedback on one assignment in hopes that he would apply what he learned from that assignment to the next assignment. This approach had some effect. James was able to improve his literary analysis to some extent as evidenced by Mr. L’s feedback and his improved grade.

Over the course of six months, James was able to improve his ability to communicate about his thinking. In his early e-mails with Mrs. K, he needed to be prompted to include supporting examples in the Native American Literature module. As

he progressed throughout subsequent modules, he added examples to illustrate his thinking without prompting. However, the mastery of this skill will still need to develop as James continues to his next English class. He will need to develop specificity to his examples as he supports his arguments.

*Communicating to meet your needs.* Being a strong online learner not only depends on your cognitive skills, but also requires you to communicate and also master time management, technical skills, and study skills. Through the use of e-mail correspondence, James was able to communicate his needs for navigating the course and obtaining technical assistance. His mentors provided him with guidance and scaffolding to help him manage his time.

This was James' first time taking an online course. For him online learning was uncharted water. He was used to sending instant messages to his friends and sending them texts with his phone, but he and his friends hardly ever used e-mail, but when he did,

I notice when I write an e-mail normally if I'm talking to a friend, say if it's some friend, I might put 'LOL' or 'haha' and then...write it. Normally I lowercase when I'm laughing through e-mail...(Interview James July 2007)

However, by the time he had finished the course his friends had some questions for him.

[F]or some reason I've been making everything capitalized and putting periods after where normally I just do commas or spaces or something. Some of my friends have noticed that; they're like 'Why do you capitalize everything in your email?'" (Interview James December 2007)

James understood from the beginning of the course the difference between personal correspondence and correspondence for school. Although his e-mails were sometime fraught with misspellings and grammar mistakes, he maintained a professional tone of voice. He rarely included the instant message slang that he may have used with his friends for texting in his emails. Below is one of James' early e-mails.

The first thing Native Americans contributed to us was their basket weaving. Each native american tribe uses a different type of material for the baskets. Northwestern tribes used cedar bark, spruce root, and swamp grass. Cherokee Indians use bundled pine needle, and Southwestern tribes used materials like sumac, yucca, and willow. Weaving baskets are apart of the Native American traditions. Basket weaving has become so popular that it has reach New England, where the material used is swamp ash.

Native Americans are also known for contributing jewelry. Some of the materials they used consist of, shells, soapstone, turquoise, and wood. The shells were given to them as a trade item among other tribes, and were incorporated with the necklaces. Soapstone was used as the piece to hold the jewelry in. Turquoise was put to use as material for the earrings, and necklaces.

Then there is carvings. The carvings had a lot of meaning to them. Like for instance, if you saw a carving on a cave it symbolized a story, work of art, or drawing. The carvings were also a way of communicating with the gods, goddesses, and spirits. Carvings are still popular today.

Another contribution is clothing. They would take animal skin, wrap it around the body, and use it as footwear, or headgear. They would even use the animals that were the same material for the clothing as weapons, or weapon holders(for example bow case). Animal skin was also a major trade item between the Indians, and Pilgrims.

Last, but not least they're known for their music. Pow wow is the most popular music from Native Americans. The music consist of drums, flutes, tribal dances, and whistles. The flutes are made out of fine wood, and the drums are made out of smooth animal skin. Also music plays a important role in the Native American tradition. (Email James July 5, 2007 11:45 PM)

From a grammatical standpoint, James shows some spelling errors in the words Cherokee, material, and popular. He also interchanges “their” for “there”. In addition, sometimes his verb tenses are not compatible for standard written English. It is difficult to tell if the errors were made in haste of typing with no editing, or if this is the way that James writes normally. Mr. L commented about James’ grammar, “There were the typical mechanics difficulties with subject-verb agreement, with use of apostrophes, failure to spell things correctly, just a lack of fluidity to his writing that was symptomatic of someone who maybe hasn’t read as much as he should have by now.” (Interview Mr. L December 2007)

Another example of James’ early e-mail correspondence is below.

I’ll use the republican system for example. They have a board of elected officials that are over different parts of the government. It played major role, by heping

them learn different aspects of politics. You would be surprised at the amount of, successful people in North America, that are apart of the Native American race. I was watching a special on Comcast tv talking about, how the Native Americans are building up all these casino's and taking over fortune 500 company's. I've studied the history of Native American, when I was in middle school. My personal opinion. I don't think American's appreciate, Native Americans as much as they should(what I mean by that is. It seems like every once in a while you run into a newspaper article, or here on the news, about how there is a feud between the American's, and native American's over who has ownership over certain land, and etc. (Email James July 2007)

In this response, James continued with spelling errors in the words watching and appreciate. He used commas indiscriminately, continued to interchange "their" for "there," and did not capitalize all of the proper nouns. Interestingly, he did capitalize the pronoun I, which is often lower case in text messages. In emails from the beginning of the course and in formal assignment correspondence, James remembers to capitalize his I's; however, as time progresses when he is informally e-mailing his mentor, he sometimes uses the lower case i. This may come from a greater comfort level with his mentor or just a lapse into instant message grammar. Below is an example from one month into the course.

Here is the rest of the work let me know if somethings wrong because I might of sent you some pictures im not sure. Please notify me asap concerning what work I have left for certain modules. (Email James July 26, 2007 3:53 PM)



By the end of the course, James seems to have reduced the frequency of his grammatical errors in his parting email to his mentor, Mr. L.

Dear Mr. L,

I would like to thank you very much for your help and feedback on this course. I have obtained a lot knowledge from this course as well. Working with my mother has given me even better skills when writing a paper. I also like English more after taking this course. This course was interesting and it was challenging at times. I liked how you start with The Native American module and end with The American Dream module. Thanks again for all your help and I the final assignment is attached on this email. (Email James December 1, 2007 10:21 PM)

This email is devoid of grammatical errors that have been present in some of James' previous e-mails. There are no lower case I's. The verb tense is consistent and the capitalization of proper nouns is correct. It would seem that during James' experience he has learned to proofread his e-mail for grammar and spelling mistakes leading to clearer communication between James and others.

James also uses e-mail correspondence throughout the course to communicate his needs for technical and navigational assistance. Below is an example of James asking for technical assistance. His mentor had contacted his parents because she thought that James was not turning in his work on a regular basis. It turned out to be a computer glitch. For some reason, James' e-mails to his mentor were bouncing back.

My parents notified me that you were saying I was behind in my work. I think I've found the problem. There must be something wrong with the internet, because

for the past two, or three days I've been getting messages sent back to me saying there is a failure in the system(I double checked the addresses, and the same thing keeps happening). What brought it to my attention was that you would respond to some of my work, and then the remainder, I would never get any feedback off of. Is there a computer technician, that is on this online course, who can fix the problem? (Email James July 12, 2007 2:43 PM)

James communicated with his mentor about the problem with the e-mails. It turned out to be a problem with pop-ups and his browser, which he was able to fix. Utilizing an online environment required James to show his problem solving skills and articulate what he thought the problem to be. He noticed that he was not getting feedback on all of his work, which prompted him to communicate with his mentor about the technical difficulty.

The online environment also helped to develop James' skills for reading and comparing information in an online environment. He wrote to his mentor:

I turned in the poster, reflective letter, and north american poetry worksheet. At first I was wondering why I had to print it in order to find the answer, but I just minimized the info, and found the answers/resource on the next webpage. (Email James July 12, 2007 2:14 PM)

The idea of minimizing a window instead of printing the information is a computer skill that James may have not thought of before taking an online course. Interestingly, he used this skill even though the directions on screen asked him to print the page. This

highlights James' use of the skill of screen reading, a skill not often needed in a face to face class, but invaluable in an online one.

The technical glitches that James experienced coupled with missing assignments seemed to affect James' ability to finish all of his work. Both Mrs. K and Mr. L devised methods to help James chunk and manage his work. Mrs. K gave James guidelines for helping him to keep organized. She asked him to keep a checklist, find a specific spot to do his work, and to proofread his work before turning it in. These guidelines helped James at first, but he seemed to need more scaffolding in managing his work.

When James began with his second mentor, Mr. L tried to alleviate this problem. Given that they had a looming deadline in December, Mr. L modified the course for James. In addition, he chunked James' work for him so that he was to complete one assignment each night. This technique was intended to keep James to a schedule and cut down on the missing assignments.

James,

Great job with the assignment! Your responses were exactly what I was looking for. You get the full ten points the assignment was worth. The only problem I had with your work was the pace. I sent the assignment early last week. If you work one hour a day, you should finish the assignments I send in one day unless I indicate otherwise. We are three or four assignments behind. Here is a link to the second assignment for this module:

<http://vhs.gmu.edu/courses/english11/module7/building3.aspx>

Get it done in one night and send it back. We have to be done by December 1.

Your first assignment was great. Just work faster. (Email Mr. L September 10, 2007 6:36 PM)

This chunking seemed to work for James. With this added bit of direction and structure he was able to complete his assignments. He said the following about working with Mr. L.

It was different. Mr. L, of course, interacted more. We didn't do the digi-chat thing where you go on and do the automatic shout-out like MSN, but it was nice how we got back together. Say, if I had to redo an assignment, he'd send it back and show me different links or things to help, or "Go to this website. This might help you with your structure, but I like how he kept it. He kept it kind of balanced. Or, you'd do two or three assignments and have it done by this Friday or this Saturday. (Interview James December 2007)

In this environment James needed additional scaffolding from his mentor to manage his time and assignments. With the close one-on-one relationship that he developed with Mr. L, he was able to communicate about his writing and get feedback on what changes to make.

I would send him some sort of thing of an analysis and then he would it send it back saying, 'All right, these are my thoughts, if I was writing the paper.' Then I would go back and I'd go, 'Okay, that's a good idea.' So it's basically like a sentence structure thing. (Interview James December 2007)

The online learning environment required that James be specific in his thinking. Without specific examples, it was difficult for his mentors to know if he had understood the material or not. Working in the online environment made it necessary for James to communicate about more than just his assignments. He had to be able to articulate about technical problems he was having and work with his mentors to manage his assignments and his time.

*Research Question Two: How Do These Students' performances on Writing Products Change While Learning in This Online Environment?*

Writing was also a large part of the assignments that James had to complete. In addition to 150 word essays and summaries that were part of the challenges, James was required to complete two longer research essays. One was on transportation in the early 20<sup>th</sup> century and the other was on the American dream. The transportation essay was a research essay that was written in the third person and required secondary sources. The purpose of this assignment is to develop James' skills in performing and writing about research. The American Dream essay was more of a personal essay written in first person that included interviews as primary sources. The American dream essay was assigned at the end of the course. In order to compare the essay that James wrote in the middle of the course versus one that he wrote at the end, each essay was scored by two raters using the rubric established by the Virginia Department of Education (2005) for the scoring of direct writing portion of the Standards of Learning End-of Course test. This is the protocol that the Virginia Department of Education uses when scoring essays. If an essay differs in scores by two points or more, the essay is rescored by a third scorer. The

rubric describes essays ranging from 1 to 4 in the domains of composing, written expression, and usage and mechanics (Appendix C). I rated the essays along with a colleague. Both of us have a background in English education and have been teaching for more than 9 years. Table 6 shows the ratings for the transportation essay.

Table 6

<i>Transportation in the Early 20<sup>th</sup> Century</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	2	2	3
Rater 2	2	3	3

The transportation essay is an assignment that was given in the middle of the course. By this point in the course, James had had the opportunity to complete several smaller writing assignments. This was the first longer research paper required. Both raters agreed that the essay scored a 2 in the composing domain. The paper was rated a 2 out of 4 in the composing domain because of issues with organization and the partial lack of valid and relevant information. Overall, there is a general organization to the paper. It is organized into sections, one for each type of transportation. In each section, James provided information about each form of transportation. However, there are some issues

in terms of individual paragraph organization and transitions between sections. In terms of the organization, the first rater stated:

Overall, although there is an organizational structure in the way of separate sections for each type of transportation, however; there is not a cohesive theme or thesis that holds them together. The introduction states that the writer will elaborate on the different forms of transportation in the early 20<sup>th</sup> century. Each section is titled, but there are no transitions between sections that would give information on how the different types of transportation might be related or even dissimilar.

The second rater pointed to difficulties with paragraph organization.

Organization within paragraphs is poor. The first paragraph under Bus Transportation, for example, covers at least three different topics (inventors, uses, and early buses compared to modern buses). That paragraph also typifies the widespread dearth of transitional words in the paper.

The information in the paper was in some places uneven. James included accurate information in most sections of the paper; however, some sections contain inaccurate or irrelevant information. The first rater stated:

There are erroneous facts and not enough valid sources. For instance the author states, "Planes were used in the war to drop bombs, and nuclear weapons on the enemy". He states this in reference to World War I. Nuclear weapons were not used in World War I.

Rater two found that there was sometimes information included that did not seem relevant to the topic.

Information is elaborated throughout, but there is a tendency to “tell everything,” even when some of it is not pertinent, and to add information that is not clearly related (“Buses ... were also used to pave the way for many African Americans today”). Both of those problems also contribute to the impression that the paper has weak unity.

James’ difficulties with organization and filtering of information contributed to his low score in the composing domain. For rater one, he continued to score low in the written expression domain. Rater two found that his written expression was improved over his composing. Below are his thoughts.

I would rate vocabulary and information each at a score of 3. The writer’s word choice alternates between the bland (“when the first commercial airline *started*”) and the vivid (“Commercial airlines were *introduced*”). It seems there is reasonable control of vocabulary. Clearly there is lots of information (though some of it is wrong: nuclear bombs in World War I?!!). As with many students’ papers, there is little in the way of a distinct voice, nor is the tone developed in any definable way. But since this is a descriptive report told in the third person, those features don’t carry as much weight as they might in a narrative or persuasive paper. Sentence rhythm is sometimes good, often awkward due to poor syntax.



Rater one agrees with Rater two's comments on poor syntax and finds the report to be confusing in places.

This paper is inconsistent in its written expression. Some of the sentences are stilted. For instance, "Planes helped forecasters with communication when pertaining to things like the weather, radars, and war." Some sentences do not make sense. "They were to as durable as they were from 1900 to 1930 were noticeable." Overall the language was bland or did not fit into the paragraph making the reader think that the research was paraphrased without an understanding of the original source.

In addition, rater one explained that James was repetitive in his explanation of some facts.

The paper is sometimes repetitive. In the section on automobiles, the writer used three sentences that essentially state the same information.

"The popularity of automobiles paved the way for suburbs by bringing more people to the community. Automobiles also helped established suburban developments and turned rural neighbors into suburbia. Garages and driveways were invented in America shortly after automobiles were established and the first place they were set up in suburban area.'

Although rater one and rater two disagree on the level of control James exhibits in the written expression domain they seem to agree on the issues with the paper.

Both raters thought that James exhibited reasonable control of the usage and mechanics domains. They both scored the paper with a 3. His usage and mechanics in the papers was markedly better than the usage and mechanics in his emails. This is most

likely due to the process of revision that James may not have used in his the shorter assignments. The raters also reviewed the essay on the American dream. Table 7 shows the scores.

Table 7

<i>The American Dream</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	3	2	2
Rater 2	3	2	2

This essay was based on research James performed with secondary and primary sources. James interviewed his parents about their perspective on the American dream and provided his own. This is the last assignment of the American Literature course.

In the composing domain, both raters scored his paper with a 3. This is an improvement over the rating given to the transportation essay. There is a stronger sense of structure in this essay and the transitions from one section to another are smoother than in the previous essay. In addition, James was better able to articulate his ideas and is able to cite specific information from the interviews to support the description of the American dream for each generation. However, the paper was rated a 3 out of 4 in the composing domain because of issues with organization, lack of an overall thesis, and

weak opening and closing paragraphs. Rater one said the following in reference to organization.

In terms of composing, this paper has some structure, however, the opening is weak and closing is nonexistent. In the opening he states “I will also discuss facts for the interview of my parents and try to compare how the American Dream has changed from generation to generation.” This sentence is a little awkward and difficult to understand. In addition, although the writer states in his opening that he will compare the views of the different generations, he does not do it. He only describes each generation’s views.

Later in the piece, the writer describes themes that are present in the works of Amy Tan, Michel-Jean Crevecoeur, and Martin Luther King Jr., which adds another dimension to the piece, but the placement of this section is awkward. It is placed between his parent views of the American dream and his own. It would have worked much better as an opening. In its current position, it detracts from the flow of the piece. Nevertheless, there is a consistent structure in the presentation of the views of his parents. The structure for the presentation of their views is very parallel.

Rater Two’s assessment of the paper in terms of organization and the opening and closing paragraphs is in sync with rater one’s assessment.

Likewise, the overall organization of the essay is readily apparent, although the paragraph about Jean de Crevecoeur et al is totally out of place. However, the unity of the piece is inconsistent. The opening doesn’t grab the reader’s attention

and does nothing except state, 'here is what I am going to do.' The closing paragraph is not really a closing at all, just a presentation of another perspective (the author's).

Both raters felt that this piece was an improvement over the transportation essay in terms of composing. Although both rated it a 3 on the rating scale, they thought the essay rated a 2.5 and rounded up to fit in with the established scale. Based on the rater's results and comments, in comparing these two essays in the composing domain, James made some gains in structuring his essay, elaborating on his ideas, and providing transitions. These gains were not seen in the written expression domain.

In the written expression domain, both raters scored the paper with a 2. For rater one, this is consistent with the score on the transportation essay. For rater two, this is a decline from the score of 3 that was awarded for the transportation piece. Both raters agreed in terms of James' use of word choice. Rater one stated.

There is no use of any figurative language, but the writer has chosen interesting words to illustrate his views and those of his family members. He states, "The American dream is tarnished...." However, some of statements are vague and don't necessarily refer to a previous part of the paragraph. For instance, "He thinks the dream needs to be kept in perspective as it was originally planned."

There is no reference to an original plan.

Rater two stated.

There seems to be a reasonable amount of specific vocabulary (“slavery became *abolished*,” “their dream was *furthered*,” their “hard work *afforded*” them, “the American dream is *tarnished*”) but there is also much bland vocabulary (“they *want* a piece of the American Dream,” “These people *take on* the mindset of U.S. citizens,” “King’s dream theme is *on* all Americans having equality”).

Both raters agreed that James used some very specific vocabulary that added to his work, but that there were also generic words that could have been replaced. The raters disagree about the presence of voice in the piece. Rater one hears the voice of the writer, “Since this piece is written in the first person, the writers voice is very prevalent throughout the piece.” Whereas, rater two stated that the voice was absent. “There is no sense of voice, the writer behind the words, other than the inference that he is an African American male, until the last paragraph.”

Overall, the piece showed some control in word choice, but little sentence variety and no use of figurative language, all of which contributed to the rating of 2 in the written expression domain.

In usage and mechanics, James scored lower on the American dream essay than he did on the transportation essay. The transportation essay was submitted to the teacher and revised multiple times; whereas, the American dream essay was only submitted once in its final draft. This lack of revision and comment from his teacher most likely played a role in lower score the raters awarded his essay in usage and mechanics. Both raters noted inconsistency with subject verb agreement.

The writer shows consistent difficulty with subject verb agreement. For instance, he states, “She said this mean people are for themselves and are not interesting in doing what is right for everyone.” Another example is “My mom stated her great grandparents, grew up in slavery and the ultimate goal for their children were to be free...” (Rater 1)

Although James showed consistency with his end punctuation, internal punctuation specifically the use of commas was inconsistent. Rater two stated.

In terms of mechanics, the internal punctuation is generally poor (“She stated a saying she heard from here 93 year old grandma that is still living today have a new motto which is ‘get all you can, and can all you get.’”), though end punctuation, apostrophes, and quotation marks are pretty much used correctly.

Rater one stated.

In addition, the writer does not seem to understand comma rules. He uses them indiscriminately, or to create a fused sentence. For example, “My dad states families are not as wholesome as they were when he was growing up, the divorce rate in this country is outrageous, along with the single parent homes that has swept across America.

The errors that James’ made in the American dream paper are consistent with the kinds of errors he showed in his emails and short assignments. However, the amount of these errors was reduced. In writing longer papers, it would seem that James took more care in revising his papers for usage and mechanics than he did for short summaries.

In comparing the two essays for growth over time, James' written products improved in the composing domain; however, he remained steady in the written expression and usage and mechanics domains. James has improved his ability to structure an essay and elaborate on information, but still needs to improve his use of language and punctuation.

*Research Question Three: How Do These Students' Perceptions of Their Writing Processes Change While Learning in This Online Environment?*

Over the period that James took the online American Literature course his writing process evolved to include more revision. In addition, he learned how to revise his papers independently more often before submitting them for teacher feedback. This was an essential habit to cultivate as James moved toward a more independent writing process. The natural delay time in response from an online teacher worked in James' favor since he began to exhibit greater independence in the revision of his work.

At the beginning of the course, James worked from a stream of consciousness way of writing. He would sit down and just begin to write what he thought about the topic. He would do this until he exhausted what he had to say.

I started off like maybe doing a whole page or two real quick, but then I read over it and made some changes, and then I was like, "All, right, I've got two or three more pages left." This thinking part. It seemed like—say if it was a five-page paper—I could go out and hurry up and type two, two and a half pages, and then it seemed like [?]. It was like, man, how do I want to end this? I don't want to

keep talking and then have to do another page on top of that. Those seemed like the hardest, the last two at the end. (Interview James December 2007)

The stream of consciousness process did not really work for James on the research paper on early 20<sup>th</sup> century transportation. His first draft was an outpouring of all that he knew about transportation and his personal experiences with different types of transportation. He did not have any information about early 20<sup>th</sup> century transportation. He also had very few facts related to the different types of transportation he did address. He talked about his early process with this paper.

Then since I'm into cars and transportation, all right, I could put this in but still.... That was kind of a struggle. I kept trying to do it modern day for some reason. Like I started, then I was about to go into new cars coming out. Hold up! I can't do this. My mom, she noticed that in one of the paragraphs, or almost a page I did. I was talking about stuff in today, and she was like, "You've got to keep it in the early twentieth century." I was like, "Oh, yeah, I've got to go back to that page and redo that." It was kind of not too much of a challenge, but just the fact it was in the early twentieth century, I really had to research it out and everything. (Interview James December 2007)

As James began to complete more research on his topic, he used webbing and outlining to help him to organize the information in his essay. As James moved from his first draft to the subsequent three drafts, with his teacher's guidance and feedback, he incorporated more information that pertained to his topic and limited the information that did not fit. His teacher commented on the process.



But with the transportation one, from early version of that to the end, yeah, there were a lot of steps along the way. Yeah, I think he made some progress in understanding that in the beginning he wasn't at all focused on what his real topic was. He was kind of all over the place, but by the end of it, I think, he had a better feel for the fact that he needed focus on different modes of transportation in the early part of the twentieth century and how they changed society. At first he didn't grasp what he was supposed to accomplish. That's what I mean about the difficulty with him in terms of writing is if the prompt says, "Your magazine editor wants you to write an article about some event or change in the world that occurred during the first part of the twentieth century and how it affected mankind" or whatever, he would take that and write something.... I think he wrote about metro buses in DC and how they helped with transportation for people who couldn't afford it or something. I'm like, "No, no, no, metro buses in DC, that's now. You have to talk about what happened in the early part of the twentieth century and how it changed." It took a number of attempts submitting revisions and getting back before he arrived at something that I felt like I could check off that he's done a research paper. (Interview Mr. L December 2007)

James learned to revise his work. He learned to go beyond basic editing and spell check.

I did that [revision] during the summer, of course, when I started doing that, when I had somebody tutoring me with it. She had taught me how to do that. You could see something and you could be like "Oh, this is done," but then maybe you

could put more info or what's in your heart or whatever to write. By switching that sentence around, that can make another whole meaning to the, say, if I'm writing on a book or whatever. (Interview James December 2007)

In addition, he took away with him a sense of how to structure an essay and to use the word processing for his first draft.

I think it changed, especially with sentence structure. I would start off good with papers, but then it would venture off somewhere, and towards the end it would be like I would still be on that topic but where I was going it wouldn't basically hold you enough. To me, I was like, yes, but then when you let somebody else read your paper, it's kind of a shocker, like, "Oh, I didn't see that." Then it's like a fresh pair of eyes looking at it. You might not see errors or whatever. But I think it changed a lot. Even now, this whole year I think has helped my writing. I did a paper the other day and I was typing—well, that's something I didn't do before, so I changed a little bit. (Interview James December 2007)

He also learned the importance of grabbing a reader's attention in the introductory paragraph of his essay.

Before, maybe, say, starting out with a sentence. The first one or two sentences wouldn't kind of grab someone's eye if they're reading it. Like you would understand it, like you would understand it, like you would see later on, maybe the second through fourth page if it was a four-page paper, for instance. That helped me as far as grabbing the reader's eye and all that, like getting them into it

and staying along course with my subject. As far as order, I'd do two pages in order and then I might skip to something else and go back. That's the problem I used to do, but now it's like I set everything in the right order. (Interview James December 2007).

Although James still has a lot to learn about writing and revision, he made significant progress by the end of the course. His teacher commented.

I think the American Dream essay that he turned in at the end was actually one of the better pieces of writing that I got from him, but it was also mostly a personal sort of thing...I didn't feel really good, but I felt better about signing off on him being done with English 11 following the essay than I did with some of his earlier work. (Interview Mr. L December 2007)

*Research Question Four: How Do These Students' Self-efficacy in Their Written Expression Change While Learning in This Online Environment?*

In the time between when he started the course in July and when he finished the course in December, James did not change his perception of himself as a writer. In the beginning of the course, he could remember writing poetry and music lyrics when he was in middle school. He considered himself a writer when it came to music and poetry.

In a poetry-type, music sense, yeah, I would, but as far as doing papers I guess you could say.... Back when I lived in St. Louis, I went to State in sixth grade and in eighth grade I went to State, and I came in first in sixth grade and then third in eighth grade, for like writing and poetry. I did a long one in eighth grade, and

then in sixth grade I just did music and poetry. I guess you could say that. I always thought maybe once I hit forty or whatever I wouldn't mind writing a book or something. (Interview James July 2007).

By the end of the course, James had not changed his perception of himself as a writer.

I did some [poetry] last summer. I did maybe three or four things in the little time that I had, but other than that, this year I haven't done too much of it. ...I wouldn't mind getting back into it. (Interview James July 2007)

However, when it comes to writing academic papers, James is less confident about his writing. His mentor, Mr. L. agrees.

I hope he would—what's the buzz word in education, that efficacy, that ability to assess where you are—I hope he would be able to look at himself as a writer and say, "I've got a long way to go." I don't know that at that point in time he would say, "And I want to get there," or if he would say, "It's not my thing. I'm not a writer." Maybe he's a brilliant math student. Maybe he doesn't anticipate a career where there is a lot of writing involved. I don't know, but I hope that he realizes that he's not a very strong writer. (Interview Mr. L December 2007)

Although James did not come to view himself as a writer during the American Literature course, he did evolve in his ability to communicate, his performance on written products, and his perception of the writing process. Through probing questions and feedback from his mentors, he was able to improve his ability to communicate about his thinking. Over time, he developed the habit of providing specific examples to illustrate

and support his opinions. This skill also helped him to make a deeper connection to the literature he was asked to analyze. He adapted to reading online by practicing reading text in over multiple windows. James' writing takes on many of the characteristics of his verbal communication. Writing to his mentor via e-mail caused him to begin to pay more attention to the grammatical conventions in writing. The practice of writing to someone in a professional capacity required him to take note of syntax and grammar.

His performance on more formal writing assignments evolved as well. By going through the process of multiple revisions in the transportation essay, he was better able to structure his final American dream essay and articulate his ideas using specific examples. In addition, he continued to minimize the usage and mechanics errors in formal products as well.

James also gained a better appreciation for revision as part of the writing process. He learned not just to spell check his work, but to move sections and rewrite whole paragraphs. James still has a ways to go on his journey as a writer, but he is no longer in uncharted waters.

#### *Data Analysis Process*

After I wrote a narrative of James' data, I analyzed the narrative to pinpoint themes that showed relevance across research questions. In analyzing James' story across the different questions, I made the following connections.

- Interaction between the mentor and the student helps the student to evolve in thinking and writing skills.

- Interaction between the mentor and the student helps the student to develop time management skills.
- A student's understanding of context and audience shapes tone and style

*Interaction between mentor and student helps the student to evolve in thinking and writing skills.* The interaction between James and his mentor helped him to develop his thinking and writing skills. James worked closely with his mentors. Through his interaction with them, he was able to deepen his thinking and writing skills. Mrs. K and Mr. L used prompting questions to help scaffold James to support his thinking with evidence from the texts he was reading. Another approach they used were procedural facilitators that broke down the path of thinking into specific steps. Given the time constraints, Mr. L gave feedback on each assignment so that James could apply what he learned on that assignment to the next one. Over time, James was able to provide evidence to support his thinking without the aid of the prompting and procedural facilitators. However, the feedback from his mentor still proved to be essential to his growth as a writer.

His mentors played a key role in helping James to revise his work. Mr. L required and gave feedback to James as he completed multiple drafts of his essay on transportation. James developed a stronger understanding of how to structure an essay. The interaction between James and his mentors affected James' revision of texts. Over time, James internalized the need to revise on a meaning making rather than surface level. Due to the continued interaction with his mentor, his writing process evolved to include

more revision and production of more structured and cohesive essays. During the wait time inherent in an online learning environment, James forged forward to self-edit and revise while he was waiting for formal feedback from his mentor.

*Time management skills are scaffolded and fostered by interaction with a student's mentor.* The interaction with his mentors also helped James to manage his time. The mentors used two approaches to help keep James on track. Mrs. K communicated with James about time management strategies that might help him to organize his work. Mr. L broke the assignments in to smaller parts and required that James meet a daily deadline instead of a weekly deadline. This allowed James to focus on specific segments of the assignment. With the mentor's scaffolding James was able to finish his course by his extended December deadline.

*Student understanding of context and audience influences tone and style.* James had an understanding of the kind of diction to use in informal writing to his friends versus formal writing for assignments. There is no text message slang in his email correspondence to his mentors. In addition, although James shows usage and mechanic errors in his correspondence, the amount of usage and mechanics errors in his formal papers is greatly reduced in comparison to errors in his email correspondence. This showed a greater use of proofreading for his assignments than his emails. It also showed an understanding of context.

## Zora

Zora is an outgoing, young woman of Middle Eastern descent whose family moved two years ago from Michigan to a suburban neighborhood in Northern Virginia. Zora attends a public high school in an affluent area. She gets a kick out of watching professional wrestling and really enjoys hanging out with her friends. One thing she likes about her new home is the diversity. “I do like it here more than in Michigan... I don’t like the snow; I like the sun. More diversity I like that...It’s such a small city [her hometown in Michigan], and it’s like the number one city in the US that’s all Middle Eastern.”(Interview Zora July 2007)

Zora took a course at The Online Academy because she needed an additional credit in World History to graduate that she did not need in Michigan. Many of her previous history courses have consisted of lectures and taking notes. One of the reasons she likes The Online Academy is because she feels like she learns more.

In my opinion you can learn more... [W]hen I had US history, they were like, “Okay, here’s notes,” and you don’t really read the notes as you’re writing to get everything. You’re just like, “Okay, okay,” and then you just start putting it in your binder with the rest of the notes, where actually this one, you have to read it or you really can’t complete your assignment.” (Interview Zora July 2007)

Zora was supposed to finish her course over the summer. She started the course making very good progress, but due to a series of interruptions and complications her progress waned.



[She] started off really strong, and then she had a tonsillectomy, and then after that, it's been a battle since then trying to get anything out of her. (Interview Mr. A December 2007)

Zora decided to take World History online instead of in summer school because she liked the flexibility of the online environment. She did not drive and did not really have a way of getting to and from summer school. She had planned to have her tonsils taken out in early July, and she was taking a trip to Jordan for the month of August. All of these factors played a role in her choosing The Online Academy to complete the World History course. Due to many crises, it took Zora 10 months to finish the course. She began in July of 2007 and completed the course in May of 2008.

*Research Question One: How Do These Students' Abilities to Communicate in Writing Change While Learning in This Online Environment?*

During the course, Zora used email as her primary way of communicating with her mentor. Her emails were steady and often. She asked questions about her assignments. She asked for and gave technical help to her mentor. She asked for reassurance and clarification that her work was correct and up to par. She chatted about her experiences in Jordan. But, as summer turned into fall, communication slowed until it reached a point where there was no communication at all. Zora had many interruptions that impeded her ability to finish the course during the summer. The first was a tonsillectomy that grounded her for about two weeks in July. In the midst of all this, the family was moving. The other complication was a family vacation to Jordan in which the internet connection was not always working. The next was the beginning of school and

two Advanced Placement courses that took up a lot of Zora's free time. The last was her father's heart attack, which left Zora little time to study in school or out of school. Each of these interruptions and crisis caused Zora to slow down a little bit or stop completely; however, eventually 10 months from the beginning of her course she was able to finish.

*Communication.* Zora's first communication was very formal. In this communication, she paid careful attention to the form of a letter. She is careful to use upper case i's and refrain from other instant messaging or texting conventions. In the middle of the correspondence, she refers to her mother loving history. She uses an artful image of a quilt made up of history sheets. At this point, she did not know her mentor and treated their correspondence as a business arrangement. Her email contains a greeting and a salutation.

Hello Mr [A.], sorry I haven't been able to email you soon. I hope this doesn't start off a bad impression. Yesterday was the last day of school and my mind has been around finals. Well, let me start by introducing myself, my name is Zora. I just finished my junior year. I'm taking this class because I moved from Michigan in Aug. '05 so my classes don't meet up to the Loudoun County standards. I am taking this class online because my Dad works with the US Army and Government and will be traveling. My brother will be with my family in a different country for the summer, and my Mom works 7 days a week with the US Army and she wont have anytime. Now if you are asking yourself if I drive, I have strong morals and I believe that I should drive at the age of 18 instead of 16. Not many people know a teenage person who delays their time in driving so I'm

probably your first. I'm not a big fan in history, however, my Mom is. I wouldn't be surprised if she had a quilted blanket from history sheets. ☺. Okay, I do have one problem, I've been having some complications with my tonsils, on the fifth of July, I am going to have them removed. Now I would like to know if I could do some work before I have them taken out, so I am not behind since the Doctor told me I will be in bed for 10 days after the surgery. I thank you so much for taking the time out of your summer and teaching me, and taking time out of your day and reading this. I will be checking email everyday from now on. I would like to start my WH2 online course now please.

Thank you,

Zora (Email June 20, 2007 10:52 AM)

Zora's formal correspondence continued. She continued to use a salutation in the end. This correspondence was a little more relaxed then her previous correspondence. She omitted apostrophes, which is a carry over from text messaging. As time progresses, she talked mostly about the work she was submitting. Eventually, her correspondence became shorter.

I have completed the second part of the module one. Hopefully I will have the online research done by tomorrow or Sat. I would have sent you this attachment earlier but I havent been feeling a bit too well. As you can probably tell, I a sick person. I am always sick, its not a good thing. Hopefully when the tonsils are removed I will be feeling much better since they are my main reason I dont feel

good. Please, feedback from you about my letter would be very nice. I would gladly appreciate it. It may not be the best letter, but I'm trying my best and taking this serious.

Good Night,

Zora (Email June 21, 2007 11:48 PM)

As Zora's correspondence continued, she lost the formal qualities that her earlier email had. She paid less attention to capitalization and use of apostrophes in contractions. She also included more emoticons in her correspondence.

okay the attachment helped me very much. Thank you. I did it differently though which I used straight lines and shaped them out. I then experienced with colors for each section such as mountains, deserts, and rivers. On the second map I did a key box of colors to know which section like southern route, central route and north route in three different colors, I did submit the check list now they are set very far. But I do that on purpose incase anything happens (ex: homework date due 06 23 07 and it was 06 22 07 when i went to the pool or got sick or just wasnt able to complete it. It would then count as late when i turn it in 06 24 07) so I should be able to finish the assignments before the checklist dates. Hopefully this assignment is complete. Let me know if I didnt do that well of a job. :o)

Thanks ☺

Zora (Email June 26, 2007 3:35 PM)

In the early emails, Zora was very proactive about asking for clarification when she did not understand something. In addition, she was able to move on while waiting for feedback from her mentor. Both are important study skills to have in an online environment. By July 2<sup>nd</sup> Zora was feeling very comfortable with her mentor. The formality of her emails had decreased considerably. She was using the lower case i, had multiple exclamation points and used emoticons to emphasize her point.

Yay!!!! you make me happy with your positive comments!!! i thank you oh sooo much!!!!☐ Yeah I was thinking that even though we weren't emailing each other because you were gone i wanted to still continue even when you were there to give me feedback instantly i was telling it'll be fine because you will give me feedback sooner or later am i right? :) So the categories for the jepor. you agree with?☐ Talk to you tomorrow!!☐ Zora

(Email July 2, 2007 11:36 PM)

Generally, a mentor sets a tone for email correspondence. Mentors walk a fine line between building a relationship with their students and maintaining formal boundaries. Mr. A maintained a professional demeanor while giving encouragement and feedback.

I am glad you are getting back in the swing of things. I am sorry I haven't emailed you sooner. I am visiting my parents and there internet has been hit and miss while I have been here. It seems to be working well now. I will be at my house tomorrow anyway so get on working.

Try not to get overwhelmed with all you have left just focus on one assignment at a time, one module at a time. You are a really good student. Please, let me know if you are having difficulty with anything. I am here to help. You have been pretty self-sufficient so far which can be a good thing, very commendable, but know I am here if you need me.

Best of luck. Keep up the amazing work. (Email Mr. A. August 7, 2007 11:19 AM)

Zora's writing became less formal as she built a relationship with her mentor. When she was away in Jordan they continued to get to know each other as they talked about the sights. In this email exchange, she abandoned capitalization, apostrophes and some spelling conventions.

Hi Zora,

I have not heard from you in a while. Let me know what is going on when you get back in the country or if you will be working from abroad.

I hope you get a chance to see Petra. I'd love to visit it some day.

(Email Mr. A August 22, 2007 11:26 PM)

Yeah I am doing as much assignments as I can. I went to petra yesterday veryyy cool. and today city aqaba on the red sea. I am in a hotel so I wont be able to communicate until sat. since you have to buy a card that lasts for an hour and its not that cheap. I will arrive in Virginia on monday at 8pm and the internet will be installed on the 29th I have plenty of homework downloaded from modules (6 7

8). I am sooo sorry for not turning in many assignments I promise the minute the internet is installed I will send soooo much and hopefully finish a whole module in two days. I wont break my promise.

Zora (Email Zora August 23, 2007 4:11 PM)

The hypothesis was that Zora's communication would become more formal in her correspondence with her teacher; however, Zora expected that the people, adults or teenagers, with whom she was corresponding would adopt a less formal tone when writing to her. Here is her first impression of her mentor based on his initial emails.

Well, in the beginning he sounded very extremely like uptight and with A.L. (sic) too. I was like, "Okay, I'm not really going to be able to communicate with people who are like that." Most people I know they're like, you know, very relaxed, because usually people are.... I'm not saying like all, but so far what I've had and what I've seen. They don't really like explain stuff much. So I was sending, like, smiley faces, and they were like "Oh Okay." They didn't go back to like spelling the letter 'R' instead of the word 'are,' but they were just more like easy. (Interview Zora July 2007)

Zora thought that if she was less formal with her emails, using smiley faces and other emoticons that this would help her mentor to be less formal as well.

I started like sending emails and all. I'd go, "I'm sorry," and I just kept updating him like whenever, to the point where he's become very like easy and like "How you doin'?" and all this. And I was like, "Good. How are you? Well, I got this email done. Let me know. Email me back if I haven't got it completed or if I

missed something,” and then he’s like starting out to send smiles. Then, like,  
“Make sure you get your assignments done, because summer’s about to end,” and  
like little sad face, things like that. (Interview Zora July 2007)

Although Mr. A. does use an occasional emoticon in his emails, he maintains a  
professional correspondence.

Thank you for submitting your latest work. I will update the progress form later. I  
am impressed with what you have done. Thanks for doing such a nice work. Keep  
on with your assignments so you can finish successfully. : P (Email Mr. A. July  
13, 2007 1:56 PM)

Zora’s early correspondence was also fraught with concern about deadlines and  
getting it right. She repeatedly asked for feedback on her work and for clarification when  
she does not understand.

Does “thanks sound like a good plan” is the feedback from the online web quest?  
Because i need the feedback in the last challenge poster project.

(Email Zora July 25, 2007 5:09 PM)

Her emails show a growing confidence in working in an online environment. The more  
positive feedback she received from her mentor, the more confidence Zora had. Her  
mentor, Mr. A. wrote:

Nice work. You did a nice job with the key and using the color codes for the  
trade routes. I would have moved the label for the Ottoman Empire over slightly



to the southwest where modern day Turkey/Istanbul is but other than that you did a wonderful job. (Email June 26, 2007 3:35 PM)

Zora replied:

☺ yay. you will be receiving the second assignment today and i should be beginning the third one today. Thanks, my confidence for this course is boosting.

Zora (Email June 27, 2007 12:17 PM)

Working with computers and all things technological was second nature to Zora. She did not have any fears of working online and takes into stride software that might be new to her.

I'm not like perfection like Bill Gates on Microsoft or anything, but then you learn stuff like I learned how to do shapes on Word. But then like I ended up learning more about it, because I did like copy-and-pasting. I adapted more, too, that when I pasted it, I was able to format and change it where I could stick the picture in front of the words instead of behind it. So your computer skills increase rather than just staying neutral. ... It just increases. (Interview Zora July 2007)

However, occasionally Zora needed technological help and used email to describe her difficulties.

I have a couple of times because in the beginning I was still at like the rough edges. It was easy, but I don't expect it to be a hundred percent easy, because it's my first time taking the class. There were times where like I emailed him and I asked him some question, because I had troubles dragging stuff. They had a

white background. It wasn't really see-through. So I was asking him in emails like, "Is this the way it is. I'm trying to fix it." (Interview Zora July 2007)

For some reason, i am able to sign on and go to the website mail.gmu.edu but the internet doesn't allow me to go to mail.gmu.edu please please i will assign two assignments tomorrow i am going to read the modern world history and write out the section review questions. after submitting this email i am going to try a couple more times to see if it lets me through. I will send you a text because it is too late to call you. (Email Zora April 29, 10:24 PM)

Okay the chart for activity 3, when you click on the map on the lower left corner is not loading up as an error. And the website isn't helping me much I will begin to work on another assignment but, let me know what I could do or why my picture isn't working for me.

Zora (Email Zora May 1, 2008 8:06 PM)

Overall, her mentor thought she was pretty technology savvy.

Initially I would say she was very adept at the technology and she didn't really have any problems other than software problems. She had a problem with—what's the name of the program? Inspiration, and once we got it on there and she started using it, it was fine, but it took an initial comfort level with that. Other than that, she had the skills to do it and she used it well when she was working on the courses. (Interview Mr. A December 2007).

*Later communication*

As the summer turned to fall, communication between Zora and her mentor ceased. She had not finished the course and school was starting. Zora had signed up for two Advance Placement courses that were taking up a lot of her time.

And then ever since school started I'm taking, like, the two worst AP classes you could take possible in the same year, which is AP government and AP psych. So both of those classes, they're not that bad, but both classes are about reading, reading, reading, and outlining. So I'm basically getting two chapters per week from both classes. So I haven't had any time to go near to the computer.

(Interview Zora December 2007)

Just that it [communication] stopped....Early on she was very good at responding to my emails and stuff, and now I am getting nothing back, even when I email her personal account and things like that. (Interview Mr. A December 2007)

Mr. A and Zora did not pick up correspondence again until March 2008. At this time, there was a push for Zora just to finish the course. She was scheduled to graduate in May and needed the course to fulfill her graduation requirements. At this point, most emails contained short messages stating that her assignments were attached.

Im skipping around trying to do as much as possible. So far here are my three assignments from chapter 11 hopefully I can finish this chapter today and start another one. (Email Zora March 11, 2008 6:07 PM)

Thank you for elaborating and listing the sites for me. Please let me know what you think. Thank you. □ Zora (Email Zora May 3, 2008 10:21 PM)

I tried my best to answer correctly i mainly used my book since that carried majority of the answers. (Email Zora May 6, 2008 10:27 PM)

Other emails asked for clarification or an extension of time. Zora's father had a heart attack shortly after spring break.

Hello. Sorry for not answering. My father had a heart attack after spring break he's been in the hospital he just came back home this passed sat. it's been hard for me to get back on this and complete what i had. Please don't give me an F, anything but that. I've really tried especially with the surgery and moving, having to be the parent of the house because my parents are never home, and being in the hospital multiple times through out the year. A D would be best. Anything that's passing. I understand people finish under 2 months and that's how it should be done that's the correct way but through my extensions were reasonable. I took the sol and passed. I also lost internet all last week and just got it back yesterday please Mr. [A.] call me. [555-555-5555]. Please. (Email Zora April 22, 2008 9:40 PM)

I need help with chapter 7 assignment 3 city planning. I don't really understand what I should do. (Email Zora April 28, 2008 8:57 PM)

Okay, since i'm having difficulties with chapter 14? I started on 4 and completed, hopefully, in your standards, the first assignments. Let me know if there is anything i must do.

Zora (Email Zora May 1, 2008 9:04 PM)

As Zora progressed toward her impending deadline, she became less willing to chat. Her emails were shorter and to the point. Zora was able to complete enough of the course to gain the credit for graduation. Over the duration of the course, Zora used email to communicate about her assignments, to ask for clarification, to ask for technology assistance, to talk about her trip to Jordan, and to explain about the complications that she is experiencing in her life that are affecting her work in the course. During this period, Zora's emails changed from formal to very informal. She began with a professional letter to her mentor and ended with short emails that had many of the conventions of texting. Although Zora did not show in her emails that business correspondence is often formal, she did think of email as only used for professional correspondence.

When I talk to my friends, it's like.... I don't know. Nowadays teenagers are more like AIM and Yahoo and MySpace and FaceBook. The only way I could communicate with my mentor is, one, email. (Interview Zora July 2007)

She used Facebook and texting to talk to her friends. She hardly ever used emails.

Because now I just don't even get emails from like friends or cousins. Now, it's like even you don't talk on Internet; it's more like texting and more like phone calls onto cellphones than it would be, but other than that, to be honest, I've not used my email, only when I had to attach pictures, like my senior pictures so she could show her coworkers, or if I were to email my brother, since he's overseas and I can't really communicate with him as much because, you know, the cost of

the long distance and all that. So I'd be like, "Just email me when you can."

...And then when I have to email you, and then I might email A. L. or my teacher.

That's basically all. Yeah, you could say for formal stuff, professional.

(Interview Zora July 2007)

Although Zora only used email for professional correspondence, as her relationship with Mr. A. grew, she did not feel the need to use professional writing conventions. However, Zora did use standard written expression in her assignments.

In the very beginning of the course she was very strong. Her emails to me were more informal, but her coursework was formal. With some students they either do both informal or both very formal, and she would switch roles. Her correspondence to me was more informal, the typing was more lower case and whatnot, but when she turned something in, it was formal and edited and that type of thing....Yeah, I think maybe that.... In her emails I got a sense that sometimes it was a little broken English, not broken but it wasn't as smooth. The syntax was a little bit different. But when she wrote for school, she had it all right where it was supposed to be. That may be what I noticed with email more than that informal stuff. It wasn't polished. (Interview Mr. A. December 2007)

Zora's treated emails with her mentor as an ongoing conversation. But in the end she understood that there are conventions for professional email and she found that these conventions bled into the conversations she has with her friends.

Like I told you last time, you know, nowadays with all like texting and stuff, it's barely email. I've probably like only emailed, like, once in my life. I'm sorry, I'm trying to look for my cellphone. Now, yeah, I could tell you that I could communicate a lot better through the email. It's better now, I guess, because you're so used to it. Now I can just pick it up and put it in, like, business format in a nice, proper way. Then, instead of IMing where you just write out like 'R' or 'U'—the letter 'U' is what I mean—now I just don't pay attention, I'll just actually spell out the word 'you' and 'are' and everything like that. (Interview Zora December 2007)

Even though Zora was informal in her emails, she understood that the assignments she submitted needed to follow the conventions of standard written English. Her assignments looked vastly different from her email conversations.

*Research Question Two: How Do These Students' Performances on Writing Products Change While Learning in This Online Environment?*

In the World History course, raters looked at four assignments: one from module one, one from module three, one from module ten, and one from module 14. Zora did not complete the module 14 assignment. The assignment from module one asked students to write two paragraphs, one comparing Buddhism and Hinduism and another comparing Judaism, Islam, and Christianity. As with James, raters used the Virginia EOC SOL Writing Rubric (Virginia Department of Education, 2005) to rate Zora's writing in the domains of composing, written expression, and usage and mechanics. Table 8 shows the ratings for the assignment in module one.

Table 8

<i>Zora-Module One: World Religions Comparison</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	3	3	3
Rater 2	2	3	3

Rater one rated Zora's writing slightly higher than rater two in all three domains.

In reference to the composing domain rater one stated:

The paragraphs are pretty straightforward comparisons of monotheistic and polytheistic religions. The writer clearly states that the paragraph will compare the similarities and differences. Where the writer falls short is in the elaboration and in transitions. In some parts of the paragraphs, the writer has elaborated fully, however; the writer could have elaborated more on the similarities between religions. (Rater 1)

Rater two disagreed and rated lower because he felt that there was no central thesis or topic. He agreed that the transitions were lacking.

Neither paragraph has a single, identifiable thesis statement or topic. There seems to have been little thought given to the organization of the paragraphs.

Transitions between ideas are thin or non-existent and one idea follows another without any rational plan. (Rater 2)



In terms of written expression, each rater remained consistent with his or her rating.

Although they disagreed on the rating, their comments were similar.

Overall, the specific vocabulary for each religion was consistent and included in the paragraphs. However, there is some general vocabulary that could be improved, for example “stuff” and “cussing.” (Rater 1)

Word choice is unsophisticated and sometimes inappropriate to the context (cussing, lying, cheating, and sexual stuff) (Rater 2).

In addition, rater two found problems with the sentence variety, which may have lead to a lower rating.

The frequent awkward constructions do no make the writing unclear, but they show little control of syntax. Sentence variety is haphazard (Rater 2).

In the usage and mechanics domain, each rater found some errors. Rater one felt that overall the usage and mechanics were under control. However, rater two felt that the grammar errors detracted more from the piece.

Although there is a subject verb disagreement error, overall the usage and mechanics are consistent. The writer used semicolons, commas, and end punctuation appropriately 98 percent of the time (Rater 1).

Missing punctuation, lack of subject-verb agreement, and incorrect sentence structure are evident throughout both paragraphs (Rater 2).

In module three, students are asked to put together a five-part movie advertisement for a series on the reformation era for the History Channel. As Zora progressed to this module, she shows some gains in the composing domain. Table 9 shows the ratings.

Table 9

*Zora-Module Three: Advertisements for the History Channel*

	Composing	Written Expression	Usage & Mechanics
Rater 1	3	3	2
Rater 2	3	2	2

Both raters gave the assignment a 3 in the composing domain. This shows an increase from the first module for rater two. He stated:

Each paragraph seems to focus on a central idea, even if that idea is sometimes underdeveloped. There is an evident structuring of the writings to reflect the mode of writing specified by the assignment (Rater 2).

Since the assignment asked the students to write an advertisement, it gave students an opportunity to create a strong voice. Rater one noted the tone in the writing.

What is nice is that the writer tries to set a specific tone of wooing in her ads that mimic a radio or television announcer, for example “We take you for a ride through the ups and downs of this era. This is nothing like you have seen before. It’s a journey you won’t regret,” (Rater 1).

The written expression scores stayed static in comparison to the assignment from module one. Since the assignment is an advertisement, it allows the students to be creative with their phrasing. Rater one noted:

Although this assignment gives the writer the opportunity to play on words, (the piece’s tone is light and purpose is persuasive) the use of interesting phrases is uneven throughout the assignment. The best example of the writer connecting to the reader is in part four when she writes “France is the county that every girl dreams about going to, we think of the monuments, models, perfume, cologne, and French bread,” (Rater 1).

Rater two also noticed the voice, but found that the paragraphs were awkwardly constructed.

While the voice is evident, awkward constructions are so frequent as to render the writing weak (Rater 2).

Both raters agree that the domain usage and mechanics could be improved. There are some fused sentences caused by the use of a comma instead of a semicolon. Some verbs are missing, but this would seem due to lack of proofreading rather than lack of knowledge that a verb should be present.

The assignment in module 10 shows improvement in all writing domains for either one or both raters. The raters' scores are in table 10.

Table 10

<i>Zora-Module Ten: WWI Biographies</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	3	3	3
Rater 2	3	3	2

In this assignment, the students were asked to write mini-biographies of some of the key players in WWI for a series on the Biography Channel. For rater two, the biographies showed an improvement over previous assignments. He stated, "Each paragraph succinctly recounts the importance of a single politician." Rater one found the paragraphs to be well organized.

The written expression score also improved according to rater two. "The writers use of vocabulary and sentence variety is strong." Although the number of errors was reduced, usage and mechanics is the only category in which Zora did not improve. Rater one stated, "There was only one fragment and a misplaced comma."

Although Zora had some issues with usage and mechanics, overall her writing was clear and met the requirements of each assignment. Her writing for assignments was markedly better in written expression and usage and mechanics than any of her emails. When Zora wrote emails she was speaking off the cuff, having a conversation with the recipient. When Zora wrote for assignments she was writing with a purpose and uses standard conventional English. She showed the types of errors one might expect of a student her age. During the course, she improved in her written communication, but not her usage and mechanics. The writing process that Zora used allowed for limited proofreading and may account for the usage and mechanic errors.

*Research Question Three: How Do These Students' Writing Process Change While Learning in This Online Environment?*

Zora used writing for many purposes. She used it to monitor her personal growth. She used it to learn information and to express her understanding of a concept. In the World History course, many assignments ask for summaries of information and used guiding questions to help students write. Zora's writing process was reciprocal. She gave what she was asked for. She looked at the questions that were asked and organized her paragraphs based on the questions.

They'll say something like, 'All right, how is the Roman Catholic towards people?' and then like, 'Who is Martin Luther?' and then 'What are the differences between this, this and this?' or like 'What did Martin Luther do in his life?' So then I'll start with an introduction like about how did the Roman Catholic were treating the people and like how strict they were and what they

believe in. And then I'll bring it in to be, like, 'Martin Luther was born....'

(Interview Zora December 2007).

This may be why the raters noticed that Zora was missing some transitions between subjects in her paragraphs. Her writing process in response to the questions was to answer them not necessarily looking at the paragraph as a whole, but rather she progressed from question to question. Nevertheless, Zora did show proofreading and minor revision of her work.

Well, I always go back and look at it just to make sure. Usually when they ask questions, it's pretty easy. It's not like, 'Oh, write about this,' because then you're like, 'Oh, I have to create my own rubric, or try to read their minds to know what they want exactly.' Whereas when they ask questions it's pretty easy. It's because like, 'All right, so they're asking, but then I have to make sure that I format it in a correct way,' not like where I'm going to put Martin first, then I'm going to put Roman, or I'm going to put between them the difference between both. It's going to make you feel lost. You're going to read it and be like, 'What the heck's going on?' ... Then I'll just go back and make sure that there are no mistakes but at the same time that it all blends in together. I'm not that great at writing, but at least it makes sense. (Interview Zora December 2007).

It would seem based on her comments that Zora did take the time to look back at her thoughts on paper to make sure that they make sense to the reader. She was also concerned about the proper formatting of the page.

Deep revisions did not seem to be part of Zora's process. This may be due to the decreased emphasis on writing by the mentor whose discipline is history instead of writing. Mr. A. stated, "I wasn't really grading her on writing; it was could she answer the question." However, he did feel that she was clear in her writing for a student who was taking a history course.

I think she realized that she had to write things. She did realize that. With some kids that's seen as more work, and other kids like that. I think she did realize that she had to be clear with her writing, and it didn't take her long to do that. She was a good writer when she wrote, but there weren't a whole lot of essays or formal things in the course to that point. But when she wrote, she did okay with it. (Interview Mr. A December 2007).

Although Zora was not required to revise her writing to the extent that she would in an English class, she did find that utilizing Microsoft Word on a continued basis might have helped her writing.

I guess because it's a lot of typing. When you're typing stuff on the computer, it actually.... You know how when you do it in Word, it'll be like, 'Oh, wrong word, wrong word.' You kind of memorize things pretty quick. I usually spell words wrong. Sometimes I'll mess up 'especially, either the 'i' or the 'a,' but now it's like pretty quick. Now you can just pick it up. When you write in a journal, it doesn't sit there and say "fragment - revise it" or anything like that. I guess, because you're so used to Word, you kind of pick up things. Then, since Word didn't tell you everything a hundred percent, you reread it, so when I reread

it I pick up things real quick. I guess that's why it helped me out, because the class made me use Word so much. (Interview Zora December 2007)

Overall, Zora did not exhibit any large-scale changes in her writing. It was not the focal point of instruction. Revisions were not mandated, and thus some of the learning about writing process was lost. However, she used writing as a learning tool. The process of her writing did not evolve much, but the substance of her learning was aided by her writing about a concept.

*Research Question Four: How Do These Students' Self-efficacy in Their Written Expression Change While Learning in This Online Environment?*

Zora saw writing as a tool. She used it to learn more about herself. She thought of it as a skill that everyone should have, but she did not think of herself as a writer. Zora had used a journal before to record her thoughts. She used it to see who she was and how much she had changed over time.

I started to write into my journal for five months. It was about three months before I moved and then two months into being here in Virginia. Did you notice the way I started writing? You know how people say the way you write is that way you are. So I started doing that, and then I wanted to see a difference or if I was happier, if my handwriting changed or if I like improved on my writing. That's what I did.... Well, my handwriting changed. I did sound a lot more excited. (Interview Zora July 2007)

Zora also saw writing as an essential tool for everyone, regardless of one's interest.



I thought you actually needed writing, because I think even if you're majoring in math, you're going to need to know how to write in college. You're going to have to write about, okay, how did math start. So I thought it was good. But actually I'm not really like the best man in English, because I'm not amazing compared to other people. (Interview Zora July 2007)

Zora did not waver from the idea that she was not that good at writing. She continued not to view herself as a writer. Her mentor concurred.

I'm not that great at writing, but at least it makes sense...I don't write poems, always wanted to, but I'm not gifted to write poetry. I always wanted to have like other people write their own stories. I can't do that either, so I just stuck with the journal and that's what I did. I haven't really wrote in a journal probably since October of my sophomore year. (Interview Zora July 2007)

"No, I'm not [a writer]. I like math a lot better than English." (Interview Zora December 2007)

"I think she could do well writing, but I don't know that she thinks of herself as a writer." (Interview Mr. A. December 2007)

Zora's self-efficacy as a writer did not really change during the time she was taking the course. She did not identify herself as a writer.

Zora defied expectation when her conversational correspondence became less formal as the course progressed. Nevertheless, she was able to communicate succinctly her needs for feedback and occasional technical assistance. She showed an understanding that email could be more formal and professional. She showed some

improvement over the course in written expression and composing but maintained the same level for usage and mechanics. Zora continued to have a limited writing process as she completed the course. Had there been a greater emphasis on writing, she may have developed her capacity for revision. Finally, although Zora recognized the importance of writing, she did not identify herself as a writer.

#### *Data Analysis Process*

In analyzing Zora's story across the different questions I made the following connections some of which were shown in James' narrative as well.

- Student understanding of context and audience shapes tone and style
- Communication of learning needs is part of completing an online course
- Interaction between mentor and student helps the student to develop time management skills.
- Student motivation plays a key role in completion of course

*Student understanding of context and audience shapes tone and style.* Zora showed an understanding that a writer changes the tone and style of her writing based on the context and audience for the writing. Zora began writing to her mentor in a very formal way. She included in her emails all of the conventions that one would find in a friendly letter. As she comes to know her mentor better, her friendly tone was maintained, but the form of her emails take on many of the conventions of text messaging.

In the beginning it was, like, awkward. You know how when you meet a new friend for the first time and you're like...? It's that first impression. "Hey, how you doin'?" And once you actually talk, you're just like, "Okay. I understand how you're goin'." I used to, like, when I send him emails, "Hey, what's up?" instead of "Hey, how are you?" (Interview Zora July 2007)

Her mentor did not have a problem with this level of discourse for emails. However, Zora altered her level of discourse when it came to her assignments. Although her audience was the same, her mentor, she altered her tone and level of discourse to fit roles described in the modules. For instance, in module 3, Zora was asked to write previews for the History Channel. She altered her role; she changed from a student to an advertising executive. As a result, she altered her style of writing and use of correct usage and mechanics. The role that students took on helped to define their purpose for reading and for writing. They were not only reading to learn the information, but they were also reading and writing to gain knowledge to fulfill the role or persona they were asked to take.

*Communication of learning needs is a part of completing of an online course.*

Zora was able to communicate her learning needs effectively. When she did not understand a direction or what was expected of her, she asked her mentor for clarification. When there was an error in the webpage or a glitch in the technology, she was able to communicate her concerns to her mentor. In addition, she showed initiative and perseverance to go on with the course until she received the answer to her question. She did not let snags stop her from moving forward in the course. Zora also repeatedly

checked her own understanding with that of her mentor. She wanted reassurance that she was meeting the expectations of her mentor.

*Interaction between mentor and student helps the student to develop time management skills.* Zora also had some setbacks once she began school in the fall. She could not quite keep up with her Advanced Placement courses and other schoolwork and catch up in her online course. Once she resumed communication with her mentor in March she was on a strict deadline to finish the course before her graduation. She needed the credit to graduate. Her mentor helped to scaffold her management of her time by requiring that she communicate with him everyday and show progress each day as well. The day before her Advanced Placement exams was the only exception. Zora was able to keep to this schedule with her mentor's continued encouragement. When her father had a heart attack, Zora was able to communicate this to her mentor and find time to make up the work she might have missed while he was in the hospital. The interaction and relationship that she had established with her mentor made it possible for her mentor to work with her during this troublesome period.

*Student motivation plays a key role in completion of course.* At the beginning of the course, Zora's motivation was extrinsic. The course was one more requirement for graduation. At the beginning of the course, she did not really engage in the course much after she went on vacation. Once school started, she had a hard time juggling it with the other courses she was taking. However, her motivation became intrinsic as she approached graduation. Obtaining a diploma and going to college were intrinsic motivators for Zora and enabled her to meet the tight deadlines that she had in the spring.

## Richard

Richard is an affable young man who loves basketball and music in equal measures. He attends an honors high school science academy that only accepts 15 percent of its applicants. He was taking an online World History course during the summer so that he could take an additional music elective during the school year. He had a busy summer planned with a trip to Hawaii, playing basketball on a travel team, and being a counselor at a basketball camp for younger players. Taking a course with *The Online Academy* just made sense given his plans. Richard was very self-motivated and planned to complete the course in time to take his Standards of Learning (SOL) test the beginning of August. He began the course at the end of June and reached his goal completing the course during the first week in August.

*Research Question One: How Do These Students' Abilities to Communicate in Writing Change While Learning in This Online Environment?*

The primary way in which Richard communicated with his mentor was via email. His email correspondence showed that he was able to manage his time effectively and could ask for technical and instructional help with ease. In addition, it showed some of the conventions of the instant messaging and texting. Richard and his mentor, Mrs. S, built a rapport over time. Most of their emails were short and to the point, but towards the end of their time together, occasionally the emails became more witty and jocular. Richard thought that he saw a progression in the emails.

At the beginning, it was to the point, you know, but at the end it started getting more of the conversations after I got to know her and she got to know me.

(Interview Richard August 2007)

Most emails from Richard to Ms. S generally stated little more than here is the assignment.

“Here’s my top ten list, i hope you enjoy it.” (Email Richard July 12, 2007 4:27 PM)

“Well, that one was fun, pretty easy too.” (Email Richard July 15, 2007 4:23 PM)

“Here are the room designs” (Email Richard July 16, 2007 10:24 PM)

“here are my goals of the congress of Vienna” (Email Richard July 29, 2007 7:09 PM)

As time progressed and Richard was nearing the end, completing the course at rate of one module per day; he started to make joking comments. His mentor and he began to banter back and forth.

“Take another look at the direction for the Inventions Inspirations. Yours is missing some information. Resubmit for happier points!” (Email Ms. H. July 29, 2007 3:04 PM)

“Reading directions is fun! Hopefully this will get me some happier points” (Email Richard July 30, 2007 8:48 PM)

“Another module done! only 4 more to go! (Email Richard August 2, 2007 2:53 PM)

“Dude, you rock my socks off, see, no socks. What an excellently organized and supported rebuttal to the editorial. Thank you, a pleasure to read.” (Email Ms. H. August 2, 2007 8:52 PM)

Although Ms. S and Richard seemed to have a strong rapport, Richard thought that his face to face relationships with teachers were stronger.

It's just different because it's online and it's not really like face to face. It makes things just different, really, less connected.” (Interview Richard July 2007)

His statement is somewhat qualified in the fact that he made it in the beginning of his online course. In addition, he only had eight weeks time with his mentor.

Through email, Richard was able to ask for technical help and clarification on assignments. In general, Richard thought that it was more difficult to do these activities on line because you had to explain what was going on instead of being able to show it.

It [communicating with my mentor] was a little bit difficult sometimes, because sometimes it's harder to write what you're saying than to actually say it.

(Interview Richard August 2007)

Nevertheless, Richard was able to communicate and resolve his technical difficulties. Below he resolves an issue with Inspiration files.

I don't know if its my computer, or if the server for the online academy is being weird, but something is up. I cant download the inspiration file for the counter reformation and when i downloaded the last documovie file it was all sharps and flats and music notes! I changed the music notes to regular letters, but I still can't download the inspiration file. I guess i'll come back to that later or something.

(Email Richard July 23, 2007 2:17 PM)

I finally got the inspiration file to work! here you go! (Email Richard July 23, 2007 9:14 PM)

Later in the course, he is able to solve a technical problem with PowerPoint files.

here are the biographies, and for some reason my computer still isn't letting me attach powerpoints to emails. I've done them, I just can't send them. As soon as it works you'll get them. (Email August 1, 2007 3:27 PM)

Here is the powerpoint for WWI. The other powerpoint from the challenge will be difficult. It's a 10 mb file so its too large to e-mail. Can you accept a zip file? (Email August 1, 2007 7:00 PM)

PowerPoint is one tool that the designers of the World History course used to help students show their understanding of the concepts. Richard was able to hone his PowerPoint skills while he was taking the World History course. He found that it was something that he really liked.

This was a fun one to do. I have taken a liking to powerpoints over this course . (Email Richard August 4, 2007 11:23 AM)

His mentor found that Richard began to understand the technology tools pretty well over time.

Well, like I said, Richard loved to do the Top 10 lists. He said, I think, at one point that he discovered that PowerPoints were really quite easy. I just don't think he'd worked with them a lot before. He struggled in the beginning with, you know, the basic opening of things. Inspiration documents just totally blew



him away at first, but a lot of the students. But he settled right in, and I remember him saying.... Because he kind of piddled along at first, too, put it off and put it off, and then I started clamping down on him. I remember him saying, “My gosh, I wish I had done this sooner because this really isn’t that hard,” and you just go, “Agh!!!” (Interview Mrs. S. December 2007).

Like many online students, Richard had to find the right pacing of the course. However, Richard was the only student in this study to finish the course in the original summer school timeframe. Over the eight weeks that he was taking the course, he expressed many messages that showed his ability to manage his time.

Heres the timeline of monarchs. I think I’m going to finish this module today or early tomorrow! I should probably keep my pace around a module a day so i can finish before the SOL test. (Email Richard July 25, 2007 8:04 PM)

And here is what i have from module 7 so far. It is everything but the final powerpoint, which i am currently working on. I plan on finishing that soon and beginning module 8 tonight. (Email Richard July 29, 2007 3:04 PM)

I’m gonna knock this module out pretty quick (Email Richard August 1, 2007 10:09 PM).

Another module done! only 4 more to go! (Email Richard August 2, 2007 2:53 PM)

By sticking to his schedule at the end of course, Richard was able to meet his goal of completing the course before the SOL exam.

Richard's emails were inundated with texting conventions. The three conventions that were most common in his emails were the use of lowercase "i" the elimination of apostrophes in contractions, and beginning a sentence without capitalizing the first letter. Below are some examples.

well this stuff is getting fun! (Email Richard June 20, 2007 11:11 PM)

im having a ton of fun with this now! (Email Richard June 21, 2007 12:07 PM)

Here is what i think is the last persona for the day (Email Richard July 25, 2007 7:13 PM)

here is my menu, hope you enjoy it (Email Richard July 30, 2007 9:43 PM)

However, these texting conventions did not cross over into his assignments. Whether he was submitting an assignment in the body of the email or as an attachment, he paid attention to the usage and mechanic conventions of standard written English. In module 11 there are questions that are asked about the Treaty of Versailles. All of his answers, which were embedded in emails, use standard conventions.

*What changes should have been made to the Versailles Treaty that may have prevented the horrible economic and political conditions in Germany after World War I?*

Germany could have lost less land, and not had to pay as many reparations.

*How could you argue that the Treaty led to World War II?*

The Treaty put them in a position where the people were all very mad at the Allies. Then with Adolf Hitler fueling the fire things could only get worse from there. (Email Richard August 1, 2007 9:42 PM)

Another assignment asked for information about the aftermath of the Cold War.

Countries began to want to fight for their independence from the Soviet Union. People began criticizing Gorbachev and looking to Boris Yeltsin. The Soviet Union tried to maintain control, but people no longer wanted to be Soviets. The Soviet Union fell after all of the countries declared their independence. The former Soviet states became the Commonwealth of Independent States, or the CIS. However, this was not a smooth transformation. There were problems in Russia. Yugoslavia was having problems, and its states ended up breaking up into their own countries.

Even in Eastern Europe there were problems. Poland voted out a leader and Czechoslovakia broke up into Slovakia and the Czech Republic. (Email Richard August 7, 2007 2:18 PM)

Overall, Richard was able to communicate effectively in his emails throughout the course. He showed independence in his time management and technical skills and was able to communicate any problems he was experiencing. Although he used texting conventions in his email, in his assignments, he maintained standard usage and mechanic conventions.

*Research Question Two: How Do These Students' Performances on Writing Products Change While Learning in This Online Environment?*

In the World History course, raters looked at four assignments: one from module one, one from module three, one from module ten, and one from module 14. The assignment from module one asked students to write two paragraphs, one comparing Buddhism and Hinduism and another comparing Judaism, Islam, and Christianity. As with James and Zora, raters used the Virginia EOC SOL Writing Rubric to evaluate Richard's writing in the domains of composing, written expression, and usage and mechanics. Table 11 shows the ratings for the assignment in module one.

Table 11

<i>Richard-Module One: World Religions Comparison</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	1	1	3
Rater 2	1	1	3

Both raters felt that there was a lack of significant elaboration in the assignment on comparing religions in module one. Each section was very short and contained little detail. As a result, Richard scored a 1 in the composing domain.

Both paragraphs fit the description of a “1” paper in that the rubric states that “the piece is so sparse that the presence of a clear focus is insufficient for it to earn a higher score,” (Rater 2).

These paragraphs are too short and do not adequately convey the similarities and differences of the religions. There is no true central idea that is elaborated significantly (Rater 1).

Both raters also scored the written expression with a 1. They found no sentence variety and non-specific vocabulary.

Based on what is presented here, there isn’t any vocabulary or sentence structure that would help with the tone of the paragraphs. The paragraphs are bland. Most of the verbs are passive. (Rater 1)

Even if the paragraphs were longer, one would still find a monotonous lack of sentence variety, bland vocabulary, and the absence of voice (Rater 2)

The raters agreed in the domain of usage and mechanics. Both raters scored the assignment with a 3. Based on the limited length of the paragraph, and the simplicity of the sentences, there were few usage and mechanics errors to make.

There are few errors in what is presented. It is a 3 because of lack of evidence of use of commas and other punctuation. There is no higher level punctuation necessary in the simple sentences used in these paragraphs (Rater 1).

There were 8 out of 9 complete sentences, little pronoun shift, and no punctuation errors. However, except for periods, there was no punctuation necessary. (Rater 2)

In module three, students put together a five-part movie advertisement for a series on the reformation era for the History Channel. The ratings for each domain were significantly better for the assignment in module 3 than in module 1. Table 12 shows the ratings.

Table 12

*Richard-Module Three: Advertisements for the History Channel*

	Composing	Written Expression	Usage & Mechanics
Rater 1	3	2	3
Rater 2	3	2	3

In the composing domain, both raters scored the assignment with a 3. There was a considerably greater attention to structure and elaboration in this assignment.

For the most part the paragraphs are succinct. They do not contain the sophistication and elaboration that one would expect with a 4, but there are key ideas elaborated in each paragraph. There are very few digressions, but one example is the statement that “Princes were tired of paying taxes to the Church because they saw no benefit.” Although this is true; there lacks a transition to the idea. It seems abrupt (Rater 1).

There is clearly a central focus to each of the pieces, and the writer rarely strays from that focus. However, the lack of cogent openings and closings prevents this from earning a 4 (Rater 2).

In the written expression domain, Richard showed improvement over his score on the assignment in module one; however, there were still issues with repetition and word choice.

Although mostly straightforward, some of the phrasing is awkward, for example, he states, “All of these writings going to the people were possible only because of the invention of the printing press.” There is also less specific vocabulary word such as using people to refer to Erasmus and John Wyciffe (Rater 1).

Distracting repetitions and informal wording demonstrates inconsistent control of written expression (Rater 2).

Richard maintained his usage and mechanic rating from the previous assignment. Both scorers gave the assignment a 3.

There are various comma, fragment, and end punctuation errors. The comma errors are consistent and therefore show a lack of knowledge of some comma rules. The fragment and end punctuation are inconsistent and therefore show a lack of proofreading rather than a lack of knowing. Overall the writer exhibits proper usage and mechanics in the assignment (Rater 1).

Generally usage and mechanics are good (Rater 2).

The assignment in module 10 shows improvement in all writing domains when compared to the first assignment. For rater one, the assignment shows an improvement in the composing domain in comparison to the assignment from module 3. The raters scores are in table 13.

Table 13

<i>Richard--Module Ten: WWI Biographies</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	4	3	3
Rater 2	3	3	3



In this assignment, students were asked to write mini-biographies of some of the key players in WWI for a series on the Biography Channel. Overall, both raters felt that the composing paragraphs were well developed.

The writer does a good job of writing about each of the players. Each paragraph is succinct and elaborates on the role each leader played in relation to WWI.

(Rater 1)

Rater 2 did not find the paper to be as strong as rater 1 did.

The organizational pattern of each one is apparent, if not strong. All sentences stay on topic.

Richard continued to perform well in written expression. His vocabulary was specific, and he was able to show a strong voice in this piece.

There is some variety of sentence structure. The writer does a credible job of writing in the voice specified in the assignment. There are occasional awkward expressions, so it's not a 4. (Rater 2)

The vocabulary is very specific and there is some variance in sentence structure.

(Rater 1)

In addition, the usage and mechanics rating is consistent with the previous assignment.

Syntax and punctuation are generally good, although several misusages do stand out. There are no spelling errors. (Rater 2)

Raters also looked at an assignment from module 14. This is one of the last modules in the World History course. Students were asked to make a recommendation on which country the US should extend aid. This was a multiple paragraph essay with an introduction and a conclusion. Table 14 shows the scores.

Table 14

<i>Richard-Module Fourteen: USAID Recommendation</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	3	3	2
Rater 2	3	3	3

The assignment maintains a score of 3 for both raters in all domains. Overall, the essay is well structured, but it could include more elaboration.

The structure of the essay is consistent. In each paragraph, the writer compares each of the potential recipients of the funding with each other and the requirements of the funding category. I would want to see more elaboration in each of the categories as to why one country was chosen over another. Some of the reasoning is vague. (Rater 1)

The structure of the entire essay, while it is specified in the assignment, is very good. Transitions within paragraphs are not always strong, for instance when the writer moves from discussing one country to another (Rater 2).

The written expression domain has also been scored with a 3 due to the shift in voice and tone.

A scholarly tone is attempted, but there are some lapses into first person judgments. Once or twice, the use of colloquial vocabulary detracts from the tone. Sentence variety is apparent, but not pervasive. (Rater 2)

The vocabulary sometimes sophisticated, but often bland. For instance, “Education is pretty good” vs. Apartheid was abolished (Rater 1).

The usage and mechanic score is also a 3. Errors are limited to punctuation.

Nearly all of the errors are in punctuation. While none of them distracts from the essay’s meaning, there are enough of them to make it clear that the writer lacks consistent control of the domain (Rater 2).

Most usage and mechanics are consistent with comma errors that are present in previous assignments (Rater 1).

Overall, Richard showed an improvement in all three domains of writing. His first assignment was very limited and he did not elaborate very much on his ideas. As a result, he scored low in all domains. Over the next few assignments, he showed gains in all domains. He scored a 4 in the composing domain for the module ten assignment. This assignment asked for succinct writing in the biographies of world leaders. There was a very strict parameter and guidelines for writing. This seemed to aid Richard in

composing the biographies. The last assignment in module fourteen, a briefing paper, required Richard to write a longer format assignment. Although he did not score a 4 in any of the domains, he had solid 3s in all of them. This briefing paper showed significant growth over the limited comparisons he wrote in module 1.

*Research Question Three: How Do These Students' Writing Processes Change While Learning in This Online Environment?*

Richard's writing process followed that stages that Flowers and Hayes (1981) described. He begins the process by organizing his thoughts; this would be his brainstorming stage. He then progresses to the planning stage. He generally uses an outline to plan his writing. Next, he drafts his papers and revises multiple times. Below is how Richard described his process at the beginning of the course.

I'd have a lot of different things going through my mind. Then it would start getting less and less confusing as I went on and I started to get more of a vision of what it was going to be like. Then I would go through all the planning. Then I'd get more and more towards the end, I'd get to the end and I'd think I'm done, read over it, but it might get more confusing. So I'd go back and edit it and rewrite it. Then after doing that three or four times; it would probably be the end thing...[I would] think about things, try and plan it in my head. As I get a source all planned in my head, I'll do an outline or just start jotting down ideas, start narrowing down more and more until I get something I think I like. (Interview Richard July 2007)

The second stage of planning seemed to be a critical stage for Richard. He spent time creating an outline for each of his writing assignments. He also found that gathering information, by taking notes essential to the writing process.

That's the way I like to start most of the time. Have a solid plan at the beginning, I find it a lot easier to write after that. (Interview Richard July 2007)

I take the notes and then take another piece of paper and start ordering in some order I want to have them in for my essay or whatever it is, and then develop them into sentences, and just go back and look at it. With the notes I like to do it on paper, just because I find it's a bit easier. When I'm actually typing it at the end, I always use a computer for writing. Yeah, the outlining is all actually written up. (Interview Richard August 2007)

Below he described the process he used in creating the storyboard in the module 3 assignment on the Reformation.

With this one, there were different parts that I had to look at. I took notes while I was reading and put down ideas for what I was going to write later, key points I wanted to touch on. My next step was trying to organize the notes in a good order for writing or storyboard, then develop that more. (Interview Richard August 2007)

Below he described the process he used in writing the brief in the module 14 assignment on foreign aid.

Well, I started the same way I did with the storyboard. There were the same ideas for a module. Then I had to look, and there was a bunch of research I had to do. So I went to different websites and took notes from there, organized them, developed them, and then wrote on them. (Interview Richard August 2007)

Each time Richard wrote an assignment, the planning stage was prominent. He described taking notes as the strategy that helps him write.

[What helps] me with writing? Lots of notes really, using them with all the ideas, and the facts have to be included. It's really, I guess, helpful to have. (Interview Richard August 2007)

Richard spent significant time on the revision process without prompting from his mentor.

Sometimes I'll go back and I'll look at the way I worded a sentence. I just won't like it, or like an entire paragraph, I'll just look at it and be, "That doesn't belong there." I'll either move it or just get rid of it, put something else there. It just depends on the day. One day I might like it; and I'll look at it a week later, and I won't like it. (Interview Richard July 2007)

I'll write something, then I'll put it away, and then look at it the next day and change most of it. Just keep doing that. (Interview Richard August 2007)

Although Richard did not feel that his writing process had changed during the eight weeks he was engaged in the course, he did learn how to use Inspiration, a technology tool for brainstorming and organizing ideas. He felt that he would

incorporate this tool into his process more often going forward. When asked if he would now use Inspiration as part of his planning process he responded, “Probably now that I’ve used it and kind of like it, I would.” Below he describes how he used it.

It was pretty easy to use to develop the notes, plus it was easier because I could just stay with my computer and use it to go over something, instead of using actual paper, which is sometimes not the best...using the graphic organizers, you know, I’ll probably use that a little bit more. (Interview Richard August 2007)

Over the eight-week course, Richard’s process did not undergo any major changes, but he did begin using a tool that he had not encountered before the course for the organizing stage of his writing process. Had Richard taken an English course, he may have seen more changes. He stated, “If it would have been an English course, then it would have been a little bit different.” The writing expectations of his mentor may also have had an effect. His history mentor places a higher value on content than on evaluating writing than an English teacher might. She stated,

Yeah, there were a few things, but it wasn’t necessarily that he didn’t write it well enough. There have been factual issues. Okay, you’ve confused this king with this king. Just go back and check that. It didn’t necessarily bother me that their spelling was a little more loose on some things....For the most part I didn’t have a problem with his structure. Now, I’m not an English teacher to I tend to not be like, ‘Your thesis is .’ (Interview Mrs. S December 2007)

Richard's writing process depended on upfront planning. He utilized his notes and research to support his thoughts and ideas. He now incorporates Inspiration, a technology tool, into his process--something he did not do before. He continues to draft and revise multiple times.

*Research Question Four: How Do These Students' Self-efficacy in Their Written Expression Change While Learning in This Online Environment?*

"I mostly like being able to write. I like writing a lot," stated Richard in his first interview. He self-identified himself from the beginning of the course as a writer. He writes inside and outside of school, but found that there is a great divide between writing for school and writing for himself.

I'd say they're pretty different, because in school, I can't say it, but I don't put much emotion or passion into it. It's more just like you're forced to do it. "I'm just going to do this to get it over with." If I'm writing outside school, I'm just doing it myself. (Interview Richard July 2007)

The difference between the two types of writing for Richard seemed to be motivation.

Yeah, I have motivation to do it. In school you're not always motivated to do it; you're forced. (Interview Richard July 2007)

However, Richard made the distinction between writing for assignments in The Online Academy and writing for assignments in school.

I think what the Online Academy does is a little bit better, because you have like all-the-situation kind of thing, like you're wanting a prize and you have to do this



or something. It just makes seem like you're doing it more for a purpose...(Interview Richard July 2007)

When Richard writes for himself, he writes lyrics for his music. He considered it a kind of poetry. "Yeah, that's really what it is, poetry." In The Online Academy he was able to put his love of music and lyrics to use. He writes in an email for module 9, "i like poems!" In module 9, students are asked to develop a poster and lyrics for a song. Richard thought about recording his song as well.

here is the poster and song lyrics. I would have actually recorded the song, but my mic is at my friends house. (Email Richard August 1, 2007 2:35 PM)

Throughout the course, Richard continued to identify himself as a writer. He could write academically, but had a passion for writing for his band and himself. At the end of the course, when asked "Would you describe yourself as a writer or a nonwriter," he responded "Probably a writer."

#### *Data Process Analysis*

In analyzing Richard's story across the research questions I made the following connections some of which were shown in James' and Zora's narrative as well.

- Student understanding of context and audience shapes tone and style
- Interaction between mentor and student helps the student to develop time management skills.
- Student motivation plays a key role in completion of course

*Student understanding of context and audience shapes tone and style.* Much like Zora, Richard also had an understanding how context and audience influences on writing. When Richard wrote emails to his mentor, he used many of the conventions used in texting. He began sentences with lowercase letters. He omitted apostrophes in contractions and often omitted end punctuation as well. However, when he included assignments in his emails, he punctuated them correctly. In addition, his assignment took on the tone required for the role he was adopting. The marked difference in the tone and writing conventions when comparing email correspondence shows that Richard had an understanding of when to use formal writing conventions and when to use informal writing conventions.

*Interaction between mentor and student helps the student to develop time management skills.* Richard was able to self-manage his time. He was proactive about sending his mentor a timeline for when his assignments would be completed. These messages helped his mentor monitor his time, but more importantly, they helped Richard to articulate repeatedly, his plan for completion. The time management self talk seemed to play a distinct role in motivating and ensuring that Richard finished his course in time to take the required Virginia Standards of Learning test at the end of the course.

*Student motivation plays a key role in completion of course.* Richard was intrinsically motivated to complete his online course. If he completed his course, he would be able to take a music elective instead of World History during the school year. Richard is a musician. The pleasure of being able participate in the orchestra during the school year motivated him to complete his course in a timely fashion.

## Georgi

Georgi attended a high school in an affluent middle class neighborhood. She had many travel plans for the summer and decided to take a World History course online. Her favorite subjects were math and chemistry, not the World History that she had signed up to take. She was also working almost full time at the Limited Too. Her hours were erratic, making it difficult for Georgi to find a consistent time to study. This was the second time that Georgi was taking a World History course. She took Advanced Placement World History in 10<sup>th</sup> grade and was not pleased with her grade. She was taking this course because she wanted to earn an Advanced Diploma as well as bring up her GPA. Unfortunately, this motivation did not help Georgi to finish the course. After many starts and stops and very little work, she abandoned the course.

*Research Question One: How Do These Students' Abilities to Communicate in Writing Change While Learning in This Online Environment?*

I am mostly concerned about my work not sending or my mentor not receiving my work. I also really don't want to fall behind, you know how I can wait till the last second to do everything. (Email Georgi June 30, 2007 9:56 AM)

Georgi wrote this in response to an assignment in the introduction module. She was to write to a friend telling him or her about her concerns about working online. Her letter to her friend would turn out to an indicator of her experience in the World History course. In addition, in the PowerPoint that Georgi completed to let her mentor learn about her, she listed procrastinate as one of the words to describe her. Mrs. S, her mentor, stated in her interview, "There were very few assignments; I can probably hold them in my hand

the number of assignments.” Georgi began the course on June 25; she took many weeks to finish the introduction module, which was designed to be completed in one or two days at the most for students taking the course in the summer. Below is a typical exchange between Georgi and her mentor. This exchange took place about one month after Georgi had begun the course. Although she had finished the introduction module, she had still not begun the World History course.

Hey girl, Where are you! Did you lose your motivation? I found it, right here!  
Come on, don't stop now! Let's start this course! Remember how you want that  
new-and-improved GPA? You can do this course! I know work keeps you  
hopping, but the rewards for spending a little time everyday on this course will  
pay off! Go Georgi!(Email Mrs. S. July 19, 2007 9:21 PM)

THANK YOU! hahah thats exactly what i needed. my moms been on my  
back about this but ive just been sooo busy. but im here now  
and im starting right away ! sorry ive disappeared for so long.  
thank you again for the motivation it really helps (Email Georgi July 20, 2007  
2:43 PM)

On July 25 Ms. Hill writes again. She has not really received much from Georgi at this point.

Georgi,

Really concerned about you! Are you checking in and working daily? We've passed the half way point and we haven't started! Oh no! But you can still do it! Just need to start! (Email Mrs. H. July 25, 2007 7:32 PM)

Georgi finally wrote back four days later. Generally, students who are taking the online courses in the summer should be in contact with their mentor at least once a day.

did you get the one when i tryed to attach it again? im pretty sure im doing something wrong but ive gotten a couple more maps and a fact page and two paragraph all saved on my computer BUT IM GOING TO THE BEACH TODAY !!. til friday but as soon as i get home ill attempt to attach for some reason the first one i send never works. Ill talk to you soon and im pretty sure (hopefully) theres a computer there if there is ill email you from it and we can keep working.

I hope your summer is going very well !!! (Email Georgi July 29, 2007 9:42 PM)

This pattern of infrequent and inconsistent work continues. The limited email correspondence between Georgi and her mentor, Mrs. S shows that Georgi used texting conventions when writing emails. In the text above, she used the lower case i. She also did not capitalize the beginning of sentences consistently. In addition, she did not include apostrophes in her contractions. Another example is in the email below.

Istanbul?? hahaha thank you very much. i am very excited that i dont have to take the sol over and im supposed to give you a date on when i want to finish this and

im thinking one of the later dates im allowed to because im wayyyyyyy far behind  
stil     !!! im gonna go do my poetry!! you should be seeing it soooonn

(Email Georgi August 5, 1:57 PM)

In this email, she used repeated letters for emphasis, used the lower case i and continues to omit apostrophes in contractions.

Neither Georgi's time management skills nor her written communication skills evolved while she was taking the World History course online. She spent little time engaged in the course; it was difficult for her mentor to address required assignments let alone aspects of writing. However, when Georgi did write for assignments, she employed standard written English.

*Research Question Two: How Do These Students' Performances on Writing Products Change While Learning in This Online Environment?*

Raters looked at two assignments submitted by Georgi--the World Religions Comparison in module one and the Advertisements for the History Channel from module 3. There were no further assignments for comparison. Both raters gave the same scores for composing, written expression, and usage and mechanics for the module one assignment.

Table 15

<i>Georgi-Module One: World Religions Comparison</i>			
	Composing	Written Expression	Usage & Mechanics
Rater 1	3	2	2
Rater 2	3	2	2

In the composing domain, raters scored the assignment with a 3. There was a clear main idea in each of the paragraphs and Georgi had used transitions effectively. The raters' comments are below.

Overall there is a clear focus to each of the paragraphs and transitions are evident. However, both paragraphs need a stronger closing (Rater 1).

There is a clear focus in each one, and there is some attempt to use transitions. The second one doesn't end; it just stops (Rater 2).

The written expression in this assignment did not receive as high a score from the raters. The text was too informal and lacks figurative language.

Overall the paragraphs are pretty straightforward and the specific vocabulary in the relation to each religion is used effectively. However, there is little use of similes or metaphors to help with the comparison. Some of the language is also very informal and in the first person. (Rater 1)

There is no sentence variety. Some of the vocabulary is too informal, for example, “Judaism is run by rabbis.” None of the works shows a command of synonyms, adjectives, or dynamic verbs. (Rater 2)

The raters also gave the usage and mechanics a score of 2. There were errors with commas and choosing the correct homonym.

There were several errors in usage and mechanics. The writer used “their” instead of “there. She is also missing commas to separate lists and coordinating conjunctions (Rater 1).

The errors are frequent enough to be distracting. They reveal no mastery of syntax, punctuation, or capitalization (Rater 2).

Although only part of this assignment was finished, raters also looked at the culminating assignment for module three. They rated this assignment higher than the previous one.

Table 16

*Georgi-Module Three: Advertisements for the History Channel*

	Composing	Written Expression	Usage & Mechanics
Rater 1	4	4	2
Rater 2	4	3	2



Both raters felt that the composing domain for this assignment rated higher than in the previous assignment. The writing had a consistent structure and was well organized.

The introduction is begins strong with the use of a rhetorical question. In addition, the conclusion is very persuasive and leaves the reader wanting watch the advertised program. The details about the Thirty Years War help to support the focus of the advertisement (Rater 1).

I actually thought this response was well-crafted, given the rhetorical situation. There was a catchy introduction and an intriguing conclusion. The body was organized to summarize the content effectively. The use of rhetorical questions provides an thread that helps hold the whole thing together (Rater 2).

This assignment allowed the writer to use a stronger voice in his or her writing. As a result, the written expression scores seem to increase for this assignment in comparison to the assignment in module one. However, the raters differed somewhat in how much of a difference. Rater one rated the assignment with a four and found that the rhetorical questions and inventive adjectives really supported the piece.

This assignment really came alive with the use of rhetorical questions. Newly formed adjectives, such as opinion altering, help to persuade the reader to see the program (Rater 1).

Rater 2 scored the assignment with a 3. He found her tone to be consistent, but her word choice too vague.

Her choice of words (“sticks up,” “particular views,” “an extremely disliked man,” e.g.) are imprecise and not in keeping with the expected tone of the piece.

Paragraphs 2 and 3 are disorganized. However, she does establish a tone that supports the “come and get it” voice-address relationship of the piece, and that tone is maintained in spite of the lapses in diction (Rater 2).

Lastly, the raters found the usage and mechanics to be consistent with the previous assignment. They both rated it a two for punctuation, capitalization, and fragments.

In this piece there are end punctuation errors. There is a continued use of “their” for there. Lastly there is also the awkward use for “Him” instead of “He.” (Rater 1)

Misspelling (“there unfair ways”), incorrect pronoun case (“Him closing”), the wrong form of a noun (“Lutheran”), incorrect end punctuation (periods where question marks should be), failure to capitalize (“catholic,” “protestant”), and a sentence fragment (“OR will the small protestant army....” are all conspicuous enough to distract the reader from the content of the selection. (Rater 2)

Overall, Georgi improved in the areas of composing and written expression. This may have been due to the nature of the assignment. Georgi preferred English over History because she could express herself better. The second assignment, a persuasive advertisement, called on many of the aspects that one might see in an English assignment. The first assignment to compare and contrast religions fitted the mold of a straight facts-oriented history assignment. As a result, this may be why she fared better on the latter assignment.

*Research Question Three: How Do Students' Writing Processes Change While Learning in This Online Environment?*

Georgi's writing process did not evolve during the short time that she was engaged in the course. Her writing process is fluid and takes on a stream of consciousness manner in the beginning stages. She remarked that writing is ubiquitous when taking an online course.

It really relies on you basically more [than] in the classroom it really does it. And then there's a lot more writing. Everything was writing on a computer (Interview Georgi August 2007).

Her writing process centered on a thesis statement. She developed her ideas for writing as she wrote. She took this approach based on advice given to her by one of her English teachers.

Just basically picking a thesis statement and then writing it. That was like the big thing, the thesis statement (Interview Georgi August 2007).

Yeah, he was more, "You pick one topic and then you write about that," and then if your opinion changes about it, that means it was a good essay because you're proving points to yourself. And then you're like "Oh!" and you realize something new. I guess persuasive. More like the main point is there, and then just write off that (Interview Georgi August 2007).

Revision was also a central part of Georgi's process. She used revision as a way of clarifying her thoughts.

I just sit down and write, and then I go back and change things. I go back, read it and change things, add things... Yeah. . . . I sit down and actually I just type, start typing. And then once I'm done or once I can't do it anymore, I go back and I change it. (Interview Georgi August 2007)

Georgi's father was also a helpmate during her writing process. His process was similar to hers, and he asked questions to help Georgi work through her thoughts.

I just think my opinion and then I start with that, and then I just go from what I think of everything. I write like that, and then I always read it over. I also ask my dad a lot. My dad helps me on, like, all of my papers. He actually writes just like I do, with a blank page and we just start going from nowhere, just ideas. You don't always have to write like a full sentence. You'll just space that out and write your ideas—you know what I mean?—and then go back and mesh them all into a paper. So he helps me with that. He has a lot of input....If he has a different opinion about it, he'll always ask me about that, and I'm like, "Oh, okay, I'll write about that," (Interview Georgi August 2007).

Georgi's writing process did not change from the first time she began the course to the time when she dropped it. Months later she described her process much the same as before.

I kind of just start from nowhere, just like write what I need to. I normally just start typing. I don't, like, write it first. Then if I had like different facts of whatever, I'll just use spaces and just put them there. I'll just put everything that I

know that I want to write out, and then I'll go back and fill in the actual writing... Yeah, I always type first. That is my floppy copy, I guess. (Interview Georgi January 2008)

Overall, Georgi is a stream of consciousness writer who uses writing as a planning stage for the writing to follow. She used revision to organize and clarify her thoughts. Her father played an integral role in her writing, acting as a sounding board for her thoughts and prompting her to think in new ways. This process did not change during the short time that Georgi was engaged in the online course.

*Research Question Four: How Do Students' Self-efficacy in Their Written Expression Change While Learning in This Online Environment?*

Writing is ubiquitous in an online course. It is the main mode of communication. Georgi did not mind all of the writing she was required to do for the online course. "Oh, I like writing, so I don't mind it." However, when asked if she considered herself a writer, she just laughed and said no. Georgi liked what writing can do. She liked the way one can communicate with people through writing; how one might be able to change people's minds on an idea. For Georgi, writing is about thinking.

I think being able to write and, like, changing people's points of view on stuff, or it's like seeing eye to eye with someone on something that you wouldn't normally. (Interview Georgi August 2007)

Her view of herself did not change while she was taking the online World history course. When asked she continued to identify herself as a nonwriter. "Nonwriter. I don't mind it but..." Her mentor, Mrs. S concurred.

I don't think she would identify herself as a writer, especially after failing the course the first time, not the second time. Her level was maybe higher-end normal. It's not great art but she's done it. (Interview Mrs. S. December 2008)

For Georgi, writing was a tool used for learning and thinking, not something that she would incorporate into her personal life.

Georgi did not spend very much time with the online course. Time management proved to be a large factor affecting her ability to complete the course. She was engaged in many activities during the summer. She was working many hours and went on a couple of vacations. It was difficult for her to prioritize the course in the midst of all the other priorities that she had during the summer.

She did show improvement in her composing and written expression from one module to the next, but this may have been dependent on the type of assignment she was given. The assignment in module three played to her strengths of persuasive writing. It allowed her to highlight a distinct voice while writing.

Her writing process did not show any change, most likely because there was so little time for any change to occur. She used writing as a thinking and learning tool, but did not use it for her personal edification. Georgi's self-efficacy as a writer remained the same. She liked to write, but considered herself a nonwriter.

#### *Data Analysis Process*

In analyzing Georgi's story across the research questions, I made the following connections some of which were shown in James', Zora's, and Richard's narrative as well.

- Interaction between mentor and student helps the student to develop time management skills.
- Student understanding of context and audience shapes tone and style
- Student motivation plays a key role in completion of course

*Interaction between mentor and student helps the student to develop time management skills.* Time management was an issue that Georgi recognized early on in the process as something that was going to be a challenge for her. She acknowledged this challenge in a letter to a friend in the introductory module. Even though her mentor attempted to motivate Georgi to move forward in the course, Georgi was not able to complete the course. She had many obstacles in her way. The first she acknowledged as being herself. She knew that she would struggle to complete the course in a timely manner. The other obstacle was her job. She was working full time. In addition, the hours she was scheduled to work were unpredictable. As a result, she could not set aside a particular time of day to work on her assignments. This strategy had proven to be helpful for other students taking course online. The last obstacle that Georgi faced was vacation. She had a couple of vacations planned for the summer, and she did not plan on working on her course during that time. All of these factors led Georgi to abandon the course.

*Student understanding of context and audience shapes tone and style.* Georgi also recognized when to use an informal tone and when to use a more formal tone. She wrote to her mentor using the informal writing conventions of texting. However, she used

formal writing conventions when writing for her assignments. She varied her tone depending on the role she was assigned for each assignment. For instance, she was very straightforward and serious when comparing religions, but she was lighthearted and persuasive when writing the advertisements for the History channel.

*Student motivation plays a key role in completion of course.* Georgi was the only student to abandon her course completely. The motivation for completing the course was extrinsic for her. She was retaking the course. The content was familiar. She was hoping to raise her G.P.A. and qualify for an Advanced Diploma. These goals were not enough to motivate Georgi to complete her course. She would graduate and go to college whether or not she reached these goals. She was more motivated to work and to go on vacation; as a result she did not complete the course.

#### Cross Case Summary

Analyzing the research questions across cases highlighted some key similarities and differences for each of the participants. The following results emerged from cross case analysis for each research question.

*Cross Case Analysis Question One: How Do These Students' Abilities to Communicate in Writing Change While Learning in This Online Environment?*

The results that emerged when answering question one related to the participants' use of texting conventions in their emails to mentors. The expectation was that students would develop a formal correspondence tone and convention when they were writing to



their mentors via email. Initially only Richard and Georgi both used the following texting conventions when writing to their mentors.

- Use of lower case letters at the beginning of sentences
- No use of apostrophes in contractions
- Use of lower case i for the pronoun I
- No end punctuation
- Use of emoticons

For instance, Richard said, “heres my top ten list, i hope you enjoy it,” (Email Richard July 29, 2007 7:23 PM). Georgi said in one of her emails.

Istanbul?? hahaha thank you very much. I am very excited that i dont have to take the sol over and im supposed to give you a date on when i want to finish this and im thinking one of the later dates im allowed to because im wayyyyyyyy far behind still!! im gonna go do my poetry!! you should be seeing it sooooon (Email Georgi August 5, 2007 1:57 PM)

Both Richard and Georgi shared the same mentor. Mrs. S was very friendly and encouraging in her emails. Although her emails were professional, students may have misread her friendly tone and responded to her using the writing conventions that they might use when corresponding with a friend. Mentors walk a fine line between cultivating a friendly relationship with their online students and correcting their students’ writing in emails. Paramount is building a relationship with a student online. Mentors

want their students to feel comfortable in emailing them. It is hard to correct writing conventions in an email that is not part of an assignment and still maintain the friendly exchange, especially in the short period of time that a mentor has to build a relationship during summer school.

Zora began the course using formal correspondence conventions. She included a greeting and salutation in her early emails. It was not until she was feeling more comfortable with her mentor that she began to use the same texting conventions that Georgi and Richard used. Zora's expectation was that her mentor would also be more informal in his correspondence. Zora equated, like many students, informal tone and texting conventions with the building of a friendly relationship.

Hello Mr [A.], sorry I haven't been able to email you soon. I hope this doesn't start off a bad impression. Yesterday was the last day of school and my mind has been around finals. Well, let me start by introducing myself, my name is Zora. I just finished my junior year. I'm taking this class because I moved from Michigan in Aug. '05 so my classes don't meet up to the Loudoun County standards. I am taking this class online because my Dad works with the US Army and Government and will be traveling. My brother will be with my family in a different country for the summer, and my Mom works 7 days a week with the US Army and she won't have anytime. Now if you are asking yourself if I drive, I have strong morals and I believe that I should drive at the age of 18 instead of 16. Not many people know a teenage person who delays their time in driving so I'm probably your first. I'm not a big fan in history, however, my Mom is. I

wouldn't be surprised if she had a quilted blanket from history sheets. ☺. Okay, I do have one problem, I've been having some complications with my tonsils, on the fifth of July, I am going to have them removed. Now I would like to know if I could do some work before I have them taken out, so I am not behind since the Doctor told me I will be in bed for 10 days after the surgery. I thank you so much for taking the time out of your summer and teaching me, and taking time out of your day and reading this. I will be checking email everyday from now on. I would like to start my WH2 online course now please.

Thank you,

Zora K. (Email June 20, 2007 10:52 AM)

The following message, written almost a year later, has many of the text messaging conventions that were found in Richard and Georgi's emails.

here are my actual countries my mistake for using your countries that was meant to be an example. where can i find USAID's grants because i could really, unless i missed it, find it on the website so i can write about it in paragraph one.

Zora (Email May 21, 2008 9:36 PM)

Zora's correspondence went from formal letter format with no texting conventions to informal.

James' emails contained texting conventions, but they were less intentional than in the other cases and less consistent as in the other cases. His errors in his usage and mechanics could be attributed to texting, but it is also possible that this was part of how

he would write normally. Unlike the other cases, James' texting conventions crossed over into his written assignments, which may indicate that he did not recognize the difference between formal and informal correspondence. In addition, many of James' assignments were written in the body of an email. This may have prompted him to correspond in a more formal way than the other cases because he might have been in the mindset that he was not only corresponding with his mentor, but also turning in an assignment. Over time, James improved his use of proper punctuation both in his formal writing assignments and in his emails to his mentor. He remarked that he felt like the correspondence with his mentor affected the correspondence that he had with his friends later.

I notice when I write an email normally if I'm talking to a friend, say if it's some friend, I might put 'LOL' or 'haha' and then do '...' and write it. I caught myself—I think it was like a month or two ago—I was typing and I typed to the person and I had everything capitalized, commas out, so they were like "What is that about?" I was like, "I don't know." Normally I lower case when I'm laughing through an email, but for some reason I've been making everything capitalized and putting periods after where normally I just do commas or spaces or something. Some of my friends have noticed that; they're like "Why do you capitalize everything in your email?" (Interview James December 2007)

James was the only participant that showed a reduction of the use of texting conventions in his emails and in his written assignments. Zora increased the amount of

texting conventions she used because of her increasing comfort with her mentor. Richard and Georgi used texting conventions throughout their experience over the summer.

*Cross Case Analysis Question Two: How Do These Students' Performances on Writing Products Change While Learning in This Online Environment?*

The results that emerged when answering question two related to the changes participants' exhibit in three writing domains over time. All four participants made gains in at least one writing domain from the beginning of the course to the end of the course. Two raters using the Virginia SOL Rubric in the domains of composing, written expression, and usage and mechanics evaluated the samples.

Table 17

*Student Progress in Writing Products*

Domain	Assignment 1	Assignment 2	Assignment 3	Assignment 4	Trend
<b>James</b>					
Composing	2	3	-	-	Up
Written Expression	2.5	2	-	-	Down
Usage & Mechanics	3	2	-	-	Down
<b>Zora</b>					
Composing	2.5	3	3	-	Up
Written Expression	2.5	2.5	3	-	Up
Usage & Mechanics	2.5	2	2.5	-	Up
<b>Richard</b>					
Composing	1	3	3.5	3	Up
Written Expression	1	2	3	3	Up
Usage & Mechanics	1	3	3	3	Steady
<b>Georgi</b>					
Composing	3	4	-	-	Up
Written Expression	2	3.5	-	-	Up
Usage & Mechanics	2	2	-	-	Steady

Note: Each score is an average of the scores from rater one and rater 2.

All participants made gains in composing. Zora, Richard, and Georgi also made gains in written expression. Zora was the only participant that showed gains in usage and mechanics. James' usage and mechanics score fell, whereas Richard and Georgi remained steady.

Both Richard and Georgi made gains from the second assignment to the third assignment just as Georgi made gains from the first to the third assignment. The third assignment rated from module ten is one that asks for very concise paragraphs on WWII leaders. It can be that the specific nature of the assignment caused the participants to be more concise in their writing and thus lead to an increased score on this assignment. Likewise, in comparing Georgi's first assignment with the assignment from module three, Georgi is writing in a mode that is her strength in the module three assignment, persuasion. This is the kind of assignment that she prefers in comparison to the assignment in module one. The assignment in module three asks for a stronger voice and uses the art of persuasion. The audience and mode of writing seem to play a role in how well each of the participants scored in each of the domains.

Although James only made gains in one domain, there was a strong cognitive load associated with the composing domain in which he made strides. Although the Virginia SOL EOC Writing Rubric shows changes in product over time, it does not show the great strides that James made from his first draft to his fourth draft of his papers. In developing his composing and revision strategies over time, he was able to make significant gains in the over all structure and therefore meaning of his writing.

*Cross Case Analysis Question Three: How Do These Students' Writing Processes Change While Learning in This Online Environment?*

The results that emerged when answering question three related to the themes of stream of consciousness writing versus upfront planning and differences in subject area for scaffolding writing and thinking. Two different approaches to writing process were

shown in the cases. James and Georgi both showed a propensity for beginning their writing process by directly writing what they were thinking and then going back to fill in the blanks. Although James includes some webbing and outlining in his process, he only does this when he is unfamiliar with the subject such as early twentieth century transportation. Below he describes his process.

This is kind of a struggle because it's early twentieth century. If it was today's time, I could've whipped out four or five pages on it. If it's talking about sports, yeah, type it up. But since it was talking about this, I kind of did a lot of webbing and then I would switch over to outline again. I started off like maybe doing a whole page or two real quick, but then I read over it and made some changes, and then I was like, "All, right, I've got two or three more pages left." I started off like maybe doing a whole page or two real quick, but then I read over it and made some changes, and then I was like, "All, right, I've got two or three more pages left." (Interview James December 2007)

I don't really have any process. I just think my opinion and then I start with that, and then I just go from what I think of everything. I write like that, and then I always read it over. (Interview Georgi August 2007)

Richard's process involved more upfront planning in the form of notes and formal outlines.

I'd find a topic that interested me, maybe something that's going on in the world or something that happened to me or something along those lines, and I'd start to



plan it out, maybe like an outline or something like that, and just start writing. Go from there, look at it, probably rewrite most of it, see how it turns out...That's the way I like to start most of the time. Have a solid plan at the beginning, I find it a lot easier to write after that.

(Interview Richard July 2007)

Zora's organization was based on responding to whatever was asked of her. She organized her writing based on questions.

They'll say something like, "All right, how is the Roman Catholic towards people?" and then like, "Who is Martin Luther?" and then "What are the differences between this, this and this?" or like "What did Martin Luther do in his life?" So then I'll start with an introduction like about how did the Roman Catholic were treating the people and like how strict they were and what they believe in. And then I'll bring it in to be, like, "Martin Luther was born...."

(Interview Zora December 2007)

All participants used revision as a key component of their writing process.

However, James seemed to make more meaning making changes in his writing over time than he might have made at the beginning of the course. His gains in composing seem to be related to his greater use of revision. Over time, James' process changed to include more revision. Overall, James was the only participant to make changes in his writing process. This was due to the ongoing conversations and feedback about his writing that he received from his mentors. He changed his writing process to include more analysis

and revision based on the feedback from his mentors. This is shown in the multiple drafts of his papers.

This result points to another theme that arises from this question--the difference in the amount of scaffolding for writing provided by the history mentors versus English mentors is different. English mentors view writing as an essential part of any assignment that they give. Throughout the course, Mrs. K and Mr. L gave James feedback on his analysis of works and gave him advice on how to structure his thinking and therefore his writing. This was particularly true for long assignments such as James' research paper on transportation. Mr. L provided James with feedback on several versions of his essay on transportation. As a result, James made great strides in his composing and revision process. He went from only making surface changes to his work to making changes that affected the clarity and meaning of what he wanted to say.

The perspective of history mentors in this study was different. They do not see writing as part of the assignment. Their primary concern was the content of the writing rather than the structure and clarity of the writing.

It didn't necessarily bother me that their spelling was a little more loose on some things....For the most part I didn't have a problem with his structure. Now, I'm not an English teacher so I tend to not be like, "Your thesis is " (Interview Mrs. S. December 2007)

"I wasn't really grading her on writing; it was could she answer the question."  
(Interview Mr. A December 2007)

They viewed their job as ensuring the understanding of the historical concepts. They did not put much weight on the how the students conveyed the information.

*Cross Case Analysis Question Four: How Do These Students' Self-efficacy in Their Written Expression Change While Learning in This Online Environment?*

There does not seem to be a change in self-efficacy as a writer for any of the participants. James, Zora, and Georgi all identified themselves as nonwriters at the beginning and end of the course. Richard identified himself as a writer at the beginning and end of the course. Whether the student was taking World History or American Literature, whether students were taking the course for the first time or were repeating the course, it did not seem to make a difference in their self-efficacy. There were no changes in the identification of self-efficacy.

*Emerging Theme: Time Management Messages as a Factor in Timely Course Completion*

Richard was the only participant to finish his course in the original time frame. This may be the result of two factors, his expression of time management messages while he was completing the course and his motivation for completing the course. Richard's time management messages were an indicator of his ability to finish the course during the summer session.

alright! Three personas in one day! and its not even noon yet (Email Richard  
July 25, 2007 11:42 PM)

Here is what i think is the last persona for the day! (Email Richard July  
25, 2007 7:13 PM)

Heres the timeline of monarchs. I think Im going to finish this module today or early tomorrow! Should probably keep my pace around a module a day so i can finish before the SOL test (Email Richard July 25, 2007 8:04 PM)

Don't worry, I've been working, I just havent sent them to you yet. So get ready for a flood of emails after this. Here is the decree as well. Richard (Email Richard July 29, 2007 2:53PM)

And here is what I have from module 7 so far. It is everything but the final powerpoint, which i am currently working on. I plan on finishing that soon and beginning module 8 Georgight. (Email Richard July 29, 2007 3:04 PM)

I'm gonna knock this module out pretty quick (Email Richard August 1, 2007 10:09 PM)

Richard's messages to his mentor and himself helped to monitor his time so that he met his goal.

Richard was the only participant who was intrinsically motivated to complete the course. Richard was passionate about his music. Completing the course would allow him to take an elective music class during the year at school. If he had failed to complete the course, he would not be able to engage in this music class. All other students were taking the course because they had to due to external requirement factors. The motivation to complete the course during the summer time frame was less for the other participants. Intrinsic motivation along with time monitoring messages may be important factors in the completion of an online course.

## 5. Discussion

### Summary

Writing is an essential communication skill. Once a mark of social grace, it is now a key to entering the workforce and maintaining a position. American firms spend \$3.1 billion annually to retrain workers with writing deficiencies (National Commission on Writing, 2004). Only 25% of 12<sup>th</sup> graders who took the National Assessment of Education Progress (NAEP) writing exam in 2002 were found to be proficient in writing. Students need to be able to communicate effectively in professional writing, including email correspondence, articles, and reports. At the same time, enrollment in online courses for students across the country has become ubiquitous. In 2005, there were more than a half a million enrollments for online courses by students in elementary and secondary schools (Powell & Patrick, 2006).

The National Commission on Writing report in 2004 showed that the following components help to improve the writing skills of students:

- Process writing theory
- Scaffolded writing tasks
- Authentic product goals
- High student self-efficacy

Research on situated learning environments shows that students are able to retain knowledge and learn more effectively in context based environments (Handley et al., 2007; Herrington & Oliver, 2000; Brown et al., 1989).

An online learning environment is a contextualized environment in which to study the writing development of students. Most of the interaction that students engage in while in an online learning environment is in writing. Teachers have a unique opportunity to help scaffold students writing, in their email correspondence, short assignments, and reports. In addition, online learning environments that are designed to put students in authentic professional roles help to build an authentic context for students' writing.

The Online Academy was the setting chosen for this study because its design supports many of the best practices in writing. Students communicate with their mentors via email on a regular basis. Mentors are educated to scaffold students' thinking with additional extension questions. In addition, each module has a representative problem in which the students must take on a professional role in which to solve.

This study investigated how students' written performance and communication abilities evolved while they were learning in an online environment. To this aim, the following research questions were addressed.

- How do these students' abilities to communicate in writing change while learning in this online environment?
- How do these students' performances on writing products change while learning in this online environment?

- How do these students' writing processes change while learning in this online environment?
- How do these students' self-efficacy in their written expression change while learning in this online environment?

These questions were answered using qualitative methods. Four students, one who was taking an English course and three who were taking a world history course, participated in the study. The participants were interviewed separately at the beginning and end of their courses. In addition, their mentors were interviewed. All email correspondence and interviews were coded and categorized. Themes emerged from this data. In addition, two to three products were scored by two raters in the writing domains of composing, writing expression, and usage and mechanics.

### Conclusions

These students showed an understanding of the difference between professional correspondence and personal correspondence. When students emailed their mentors, they used an informal register in their correspondence. All four students to some degree used writing conventions found in text messages in correspondence with their mentors. Often, there was no beginning capitalization, end punctuation, or apostrophes in contractions. Their mentors did not emphasize that the students should use a more formal register when corresponding about work via email. The mentors seem to focus more on building the relationship. As a result, students maintained text message conventions in their emails throughout the course. I had thought that students would increase their use of standard written English in their email correspondence during the course, but the opposite seemed

to be true. As the students became more comfortable with their mentors, the more text messaging conventions they seemed to use. Although this was inadvertent for James, Richard, and Georgi, Zora made a conscious effort to help her mentor become more comfortable and less “uptight,” she said.

The informal register did not seem to make a difference to the mentors. They did not comment to the students on their texting conventions in emails. The mentors placed a greater emphasis on correct grammar and usage in assignments. Students understood the difference between personal and professional work. They considered the email correspondence with their mentors to be personal, but they employed professional conventions when submitting assignments to their mentors.

Students used a more formal register when submitting assignments. These assignments contained few of the text messaging conventions that the students used readily in their email correspondence. The students did recognize that a more formal register was necessary when completing assignments for the course. For assignments that were completed as attachments and assignments that were embedded in emails, students used a formal register and used standard written English.

Students in this online learning environment found themselves not only communicating about the nature of an assignment as one would also expect in a face to face environment, but they also communicated about technical difficulties that they encountered. In addition, there was an additional load on the student to clarify directions and to ask for feedback. Mentors could not literally see if students were struggling. As a result, students communicated when they had issues with assignments or issues external



to course. They also communicated about their goals and plans for the completion of modules and the course.

Students used the professional persona that was described in each module to shape the tone and style for each assignment. The mode of writing represented in each of the assignments seemed to make a difference for all of the students. For instance, Georgi scored better on the Virginia SOL rubric when writing a persuasive piece that required a strong voice than in writing an expository piece in which the voice was neutral. The former required her to take on a persona. The latter did not require her to take on a persona.

Richard commented that the scenarios described in each module helped to frame the purpose for writing. Unlike a face to face class, he did not feel forced to write in a certain mode of writing for an arbitrary reason. The scenarios for each module provide a frame and real-world context for writing.

The development of writing processes can occur in this online learning environment, and it is dependent upon the mentor providing scaffolding for a student's writing and thinking in short assignments as well as emphasizing and expecting revision in longer assignments. James showed the greatest change in his writing process. The interaction between him and his mentors helped him to change his writing process to include more revision. James' mentors provided scaffolding for James to use to support his assertions with evidence on shorter assignments and required multiple revisions for longer essays. The required revisions helped James to develop his essays. One can see a marked difference between James' first draft and subsequent drafts.

In contrast, mentors for the World History II course did not require revisions of work based on compositional needs. As a result, students taking the World History II course did not see marked changes in their writing process. The interaction that the mentors for the English course showed concerning writing seemed to make a difference for the student they were mentoring. They had an expectation that writing would improve during the course. The mentors for the World History course did not have any expectations for the improvement of their students' writing.

An increased self-efficacy in writing does not evolve within the parameters of a short online course. Students did not change the way that they looked at themselves as writers in the short period of time they were engaged in the online course. I had expected as students became more comfortable with writing and improved their process they would begin to self-identify as writers. This was not the case for any of the participants. It may take a longer period of time for their self-efficacy to in writing to change.

### Discussion

The literature on writing instruction showed the following components as important for helping students to attain better writing skills.

- emphasis on writing process
- scaffolded writing tasks
- authentic product goals
- building self-efficacy in writing.

The importance of these components was further supported in the context of this study. Students were engaged in a writing process as they completed short summaries and

longer thesis driven papers (Flower & Hayes, 1981). All students in this study had a process for writing. Two students had an understanding of the formal steps of the writing process that is often taught in English classrooms. They engaged in formal outlines and notes to plan their writing tasks upfront and then coupled these steps with revision. The other two students had less of an understanding of the formal steps of the writing process. They showed less planning upfront and wrote in a stream of consciousness format relying on extensive revision to expand their thoughts. This supports previous research on writing process. Neither process produced a better product in terms of composition, writing expression, and usage and mechanics. Writing process varies from one individual to another.

This study also found that the writing process was most often supported in the interaction between the mentors teaching English and their student. Mentors in the English course provided feedback that allowed the student to revise his writing over multiple drafts. They gave specific goals for revision that enabled the student to make changes to strengthen his work (Ferretti et al., 2000; Graham et al., 1995). Mentors for the English course worked with the student through several drafts of his assignment. As a result, the student made changes that went beyond the surface. The student created new meaning in comparison to his early drafts and restructured his essay to make it more coherent (Dix, 2006).

Scaffolded writing tasks were present in the design of the World History II and American Literature courses. In the history course, students were often asked to complete graphic organizers to help gather and structure information before they were

asked to write about the content. These procedural facilitators helped to scaffold the students' thinking processes in preparation for writing (Graham et al., 1995). In addition, a mentor for the English course provided very specific instruction for how the student could compose his argument. These detailed instructions mimic the PLAN and WRITE protocols used by De la Paz & Graham (2002, 1998, 1997) in their studies. The specific instructions aided the student in composing his arguments. In subsequent assignments, his ability to support his analysis improved.

Another component in the literature that supports the development of writers is the use of authentic product goals (Johnstone et al., 2003; Manfield, 1993). The instructional design of The Online Academy supports this important writing component. The courses in The Online Academy are built on the pedagogical framework of the Community of Practice Learning System (Norton, 2002). In this learning system, learners solve problems that are representative of a particular community of practice. Expert mentors work with learners to help to scaffold their knowledge construction as they work to solve the problem. Each module in The Online Academy has a situation to resolve. The learner takes on a role in order to solve the problem. For instance, in the last module of the American Literature course, the learner takes on the role of a documentary filmmaker who must submit a proposal to a production company on a film that shows changes in the American Dream over time. Authentic problems such as this provided students with a built in audience and context for their writing. All students in the study showed a sense of understanding of context and audience in their writing while working in the online environment.

The authentic context provided by the design of The Online Academy shaped the style and tone students used in their writing assignments. For example, in modules students might have taken the role of a journalist, game show developer, advertisement executive, or an interior designer. Each student was able to effectively engage in the role that was identified in each module. Their writing reflected the tone and style indicated by the assignment.

Students showed a strong demarcation in tone and writing conventions between conversations with mentors via email and their content of assignments sent to their mentor. Overall, they viewed email conversations as informal and used conventions often found in text messages. They viewed assignments as formal writing and therefore used standard writing conventions. Nevertheless, if mentors would place a greater emphasis on standard writing conventions in email correspondence, students would gain another authentic opportunity to practice writing in a professional forum.

The online learning environment has potential to support students in developing their writing skills. The Community of Practice Learning System (COPLS) also provides for the one-on-one interaction of an expert mentor and a student. The interaction between the mentor and the student provides an opportunity for repeated scaffolding in thinking and writing processes. In a face-to-face classroom, a teacher often has 140 students over the course of the day. The opportunity for repeated feedback for revision is diminished in this situation. Face to face teachers rely on peer feedback to supplement where expert feedback is not feasible given time restraints.

The expert one-to-one feedback that students in this study received played a role in their growth as writers. Particularly in the American Literature course, the student received daily scaffolding of his thinking and writing. The expert mentors tailored their questions to support each individual student as his or her writing skills and content knowledge improved. In addition, they pointed students toward instructional resources that would aid in their growth. For instance, in the American Literature course, the expert mentor showed the student additional sources of information on MLA format when the student struggled with this concept.

Although the interaction between expert mentor and student is built into the design of every course in The Online Academy, the expertise of the mentor in writing plays a role in the amount of scaffolding a student might receive in improving their writing skills. In this study, mentors for the American Literature course provided more scaffolding in writing than their counterparts who mentored students taking the World History course. Mentors for the World History course did not view scaffolding students' writing skills as part of their expertise or their job. They focused more intently on the content of the writing. Mentors who consciously focused on writing made a greater difference in the writing skills of their student.

Writing is a recursive process (Emig, 1971). Writing skills take time to develop. Students in this study had a very limited time in which to improve their writing skills. The student taking the English course showed the most gains given that he had six months of continued support in developing his writing skills. In addition, his mentors placed a greater emphasis on revision than the other mentors for the World History

course did. All other participants had twelve weeks or less contact with their mentor. Given the limited timeframe, students did not show a change in their feelings of self-efficacy in writing. Writing instruction in an online environment needs to include systematic and sustained scaffolding and expert feedback.

### Recommendations for Practice

The context of the online environment provides possibilities to strengthen students' writing skills. Designing online environments that support sustained and systematic expert/novice interactions will help students to develop their writing skills in an authentic context in which clear written communication is essential.

All content areas use writing as a communication tool. As a result, all content teachers need to be educated on how to support the development of writing skills for students. Professional development should provide teachers with expertise on how to scaffold students thinking when preparing to write. In addition, it should include experiences on how to use specific strategy protocols to help scaffold students thinking as they continue to write and revise. For instance, these strategies would help teachers build upon graphic organizers like those that are embedded in the World History II course in The Online Academy.

Writing skills take time to develop. Regardless of the writing process a student uses, sustained instruction and feedback on writing skills is essential. Curriculum for writing instruction should articulate a spiral that builds greater expertise in writing skills from grade to grade.

Writing experiences should be authentic. Educators should take into consideration the real contexts and audience when designing a writing assignment. This would give students practice in varying writing based on context and audience.

#### Recommendations for Future Research

This study was exploratory. It examined the writing experiences of four students in an online environment that supported many of the best practices identified by research. Future research could include several variations.

##### *Variation One*

Complete the study with more participants. In addition, the participants would only be students taking an online English class. This would provide more information about the interaction of students and their mentors in relation to an English course. Since mentors teaching an English course would have an expectation that teaching writing was part of their description, this would provide more information on how the online environment can support writing. In addition, this study could focus more on the writing process since mentors would request multiple drafts of student's work. This would provide a look at student progress from draft to draft. This variation could also be completed with other content areas after the mentor participants have received professional development in writing instruction.



### *Variation Two*

Complete the study over a school year instead of during summer school. This would give more time to study the growth of each student. This variation may take several years to complete in order to increase the number of participants in the study.

### *Variation Three*

Complete the study in a different online learning environment. This would provide a comparison between The Online Academy and other online learning environments. In addition, it may provide more information on how to design online learning environments to support writing skill development.

Each of these variations would provide more information on how to support students' development of writing skills in an online learning environment.

## APPENDIX A

### Parent Phone Script and Consent Form (Presented to parent for signature at first interview.)

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Hello, my name is Michele Schmidt Moore, and I am part of the research team studying *The Online Academy* this summer. I am conducting a research study on the English course your daughter/son is currently taking with *The Online Academy*. I am interested in exploring the role and development of student writing skills when learning takes place in a predominantly text environment, and I would like for your child to be a part of my study. If you decide to participate in the study I would like to interview your child at the beginning and end of the online English course. These interviews should last about an hour, and we can negotiate a time and place that is convenient to you.

Participation is completely voluntary and if your son/daughter doesn't wish to participate, there is no penalty. Would you be willing to allow your son/daughter to participate? If so, can we set up a time and meeting place for the first meeting? At this meeting I have a consent form that I would like for you to sign describing in detail the purpose of the study and what will be required of your son/daughter.

---

## PARENT INFORMED CONSENT FORM

### **For the Study: Student written communication in an online environment**

#### **RESEARCH PROCEDURES**

This research project is designed to evaluate TOA during the summer, 2007, specifically the role and development of student writing skills when learning takes place in a predominantly text environment. If you and your child agree to participate, your child will be asked to participate in an interview at the end of the online English course they are currently taking. Interviews should last between 45 minutes and an hour. Interviews will be schedule at times and places convenient to you.

#### **RISKS**

There are no foreseeable risks for participating in this research.

#### **BENEFITS**

There are no benefits to your child as a participant other than to further research in online learning environments.

#### **CONFIDENTIALITY**

The data in this study will be kept confidential. Only the researcher will have access to the data collected. Your child's name will not be used on any documents or publications. For the purposes of this research, your child will be asked to select a pseudonym during the first interview for use in all data collection and reporting.

#### **PARTICIPATION**

Your child's participation is voluntary, and he/she may withdraw from the study at any time and for any reason. If he/she decides not to participate or if he/she withdraws from the study, there is no penalty. There are no costs to you, your child, or any other party.

#### **CONTACT**

This research is being conducted by the staff of The Online Academy at George Mason University. You may contact the Director of The Online Academy, Dr. Priscilla Norton at (703) 993-2015 or by email at [pnorton@gmu.edu](mailto:pnorton@gmu.edu) if you have any questions. You may also contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

**CONSENT**

I have read this form and agree to allow my child to participate in this study.

---

Name

---

Signature

---

Date

Student Phone Script and Consent Form  
(Presented to student for signature at first interview.)

---

Hello, my name is Michele Schmidt Moore, and I am part of the research team studying *The Online Academy* this summer. I am conducting a research study on the English course your daughter/son is currently taking with *The Online Academy*. I am interested in exploring the role and development of student writing skills when learning takes place in a predominantly text environment, and I would like for you to be a part of my study. If you decide to participate in the study, I would like to interview you at the end of the online English course. These interviews should last about an hour, and we can negotiate a time and place that is convenient to you.

Participation is completely voluntary, and if you don't want to participate, there is no penalty. Would you be willing to participate? If so, can we set up a time and meeting place for the first meeting? At this meeting I have a form that I would like for you to sign describing in detail the purpose of the study and what will be asked of you.

---

## STUDENT INFORMED ASSENT FORM

### **For the Study: Student written communication in an online environment RESEARCH PROCEDURES**

This research project is designed to evaluate TOA during the summer, 2007, specifically the role and development of student writing skills when learning takes place in a predominantly text environment. If you agree to participate, you will be asked to participate in an interview at the end of the online English course you are taking. Interviews should last between 45 minutes and an hour. Interviews will be schedule at times and places convenient to you.

### **RISKS**

There are no foreseeable risks for participating in this research.

### **BENEFITS**

There are no benefits to you as a participant other than to further research in online learning environments.

### **CONFIDENTIALITY**

The data in this study will be kept confidential. Only the researcher will have access to the data collected. Your name will not be used on any documents or publications. For the purposes of this research, you will be asked to select a pseudonym during the first interview for use in all data collection and reporting.

### **PARTICIPATION**

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty. There are no costs to you, your parents, or any other party.

### **CONTACT**

This research is being conducted by the staff of The Online Academy at George Mason University. You may contact the Director of The Online Academy, Dr. Priscilla Norton at (703) 993-2015 or by email at [pnorton@gmu.edu](mailto:pnorton@gmu.edu) if you have any questions. You may also contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

**ASSENT**

I have read this form and agree to participate in this study.

---

Name

---

Signature

---

Date

Mentor Phone Script and Consent Form  
(Presented to Mentor for signature at first interview.)

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Hello, my name is Michele Schmidt Moore, and I am part of the research team studying *The Online Academy* this summer. I am conducting a research study on the English courses offered by *The Online Academy* that you will be mentoring this summer. I am interested in exploring the role and development of student writing skills when learning takes place in a predominantly text environment, and I would like for you to be a part of my study. If you decide to participate in the study I would like to interview you at the end of the online English course you are teaching this summer. These interviews should last about an hour, and we can negotiate a time and place that is convenient to you.

Participation is completely voluntary, and if you don't wish to participate, there is no penalty. Would you be willing to participate? If so, can we set up a time and meeting place for the first meeting? At this meeting I have a consent form that I would like for you to sign describing in detail the purpose of the study and what will be required of you.

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## **MENTOR INFORMED CONSENT FORM**

### **For the Study: Student written communication in an online environment**

#### **RESEARCH PROCEDURES**

This research project is designed to evaluate TOA during the summer, 2007, specifically the role and development of student writing skills when learning takes place in a predominantly text environment. If you agree to participate, you will be asked to participate in an interview at the end of the online English course you are currently teaching. Interviews should last between 45 minutes and an hour. Interviews will be schedule at times and places convenient to you. As required by your employment with The Online Academy, you will be saving all email correspondence related to work with students until the course has been completed and a grade submitted. During the interview, you will be asked to share emails for that you have saved during the course.

#### **RISKS**

There are no foreseeable risks for participating in this research.

#### **BENEFITS**

There are no benefits to your child as a participant other than to further research in online learning environments.

#### **CONFIDENTIALITY**

The data in this study will be kept confidential. Only the researcher will have access to the data collected. Your name will not be used on any documents or publications. For the purposes of this research, you will be asked to select a pseudonym during the first interview for use in all data collection and reporting.

#### **PARTICIPATION**

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty. There are no costs to you or any other party.

#### **CONTACT**

This research is being conducted by the staff of The Online Academy at George Mason University. You may contact the Director of The Online Academy, Dr. Priscilla Norton at (703) 993-2015 or by email at [pnorton@gmu.edu](mailto:pnorton@gmu.edu) if you have any questions. You may also contact the George Mason University Office of Research Subject Protections at 703-

993-4121 if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

### **CONSENT**

I have read this form and agree to participate in this study.

---

Name

---

Signature

---

Date

## APPENDIX B

### Student Interview Guide 1

To establish the student's perceptions about English and writing at the beginning of their online course.

- Describe what English class was like for you at your high school. What kinds of things do you find yourself doing?
- What did you like best about English class?
- What did you like the least?
- What kinds of writing assignments do you have in English (History)?
- What kinds of writing did you find yourself doing outside of school? If any? What lead you to choose to take an English (World History) course online?
- What are some of your expectations? What do you think taking an online course will be like?

#### **To find out more about student perceptions of the writing process**

- Let's pretend that you were given an assignment to write a two page paper on your favorite—you fill in the blank. Let's also pretend that there is a camera perched on your shoulder recording what you do and it can tape your thoughts too—what would it record- What would it see? What would it hear? (How would you describe the writing process?)
- Have you had to do any writing so far for your online course—not just assignments,-- Tell me about them. What did you think?
- What seemed easy to you? What seemed hard?
- So if you were to describe how you went about completing them what would that look like?
- How did you mentor help you in this process?
- What kinds of conversations do you find yourself having with your mentor? How is that the same or different to writing to friends?
- Describe the process you took in completion of (an particular assignment from the beginning of the course). (World History-Prehistory)
- What strategies do you use to help you in the writing process? How does it help you to write? (What made it hard to write? What made it easy?)

To find out more about student perceptions of their writing products

- Each of the modules in The Online Academy begins with a challenge. Usually that challenge is met with the creating of some sort of writing product. Did having a challenge make a difference to you in writing? If so, how?
- Tell me about the first module. What are your impressions?

#### **To find out more about student perceptions of self-efficacy in writing**

- Would you label your self as writer? Why?
- How did you feel about writing?

## Student Interview Guide 2

How did your experience compare to your expectations?

To find out more about how the student would describe the communication with their mentor.

- How would you describe the e-mails you wrote to your mentor? Were they like e-mails you would send to a friend? How were they the same? How were they different?
- Did you see any differences in the way that you talked with your mentor at the beginning of the course vs. the way that you talked with your mentor toward the end of the course? Did you find that your conversations changed? If so, how would you describe the change?

At this point I could introduce examples from the communication between the mentor and the student. I would ask for the student interpretation of this communication.

To find out more about student perceptions of their writing products

- Each of the modules in The Online Academy begins with a challenge. Usually that challenge is met with the creating of some sort of writing product. Did having a challenge make a difference to you in writing? If so, how?
- Tell me about the your last module. What are your impressions?

*To find out more about student perceptions of the writing process*

- What is the writing process? How would you describe the writing process?
- How did you mentor help you in this process?
- Describe the process you took in completion of (a particular assignment from the end of the course)
- What strategies do you use to help you in the writing process? How does it help you to write?
- Do you feel that your process changed from the beginning of the course to now? If so, how.

### **To find out more about student perceptions of self-efficacy in writing**

- Would you describe yourself as a writer or non-writer? Why?
- How did you feel about writing since taking this course?

To find out more about the student's perceptions of the role of the online environment on his writing

- What role do you think learning online had on your perceptions about your writing? Was it the same as learning face to face or do you think that it had an impact on the way that you write?
- Do you think this environment changed the way you communicate? If so, how?
- Do you think this environment changed the way you write? If so, how? If not why?

- Describe what learning online was like for you? What was it like to communicate with your mentor/teacher mostly via e-mail.
- How would you describe taking an English course online to a friend?

At this point clarifications would be made about conclusions drawn from the text to see if my interpretation of e-mail correspondence and synchronous transcripts coincide with the student's interpretations.

## Mentor Interview Guide

- How would you describe *name of student* as a writer at the beginning of the course?
- How would you describe *name of student* as a writer at the end of the course?
- Do you feel that either tone, or sentence structure changed for the student over time? If so, how?
- Did you see any differences in the way that the student talked with you at the beginning of the course vs. the way that they talked with your mentor toward the end of the course? Did you find that your conversations changed? If so, how would you describe the change?
- How would you describe the process *name of student* took in composing a writing assignment?
- Do you feel that process changed over time?
- How would you describe *name of student's* picture of himself or herself as a writer at the beginning of the course?
- How would you describe *name of student's* picture of a himself or herself as a writer at the end of the course?
- How would you describe the student's ease with this online environment?
- What advantages to learning in an online environment did you notice in the students written communication skills?
- What barriers to learning in an online environment did you notice in the students written communication skills?

At this point, I would share with the mentor conclusions that I had based on the data (email, synchronous chat transcripts and writing assignments) and compare it with interpretations of the mentor. Specific questions would develop after the data has been collected.

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## CURRICULUM VITAE

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