Preaching What We Practice: A Study of Revision

Shelbie Witte
Florida State University

Abstract

In this article, a three-tiered nationwide study of the pedagogical implications of teachers' revision practices in digital writing environments is discussed. The study investigates the use of revision in the personal and professional writing of teachers and the teaching of revision in their own classrooms. During a three year period, data were collected from a sampling frame of 150 National Writing Project Summer Institute sites, resulting in 181 study participants, and included a longitudinal pre- and post-survey (including Likert survey items and open-ended questions), focus group and follow-up questions, and analysis of writing/revision samples. Results indicated that the strategies that teacher-participants historically used when revising their own writing were not the strategies they used with students. After attending the National Writing Project (NWP) Invitational Summer Institute (ISI) and participating in the associated Electronic Anthology (EA), however, the practices that the study's teacher-participants embraced while teaching writing revision to students in their own classrooms aligned more closely with the practices that they employed in editing their own writing.

Legend has it that in 2003, Billy Collins was giving a poetry reading in a bookstore in New York City. A fortunate group of graduate students had enrolled in a poetry class that semester at Lehman College, CUNY, and were dumbfounded to find that their instructor was none other than the poet laureate of the United States. Students in the class were often asked to attend poetry readings in lieu of attending traditional classes at Lehman and were on hand to hear Collins recite lines from "Litany," "Dharma," and "On Turning Ten," among others. After thanking guests for their attendance, the class observed Collins as he walked up to a shelf, pulled down a copy of his published collections of poetry, turned to a specific page, took the pen from his pocket, and began writing on the page.

"Another autograph?" a student asked, as Collins considered the page again, scribbled once more, and placed it back on the shelf.

Collins shook his head. "No, a revision. I'm always revising."

We live in a world of revision. Whether it be the ways in which we approach our lives, alter a recipe, accessorize an outfit, or modify our golf swings, our world evolves because of the revision that happens within it. Our writing, too, evolves as we consider ways to add to our prose, remove words from our poetry, reorganize our arguments in analyses, and substitute better words for almost-right words (Elbow, 1973; Murray, 1980; Sommers, 1980; Yagelski, 1995).

In a culture of *faster, instantaneous, right here right now, at your fingertips* living, the idea of revisiting a task seemingly already completed is a daunting one. Such an important function of writing pedagogy, revision is one of the most difficult things to teach (Applebee, 1981; Kirby & Liner, 1980; McCutchen, Francis, & Kerr, 1997; Sneed, 1988). Unfortunately, true revision is also rarely taught (Bridwell, 1980; Emig, 1971; Fitzgerald, 1987; Saddler, 2003).

The Teaching of Revision

Revision proves a difficult process to teach and model (Bisallion, 2007; Kirby & Liner, 1980; McCutchen et al., 1997; Saddler, 2003; Sneed, 1988; Sommers, 1980). Revising is a slow, arduous, laborious, and complex task in which one must reflect over time on the piece of writing and the changes that might be needed. Students may revise, but "they may settle too quickly on a particular choice without trying other possibilities to determine if another way exists" (Saddler, 2003, p. 21). Frequently, students do not know how to or do not want to take the time needed to consider the many possible ways of improving a piece of writing or assume that revision is completed when surface errors, such as spelling and grammar, are corrected. An aversion to the word revision has developed perhaps because it has yet to be clearly defined (Sommers, 1980). For the purposes of this study, revision is defined as a sequence of changes in a composition, in which ideas, words, and phrases are added, deleted, moved, or changed throughout the writing of the work (Sommers, 1980).

Teachers of writing must take on several different roles: they must guide students through the writing process, act as audience to students' writing, and evaluate or assign a grade to student work. Teachers are torn between these roles causing feedback that tends to fall on a continuum between evaluative feedback, which tells students how well they met the requirements of the assignment, and formative feedback, which asks the writers to clarify and reshape their pieces to effectively communicate their points (McGarrell & Verbeem, 2007). Teachers need to help students realize that revising is not about just fixing grammatical and surface errors, but also refers to the strength of an argument and overall structure of the piece, including content (Sommers, 1980). How teachers see their role and their relationship to students' writing affects the feedback they give.

When teachers or peers focus their feedback on marking grammatical or syntactical errors, student writing suffers. A focus on grammatical errors or a concern for correct form over the development of content and ideas can quickly cut off the excitement of composing (McGarrell & Verbeem, 2007; Perl, 1979). On the other hand, teacher feedback on idea development and content can effectively help students improve content. Feedback on content is

> based on the rationale that writers will be motivated to revise if they are confident that the intended audience will treat their work seriously, will want to know what

writers have to say, and will respect their authority as writers to make decisions. (McGarrell & Verbeem, 2007, p. 231)

Lack of Revision in the Curriculum

The lack of revision, both in assessments and explicit instruction, has led to students overlooking or gravely underemphasizing the revision process in their writing. Revision is a central and important part of writing and more competent writers show signs of prolific knowledge of revision strategies, whereas beginning writers make surface edits to their papers and believe the revision is complete (Graham & Perin, 2007; Lehrer & Comeaux, 1987).

Composition as a field does not lend itself easily to specific defining of its processes. Researchers, philosophers, and authors alike have been attempting to pinpoint a specific definition of writing processes, specifically revision, since the start of the field (Flowers & Hayes, 1981; Murray, 1978; Wray, 2004). Writing process models that have been and continue to be most prominent in education are the linear model of pre-writing, writing, and post-writing. Linear writing models tend to direct away from revision in writing and break up a nonlinear, recursive process into discrete stages (Sommers, 1980).

In summary, the recursive and problem-solving nature of revision is clear. The existing scholarship describes the lack of or uncertainty of revision instruction in the classroom, the unwillingness for students to revise, and the types of revisions students make when they do revise. Little is understood, however, about the relationship between the personal use of revision in teachers' own writing and the teaching of revision in their classrooms (Dutro, 2006; Gere & Stevens, 1985; Murray, 1978; National Assessment of Educational Progress & Educational Testing Service, 1986; Scardamalia & Bereiter, 1986). An exploration of the dichotomy between what we practice as writers who revise and what we preach as important in our teaching of writing in our classrooms was warranted.

Method

The purpose of this longitudinal mixed-method study (Greene, Caracelli, & Graham, 1989) was threefold and was designed to investigate ways that 1) teachers use revision in their own writing; 2) digital writing environments' impact on revision and revision instruction; and 3) the revision process is implemented into teachers' classrooms. Therefore, the research questions guiding the study were:

- In what ways do teachers of writing use revision in their own writing?
- How do digital writing environments impact revision and its instruction?
- What are teachers' perceptions of revision in their own writing and in writing instruction in the classroom?

Participants

The accessible population for this national study was a sampling frame of 150 participating sites of the National Writing Project Summer Institute E-Anthology (NWP E-A). A professional development network, The National Writing Project (NWP) supports teachers of writing in all subjects and at all grade levels to improve school and student achievement through research-based writing pedagogy. The NWP network is comprised of nearly 200 local sites hosted in universities and colleges in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands (National Writing Project, 2013). Each summer, NWP sites host NWP Invitational Summer Institutes (ISI) for thousands of teachers interested in learning more about writing and the teaching of writing, following the core principle that the best teachers of writing are writers themselves. Teachers meet daily face-to-face for several weeks to write, research, collaborate, and demonstrate pedagogical approaches to the teaching of writing. One facet of participation available to connect NWP sites to one another is the NWP E-A. The NWP E-A is an online, collaborative digital environment provided to summer institute sites to encourage active participation of the ISI participants. The NWP E-A, facilitated by experienced writing project teacher-consultants (those that have completed summer institutes), provides participants a safe online space to share, reflect, revise, and receive comments from a national audience of teachers on their writing and reflections during the institute. Forums available in the NWP E-A included (a) "Open Mic," an open forum for all genres, forms, and topics of personal writing and (b) "Classroom Matters," a professional writing forum focusing specifically on professional writing, advocacy writing, and pedagogical approaches to writing in the classroom. Feedback is given by E-A participants to the writing posted based on the type of feedback requested from the participant: Bless, Address, or Press. Participants who want more constructive feedback on their writing for positive reinforcement (Bless), ask specific questions of those giving feedback (Address), or ask for a critical review of their work (Press). Participants have the option of posting revisions to the original pieces after they consider the feedback received.

Of the 150 participating sites, a multistage cluster sample of ten NWP sites were randomly selected to participate in the study, yielding 181 study participants. This random sampling was determined by the constraints that the participants (a) post-writing to the "Open Mic" forum and "Classroom Matters" forum of the NWP E-A, (b) ask for Press or Address feedback from NWP E-A participants, and (c) post a revision of the piece to the "Open Mic" forum.

Data Collection

Data were collected in three tiers (see Table 1). Tier 1 of the study, enacted during the summer of 2009, involved 181 E-A participants from a random sampling of 150 NWP sites participating in the 2009 NWP E-A (see Table 2). After obtaining consent, participants completed a pre-survey (Appendix A) at the beginning of the

summer institute and post-survey (Appendix B) at the conclusion of their summer institute. The survey included demographic information as well as open-ended questions related to the research study goals. Additionally, all pieces of writing posted to the E-A by the study participants were collected.

Table 1

Tier Summary

Data Collection Cycle	Data Collected	Participants
Tier One	Pre-survey Post-survey E-A postings of writing E-A postings of revisions	181
Tier Two	Focus group One-on-one follow-up interviews	27
Tier Three	E-A postings of writing E-A responses to writing E-A postings of revisions	16

Table 2

Snapshot of Tier-One Study Participants, n=181

Demographics	
Teaching Assignment	
English Language Arts	45%
Elementary	20%
Special Education	5%
Foreign Language	4%
Reading	4%
Science	4%
Social Studies	4%
Math	4%
Other*	10%
Instructional Level	
K-5	31%
6-8	27%
9-12	37%
University	4%
Other*	1%
Classroom Experience in Years	
<3	26%
3-to-5	20%
6-to-10	16%
11-to-15	17%
>15	22%

* Other is from one of the following subjects: Speech, Composition, Literacy Coach, ELL, Arts/Humanities, Music, FACS, Counselor, Principal, Careers, Curriculum Specialist

Tier 2 of the study included a focus group for 2009's E-A participants, which was held at the NWP Annual Meeting in Philadelphia, Pennsylvania. Following participation in the NWP E-A, participants were asked questions related to the teaching of revision in their classrooms, digital writing environments, and computer access for students. One-on-one follow-up interviews were conducted with E-A study participants who were interested in continuing with the study, but who could not travel to the annual meeting.

Tier 3 of the study, conducted in summer 2010, focused on the writing and revision within digital writing environments, specifically the ways in which revisions by summer institute participants were coached and encouraged by responders on the 2010 NWP E-A. Sixteen study participants from Tier 1 participated as respondents in Tier 3.

Survey

The pre-survey and post-survey developed for use in this study included demographic questions, open ended questions regarding revision and writing in digital environments, a twenty-item, seven-point Likert scale regarding teachers' understanding of and use of revision in their own writing and teachers' pedagogical approaches to the teaching of revision in the classroom. Validity on each survey was established through three phases. In the spring of 2009, an initial draft of the pre- and post-survey was distributed to 15 area K-12 classroom teachers not in the study population. Based on their recommendations, changes were made to the surveys to improve the phrasing of questions and the format of seven items. The revised surveys were independently reviewed by university experts in four of the following areas: 1) professional development, 2) research methods, 3) rhetoric and composition, 4) English education. Revisions to the surveys were made until consensus was achieved. Finally, the surveys were distributed to 20 National Writing Project consultants not in the study population. Feedback was solicited on the ease of use, question order, clarity of questions in the context of the NWP ISI experience, and word choice. Final revisions were made to the surveys for use in this study.

Analysis

Data collection for the study was completed in September 2010 and analysis of all three tiers concluded in early 2012. Each artifact and data set was analyzed and evaluated independently by tier. Analysis methods employed during Tier 1 included content analysis of the open-ended survey questions and coding of drafts and revisions posted to the E-A. The focus group transcripts and follow-up interviews collected in Tier 2 and the postings of writing, revisions, and constructive feedback in Tier 3 were analyzed using discourse analysis and open coding. Findings from each tier were ultimately combined for a longitudinal comprehensive overview in relation to the research questions. Viewing the data set as a whole enabled the researcher to identify patterns in teachers' use of revision in their own writing and in their classroom instruction.

Results

Analysis of the survey, focus group and follow-up interviews, and E-A writing, revisions, and feedback resulted in eight themes (see Figure 1).
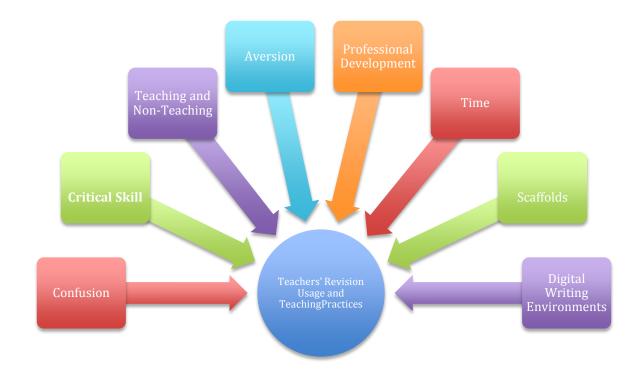
Figure 1. Emerging themes from data analysis.

Theme One: Revision Confusion

One of the primary questions asked of all E-A study participants was "What IS Revision?" Approximately half of the participants cited a definition based on the etymology of the word revision, which is from the Latin "to visit again, to look at again." Several cited definitions similar to Murray (1980), reporting, "writing in itself is revision," while others referred to revision in a manner similar to Elbow (1973) in that they "look for awkward places within the writing." The remainder of the study participants were not exactly sure how to define revision. A 2nd grade teacher reported that revision "was looking for capitalization and punctuation," while a middle school math teacher reported that revision "was writing a fresh copy of a draft so that there aren't red marks on it."

Survey results clearly indicate that there were many E-A study participants who did not know the differences between revision and editing. While some participants likened revision to *fixing the car* and editing to *painting the car*, a significant number of participants believed revision and editing were the same process or did not acknowledge revision at all, defaulting to a common definition of proofreading as editing. Interestingly, a few participants wondered why it really mattered anyway. A high school English teacher commented, "Maybe they used to be separate, but in the world of synchronous composition in digital environments, aren't we revising and editing at the

same time?" With such a varied degree of understanding of the definition and concept of revision, an investigation was needed into the ways in which the participants used revision in their own writing and how revision was taught in their classrooms.

Theme Two: Revision as Critical Skill

It is no surprise that when asked about revision, more than 95% of E-A study participants (pre-institute) said that they use revision strategies in their own writing. Text manipulation (add/move/change/delete) and questioning the purpose and audience of the writing were the common revision activities noted by the participants. Reading the piece of writing aloud to one's self was a popular strategy among the study participants. An elementary school teacher noted, "I read aloud to look for internal consistency of ideas within the paper as a whole and then in smaller parts." A middle school reading teacher noted, "Reading the paper so that I can hear it helps get me out of my head and see the paper in a way another person might see it."

Additionally, incubation, putting the writing away or walking away from the writing for a given amount of time, was the second most common act of revising. While some participants "put it away and wait until I find it again," others needed only a few hours "to clear my head and find my way back to where I began." Regardless, the freedom to walk away and allow the writing to incubate was a valuable revision strategy.

Other participants suggested that they only revise when prompted to do so by their peers. One participant confessed reluctance to revise, stating, "I revise very little, but if I do, it is from peer suggestion." "I revise as I write," said another, "and only go back to a piece to rewrite it if a colleague suggests that I do so." Overwhelmingly, pre-institute participants saw the importance of revision in their personal and professional writing.

Theme Three: The Teaching and Non-Teaching of Revision

When asked if they teach revision in their classrooms, 70% of the E-A study participants (pre-institute) said that they spent any time on revision with their students, with only 30% of participants spending any consistent or significant amount of time (more than two hours per month) on revision discussions and writing time.

Of those participants that indicated they taught revision, most focused on independent revision and writing time instead of modeling revision strategies for the class. Also, teacher revision suggestions written directly on students' papers were commonly referenced in the pre-institute survey.

Some conventional and unconventional approaches were also mentioned. "We read backwards paragraph by paragraph," explained an Advanced Placement Literature and Language teacher, "to catch or identify places that need help." Another participant

noted, "We use rubrics to compare with our students' writing. Students self-assess on the rubrics and identify what they need to work on independently."

Perhaps some of the most telling data related to the teaching of revision came from the participants who do not or rarely teach revision in their classrooms. A secondary English teacher claimed, "We never get to revision. We spend so long getting the drafts down that before we know it, it's time to move on to the next thing." A middle school social studies teacher shared that "students hate to revise and, frankly, so do I. We are ready to move on." And finally, a high school teacher shared bluntly, "I don't teach revision. I teach math."

Theme Four: Revision Aversion

It is clear from the data that for many students and teachers, the word revision has a negative connotation. Many teachers reported in the focus group and follow-up interviews that after students have written their drafts, they do not see a way to improve it or they do not want to invest the time and energy into revising it. One high school English teacher stated, "I say revision, and they go, 'Ugh'. You know, they're squeamish about it. Squeamish maybe because in the past they have revised (or so they thought) and received that paper back with all those red marks. So what's the use?" After all, for many students, revision is about correcting the surface errors in the writing. A high school history teacher noted, "My seniors are very much caught up in editing mechanics and grammar, as opposed to really rethinking a piece of writing or thinking about what that vision for that piece of writing is."

Theme Five: Revision and Professional Development

As they immersed themselves in writing during the summer institute and actively posted their texts and responded to the writing of others on the E-A, teachers engaged in many writing activities that encouraged the use of revision strategies. In prompting the professional development of teachers, these activities overcame previously held concepts and identities. For example, one high school choir teacher explained, "As a writer myself, it took me a while to get to that point [practicing revision] . . . . And I think the summer institute helped with that to a great degree." Another participant described her own change, saying, "I never had the confidence to teach revising. Being able to experience myself in a collaborative environment was exactly what I needed in order to teach revision in my classroom."

The impact of the experience can be seen in Table 3. A comparison of the revision strategies used by teachers in their own writing pre-institute to the revision strategies taught by teachers in their classrooms pre-institute reveals a lack of similarity, with the exception being peer workshop. Further, a comparison of revision strategies used by teachers in their own writing post-institute to the revision strategies taught in their classrooms post-institute highlights alignment, particularly in the areas of digital writing environments.

Table 3

Most Commonly Mentioned Revision Strategies (Pre- and Post-Summer Institute)

Used by teachers in their own writing (pre-institute)	Used by teachers in their teaching in classrooms (pre-institute)	Used by teachers in their own writing (post-institute)	Used by teachers in their teaching in classrooms (post-institute)
Questioning	Independent writing time	Writing workshop/ conferencing	Writing workshop
Reading aloud	Teacher comments on student work	Digital tools (E-A, Ning, Google Docs, Wiki)	Digital tools (Wiki, Google Docs, Ning)
Incubation	Proofreading or editing	Incubation	Teacher/student conferencing
Text manipulation	Rubrics	Conferencing	Mentor texts
Peer workshop	Peer workshop	Mentor texts	Incubation

One study participant, who said she bought into the same revision attitude as a writer, took a while to get to that point where revision mattered. During the summer institute, she had to "overcome my own obstacles" and realized that even good writers need to revise. Another participant, after attending the summer institute and taking her experience back to the classroom, stated that she saw a change in students' interest in revision and was convinced that it "was a direct result of [her] enthusiasm for it as well."

Acknowledging the importance of revision and finding practical and comfortable ways to teach it are practices that teachers of writing need to adopt. One teacher commented, "Learning to help my students be revisers and to be a reviser for myself has been about ... having really great models." She was keenly aware that "what I'm excited about as a teacher I can sell to them. They get excited about it as well." Motivating students to revise can be a difficult task, but teacher attitude is a key factor in accomplishing this.

Theme Six: Revision and Time

Overwhelmingly, study participants saw the benefit of revision in their own writing and in their classrooms. More than 95% of post-institute participants said participating in the summer institute and the E-A greatly increased their willingness to spend time on

and teach revision strategies in the classroom (see Figure 2). The same participant that claimed, "I don't teach revision, I teach math" came to the realization that "Everything we do in my class is about revision. We revise formulas. We revise our calculations. We revise our answers to critical thinking problems. Being able to stand back and evaluate one's answers, with the opportunity to revise it, is at the heart of my work in the classroom." A middle school band instructor agreed:

> I think certainly most everything that I do about revision in my work is based on work from my participation in a summer institute. We became a community of learners, depended on one another for feedback and advice, and gave critical guidance when needed. This certainly transfers over to my work with students in my classroom. Although we aren't always writing when we revise, we are certainly composing text in an auditory sense. The same concepts that apply to the written word apply here to my work.

An elementary teacher also agreed, saying, "If we create the environment and give them the time and offer the critical thinking skills, then ultimately over time, they become very sophisticated . . . writers and thinkers. . . ." These attitudes about writing that teachers gain from the summer institutes transfer directly to the students in not just writing classrooms, but in classrooms of all subject areas.
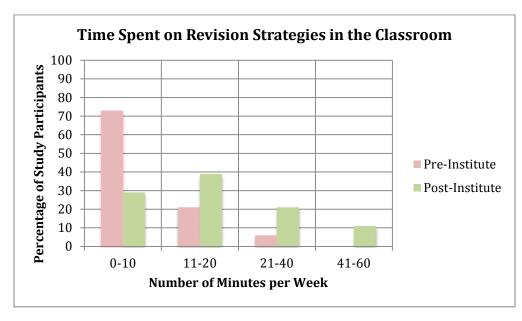

Figure 2. Teaching revision in the classroom.

Theme Seven: Scaffolds

E-A study participants recognized that important scaffolds were needed in order to implement the revision strategies they learned in the summer institute into the 21st century classroom. By providing a real audience, access to digital writing environments,

and a sense of community based on the writing groups of the National Writing Project, the study participants entered their classrooms with a renewed dedication to the teaching of revision.

When asked if study participants could have any single resource for teaching revision, a middle school Language Arts teacher responded "real audiences for every single thing that we do. . . . I struggle to find that audience that provides my students what they really need to get invested in the writing." He reiterated that his students "are totally different when they have a real reason" to write. Other study participants agreed, adding, "The key [to revision] would be to find the authentic audience." A high school art teacher shared, "The audience dictates so many of the choices writers make; students, many for the first time, become aware that they are actually making choices about their writing. The audience is in the mind of the writers when they make choices on content, organization, word choice, and so much more."

Theme Eight: Revision and Digital Writing Environments

The access and ability to use digital writing environments, even in face-to-face classrooms, was critical to the implementation of increased revision time in the teachers' classrooms. Not only was the access to the digital writing environment of the E-A a critical aspect of the participants' growth as writers and teachers, serving as a motivator for participation in revisions throughout the institute, an appreciation for the digital writing environments accompanied teachers into their own classrooms after the institute ended (see Figure 3). As one participant explained, "We now use Google Documents to upload our pieces . . . we use blogs. . . . our writing project has a website, and we certainly share student work there." Another participant noted, " I put a little bit of each student's writing up on the Elmo so that we can talk about it and revise."

Recognizing the impact of such opportunities on students, one participant remarked, "If we create the environment and give them time . . . ultimately they become more sophisticated users of technology and more sophisticated writers." A literacy coach affirmed that students in her school are "much happier to revise in a digital environment, and they're much happier to revise for digital publication."   Another English teacher stated:

> [going] to Wikipedia and participating in the editing of that, or going to Nings and Facebook and all that, I think that's really transforming attitudes about digital publishing. They love to produce things for the Internet, so they're invested in their revision because they want their good pieces to go out there.

Such comments reflect an understanding of the ways that out-of-school and in-school writing can inform each other.
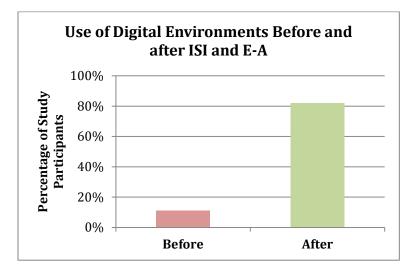
Figure 3. Classroom use of digital writing environments before and after ISI and E-A.

The data indicate teachers' attitudes about the use of digital writing environments can do much to propel students into the practice of revising. Teachers reported that the use of these environments are motivating to most students and encouraged an environment of and expectation for revision in student writing. A middle school social studies teacher explained:

> They are certainly more likely to [revise] at a time that is convenient for them. . . . Kids are awake at 2:00 a.m., and I can track their times when they're doing that kind of stuff. I think that leads, for many of them, to their enthusiasm to [revise].

Teachers like this, who believe that not all writing and revising have to take place in the classroom, do much to motivate their students to revise. What happens in the classroom can be enhanced by allowing students "time to digest it and process it" before making revisions. Allowing students to have access at their convenience can make them more able and willing to engage in true revision as opposed to editing.

Discussion

The purpose of this research study was to investigate the ways that teachers of writing used revision in their own writing processes, to study how the practice of revision was implemented in the teachers' pedagogical practice, and to understand how the use and availability of digital writing environments impacted the revisions teachers made in their own writing.

Clearly, study participants are using revision in their own writing processes. Whether through incubation, text manipulation, reading aloud, or working with peers, these teachers implement a variety of strategies in their own writing and revision

practices. When study participants focused on the teaching of revision in their own classrooms, however, several inconsistencies arose.

Confusing Revision and Editing

First and foremost, many study participants believed they were teaching revision strategies when, in fact, they were teaching only editing and proofreading strategies. Additionally, many study participants did not recognize that they were teaching revision when, in fact, they were. This confusion of terms and actions influences student learning and caused a lack of common understanding from teacher to teacher. Ultimately, if teachers are confused about what revision is and what purpose it serves, so, too, will be the students.

This study's results echo a trend in the field. Whitney et al. (2008) found that teachers in their study gave students revision activities that were really editing activities, resulting in student writing that was never revised. Teachers must make clear to students the differences between revising content and editing for grammatical and syntactical errors. Additionally, in teaching students how to revise, we must teach students *why* they need to revise and how revision is used to clarify their meaning and strengthen their arguments (Saddler, 2003). Students who are unable to see revision as a strategy for clarifying and improving content will struggle when working to improve their writing.

Inconsistency in the definition of revision and increased demands for classroom instructional time coupled with a lack of student engagement and motivation to revise result in an inconsistent focus on revision in K-16 classrooms. Often left to the independent work of the student alone, revision is rarely effective. The key to fixing confusion between editing and revising lies with clear and consistent instruction and modeling by teachers.

Digital Writing Environments

As teachers evolve in their attitudes about revision, they offer their students greater and more varied opportunities for revision. Most of the study participants are now using face-to-face or digital writing groups in their classrooms. Further, the results from the data indicate that strategies that include revision in digital writing environments are used more prevalently in the classroom when teachers use the same digital environments in their own writing practice.

While new digital technologies and pedagogical tools have emerged to help teachers in the teaching of revision, the new tools are still severely lacking in today's revision instruction, and study participants made strides, large and small, in the implementation of digital writing environments in the classroom. Technology and digitalization should encourage teachers to incorporate revision into their instruction more explicitly and with greater significance, as writers will not truly become competent

until they become greater revisers (Rowan, 2005). In teaching writing, technology provides not just audiences and purpose, but it also changes the motivation to revise. Study participants agree that students are much more likely to revise for content as well as surface errors when writing in a digital environment.

Building Authentic Audience through Community

Writers need an audience. The nature of writing demands it. Often times for students, the teacher is the audience and the grade is the purpose. This design lacks a sense of classroom community, where the audience for student work is embraced, mentored, and shared. The sense of community fostered in the NWP ISI and the NWP E-A can be recreated within the classroom among teachers and students. Experiencing the revision strategies explored and developed in the summer institutes clearly changes how teachers perceive their own writing and the writing of their students.

When teachers can build an authentic audience into an assignment, even if the audience is just other classmates, students begin to see themselves as writers with an audience rather than students with teachers. Previous studies have emphasized the importance of using digital environments to motivate students to revise because they provide an authentic audience. When they know that their writing is going to be viewed by someone other than the teacher, the final product begins to matter more (DeVoss, Eidman-Aadahl, & Hicks, 2010).

Making the Time for What We Value

Data from the study revealed that students are rarely asked to revise their work and do little revision without peer group or teacher support. Without the knowledge of how to revise or the clear instruction to revise, students can neglect the process of revision completely. To be able to guide students into more successful revision practices, teachers must both ask students to revise their work and explicitly teach how to revise (Graham & Perin, 2007; Karlström, Lindström, Cerratto-Pargman, & Knutsson, 2007). The first step in embracing revision may lie in addressing the terminology itself. For students, the word *revision* is frequently viewed as a word that their teachers use, a word belonging to the world of academic language, and not a word they themselves would ever use. By encouraging students to recognize that these terms do not live only in schools' classrooms, but rather are commonly used to describe changes students make in their lives, we may break down some student resistance. Doing so may help them be both more open to learning different revision strategies and to the revision process in general (Ghezzi, 2010).

Additionally, some students are also less open to the revision process because they focus so much on the general writing rules and typical editing behaviors. Often, students feel that if they have not violated any of the mechanical, usage, or grammar rules, then revision is not necessary, even though there are other reasons to revise a piece of writing. Experienced adult writers do use the terms revising and rewriting, but

the general strategies are the same. While the actions taken are similar, the intent behind them differs from that of a student writer.

Many teachers of writing recognize they have a reluctance to revise; it pervades the classroom. Teachers find that many things affect students' attitudes about revision, but one very specific influencing factor is their teachers' attitudes about the revision process. Teachers must show a respect for revision; they must practice in their own writing what they espouse as important to their students and vice versa.

Limitations of the Study

Although the research reached its aims, there were some unavoidable limitations. First, much of the data reported in the survey, focus groups, and follow-up interviews were self-reported data that cannot be independently verified. Self-reported data also contains the potential for bias including selective memory, attribution, and exaggeration. Additionally, the participants, while randomly selected, likely had some preliminary interest in writing, either personally or professionally, as they had devoted a portion of their summer to professional development in writing. This likelihood should be taken into account in relation to the results discussed.

Conclusion

In debunking the myth that "[n]ew-media writing simply transfers traditional writing practices into a digital environment," the 2008 NCTE Policy Brief, *Writing Now*, states:

> Research shows that digital technologies shape and are shaped by processes of writing. Furthermore, the infrastructure requirements of new-media writing have an influence on many aspects of composing because factors like bandwidth, screen size, and software constraints all shape what writers can and cannot do. Accordingly, new media writing requires modified processes of composing. (National Council of Teachers of English, 2008, p. 3)

Future questions and studies addressing the role of student revision in digital writing environments will be needed as the increased use of blogs, wikis, and online discussion forums are used to foster collaborative writing and revision opportunities both inside as well as outside the classroom space (Irvin, 2012; Kitsis, 2008).

With the increased demands for classroom instructional time for things such as high-stakes assessments and a decade-long focus on reading, time spent on the teaching of writing has suffered (Graham & Perin, 2007). Most strongly, it is evident that as teachers of writing, we rarely *preach* what we *practice*, meaning that the very time and strategies teachers use in their own revisions are not the time and strategies we teach or use in the classroom. For example, the act of incubation, noted often as a strategy used by teachers when they revise, would require a stepping away from a

piece of writing for a short-to-extended period of time. Such a strategy is seemingly unheard of in a closely scheduled and articulated schedule of curriculum, assignments, and tests. Additionally, the peer collaborations and text manipulations found effective in the participants' own revision processes are time-consuming and require a dedication of time and energy by the student.

Future studies are needed on time allocation for the teaching of writing and the role that digital writing environments can play in developing connections, much like the NWP E-A, with school-age writers. With full implementation of the Common Core State Standards across the majority of our states and the resulting assessments produced by companies such as Smarter Balanced and Partnership for Assessment of Readiness for College and Careers consortiums, the ability for students to write well, revise, and edit simultaneously in digital writing environments will be paramount to their success on these high-stakes measures.

As teachers of writing, we must continue to explore strategies for addressing the dichotomy between what we practice as writers who revise and what we preach as important in our teaching of writing. Realizing we often do not preach what we practice is the first step. When teachers respond to that realization by offering their students opportunities to immerse themselves in classroom-based writing communities and to engage in interactive electronic publication sites that foster effective and natural acts of revision, what we preach and what we practice begin to converge.

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Note

About the Author

Shelbie Witte, PhD., NBCT EA/ELA, is an Assistant Professor and Coordinator of English Education in the School of Teacher Education at Florida State University, Tallahassee. She studies 21st century literacies and multi-modal approaches to adolescent literacy learning. Twenty-first century literacies consider a wide range of communication abilities such as reading and composing print texts, composing and reading texts in digital environments, and interpreting and understanding non-print texts. Dr. Witte teaches graduate and undergraduate courses including methods at the middle and high school level, issues and trends, linguistics, popular culture and pedagogy, and technology integration. Email: switte@admin.fsu.edu

Appendix A

Pre-Survey

1.) Name of your writing project site? _____

2.) Which subject(s) do you teach? _____

3.) Which grade level(s) do you teach?_____

4.) How long have you been teaching? _____

5.) How long have you been teaching in your current position? _____

6.) When you write for any reason, (professionally, informally, creatively or otherwise), do you usually revise your work?   _____Yes   _____No

7.) If you revise your writing, what types of strategies do you employ in the process? Please briefly list some activities in the space below. Rough explanations are fine.

_____

_____

_____

_____

8.) Do you teach revision in writing directly in your classes? Please check the appropriate space.   _____Yes   _____No   _____Not Sure

9.) If you teach revision directly in your classroom, in what ways do you do so? Please circle all that apply and elaborate if necessary. (If you do not directly teach revision in your classroom, please skip to question #13).

  a. Teacher revision feedback directly on paper
  b. Teacher revision feedback digitally through tools such as Microsoft Word Track Changes/Comments or Google Documents.
  c. Peer revision groups/feedback face to face
  d. Peer revision groups/feedback digitally through tools such as Microsoft Word Track Changes/Comments or Google Documents.
  e. Independent Revision and Rewriting
  f. Reading aloud strategies
  g. Examining student work as a class to offer suggestions for revision
  h. Using rubrics to assess the need for revision
  i. Other(s) (Please explain):

_____

_____

10.) Approximately what percent of your class time is devoted to revision instruction? Please circle the closest estimate.

<div align="center">0%-20%   21%-40%   41%-60%   60%+</div>

11.) Please indicate how important you consider the teaching of revision in writing on a scale of 1-4, with 1 being completely unimportant and 4 being highly important.

1--------------------------2----------------------------3-------------------------------4

12.) If you have employed revision instruction in your classroom, please indicate the level of success you observed in students' learning and using the intended strategies on a scale of 1-4, with 1 being completely ineffective and 4 being highly effective.

1--------------------------2----------------------------3-------------------------------4

How do you feel about teaching revision in your classes? (For example: Do you like/dislike teaching revision? Do you feel it is an effective or ineffective use of time? Please write a brief answer in the space below.

13.) How would you explain the difference between revising and editing? Please write a brief answer in the space below.

_____
_____
_____
_____
_____

14.) Are you male or female? Please check the appropriate space. ____M ____F

15.) Please indicate your age range by circling the appropriate option below.

20-29   30-39   40-49   50-59   60-69   70 or older

Seven-point Likert Scale

7=Strongly Agree, 6=Agree, 5=Agree Somewhat, 4=Undecided, 3-=Disagree Somewhat, 2=Disagree, 1=Strongly Disagree

	7	6	5	4	3	2	1
1. I write for a variety of purposes in my life.							
2. I enjoy sharing my work with others.							
3. I am never concerned about the evaluation of my writing.							
4. Writing is difficult for me.							
5. My first draft is usually the final draft.							
6. I am willing to spend a long time on a piece of writing.							
7. I often choose to revisit my writing and make changes to words, ideas, or phrases.							
8. I ask others to read my writing before I am finished with it.							
9. I like to teach writing.							
10. I understand how to teach writing.							
11. I understand what my role is in the teaching of writing to my students.							
12. I don't teach writing as successfully as my colleagues.							
13. I like to teach revision when I teach writing.							
14. I understand how to facilitate revision on students' writing.							
15. I teach the same revision strategies I use as a writer.							
16. I take the necessary class time to allow students to revise their writing.							
17. I can give examples of digital writing environments.							
18. I use digital writing environments in my own writing.							
19. I use digital writing environments in my classroom instruction.							
20. If I had a choice between receiving feedback on my writing in digital writing environments or feedback face-to-face, I prefer face-to-face.							

Appendix B

Post-Survey

1.) Name of your writing project site? _____

2.) Which subject(s) do you teach? _____

3.) Which grade level(s) do you teach? _____

4.) How long have you been teaching? _____

5.) How long have you been teaching in your current position?_____

6.) When you write for any reason, (professionally, informally, creatively or otherwise), do you usually revise your work?   _____Yes   _____No

7.) During the summer institute, what types of strategies did you employ in the revision process? Please briefly list some activities in the space below. Rough explanations are fine.

_____
_____
_____
_____

8.) Do you intend on teaching the revision of writing directly in your classes? Please check the appropriate space.   _____Yes   _____No

9.) If planning to teach revision directly in your classroom, which strategies do you intend to use? Please circle all that apply and elaborate if necessary. (If you do not intend to teach revision in your classroom, please skip to question #12).

    a.   Teacher revision feedback directly on paper

    b.   Teacher revision feedback digitally through tools such as Microsoft Word Track Changes/Comments or Google Documents.

    c.   Peer revision groups/feedback face to face

    d.   Peer revision groups/feedback digitally through tools such as Microsoft Word Track Changes/Comments or Google Documents.

    e.   Independent Revision and Rewriting

    f.   Reading aloud strategies

    g.   Examining student work as a class to offer suggestions for revision

    h.   Using rubrics to assess the need for revision

    i.   Other(s) (Please explain):

_____
_____

10.) About what percent of your class time will you devote to revision instruction? Please circle the closest estimate. 0%-20%, 21%-40%, 41%-60%, 60+%)

11.) Please indicate how important you consider the teaching of revision in writing on a scale of 1-4, with 1 being completely unimportant and 4 being highly important.

1--------------------------2---------------------------3------------------------------4

12.) Have your views on the teaching of revision changed throughout the summer institute? Please write a brief answer in the space below.

_____
_____
_____
_____
_____

13.) In what ways did posting your writing on the E-anthology impact your willingness to revise your work?

_____
_____
_____
_____
_____

14.) In what ways did positing your revisions on the E-anthology impact your willingness to teach revision in writing with your students?

_____
_____
_____
_____

15.) Are you male or female? Please check the appropriate space. ____M ____F

16.) Please indicate your age range by circling the appropriate option below.
   20-29   30-39   40-49   50-59   60-69   70 or older

Seven-point Likert Scale

7=Strongly Agree, 6=Agree, 5=Agree Somewhat, 4=Undecided, 3-=Disagree Somewhat, 2=Disagree, 1=Strongly Disagree

	7	6	5	4	3	2	1
1. I write for a variety of purposes in my life.							
2. I enjoy sharing my work with others.							
3. I am never concerned about the evaluation of my writing.							
4. Writing is difficult for me.							
5. My first draft is usually the final draft.							
6. I am willing to spend a long time on a piece of writing.							

7. I often choose to revisit my writing and make changes to words, ideas, or phrases.							
8. I ask others to read my writing before I am finished with it.							
9. I like to teach writing.							
10. I understand how to teach writing.							
11. I understand what my role is in the teaching of writing to my students.							
12. I don't teach writing as successfully as my colleagues.							
13. I like to teach revision when I teach writing.							
14. I understand how to facilitate revision on students' writing.							
15. I teach the same revision strategies I use as a writer.							
16. I take the necessary class time to allow students to revise their writing.							
17. I can give examples of digital writing environments.							
18. I use digital writing environments in my own writing.							
19. I use digital writing environments in my classroom instruction.							
20. If I had a choice between receiving feedback on my writing in digital writing environments or feedback face-to-face, I prefer face-to-face.							