



The Effect of E-Journaling on Student Engagement

Diane S. Halm, PhD

Faculty Fellow of Composition Niagara University.

Received 08 June, 2017; Accepted 08 July, 2017 © The author(s) 2017. Published with open access at www.questjournals.org

ABSTRACT: *The writing to learn movement transformed writing pedagogy in the 1960's. Rejecting an emphasis on "disciplinary rigor, standard curricula, and standard 'objective' evaluation," (Russell, 1994, p. 11), Britton espoused language instruction that focused on exploratory forms of writing including journaling (Britton, 1975). While there is research on the impact of writing, few studies focus on journaling at the post-secondary level. Even fewer studies investigate journaling in freshman composition classes and virtually no studies focus on journaling in developmental composition classes specifically. This study addressed the potential outcomes of electronic journaling in developmental composition classes. The purpose of the qualitative study was to investigate how students in freshman developmental composition class use journal writing. Explored through the lens of the student-perspective, 17 students were invited to journal on Blackboard throughout the semester. One primary research question was posed: What kind of effect does electronic journaling (e-journaling) have on student engagement and self-perceived growth? This article focuses on the most distinct and clearly articulated theme which arose; the relationship between e-journaling and student engagement. Participants found e-journaling helped them become more informed, more enthusiastic, and less stressed. The majority of student-participants were satisfied with their self-perceived success as both writers and thinkers.*

Keywords: *Journaling; Student engagement; Motivation; Composition; Developmental learners*

I. INTRODUCTION

Procrastination is prevalent among college students, especially underclassmen. Research shows more than 70% of undergraduates admit to putting academic tasks off (Schouwenburg, 2004), and 50% of students practice avoidance on a persistent basis (Ferrari, O'Callaghan, & Newbegin, 2005). While students avoid homework, generally, Solomon and Rothblum (1984) found that writing essays, in particular, was the cause of more procrastination than other, less cumbersome tasks such as reading assignments or studying for tests. The reasons vary and are often complex. Factors like perfectionism as well as inability to make decisions can stop a student from completing required tasks (Ozer, Demir, & Ferrari, 2009), and this procrastination can mark the beginning of a downward spiral, often ending in student withdrawal or dismissal.

Student retention has, for some years now, been an ongoing concern, especially in four-year colleges and universities. In 2006, Act (2006) reported only seventy percent of college freshmen at 4-year colleges returned for their sophomore year. In their 2012 report, those numbers had dropped to sixty-five percent. Graduation rates too warrant consideration. Four-year institutions only graduate fifty-nine percent of their students within a six year period (NCES, 2012). More immediate outcomes include low grades, low self-esteem, and high levels of anxiety (Schraw, Watkins, & Olafson, 2007). As educators, we understand the importance of cognition in student learning. From a cognitive perspective, one of the reasons students are believed to procrastinate is because they doubt their abilities to successfully complete writing tasks and fear ramifications of failure (Shoham-Salomon, Avner & Neeman, 1989). Metacognition, students' awareness of their own learning processes, can drastically improve both the quality and quantity of student learning (Bransford, 2000) but few lessons, especially at the college level, incorporate opportunities for metacognition – thinking about thinking (Parsons, 2008).

One way to initiate such reflection is through questioning. Although little research has focused on the use of questioning strategies in college composition classes specifically, these strategies have shown elsewhere to be successful in motivating and empowering students who are otherwise reluctant to express their thoughts in writing (Smith, 2003). To that end, one might consider the use of cognitive or metacognitive questioning strategies. Questions that encourage students to reflect on their own learning styles, including strengths and

weaknesses, have the potential to promote awareness, and that awareness can culminate in more engaged learning (Valencia & Pearson, 1988). Watkins and Marsick (as cited in Cyboran, 2005) stated in 1993 that “. . . people need to bring what they are learning into conscious awareness” (p. 35). Discourse, whether oral or written, potentially promotes critical, objective thinking, and journal writing could provide the means and motivation necessary to accomplish this same kind of thinking, as well as an opportunity for students to find and develop their voices and become proactive, engaged, independent learners (Shannon, 2008).

Much research has been conducted on the impact of writing, but little of it focuses on the use of journaling at the post-secondary level. Even fewer studies have investigated the use of journaling in composition classes, and there are virtually no studies that focus on the use of journaling in developmental composition classes specifically. This study, therefore, addressed the potential outcomes of electronic journaling in developmental composition class. The purpose of the qualitative study was to investigate how students in freshman composition class, including developmental learners, engage in journal writing.

Journaling has traditionally required pen and paper but advances in technology have opened up a variety of new journaling options such as electronic message boards, e-mail, or even web logs. Cyboran (2005) believes, “Using technology can make reflective journaling much easier” (p.34). Online forums create an asynchronous environment where students may easily ask specific questions and seek feedback without the requirement of regimented intervals (Longhurst & Sandage, 2004). Other benefits of electronic journaling include students’ ability to write while teachers simultaneously read and respond to students, increasing interaction between student and teacher and potentially increasing the level of student satisfaction (Phipps, 2005). In the context of a college composition course, the driving question behind this research study was: Does e-journaling increase students’ engagement and perception of academic growth?

II. THEORETICAL FOUNDATION

Constructivist Theory

Constructivist theory is based on what scientists believe to be the brain’s natural cognitive processes; new knowledge mingles with already established knowledge to develop new insights (Feldman, 1994). Traditionally, learners have played a passive role in the process of learning. Teachers deliver information that students are expected to regurgitate in the form of essays or responses to examination questions (Brooks & Brooks, 1993). This process holds the potential for limiting the breadth and depth of knowledge. Constructivists, by contrast, believe “The brain needs to create its own meanings. Meaningful learning is built on creativity and is the source of much joy that students can experience in education” (Caine & Caine, 1994, p.105). The Association for Supervision and Curriculum Development has defined constructivism as “an approach to teaching based on research about how people learn. . .each individual ‘constructs’ knowledge instead of receiving it from others” (Scherer, 1999, p.5). Rather than teaching through lecturing, constructivist teachers assist students in processing and transforming information. Studies show enhanced learning in classrooms where constructivist theory is practiced (Hoover, 1996).

Bruner. While his constructivist theory is a general framework for instruction based upon the study of cognition, in one of his early works, Bruner (1966) devised a theory for effective instruction in the classroom which included four foundational principles, the first of which focused on understanding the contexts and experiences that impact readiness – a student’s willingness to learn. Insights gleaned, whether by verbal or written means, potentially assist instructors to better understand and overcome student insecurities, allowing for more and deeper learning to occur, but skills are often mastered incrementally and require scaffolding, and it was Bruner who developed the concept of scaffolding utilized in education today. According to Harris and Hodges (1996), scaffolding is:

In learning, the gradual withdrawal of adult (eg. teacher) support, as through instruction, modeling, questioning, feedback etc., for a child’s performance across successive engagements, thus transferring more autonomy to the child. In composition classes, such support might include activities such as dialogue in the form of journaling; posing pertinent questions and offering insights and suggestions in response to students’ questions, concerns, or potential misunderstandings. As students actively participate, both offering and receiving thoughtful, thought-provoking responses, bridges between reading, writing, and thinking are built (Hogsette, 2012). Students gain academic independence as their level of knowledge, confidence and self-efficacy increases.

Involvement Theory

Constructivist A.W. Astin, Director of Research for the American Council on Education from 1965 to 1973, espoused a theory of involvement. Astin’s theory explains how and why involvement impacts the educational experience for college students. He defined “involvement” as, “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518), and maintained that student learning is precipitated by direct involvement in their own learning (Astin, 1999; Pascarella & Terenzini, 2005; Kuh, 2009). Actions, he believed, would dictate the

student's educational experience, and writing, in the form of journaling, might reflect the kind of action Astin refers to, offering the opportunity for involvement that impacts student learning.

Self-Determination Theory

Self-determination theory (SDT) is a theory of motivation that utilizes empirical methods to inform academic practices, and is based on the assumption that all students, despite differences in gender, socio-economic status, or nationality, possess curiosity, and some level of intrinsic motivation. This motivation provides the foundation necessary for classroom engagement (Reeve, Deci, & Ryan, 2004; Vansteenkiste, 2010). When provided with academic challenge, coupled with prompt feedback, students can successfully internalize and display competency. With encouragement to explore and to take initiative, students can achieve autonomy. When they perceive they have a voice, that they are heard and responded to, students experience relatedness. When these three inherent needs are met, according to the self-determination research conducted by psychologists Ryan and Deci (2000, 2002), students become both more intrinsically motivated and engaged, and this translates to more and better

learning. Journaling addresses all three of these needs. Written conversation between instructor and students offers both acknowledgement and feedback, encourages self-exploration, and mandates initiative and active involvement in the learning process.

III. LITERATURE REVIEW

The Impact of Writing

Unlike reading and listening, receptive functions, writing, a productive function, promotes the creation of a verbal construct which is graphically recorded (Emig, 1977). "The act of writing can be a means of learning and discovery" (Olson, 2009, p.7). In "Writing as a Mode of Learning", Emig (1977) argues, "Writing represents a unique mode of learning – not merely valuable, not merely special, but unique" (p.122), and it was she, along with James Britton, who transformed this philosophy into a pedagogical approach, appropriately termed the writing to learn movement. (Bazerman, 2005). Britton initiated a paradigm shift, away from the traditional emphasis on objective evaluation of writing in American education, and instead conceived of writing as multi-functional in its purposes and applications. Instead of writing, in general, he identified three distinct types of writing: Transactional, used for communicating information, poetic, meant for creation of beauty, and expressive, intended for exploration and reflection. This last type of writing was particularly important, held Britton and his colleagues, because it had the potential to increase learning throughout the developmental stages of learners (Britton et. al, 1975). By the early 1980's, the subject of writing had received much theoretical attention, and a large body of research concurred that it was integral to the learning process (Humes, 1983). In *How Writing Shapes Thinking*, Langer and Applebee (1987) pose the question, "What contribution, if any, does written language make to intellectual development?" Among their conclusions, they found, "Writing activities promote learning better than activities involving only studying or reading (p.135).

Along with Britton, Kinneavy (1971) also helped to focus the spotlight on discourse in relation to the goals of the writer and, to a lesser degree, the pedagogical goals of the teacher. Like Britton, Kinneavy envisioned four discreet forms of discourse based on the aims of the writer.

These included: Literary, persuasive, referential, and expressive. The last form, expressive, might seem akin to Britton's expressive *discourse*, but there are some fundamental differences. In *A Theory of Discourse*, Kinneavy explains how shifting private writing into the public domain can impact and strengthen "...social relationships through sharing not just our common experiences but also our feelings and responses to them" (Williams, 2014, p.38). In his article, "Four Philosophies of Composition", Fulkerson (1979) states, the focus of expressivism is for writers to have "... an interesting, credible, honest, and personal voice" (p.345), and sees expressivist theory as a means to emotional and mental health for students. Expressivists value writing about personal subjects and consider journal-keeping essential for self-discovery (Fulkerson, 1979; Elbow, 1998).

Journaling

"At the heart of learning through journal writing is reflection" (Kerka, 2002, p.1). "...journal writing has been espoused as a means of facilitating reflection, promote personal growth, and precipitate change since 'simply to record our behavior is to interfere with it' (Simons, 1978, as cited in Andrusyszyn & Davie, 1997, ¶1). Berthoff (1983) developed a dialectic process of journaling which acknowledges that meaning changes as we write. Because knowledge is dependent on context and perspective, Berthoff maintains that students need "assisted invitations" to "think about thinking" so they might better understand what they are doing and why (p.85). To that end, she supports the use of dialectic notebooks. Useful for both critical and creative writing assignments, what separates this form of journaling from others is the double-entry format which allows

students to remark about observations, readings, or research on one page, and then respond to their thoughts and writing on the opposite side of the page. Students are encouraged to move back and forth, from one side of the page to the one facing it, from notes to recapitulations and back again. "Reflecting through journal writing gives learners the opportunity to shape their ideas, create new ideas, and connect them to what they already know" (Killion, 1999, p.37), and such opportunities for low-stakes writing allows for not just academic growth but increased self-efficacy.

Schön's Reflection-in-Action "...is thinking that serves to reshape what we are doing

while we are doing it" (Schön, 1987, p. 26), and is considered a foundational process of journaling based on his belief that reflective practice is "the capacity to reflect on action so as to engage in a process of continuous learning". Schön's model embodies the idea of thinking about our own thinking – what led us to this unique problem, challenge, or opportunity. He describes it as a, "...progression from rote following of rules to questioning, criticizing, and reforming assumptions through a continuous process he calls a 'reflective conversation' with the situation" (University of Hartford, 2005). This leads to further inquiry, and deeper understanding.

Ellis's (2004) study of college freshmen focused on the impact of student writing and reflection on the acquisition of scientific knowledge. Evidence indicated the thinking and writing process yielded better understanding and more learning. Gillian Boulton-Lewis (1994) concluded, "To be effective deep learners, it is proposed that students should also develop knowledge of their own learning processes to the same level. This might occur as an outcome of being learners and from reflecting on, and discussing, the best ways of learning" (p.389).

A recent Canadian study conducted by Lang (2014) focused on the impact of journal writing. In order to raise the level of student engagement, one English Literature teacher asked students to respond to readings in online learning journals. After completing the nine required journal entries, students were asked to evaluate the usefulness, and the student responses were exceptionally positive. Written reflections did foster deep learning while creating a climate of exploration in a low-pressure environment, and better informed the instructor about areas where students struggled, helping him to better plan future classroom activities and assignments. Reflective writing and feedback from the classroom instructor helped scaffold students.

Student Retention

Research on the topic of student retention and persistence has evolved over the course of the last several decades. The first generation of studies blamed student attrition on the individual who seemingly lacked the requisite tools or motivation necessary for success – the flaws were theirs rather than the institution's (Spady, 1970, 1971). Tinto (1975) was the first to postulate a correlation between the individual and the institution. In other words, environment too impacted student retention. The "age of involvement" followed, led by researchers like Astin (1974), whose theory of involvement is discussed in this essay. Involvement and contact with instructors were, it seemed, essential, especially during the first year of college. Still, models were limited, lacking in the individual intricacies at issue (Tinto, 2006). Today, we better grasp the important interplay of complex characteristics of both the individual and the institution. Our understanding of how culture, economics, and society impact student retention has been greatly enhanced (Johnson, et al. 2004-2005; Torres, 2003; Zurita, 2005). Throughout the years and the many theoretical iterations, however, one fact has remained key to retention – engagement is essential.

Vincent Tinto (1993) is known for his individual departure theory in higher education and is one of the most preeminent scholars to exhaustively study the issue of student retention. He maintains that persistence is possible only when students become both formally and informally integrated into the existing academic and social systems. Specifically, he points to the need for interaction with peers and instructors. Without these relationships, students seldom remain at college. While far from a panacea entirely, reflective writing, in the form of journaling, could promote open communication between student and instructor, and, potentially, between peers in a learning community as well.

Teacher Feedback

Teacher feedback is of paramount importance for student writing, including reflections (Peterson & Kennedy, 2004; Sommers, 2006; Stagg, Peterson & Kennedy, 2006; Stern & Solomon, 2006). Do students care about receiving feedback on their writing? Research answers with a resounding "Yes!" In a longitudinal study, Nancy Sommers (1982) followed 400 Harvard undergraduates through their college careers to understand the role that writing plays in undergraduate education. While considered by many to be a seminal study, she revisited the subject some 25 years later in a continuing attempt to ascertain ways to improve composition instruction. Referring to her 1982 study, she reflects:

What emerged in every conversation we had with students about their college writing is the power of feedback, its absence or presence, to shape their writing experiences. As one student told me, "Without a reader,

the whole process is diminished” (p.251) Schunk’s 1993 study investigated how teacher feedback affected both self-efficacy and writing achievement. Research concluded that feedback, especially in concert with progress goal setting, strongly impacted self-efficacy. This study is pertinent because it considered the complex relationship between strategy acquisition, feedback, self-efficacy and writing performance. Schunk found that as students meet goals, self-efficacy increases. This increased sense of agency acts as a motivator in future endeavors, hence impacting the quality of writing. Self-efficacy is, in turn, highly predictive of writing skill and strategy use.

IV. Methods

Research Design

This study used a qualitative methodology and Denzin and Lincoln’s (1994) constructivist-interpretive approach to provide insight into “...the complex world of lived experience from the point of view of those who live it” (Schwandt, 1994, p. 118). A case study approach was utilized because, according to Creswell (2007), “...case study research involves the study of an issue explored through one or more cases within a bounded system” (p.73).

Research Site

All research; student writing, multiple observations and interviews, was conducted on the campus of a small, Catholic, liberal arts university in Western New York. Undergraduate enrollment includes approximately 3,300 students. Of the roughly 800 freshmen who began in 2013, approximately 120, or 15 percent, were identified as in need of remediation in composition. Demographically, the University is comprised of approximately 65 percent Caucasians, 5 percent African Americans, 10 percent International students, 15 percent who fail to identify themselves, 2 percent Hispanic, and 1 percent American Indian or Alaskan Native (College News, 2013).

Participants

Sixteen native English (L1) students and one International (L2) student who were currently enrolled in the primary investigator’s two sections of freshman composition (Fall 2013) participated in this study. Participants included six females and eleven males. Three of the females were freshmen, one female was a sophomore, and two of the females were juniors. Nine of the males were sophomores, and two others were juniors. Two of the seventeen participants, a female classified as a freshman but who was in her second year at this college, and a male in his junior year, had unsuccessfully attempted this class prior to the study. Upon admission to college, eight participants, three females and five males, were identified as in need of developmental assistance. Therefore, all eight students enrolled in and successfully completed Critical Reading Skills (CRL) previous to beginning Developmental Writing and Thinking 100 in the fall of 2013. CRL, Critical Reading Literacy, is one of the mandated courses required of students who are deemed inadequately prepared for college reading and writing tasks, and approximately 15 percent of entering freshmen are mandated to complete CRL based on a number of factors, including low SAT scores, English Regents exam scores, and their final grades in English class. 14 students self-identified as Caucasians, while the other 3 labeled themselves African Americans. No study participants were designated as special needs but German was the native language of one male, a junior. Students ranged in age from 18 years, 3 months, to 26 years, 10 months at the time the study was begun.

These freshman composition students were chosen based on the diversity of ability levels represented. All participants were enrolled in two sections of Writing & Thinking 100, a mandated composition class and sections that I taught. Although these two sections are labeled “Developmental” and class time equals four hours per week versus the three hours spent in other, “regular” sections of freshman composition, approximately 25 percent of these students did not require developmental assistance, and 3 of the students exceeded average criteria for admissions to this college. Additionally, as their class instructor and the primary researcher, I had easy access and an ongoing relationship with these students, allowing for open, honest dialogue and communication between researcher and participants.

I am committed to examining standard practices in composition classes as they greatly impact student outcome. Data provided by the Department of Education’s National Education Longitudinal Study reports that developmental students in four-year institutions suffer from substantially lower graduation rates than their non-developmental peers; 52 percent versus 78 percent (Brock, 2010, p.115). It was and is my hope that findings from this limited research might prove insightful for other educators, and might also inform my own pedagogy, leading to better, more effective strategies I can implement in my own classroom.

Recruitment

As the primary investigator, I approached a total of 17 students, all students enrolled in Writing & Thinking 100, sections YA and YB, the two classes I teach. I passed out the Information Sheets (See Appendix A), and read the information while the students followed along. After answering questions students had about the research project, I asked the Department Secretary to collect signed permission slips from those who wished to participate in the study, allowing me to use their writings and responses, de-identified, so as to protect privacy rights, in this research project. The secretary then put the signed permission slips in a manila envelope and kept these in her drawer until the end of the semester, after I, as the classroom instructor and primary investigator, had recorded final grades for the students. This assured there would be no bias or ramifications for those who chose not to participate in the study. All 17 students did sign the permission slips, agreeing to participate in this study.

Data Collection

In this section, I will first explain the amount and kinds of data collected and the means by which this was accomplished. In addition, details of participant preparation will be provided. In recognition of triangulation, data was collected by three different means:

E-journaling. Once a week, throughout the semester, students were required to reflect in e-journals; writing on the writing task, on their own learning, and on themselves as writers. Students were given full freedom and encouraged to reflect on anything they wanted to. Before reflecting each week, I emailed students a recap of activities in or after classes, and sentence starters were offered in order to help students begin the process. I responded to students, validating their posts, asking questions and offering suggestions when appropriate. While I hoped students would respond, it was left in their hands; no grade was given based on completion of these weekly reflections. In order to remind those who may have forgotten, or to help motivate those who were reluctant to respond, an e-mail was sent to students on a weekly basis, asking them to journal by the end of the week. Because some students may have struggled with direction, weekly recaps were offered in the e-mails, sentence-starters were offered, or questions were posed. Students, however, were encouraged to focus on any topic pertinent to them rather than limiting themselves to those listed and they were welcomed to reflect on any aspect of their learning. The student posts that will be offered throughout this study reflect their priorities – what they wanted to communicate, and therefore, should be considered unprompted and unsolicited.

According to feedback, students spent approximately 20 minutes per week writing in their electronic journals. Conversely, I spent roughly one to two hours reading and responding to student posts on a weekly basis. While some may consider this prohibitive, it offered many insights on fears and aspirations and I found the time to be well spent in consideration of the conduit created through written communication between students and instructor. The platform used was Black Board, available to all students on the School's website. In order to assure student ability to complete weekly posts, a brief orientation on how to access and post journal entries was conducted before journaling began. A Smartboard allowed a visual display and any questions or concerns were addressed at that time. I informed students that those who chose not to participate in the study would still be welcome to complete weekly reflections but their responses would not be included in the data analysis or later coding. As it turned out, all students signed permission slips, agreeing to participate in the study.

Interviews. Students also participated in private, semi-structured interviews at the end of the study, answering questions about the relationship between their journaling and their learning experience, the impact journaling had on engagement and learning (see Appendix C). Because of time constraints, especially students' finals schedules, these exit interviews lasted only 20 minutes each. They were scheduled based on student availability and were administered in familiar surroundings – their classroom. With their permission, interviews were audio-taped, transcribed and then coded to allow for later analysis of data to be done.

Final reflections. Last, artifacts; student-written reflections completed in class, were studied in light of students' e-journals, noting individual trials and triumphs. Students were offered 45 minutes to convey any thoughts on their experiences, with only minimal guidelines provided (See Appendix B). This was presented to students as a free-write, an opportunity to consider where they began, where they finished, and what they learned along the way. Both practical and personal skills were to be considered, along with the personal and academic challenges they confronted throughout the semester. It was hoped that these artifacts would reflect a level of self-awareness, due, at least in part, to the active engagement e-journaling provides for.

Data Coding and Analysis

The first cycle of coding included an affective coding method because this study sought to better understand student motivation and engagement – things impacted and reflected by personal feelings and emotions (Saldana, 2013, p.105). Values coding (Gable & Wolfe, 1993; LeCompte & Preissle, 1993) was also

used to determine, "...participant motivation [and] agency" (Saldana, 2013, p.111). Initial coding of journal reflections, transcriptions of semi-structured interviews, and written reflections focused on words relating to feelings such as happy, frustrated, bored, excited, confused, confident, insecure... I also focused on words related to activities such as reading, writing, responding, revising, and researching. Of special interest were those sentences that combined words from both of these groups as they reflected a relationship between an activity and a visceral response in relation to that activity. As themes began to emerge, secondary coding was determined based on those emergent themes. During secondary coding, I encoded for patterns because I discovered, during initial coding, that there seemed to be a relationship between student discussion in the classroom and participants' subsequent sense of efficacy. Therefore, I studied sentences relating to communication and input; words such as feedback, offered, assisted, and suggested, as well as words and phrases that reflected students' level of efficacy and persistence – words and phrases such as completed, stumbled, stopped, added, expanded, approached, accomplished... Although many sentences contained both academic and visceral words, this was not always the case. During analysis of the data, the first and most powerful theme to emerge was the relationship between e-journaling and student engagement. In other words, the ways in which journaling impacted the level of student engagement while researching and writing essays.

V. FINDINGS

The Relationship Between E-Journaling And Student Engagement

In order to ascertain if and how the act of journaling, specifically, impacted the writers' experience, I used three different venues for student feedback. My rationale was to give students several opportunities to discuss their experiences with WRT 100. In addition to participants' weekly journal entries on Blackboard, I asked about the impact of their journaling during interviews. Conversely, I very intentionally avoided focusing on the subject of journaling during student reflections. Instead, I asked students to consider how they spent time and energy in and out of class; what helped or hindered their personal and professional progress, and what, if any, take-away they were leaving with. They responded in writing. If journaling had indeed impacted, I hoped that this activity would be noted in these student reflections.

As a long-time composition instructor, I am painfully aware of the obstacles to student success, one of which is student attitudes and their perceptions about writing. One of the student-participants that we'll call Jason summed it up perfectly in his final reflection: "Let's be honest, no teenager nowadays gets all excited to write essays or papers. I was no exception to that. I hated making outlines, doing research, and all of that". While not all students dread writing, this sentiment was echoed by many of Jason's peers. Cain admitted that because his writing abilities were lacking in high school, he knew he would, "...hate this course". "I walked in dreading the thought of taking another writing class, mostly for the fact that writing and I did not get along in the least bit". Zack went even further, admitting that he was unmotivated to do the necessary work because he had previously failed freshman composition and this experience had caused him to lose his love, "... of the art which is written communication". Jack too had unsuccessfully attempted this class prior to my study; "I dropped out because I didn't want all of that work. I never liked writing, and especially don't like writing about something I have no interest in... I was lazy, not willing to put the time into what I needed to do". While some students would rather avoid the unpleasant task of composition, Randy is not atypical of some students who walk into class convinced that it's just a waste of time and energy. "After sitting down and going through what was expected of me and where I would stand at the end of the semester I saw no reason to try it". Freshmen like Beth also believed she was wasting her time because according to her, "I thought I knew everything". Fabian too was dubious; like many students, he admitted that he had never enjoyed writing, and added, "My relationship to writing was rather bad. It was very difficult for me to meet my required tasks. That's why I found it annoying to spend time on it". Others, like Tasha, were just afraid because they believed themselves to be "horrible writer(s)".

When negativity is pervasive and student motivation is minimal, it's difficult to get students involved, and it's this kind of involvement that will, according to Astin (1999) impact the classroom experience (Astin, 1999; Pascarella & Terenzini, 2005; Kuh, 2009). That was the genesis of this research project. I wanted to know if weekly journaling would help student-participants become proactively involved in their own learning, and according to responses gathered during interviews, the overwhelming evidence reflects positively.

Randy, who initially saw little reason to put forth effort, saw real merit to journaling; "I've learned that in order to write an effective paper, I need to address who my readers are, and appeal to the readers with specific content written specifically towards them". Although he had not previously noted anxiety, Randy also noted that, "Journaling helped with all the stress. Typing [on] all the things we've done is a lot less stressful than [just] thinking about it". When asked whether he'd recommend journaling in other classes, he immediately responded, "Yes, It does very well to organize thoughts and strengthen the bond between thinking and writing". These insights seem to reflect growth that comes from a certain level of both introspection and perseverance, neither of which might be expected from a student who initially, "... saw no reason to try".

Cain, who felt ill-prepared and began the semester expecting to hate the course, also found himself re-invigorated; “I’ve become a more confident and organized writer... It helped me realize that this class was in fact helping me evolve as a writer”. I saw evidence in his writing to easily support his assertions, and although he admits that writing is still a chore, he acknowledged, “Journaling helped me with getting my thoughts on the current paper onto paper and out of my head to help me further reflect on the structure and the ideas I had about switching topics”. Although Cain told me journaling with the use of technology was challenging because of his limited knowledge, he supports the idea of journaling in other classes because, “...it helps the teacher reflect on the progress of the course... and ... the class can see how they are [doing] in relation to the course guidelines and the professor’s thoughts on the individual course could prove to be vital to the student”.

Beth, who began the semester believing she already knew everything, also supported journaling in other classes, and interestingly, she, like Cain, also believed this activity to be as useful for the teachers as it is for the students; “...it [journaling] is beneficial to students, allowing them to reflect. It also allows teachers to gain insight on their students’ feelings toward certain activities and assignments”. Throughout the semester, Beth found she had much to learn; One of the biggest changes in my writing has been its organization. I have found that planning my paper beforehand through the use of an outline is extremely helpful. The outline allows me to organize my thoughts and research in a logical way. It also makes the paper less difficult to write because I have an order to follow. Another aspect that’s changed about my writing is that I take into consideration the audience I am writing to. By doing this my writing has become more effective and has purpose... I realized I have my own unique style and tone. I also noticed that by taking small steps before writing my paper makes writing easier for me. She attributes much of her evolution to journaling; “Journaling helped me develop more of a unique personal writing style as well as allowed me to reflect on what we did in class. It made me realize what I can do to improve my writing the next time or what was useful when I was writing”. The long-term impact of journaling will potentially be far-reaching, especially throughout Beth’s college experience; “I used to view writing as a daunting and obligatory task but now I view it as a creative and not so stressful task”. While neither she nor Randy initially acknowledged feelings of stress, it seems to be a reality for these students and potentially many more. Hugh initially began with a much more positive attitude than many of his peers, but found himself surprised at the daunting number of hurdles he confronted throughout the semester;

I found my writing was missing key components such as a focus, development, and organization. I was even failing to include a thesis in my papers... Addressing an audience was something I had never heard of before. It was new and confusing to me. I wondered why I had to direct it to an audience, and what significance that aspect had. The question is, “Did journaling impact his ability to engage better with the task, motivating him to persist in his evolution?” According to Hugh, the answer is “Yes”. “Reflection in writing made me reflect more on direction and development. It made me think deeper about the assignment”.

Unfortunately, due to her obligations in ROTC, another student-participant, Tasha, was unavailable to be interviewed, but for a student who was scared to begin her journey, she rose to the occasion nobly, tackling class assignments with commitment and dedication and this aided in her success;

“In writing I started to see my flaws as a writer. [I] began to see my lack of organization. I was writing paragraphs with multiple topics and I wasn’t articulating my point clearly enough for the reader to understand. I learned how to properly conduct research... This class taught me that it’s okay to do something over and over again, for desired results... I learned how to be a better persuasive writer. Tasha expressed these sentiments in her final reflective writing, but can her growth be attributed to journaling? In seeking the answer, I turned to her journal entries and saw evidence of internal dialogue which reflected the improvements she noted in her final reflections;

This week in class we are preparing to write our research paper and learning how to scrutinize different types of articles. I am nervous about this paper because writing is something I struggle with and I don’t feel strongly about my topic. I’m learning a lot in class but, I am mad at myself for not getting it right the first time. I wanna get better at writing and articulating myself on paper and expressing my point.... The tip that I will always remember is that no paper starts out great even the best writers edit themselves several times. Another tip was to write down my thoughts on paper and then sort it out. Constructivists might say that Tasha is developing insights through merging new knowledge with knowledge previously obtained (Feldman, 1994). Perhaps journaling promoted this process and allowed it to occur more naturally – through written dialogue. Yet another student, Pat, professed to starting the semester with sub-par writing skills. He also admitted that to him, writing was a task and far from enjoyable. At the end of the day, however, he happily announced that both his skill level and attitude were much altered. Interestingly, he was the only student who actually pointed to journaling, specifically, as being instrumental to his success, when writing his final reflection;

Writing in a journal of what I was going to write about in each paragraph helped to keep a well organized paper and good flow... Journaling has helped me reflect back on the events we learned weekly in class. It gave me the necessary time to focus on what I learned... Journaling impacted my writing skills by taking the information and applying it to my assignments... It made me realize my weaknesses in the writing area and what

I needed to accomplish/apply to when I work on project assignments... it helps me organize my thoughts and add necessary information to write a stronger paper. With more time and practice I hone my writing skills. The breadth and depth of comments focused on the journaling experience are perfect for one who earlier considered writing "a task". When encouraged to explore and take initiative, Pat was able to tap into his natural curiosity and internal motivation referred to in self-determination theory and this laid the foundation necessary for classroom engagement (Reeve, Deci, & Ryan, 2004; Vansteenkiste, 2010). Journaling allowed Pat to consider his strengths and weaknesses, helped to connect writing to purposeful communication, and as his thinking deepened, his concerns slowly strayed away from those which were focused on himself as writer, and inched towards those that were more concerned with others, his readers.

Now I'm learning to express how I feel about certain topics and learning about interesting facts while researching articles... Writing helps me to express my feelings and share my experiences with others. Since I have been writing more often, I have in fact become more observant of details and reflect on past experiences that have helped to add depth to the paper... Writing offers an opportunity for me to share my thoughts, ideas, and feelings on a given subject... I feel the best aspect of the paper should be how it attracts a reader and keeps them interested from start to finish. Having an exciting and interesting paper that has your own voice and it can really change someone's view on a topic. Not all student-participants experienced this kind of metamorphous, but the need to be heard, the freedom to express one's "voice" was not unique to Pat.

Jason was one of the few students who maintained that journaling had little use or importance to his evolution as either thinker or writer, although he did believe that the act of journaling spurred, "... growth through practice. By getting that chance to practice writing skills it allows me to work at it and get the skills I need to be a good writer". He did, however note the over-arching impact of the writing experience, saying, "This class course changes the writer but allows you to keep your voice. You basically take who you are as a person and write it down on paper only now you are doing it in a well-organized and structurally correct way". He also noted that he believed his thinking process had evolved. He wrote:

I am more curious... When doing research and coming across facts I don't just copy, paste, cite, but dig deeper. Is the author reliable? What credibility does this person have? Is this source .com, .org, .gov? Things that make you go, "yes, this is a reliable source". It doesn't stop there. When doing research, I sometimes get off track when I find interesting research. It's hard to turn it down. It was sometimes hard to stay on track because of all the new interesting facts that just kept popping up. At the end of the semester, Lisa told me, "I perceive the task of writing differently now because when I write, I want my writing to have a purpose and to really interest my readers". Importantly, she attributed her new-found goals to her journaling, telling me, "Journaling made me really think about what I learned and what I really got out of the class and what made the most impact on me". Her new understanding translated into practice, and writing, for Lisa, stopped existing in isolation. Instead it became a means of learning, but first she had to proactively decide what she wanted to know; "... having a lot of options to choose from helped me decide which I have a lot of information on and that I want to learn more about". Lisa learned not just about writing but about areas of interest because she was given options. Offering students the freedom to choose is in keeping with Montessori philosophy and is shown by research to be effective in enhancing motivation (Deci & Ryan, 1985). "I would definitely consider journaling on my own in the future because it really makes you think about what you learned and how the tools you learned help you for the next papers. It also helps you decide what you really want to write about".

While Olson (2009) believed that the act of writing, generally, created a pathway to learning and discovery, Britton (1975), and Fulkerson (1979) envisioned exploration and reflection as byproducts of expressive writing specifically. Fulkerson, like other expressivists, maintained that this genre of writing freed writers to discover, "... an interesting, credible, honest, and personal voice" (p.345). Throughout the semester, however, students were challenged to create essays that that both informed and motivated readers to movement.

Accomplishing this often herculean task required that students first become engaged with their own topics, educate themselves enough to become authorities, and to express their knowledge with color and flair. Students had to find a way to have a meaningful conversation with readers that would impact and initiate change. E-journaling was used as a means to motivate inner-dialogue, and it was hoped that through conversation with self, students would accrue knowledge – both on the topic and on themselves as thinkers and writers. With knowledge, according to self-determination research conducted by psychologists Ryan and Deci (2000, 2002), students would become both more intrinsically motivated and engaged. This, to a large extent, appears to have been the case. According to Fabian, one of the student-participants, "I learned that writing can motivate you to get deeper knowledge in a topic and it does not necessarily have to be boring".

The Relationship between E-journaling and Perceived Academic Growth

Past experiences can impact future behaviors. As educators, we understand that success begets success. In other words, students who feel capable and competent are more likely to enjoy learning, and ultimately, this motivation manifests in a life-long quest for knowledge which is one of the goals of education. In the last section, I studied how e-journaling altered students' perceptions about writing and thinking, and I considered whether the act of e-journaling engaged students to become more self-propelled in their learning. In this section, I study the results of enhanced engagement on self-perceived success. How did students envision their outcomes; did enhanced engagement, in their opinions, lead to increased learning? Did students intuit an increased level of knowledge, confidence and self-efficacy? First, I focused on participant-interviews. Here, students were asked to consider the impact of journaling, specifically, on their success. Their responses were overwhelmingly positive. Cain now envisions himself to be a, "...more confident and organized writer... my writing has improved night and day", and Beth was happy to discover to "...I have my own unique style and tone". Some students have set goals for themselves. Lisa wants her future writing, "... to have a purpose and to really interest my readers". Pat appreciates that he now has a, "...better awareness of the proper style of writing and organizing information to complete a paper" because he better understands, "...the importance of writing, especially since we communicate via email, twitter, technology, etc... I will come away with what I learned for my future use". Hugh walked away believing that he's now capable of thinking more deeply. While reflecting on writing, he and many of his peers seemed to consider not just their accomplishments but how they might utilize their newfound skills in the future.

Throughout the semester, Hugh's journal responses pointed to his self-perceived evolution. Comments like, "I'm very happy with the progress", and, "I am excited to write" led to increased persistence, and according to him, this persistence paid off. He now feels he has a, "...stronger foundation in writing" which will enable him to compose writing that's, "... much more solid overall", "...It makes you think about the great things you can do". He feels confident that he can now, "... write about something and actually put my opinion into it and make it a little argumentative (which I love)". Tasha too seems much more optimistic and has become a much more confident student; "Before this class I thought I was a horrible writer, but I don't think that now". To some degree, she has been transformed from one who needs help to one who instead offers it; "Maybe my journey can help someone start theirs". Some student, like Beth, appreciate improved skills for future academic purposes; "The tools I learned in writing and thinking class will prove extremely useful when I go on to write more papers in the future". Others, like Pat, look further forward and believe, "... the strategies and techniques will help me in the future as I go on to pursue a career". Before college, Lisa had been exposed to few scaffolding activities such as brainstorming, outlining, or essay revision, and she focused on these things in many of her e-journal entries. When offering her final reflections, she noted; I think my writing skills have definitely grown. However, it wasn't just my writing

skills that got better but my researching skills, and interviewing skills. Writing 100 taught me that taking the time to outline my papers before I start writing them will help me understand where I am going with my papers. This class also helped me editing and acting as my own audience to ask questions to help me better my essays. I think the things I learned in this class will help me in the future when it comes to writing papers for other classes. According to Jay, "I have grown leaps and bounds. I've learned a lot about myself and how I'm going to be successful in an environment such as college". He seemed excited to share his newly acquired knowledge; I've not only used these lessons in my writings in her [Mrs. Halm's] class but also in my other classes. When doing a paper for Religion or even helping a friend with a paper, every aspect of a good writer is expressed and when reading I can hear the voice speaking to me as if it were being read to me. Writing is more than writing words on paper...you're holding a conversation and just speaking your mind. Other participants appreciate not just their improved skills but newfound passion. Zack reported, "I've not only gotten my love for writing back, but I strengthen my voice because of it. It has made me a better and more passionate writer and speaker". Jack, a future lawyer, left the class with a clear sense of purpose for his new knowledge; You need to be able to communicate well in this day and age regardless of who you are. You have to reach people... you need to be able to get the information across to them so they understand and understand completely. It's not about how smart you already are or are trying to sound... I will always remember the skills I learned in writing 100 and fine tune them every day to make myself not only a better writer but a better communicator as well. Though Andy offered little during e-journaling, he attributed the activities we completed throughout the semester, those things I asked students to consider while e-journaling, to his ultimate success; Through the various papers we wrote, the vast amount of ideas we researched and the many sub-assignments we completed in class, I acquired skills that I will never lose because they will be incorporated in my everyday life, in my job, and at home.... I learned that I can actually think and write, as opposed to what my high school papers said.

At the end of the day, many student-participants believed themselves to be more capable and even enthusiastic about the prospects of future writing opportunities, at least according to what they told me during interviews and in their written reflections at the end of the semester. This was good news - maybe too good.

Therefore, I revisited the many e-journal entries completed by the students throughout the semester in search of insights and evidence to support and help me better understand how and why their attitudes and identities were seemingly so profoundly transformed. I found many instances of students, sometimes chiding themselves but more often reassuring or congratulating themselves, for persisting, overcoming, learning, and ultimately growing throughout the semester. As early as three weeks into class, students like Beth were connecting activities with outcomes, and reflecting on hurdles and areas of growth. Observations such as, "... writing is a good way to discover new ideas and view things in a way I may never even thought of before", "I've been learning a lot these past few weeks and that what I'm learning in writing class is proving extremely useful helping me in my other classes" and, "I'm not the only one that makes mistakes" appear indicative of this student's ability to process and transform information – constructivism in action. By November, Beth was immersed in the low-stakes journaling process and with no hesitation, she reflected on her writing experiences before college:

When I first came into writing class in the beginning of the year I didn't like writing. I always wanted to avoid it because every time I wrote a paper it was stressful and frustrating. I had these feelings because I was never sure how to convey my thoughts clearly and most of the topics I wrote about were not relatable to me or I didn't find them interesting. I feel that my experiences with writing in the past are what made me dislike it so much. Throughout high school I wasn't given a lot of opportunities to write creatively which is what caused me to think of writing as a dry and boring task. The few opportunities I did get to be creative with writing and choose topics that appealed to me I will say made writing more enjoyable for me. Now in writing class my feelings on essays and research have changed a lot since I first arrived in September. I find that I don't view writing as such a daunting task anymore because I've learned how to organize my thoughts and what components I need to have to write a good paper. I also learned how important it is to have a clear focus and accurate research. I now feel like I have the necessary tools to write more effectively making writing way less scary than it used to be. In this case, as well as many others, journaling did indicate growth and internally-mediated change, and Simon's (1978) theory does seem to bear out; "simply to record our behavior is to interfere with it" (Andrusyszyn & Davie, 1997, ¶1).

Tasha's journey was not without a certain number of trials and tribulations, but over the course of just two months, the transformation of her ideological identity was immense. In October she wrote, "

This week in class we are preparing to write our research paper and learning how to scrutinize different types of articles. I am nervous about this paper because writing is something I struggle with and I don't feel strongly about my topic. I'm learning a lot in class but, I am mad at myself for not getting it right the first time. I wanna to get better at writing and articulating myself on paper and expressing my point. By contrast, here are some of the things Tasha noted as she offered her final reflections in December:

[I] learned how to properly conduct research... I learned how to be a better persuasive writer... it's okay to do something over and over again... I started to see my flaws as a writer... I was writing paragraphs with multiple topics and I wasn't articulating my point clearly enough for the reader to understand... I rewrote my paper three times and each time I rewrote it I started from the beginning. I know with more time I could've made it better... Every paper I have written after my moment of clarity with my lack of organization, I received no grade lower than a B on my papers... digging into a topic of my choice made it seem easy in my essay... class has been fun... I enjoyed writing... at the end I loved my paper. Emig (1977) wrote, "Writing represents a unique mode of learning – not merely valuable, not merely special, but unique" (p.122). In Tasha's reflection, she makes clear how the act of composing, both in essays and in e-journal entries, allowed her to re-imagine both the task and her identity, increased her level of knowledge, allowed her to tap into her natural curiosity, and to unleash her creativity. While essay assignments called on cognitive skills, journaling begged her and her peers to consider issues on a metacognitive level.

VI. CONCLUSIONS

Berthoff (1983) believed that students need "assisted invitations" to "think aboutthinking" so they might better understand what they are doing and why (p.85). E-journaling gave participants that opportunity and there is evidence of the personal growth that Kerka (2002) predicted. As students engaged in this form of inner-dialogue, new knowledge mingled with that already established, and this yielded insights (Feldman, 1994). As Astin's (1999) involvement theory suggests, student learning was precipitated by direct involvement in their own learning and to varying degrees students found inspiration; they were motivated by the challenge, fully engaged with the task. Personal discovery fostered learning which increased motivation and this drove an increased level of interest in pursuing their task. In concert with academic challenge and feedback, students were able to internalize and display competency.

They were encouraged to explore and to take initiative and many students achieved autonomy. They found their voices, and did indeed become both more intrinsically motivated and engaged.

This translated to more and better learning but one should not consider the act of journaling, in isolation, as the sole reason for this outcome. Thought-provoking, interactive exercises act as fuel for the fire. Cooperative opportunities for learning engage students and promote interaction with peers and instructor. Over the course of the semester, student-participants became both formally and informally integrated into the existing academic and social systems and this, according to Tinto's (1993) individual departure theory, increased the likelihood of persistence throughout college. These students reacted to peer and instructor response in much the same way as those in Sommers' 1982 study; feedback, did shape their writing experiences. The findings of my study mirror those of Schunk's (1993); feedback, especially in concert with progress goal setting, strongly impacted self-efficacy. As students met goals, self-efficacy increased. This increased sense of agency acted as a motivator, and this impacted the quality of writing. Self-efficacy was, in turn, highly predictive of writing skill and strategy use. When students reflected on their efforts in class afterwards, writing acted to promote learning as Applebee (1987) believed would be the case. In keeping with expressivist theory, students responded that journaling enabled them to find their own voices and reduce their level of stress. Writing about personal subjects aided students in their innate quest for self-discovery.

Suggestions For Further Research

The size of this study was small, and although all 17 students initially agreed to Participate, not all of them journaled on a regular basis. Students in this study chose to participate, and those who did so were, perhaps, more motivated to succeed. This might create a scenario in which a self-fulfilling prophecy is more likely. Some participants journaled weekly, while others reflected far less frequently. This open-door method was intentional. In order to create a non-threatening, low-stakes environment, students were invited rather than mandated to use e-journals, and those who availed themselves of the opportunity did indeed find themselves more engaged, more informed, and more motivated to learn. A larger study would potentially be enlightening and prove useful in ascertaining the validity of my findings. It might also be interesting to pursue a study in which all students were included. This would perhaps better reflect students' use of e-journaling, especially with those students initially disinclined to participate. Assigning a value reflected in a grade, while detracting from the ideal low-stakes environment, could propel more journaling and the findings could potentially help researchers identify ways to engage those students who might otherwise finish the semester having benefitted little from their time in composition. My last suggestion focuses on how instructors might assist students in the journaling process. Throughout the study, I e-mailed students with a short recap of the week's activities. Because of their lack of familiarity with journaling, some seemed unsure how to proceed. Therefore, offering, but not mandating, direction could potentially help students to focus and reflect on issues they had previously failed to consider.

REFERENCES

- [1]. ACT, Inc. (2006). National collegiate retention and persistence to degree rates. Iowa City, IA: http://www.act.org/research/policymakers/pdf/retain_2006.pdf
- [2]. Act, Inc. (2012). National collegiate retention and persistence to degree rates. Retrieved: http://www.act.org/research/policymakers/pdf/retain_2012.pdf
- [3]. Andrusyszyn, M., & Davie, L. (1997). Facilitating reflection through interactive journal writing in an online graduate course: A qualitative study. *Journal of Distance Education*, 12(1).
- [4]. Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518.
- [5]. Bazerman, C. (Ed.). (2008). *Handbook of research on writing: History, society, school, individual, text*. Mahwah, New Jersey: Erlbaum.
- [6]. Berthoff, A. E. (1983). How we construe is how we construct. In P. L. Stock (Ed.), *Forum: Essays on theory and practice in the teaching of writing* (pp.166-170). Portsmouth, NH: Boynton/Cook.
- [7]. Boulton-Lewis, G. M. and Tait, K. (1994). Young children's representations and strategies for addition. *British Journal of Educational Psychology*, 64: 231-242.
- [8]. Bransford, J. D., Brown, A. L. & Cocking, A. R., editors (2000).
- [9]. *How people learn: Brain, mind, experience, and school*. National Research Council, National Academy Press, Washington, DC, 346 pp.
- [10]. Britton, J., et. al. (1975). *The development of writing abilities (11-18)*. Schools Council Publications.
- [11]. Brooks, J.G. & Brooks, M.G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- [12]. Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- [13]. Caine, R N & Caine, C 1994, 'Mind/Brain Learning Principles'. In *Making connections: Teaching and the human brain*. Addison-Wesley.
- [14]. Clay, M., & Cazden, C. (1990). In L.C. Moll (Ed.), *Vygotsky and education: Instructional implication. A Vygotskian interpretation of reading recovery and application of sociohistorical psychology*, 206-222.
- [15]. Creswell, J. (2007). *Qualitative inquiry & research design*. Thousand Oaks, CA: Sage Publications.
- [16]. Cyboran, V.L. (2005). Fostering workplace learning through online journaling. *Performance Improvement*, 44(7), 34-39.
- [17]. Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- [18]. Dewey, J. (1913). *Interest and effort in education*. Cambridge, MA: Riverside.

- [21]. Drpamelarutledge. "The Positive Side of Video Games: Part III". paper blog. Retrieved 5/1/14 from <http://en.paperblog.com/the-positive-side-of-video-games-part-iii-294723/>
- [22]. Elbow, P. (1998). *Writing without Teachers* 2nd ed. Oxford University Press, USA.
- [23]. Ellis, R. A. (2004). Student approaches to learning science through writing. *International Journal of Science Education*, 26(15), 1835–54.
- [24]. Emig, J. (1977). Writing as a mode of learning. *College Composition and Communication*, 28(2), 122-128.
- [25]. Ferrari, J. R., O'Callaghan, J., & Newbegin, I. (2005). Prevalence of procrastination in the United States, United Kingdom, and Australia: Arousal and avoidance delays among adults. *North American Journal of Psychology*, 7, 2-6.
- [26]. Feldman, D. (1994). *Beyond universals in cognitive development*. Norwood, NJ: Ablex.
- [27]. Fulkerson, R. (1979). Four philosophies of composition. *College Composition and Communication*, 30: 343-48
- [28]. Gable, R. K., & Wolf, M. B. (1993). *Instrument Development in the Affective Domain*. Boston: Kluwer.
- [29]. Hogsette, D. (2012). Develop critical thinking skills through journal writing. *Teaching Tips From CUTLA*, issue 7.
- [30]. Humes, A. (1983). *Review of Educational Research*, 53 (2).
- [31]. Jonassen, D. H., Davidson, M., Collins, M., Campbell, J., & Haag, B. B. (1995). Constructivism and computer-mediated communication in distance education. *The American Journal of Distance Education*, 9(2), 7-26.
- [32]. Kerka, S. (2002). Journal writing as an adult learning tool. *The Clearing House on Adult, Career, and Vocational Education (ACVE)*: <http://www.cete.org/acve/docgen.asp?tbl=pab&ID=112>
- [33]. Killion, J. (1999). Journaling. National Staff Development Council, *Journal of Staff Development*, Summer 1999.
- [34]. Kinneavy, J. (1971). *A theory of discourse*. New York: Norton.
- [35]. Lang, A. (2014). Using online learning journals to enhance students' engagement with literary theory. *The Higher Education Academy*. Accessed March 23, 2014. <http://www.english.heacademy.ac.uk/explore/publications/casestudies/technology/journals.php>
- [36]. Langer, J.A. & Applebee, A.N. (1987). *How writing shapes thinking*. Urbana, IL: National Council of Teachers of English.
- [37]. Le Compte, M. and Preissle, J. (1993): *Ethnography and Qualitative Design in Educational Research*. London: Academic Press Inc.
- [38]. Longhurst, J., & Sandage, S. A. (2004). Appropriate technology and journal writing: Structured dialogues that enhance learning. *College Education*, 52(2), 69-75.
- [39]. Murphy, Curtiss (2011). "Why Games Work and the Science of Learning". Retrieved 5/1/14 <http://www.goodgamesbydesign.com/2011/07/why-games-work-the-science-of-learning/>
- [40]. National Center for Education Statistics. (2012). *Fast Facts*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=40>
- [41]. Newell, G.E. (2005). Writing to learn: How alternative theories of school writing account for student performance. In MacArthur, C.A. Graham, S., & Fitzgerald, J. (eds.) *Handbook of Writing Research*. Guilford Publications.
- [42]. Olson, G. (2009). "Toward a Post-Process Composition: Abandoning the Rhetoric of Assertion." *Post-Process Theory: New Directions for Composition Research*. Ed. Thomas Kent. Carbondale: Southern Illinois UP. P. 7–15.
- [43]. Özer, B., Demir, A., & Ferrari, J. (2009). Exploring Academic Procrastination Among Turkish Students: Possible Gender Differences in Prevalence and Reasons. *Journal of Social Psychology*, 149(2), 241-257.
- [44]. Parsons, S. A. "Providing All Students ACCESS to Self-Regulated Literacy Learning." *The Reading Teacher* 6, no. 18 (May 2008): 628-635.
- [45]. Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. Volume 2. Jossey-Bass, an imprint of Wiley.
- [46]. Peterson, S., & Kennedy, K. (2006). Grade six teachers' feedback on girls' and boys' narrative and persuasive writing. *Written Communication*, 23(1), 36-62.
- [47]. Peterson, S., R. Childs and K. Kennedy. 2004. Written feedback and scoring of sixth-grade girls' and boys' narrative and persuasive writing. *Assessing Writing*, 9: 160-180.
- [48]. Phipps, J. J. (2005). E-journaling: Achieving interactive education online. *Educause Quarterly*, 28(1).
- [49]. Principles for Learning: A Foundation for Transforming K–12 Education. NCTM. Retrieved 5/1/14 from: nctm.org/uploadedFiles/Research_Issues_and_News-Section_Navigation/Legislation/Principles_for_Learning_May_2010.pdf
- [50]. Rathunde, K. & Csikszentmihalyi, M. (2005), "Middle school students' motivation and quality of experience: A comparison of Montessori and traditional school environments", *American Journal of Education* 111 (3): 341–371.
- [51]. Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding the sociocultural influences on student motivation. In D. McInerney & S. Van Etten (Eds.), *Research on sociocultural influences on motivation and learning: Big theories revisited* (Vol. 4, pp. 31–59).
- [52]. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- [53]. Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). Rochester, NY: University of Rochester Press.
- [54]. Saldana, J. (2013). *The coding manual for qualitative researchers*. L.A., CA: Sage.
- [55]. Scherer, K. R. (1999). Appraisal theories. In T. Dalgleish, & M. Power (Eds.). *Handbook of Cognition and Emotion* (pp. 637–663). Chichester: Wiley.
- [56]. Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- [57]. Schouwenburg, H. C. (2004). Academic procrastination: Theoretical notions, measurement, and research. In H. C. Schouwenburg, C. H. Lay, T. A. Pychyl, & J. R. Ferrari (Eds.), *Counseling the procrastinator in academic settings* (pp. 3–17). Washington, DC: American Psychological Association.
- [58]. Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things we do: A grounded theory of academic procrastination. *Journal of Educational Psychology*, 99(1), 12-25.
- [59]. Schunk, D. H., & Swartz, C. W. (1993). Goals and progress feedback: Effects on self-efficacy and writing achievement. *Contemporary Educational Psychology*, 18(3), 337-354.
- [60]. Shannon, S. (2008). Using metacognitive strategies and learning styles to create self-directed Learner. *Institute for Learning Styles Journal*, vol. 1.
- [61]. Shoham-Saloman, V., Avner, R., & Neeman, R. (1989). You're changed if you do and changed if you don't: Mechanisms underlying paradoxical interventions. *Journal of Consulting and Clinical Psychology*, 57, 590–598.
- [62]. Smith, K. S. (2003). Increasing motivation, clarity, and depth in writing assignments for at-risk students. *The E-Journal of Teaching and Learning in Diverse Settings*, 1(1), 94–104.
- [63]. Snyder, C.R. & Lopez, Shane J. (2007), "11", *Positive Psychology*, Sage Publications, Inc., ISBN 0-7619-2633-X.

- [65]. Solomon, L. J., & Rothblum, E. D. (1984). Procrastination Assessment Scale- Students (PASS). In J. Fischer & K. Corcoran (Eds.), *Measures for clinical practice* (pp. 446-452). New York: The Free Press.
- [66]. Sommers, N. (2006). Across the Drafts. *CCC* 58(2): 248-256.
- [67]. Sommers, N. (1982). Responding to Student Writing. *CCC* 33(2): 148-56.
- [68]. Stern, L. A. & Solomon, A. (2006). Effective faculty feedback: the road less traveled. *Assessing Writing*, (11)1: 22-41
- [69]. University of Hartford, College of Education, Nursing, and Health Professions, Division of Education.(2005). *Conceptua framework for educational programs*. West Hartford, CT.
- [70]. Williams, J. (2014). *Preparing to teach writing: Research, theory, and practice*. Routledge.
- [71]. Valencia, S., & Pearson, P. (1988). Principles for classroom comprehension assessment. *Remedial and Special Education*, 36, 31-33.
- [72]. Vansteenkiste, M., Niemiec, C. P., & Soenens, B. (2010). The development of the five mini-theories of self-determination theory: An historical overview, emerging trends, and future directions. *Advances in motivation and achievement: The decade ahead: Theoretical perspectives on motivation and achievement*, 16A, 105-167.
- [74]. Vygotsky, L.S. (1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: MIT Press. (Original work published 1934).
- [75].

Appendix A Letter Requesting Participation

Information Sheet

Invitation to Participate in a Research Project

Introduction: You have been invited to participate in a research study titled “The Impact of E-Journaling on Student Thinking And Academic Writing.” This study is being conducted by Diane Halm under the supervision of Dr. David Bruce in the Department of LAI, University at Buffalo. This research study is intended for adult participants who are 18 years of age and over. If you are not yet 18, please do not participate in this study.

Volunteer Status: While journaling will be required as a class requirement, your participation in this study is completely voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled as a student at Niagara University. You have the right to refuse to answer particular questions during out student-teacher dialogues. You may elect to withdraw from this study at any time and the information we have collected from you will be destroyed. If you become upset during the survey, simply stop answering the questions. Any significant new findings developed during the course of the research, which may relate to your willingness to continue participation, will be provided to you.

Purpose :The purpose of this study is to determine the effectiveness of a reflection strategy, e-journaling, on engagement and motivation, culminating in better expository essays. It is hoped that this research will further our ability to motivate active learning and that engagement will yield improved student achievement. Should the study show reflective writing to positively impact student engagement and achievement, the practice could be implemented in all WRT 100 classes as well as other academic classes. Approximately 20 participants will be involved in this study.

Procedure: You will be reflecting on your class work and progress weekly, throughout the semester. Additionally, you and I will discuss your thoughts and concerns on a one-to-one level. With your permission, these chats will be audio-recorded so I might transcribe conversations, and study the information later. Submitted essays may also be used in the creation of this research study.

*Please note – All permission slips will be collected by our English dept. secretary. She will keep them for me until the end of the semester – until after your grades are submitted. At that time, I’ll collect the envelope, open it, and see who has agreed to participate in the study. Only data from those who have signed the permission slips will be used. I hope this will eliminate any undue pressure to participate and/or assuage any fears you might have that your willingness to participate might impact your class grade. I will not know who is participating until your grades have been submitted.

Time Commitment: Your participation in this study will not call for any additional time – either in or out of class.

Risks: There are no known risks to participating in this research.

Benefits: There is likely no direct benefit to you for participating in this study, but it will help us (and other teachers) to develop more effective ways to engage students and support their academic growth.

Payment: There is no cost to you to participate in the interview, nor will you be financially compensated for participating in this study.

Confidentiality: Your individual privacy will be maintained in all published and written data resulting from the study. The data will be kept in a locked room where it will remain for approximately five months following the completion of the project. At that time the data will be destroyed. If you withdraw from this study, no further data will be collected but any information that you have provided may be retained by the researcher and analyzed. In order to monitor this research study, representatives from federal agencies such as NIH (National Institutes of Health) and OHRP (Office of Human Research Protection) or representatives from the UB Human Research Protections Program may inspect the research records. This process may reveal your identity.

For Further Information

Any questions, concerns or complaints that you may have about this study can be answered by Diane Halm. (716) 836-6981 ddrjh@aol.com or her faculty sponsor Dr. David Bruce, who can be reached at (716) 645-3172 or dlbruce@buffalo.edu

If you have any questions about your rights as a subject in a research project, or questions, concerns or complaints about the research and wish to speak with someone unaffiliated with the project, you should contact (anonymously, if you wish) the Social and Behavioral Sciences Institutional Review Board, 515 Capen Hall, University at Buffalo, Buffalo, NY 14260, or by phone 716 / 645-6474. By signing this document, you are agreeing to participate in this research study, for which I am very grateful. Thanks much for your consideration.

First Name

Last Name

Date

Appendix b

Final reflection prompt

Please write an essay directed to the Director of the Writing program in which you reflect upon your work in writing class this semester. The purpose of your essay is to give the audience insight into what you learned this semester about yourself as a writer, about your writing process, and about the subject of writing.

Appendix C

Questions for Student Interviews

You've spent the semester working on writing projects. Now that it's all done, can you tell me:

1. In what ways do you think you've changed as a writer?
2. What have you come to understand about your own thinking and writing?
3. Do you perceive the task of writing differently now, and if so, how?
4. What part, if any, did journaling play in your evolution?
5. In what ways did journaling impact your growth as a writer?
6. Did writing about writing change the way you viewed assignments?
7. Would you consider journaling, on your own, for future writing assignments?
8. Do you think teachers should include journaling for writing assignments in other classes?