

MIDDLE SCHOOL STUDENTS' PERSPECTIVES OF AND RESPONSES TO STRATEGIC REVISION INSTRUCTION

Elizabeth G. Dinkins

Bellarmino University, Louisville, KY

Common Core writing standards emphasize the need for students to use a variety of approaches to compose and revise texts. Writing research indicates that revision processes receive less instructional time than planning or drafting processes (MacArthur, 2013; Sommers, 1982; Witte, 2013). Using a constructivist grounded theory approach, this study examined the experiences of 1 eighth grade teacher and 5 of her students during strategy-based instruction designed to foster independent revision behaviors. The author acted as a participant researcher to conduct 28 hours of classroom observations, student and teacher interviews to understand teacher and student perspectives over the 9-week instructional period. Student writing samples were examined before and after the revision instruction to understand how students' revision behaviors changed. Three themes emerged pertaining to teacher experience: (a) the use of limitations to foster growth, (b) writer's notebooks for revision practice, and (c) memorization to foster transfer. Two themes emerged illustrating how students experienced and responded to this instruction: (a) students positioned their learning within their existing writing needs, and (b) students' awareness shifted to a more global understanding of text. Findings reveal that specific strategy instruction may provide a foundation for students and teachers to understand the revision process and create a starting point for additional learning.

WRITING INSTRUCTION: NEW FOCUS ON AN OLD CHALLENGE

The 2007 and 2011 National Assessment of Educational Progress data indicate that a significant percentage of American students struggle with writing. In 2007, only 35% of eighth grade students performed at or above

the proficient level and in 2011, only 27% of eighth graders reached this goal. A consistent and significant achievement gap exists: white students outperform Black and Hispanic students; females outperform males; and students who do not qualify for free and reduced lunch outperform those who do. This disparity has significant implications; writing is a "threshold skill" (National Commission on Writing

• Correspondence concerning this article should be addressed to: Elizabeth G. Dinkins, edinkins@bellarmine.edu

Middle Grades Research Journal, Volume 9(2), 2014, pp. 75–90
Copyright © 2014 Information Age Publishing, Inc.

ISSN 1937-0814
All rights of reproduction in any form reserved.

for America's Families, School, and Colleges, 2004, p. 3) for both employment and promotion. Further, the Common Core standards (National Governors Association & Council of Chief School Officers, 2010) provide a new emphasis on writing instruction with ten writing standards explicitly devoted to preparing students for college and career writing demands. Standards, assessment, and accountability have been named the "most powerful drivers of education systems" (Council of Chief State School Officers, 2013) indicating increased assessment pressure on writing and posing challenges for teachers previously working under the reading and math emphasis of the No Child Left Behind Act. These national reports and reform initiatives reveal a critical need for effective writing instruction that can empower struggling adolescents.

Research indicates that the writing workshop "has become the prominent paradigm for the teaching of writing in the United States" (Harris, Graham, & Mason, 2006, p. 300). Although there is no single definition of the writing workshop classroom, general characteristics include: teaching writing as a process; writing for real audiences; high levels of student choice, interaction, and ownership; examination of model texts; teacher modeling with a focus on writing craft; and classroom publishing (Atwell, 1998; Fletcher & Portalupi, 2001, 2007; Portalupi & Fletcher, 2001; Pritchard & Honeycutt, 2006; Ray, 1999). Composing, drafting, and revising texts, inherent parts of the workshop approach, are also emphasized by the Common Core standards. Writing standard five requires students to "develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach" (National Governors Association & Council of Chief State School Officers, Standard 5, 2010). Taken as a whole, all ten standards require students use a process approach to write a range of texts for a variety tasks and purposes and establish the goal of teaching students to compose complex texts independently by the end of high school. Revision is essential in helping students learn to write indepen-

dently because it pushes students to critically consider the effectiveness of their work, yet research indicates that revision is frequently overlooked by students and teachers (MacArthur, 2013; Witte, 2013). This study used a pragmatic approach to examine the experiences of one eighth grade teacher and five of her students during instruction designed to foster independent revision behaviors.

I begin with a discussion of the research surrounding teaching revision and share the theoretical framework guiding the research design. I then present findings from this qualitative research project and conclude with a discussion of implications for teachers, teacher-educators, and future research.

A Well-Established Challenge: Teaching Revision

The extant literature about revision acknowledges the cognitive demands of the process, its underemphasis in classroom instruction, the ineffectual approaches of struggling students, and its inextricable relationship with reading skills (Graham & Harris, 1993; Graham & Perrin, 2007a; Hayes & Flowers 1986; MacArthur, 2013; Sommers, 1982; Witte, 2013). Studies of adult writers found that revision involves recognizing a dissonance between what is written and what is meant then using specific knowledge about genre, form, organization and idea development to make effective changes (Hayes & Flower, 1986; MacArthur, 2013; Sommers, 1982). In this way, revision involves declarative, procedural, and conditional knowledge (Pressley & Harris, 2006; Schraw & Moshman, 1995); students must not only be able to recognize problems in their writing, but also what, when, and how to improve them. Proficient writers revise throughout composing and use revision to think more critically about their topics as well as hone their work for an audience, making revision as much a process of discovery as it is creating a final product (MacArthur, 2013; Sommers, 1982; Zito, Adkins, Gavins, Harris, & Graham, 2007).

Sommers (1982) and others (MacArthur, 2013; Witte, 2013) acknowledge that revision often receives less instructional time than planning texts. Witte's (2013) study of the revision practices and pedagogies of 181 writing teachers indicates that this underemphasis might relate to teachers' confusion over defining revision with some viewing revision as reseeing writing while others see it as final editing. Sommers (1982) asserts that emphasizing pre-writing processes prioritizes the initial discovery and development of ideas and relegates revision as a follow-up polishing stage. Both researchers point to a difference between how proficient writers revise and classroom instruction.

Struggling writers tend to see revision as the final stage and have fewer strategic options for recognizing the dissonance between intention and what is actually written (Graham & Harris, 1993). Because these students lack the self-regulation skills needed to shift between evaluating text and making strategic changes, they approach revision from a limited perspective that focuses on neatness, word replacement, and mechanical error correction (Graham & Harris, 1993; MacArthur, 2013). Further, students who are confident in their abilities are more likely to persevere in the task, while students who feel less capable are more likely to abandon it (Boscolo & Gelati, 2013; Klassen, 2002). Finally, effective revision depends on students having strong reading comprehension skills (Hayes & Flower, 1986; Graham & Harris, 2000; Hayes, 2004; MacArthur 2013). Writers must be able to read and evaluate the effectiveness of their work. Students who struggle with reading may recognize problem areas accurately.

Despite these challenges, research suggests that explicit instruction addressing the cognitive demands of revision helps students develop stronger revising behaviors and improved writing (Graham & Perrin, 2007b; MacArthur, 2013). Strategy instruction has been found to be particularly beneficial for helping struggling writers manage the evaluation aspects of revision as well as employ

problem solving approaches to improving text (De La Paz & Graham, 2002; Fidalgo, Torrence & Garcia, 2008; Graham, MacArthur, & Schwartz, 1995; Midgette, Haria, & MacArthur, 2008; Monroe & Troia, 2006). Three studies (De La Paz & Graham, 2002; Fidalgo et al., 2008; Monroe & Troia, 2006) examined the combined effects of strategy instruction in planning and revising strategies on the writing of middle school students. All three studies led to improved texts in terms of content and organization, but the difference between treatment effects for planning and revising was less clear. Two studies (Graham et al., 1995; Midgette et al., 2008) examined the effects of goal directed revision instruction with both resulting in treatment group students producing higher quality texts. Together these studies suggest that students benefit from revision instruction that makes explicit the processes and behaviors writers use to improve texts.

Theoretical Framework and Research Design

The current qualitative study used a pragmatic approach to tackle the challenge of revision in one eighth grade classroom. Pragmatic approaches to research seek to address questions relevant to classroom practice with participants and researcher acting as partners throughout the research process (Dillon, O'Brien, & Heilman, 2000). The traditional expert-novice relationship between researcher and participant evolves into a collaborative relationship where both parties function as resources serving the inquiry process. The participating teacher, Mrs. Murray (all names are pseudonyms), was interested in strategies for teaching revision that could help her foster student independence. As a researcher, I was interested in how explicit strategy instruction that emphasized a gradual release of responsibility could be used within a writing workshop classroom. Together, we wanted to understand how students thought about and navigated the revision process.

Prior to the inquiry, Mrs. Murray taught revision through teacher-student conferences, student peer conferences, or revision checklists. With conferences, Mrs. Murray hoped to teach the writer not the writing (Calkins, 1986/1994; Murray, 1982). Murray (1982) asserts that writers must learn to have conversations with the “other self” (p. 140) if they are to produce effective texts. Calkins (1986/1994), building on this assertion, explains that conference conversations should help the writer develop more effective practices. Mrs. Murray noticed that her students used peer conferences to point out editing mistakes or occasionally asked each other to “describe more.” Teacher-led writing conferences produced better products, but students still relied on Mrs. Murray to point out problems and talk them through changes. She explained how conferencing led her students to “wait for you to tell them what’s wrong.” One student, Dante, described his revision process as exactly that: “Mrs. Murray tell us where everything was and we fix it and check it off and she gives us a grade.” In fact, most of the students found revision an opaque chore that they engaged in reluctantly or skipped altogether. Her revision instruction seemed to foster a level of teacher dependence instead of students discovering the other self for listening, evaluating, and problem solving (Murray, 1982).

Mrs. Murray wanted to use an instructional strategy that provided students with a set of tools for revising their texts independently. As her partner in this research process, I introduced her to Self-Regulated Strategy Instruction (SRSD) (Danoff, Harris, & Graham, 1993). Research indicates that strategy instruction that incorporated SRSD yielded consistently positive effects on the achievement of struggling writers (Graham, Harris, & MacArthur, 2006; Graham, Harris, & Mason, 2005; Sexton, Harris, & Graham, 1998) with one meta-analysis finding an average effect size of 1.14 (Graham & Perrin, 2007b). SRSD’s emphasis on fostering independent strategy use appealed to Mrs. Murray’s goal of teaching her students to become independent revisers.

SRSD consists of a six-stage instructional framework for explicitly teaching drafting, composing, and revising. The stages: *developing background knowledge*, *discussing the strategy*, *modeling the strategy*, *memorizing the strategy*, *supporting the strategy*, and finally *independent strategy use*, act as a flexible framework to scaffold instruction and support students’ independent performance (Graham & Harris, 2003). *Developing background knowledge* and *discussing the strategy* involve providing students with the knowledge and skills needed to perform the strategy as well as explaining its benefits and conditions for use. Once students understand the purpose of the strategy, the teacher *models* each component of the strategy and asks students to practice in a *supported*, collaborative context. During these two stages, students are asked to commit the strategy to *memory* and reteaching is used as needed. *Memorizing the strategy* facilitates declarative knowledge and fosters the eventual goal of *independent strategy use*. How Mrs. Murray tailored SRSD instruction to teach revision is discussed in the methods section.

While pragmatism shaped the problem-focus and instructional design of this inquiry, the sociocultural nature of writing instruction informed the research questions and methods. Interactions between students, teacher, and content reciprocally define the classroom context or, as Packer and Goicoechea (2000) explain, the individual and the classroom community “mutually constitute” each other (p. 234); thus, an inquiry into writing instruction must examine both teacher and students. Further, Erickson and Schultz (1992) hypothesize that how students experience a curriculum may account for “the difference between acquisition of lower order and higher order skills, between higher literacies and lower ones” (p. 465). Writing research indicates that student beliefs about and motivation for writing interact with performance (Klassen, 2002). By examining instruction in a classroom context defined by students and teacher, I hoped to address two questions:

1. How does a teacher implement instruction that combines a specific revision strategy with her existing workshop?
2. How do five diverse eighth grade students experience and respond to this instruction?

METHODS

I acted as a participant researcher and collected qualitative data using a constructivist grounded theory design (Charmaz, 2006/2009). The research site was an eighth grade classroom housed in a persistently low achieving Title I middle school. To understand how Mrs. Murray implemented the instruction, I conducted 28 hours of observations over 9 weeks including 4 hours prior to the new revision instruction. Once Mrs. Murray introduced the new revision instruction, I observed the class 4 days a week for a 7-week period. I audiotaped each class and transcribed the day's recording to add to my field notes. To insure I understood Mrs. Murray's instructional process and decision making, I conducted five approximately 30 minute semi-structured interviews with her.

To understand how students experienced and responded to this instruction, I used teacher recommendations, prior writing assessment scores, and early observational data to select five focal students to follow through the learning process. Stephanie, Melanie, Desiree, Keith, and Dante, reflected the overall diversity of Mrs. Murray's classroom and varied in terms of writing performance and special education needs. Stephanie, a Caucasian girl, considered herself a strong writer and was a journalism student who actively participated in class discussions. Mrs. Murray considered her the best writer in the class. Melanie, another Caucasian girl, was a quiet student and an avid reader of fantasy and science fiction. She was classified as having a disability in writing. Desiree, an African American girl, loved to socialize and struggled to stay focused in class. Dante, an African

American boy, was classified as having a learning disability in reading and had a hard time staying awake in morning classes. He professed to enjoy writing and described a science fiction crime story he was writing at home in his spare time. Keith, an African American boy who planned on joining the military, was unsure of his abilities and enrolled in an intervention reading class. Stephanie was the only student to score proficient¹ on her seventh grade writing assessment. All other students scored apprentice.

To understand how students responded to this instruction, I collected responses to pre- and postwriting prompts, as well as writing samples completed during instruction. These texts provided examples of applied strategy use and acted as stimulated recall prompts for students to reflect on during interviews.

I interviewed each of the five focal students at the beginning, middle, and end of the instructional process. Each interview lasted about 20 minutes and was divided into two segments: (a) student response to direct questions about classroom instruction, and (b) students discussing a specific piece of their own writing in terms of their revision process, strategy use, and thinking. This two-segment structure helped illustrate how students considered and applied their new revision knowledge to individual texts.

I analyzed interview and observational data using an inductive, constant comparative coding process with three central stages: initial coding, focused coding, and theoretical coding (Charmaz, 2006/2009) with each coding stage reducing data to identify final themes grounded in clear evidentiary warrants. I used memos to keep track of my emerging theories and test findings. As codes and themes began to emerge, I used interviews with the teacher and students to check my interpretations and test the credibility of my findings. I kept a reflexive journal to identify my own biases and maintained a constant comparative process to insure my codes and themes cling to data. I analyzed the pre- and postwriting assessments using a deductive coding process that exam-

ined changes at the word, phrase, sentence, and paragraph level. My analysis reflected the recursive nature of the revision process (MacArthur, 2013; Sommers, 1982); thus, I counted any change (addition, deletion, move, or rewriting of text) made between first and final drafts and examined these for application of the revision strategy and impact on the overall quality of writing.

Strategic Instruction: Revising Step by Step

Mrs. Murray decided to teach her students the CDO-ADM revision strategy (Harris, Graham, Mason & Friedlander, 2008, pp. 287–303) using SRSD (Harris et al., 2008). The CDO-ADM strategy teaches students to revise using a three-step process of *comparing*, *diagnosing*, and *operating* on their writing through *adding*, *deleting*, and *moving* text. Students were taught to read each sentence of their work and ask, “Is this what I meant?” to *compare* what is written with the intended meaning. Students then mark problematic sentences, *diagnosing* them for operation. In this step, students decide what is wrong with the writing and contemplate how they can fix it. Finally, students *operate* on their writing by *adding*, *deleting*, *moving*, or rewriting text. When all three steps are combined, students are equipped with a clear set of options for revising their work.

Using SRSD, Mrs. Murray first *developed students’ background knowledge* by discussing the purpose of revision. This step flowed directly into *discussing the purpose* of the CDO strategy with students and how it would benefit them and their writing. In the third step, Mrs. Murray *modeled* each component of the strategy in an interactive lesson where she thought aloud to evaluate her own writing then worked through each option (deleting, adding, and moving) for improving texts. This was followed by asking students to engage in *collaborative practice* by working as a class or with partners to revise a text. Once students were successful with the collaborative practice and

had *memorized* the strategy, Mrs. Murray asked them to *use the strategy independently*.

FINDINGS

Three themes emerged that describe the way Mrs. Murray integrated this new revision instruction into her existing writing workshop: (a) limitations to foster growth, (b) writer’s notebooks for revision practice, and (c) memorization to foster transfer. Two themes emerged illustrating how students experienced and responded to this instruction: (a) students positioned their learning within their existing writing needs, and (b) students’ awareness shifted to a more global understanding of text. Each theme is discussed below.

Limitations to Foster Growth

Following the explicit instruction and gradual release model of SRSD (Graham, Harris, & MacArthur, 2006; Harris et al., 2008), Mrs. Murray taught each operation skill (add, delete, and move) in isolation. This decision was as much about her own instructional tendencies as it was her students’ revision habits. Mrs. Murray acknowledged that her previous revision instruction emphasized “mostly adding things in to help students build up their drafts.” She hoped that focusing on one operation at a time would push students out of their “delete a word here or add a word there” comfort zone. With this approach, Mrs. Murray imposed early stage limitations to foster students’ understanding of when, how, and why to use each form of text manipulation.

Mrs. Murray used her usual workshop think-alouds to model the cognitive and procedural aspects of each part of the process. For example, when teaching the adding operation, she thought aloud about her audience awareness; “Good readers visualize but as a writer, I’ve got to help my readers out. I’ve got to supply the details that help them do it.” When she taught moving text, she thought aloud about whether a particular sentence should begin or

end a paragraph, trying out each option and discussing its effect with students. Students participated in these conversations, offering advice on wording or debating the effectiveness of a particular change. Procedurally, she would mark text up with carets or strikethroughs or arrows to help students see how “messaging up the draft” was an essential part of the process. More than a few times, students experienced frustration with being able to only add or delete or move text during a particular practice session, but Mrs. Murray persevered in her insistence that they stay focused on one skill at a time until they learned to use it effectively. Students pulled desks together, swapped notebooks, and talked about revision: “Can I just draw a big arrow for where I want this to go?” “How about you put that paragraph at the end?” or “I deleted stuff, but I really want to add now.” These practices challenged students to collaboratively consider their decisions. At the end of these sessions, Mrs. Murray asked students to share what they had changed and why. Following the SRSD framework, Mrs. Murray monitored how students practiced each skill, stopping the class to reteach a skill as needed. She reminded students that this was practice and “just a framework for understanding the revision skills” and not about producing finished writing. Once students mastered each component, she pushed students to apply operations they decided were necessary: “You may not move every time; you may not delete every time; you may not add every time. It’s your discretion what needs to be done.”

Writer’s Notebooks for Revision

As Mrs. Murray wove the CDO revision strategy instruction into her workshop, she expanded the use of writer’s notebooks to include intentional practice of revision techniques. Prior to this strategic instruction, students’ writer’s notebooks acted as a collector’s box for “seed ideas” (Fletcher, 1996, p. 31). She described using the writer’s notebook for

inspiration as one of her instructional strengths:

I think I feel the most comfortable about my own ability in putting together the beginning part: getting the mentor texts together, getting the seeds, and then getting their work on paper. I think I’ve always been really good at finding the right quotes, finding the right things to get their ideas on paper.

As part of collaborative practice, Mrs. Murray asked students to use writer’s notebooks differently to practice revision operations on their notebook entries. During these practices, Mrs. Murray emphasized that students read carefully to think through the comparing stage. She instructed students to, “whisper it to yourself to hear problem areas” and ask “is this what I meant?” Students often read two or three entries before finding one that would work.

Some students resisted this new writer’s notebook activity. Stephanie struggled to reconcile how a writer would revise something never intended for an audience, while Desiree felt like revising her entries made her think differently because, “when you go back it kind of changes it because you are changing how you feel.” Mrs. Murray diffused this tension by reminding students that practice was part of learning:

Practicing to write well, so that every time you are thinking and communicating on paper, you communicate well. Learn the skill of reading, comparing, and then revising as you are writing because it’s a skill you will always need in high school and after high school if you go to college.

With this shift in students’ use of their writer’s notebooks, Mrs. Murray also emphasized the recursive nature of revision instead of leaving it as the final stages of a linear process.

Memorization to Foster Transfer

In keeping with the SRSD stages, Mrs. Murray expected students to memorize the

strategy. She peppered writing time with oral quizzes and explained how students should transfer the strategy to non-language arts settings:

Don't think this happens just in language arts. This happens when you write for anybody. It is a tool you can put in your pocket from this time forward—even if you need to write a letter to your kid's school one day or a letter to the utility company. This is a strategy you can use with whatever you need to write.

Once students had the strategy memorized, Mrs. Murray incorporated the CDO-ADM into the process she expected students to use to complete standardized writing assessments. CDO-ADM became as important as understanding the prompt, prewriting, and drafting. She explained to students that “now, instead of just checking it over, you have a strategy to help you revise and get it on the paper like you want.” By expecting students to memorize and use CDO-ADM in different settings, Mrs. Murray emphasized revision and prewriting equally.

Students Positioned Their Learning

All five students reported using the strategy on the post-instruction writing assessment as well as in other writing contexts. How and why students used the CDO-ADM strategy, however, depended on what motivated students to write, what they considered important aspects of writing, and their perceptions of the writing process.

Melanie. Melanie enjoyed writing, but she felt a significant tension between school-based writing and the writing she did for fun at home, and she craved a sense of autonomy. She enjoyed creative assignments and spent her free time writing “stories about werewolves, adventure, fantasy, not like that old history stuff.” While she acknowledged that all forms of writing are important (“Even demolitionists do writing!”), she described school writing as very different:

You just have to think about it more as in you don't really have your opinion to speak. As in you have to think about what you've been taught, what's going on, what the question is actually asking you. The school writing side is the fact that you just don't really want to write about it. It's easier to get distracted; it's easier to just not care. It's like it's strict military and then there's open grass—it's two separate things. Military or grass.

Revising posed a particular frustration for Melanie because it involved doing whatever teachers demanded; she did not feel in control of her own revision process and that posed a unique challenge for her. In discussing her pre-instruction approach to revision, Melanie explained, “Sometimes I couldn't figure out and it just wouldn't work.” She positioned the strategy in relation to her need for control over her writing:

I understand it [revising] more and I try. I actually try and do my best I can on it. It makes me want to do better because I can remember it and I know what to do. With the CDO-ADM you have your freedom to rewrite whatever you want. No matter if you are in the military side or the freedom side, you always have that much freedom if you are using it.

Melanie embraced the revision strategy with clarifying relief and positioned her understanding in terms of her need for ownership over her individual writing process.

Keith. Keith lacked confidence in his abilities and was keenly aware of the public nature of the classroom. He described his ability “in the middle” and enjoyed writing when he could write “straight from your mind.” When he did not understand a task, he struggled to complete it:

When you give me an assignment I don't know. I struggle with doing that. I panic. It feels wrong. I'm like, 'I'm not like this person.' I feel kind of left out when everybody starts raising their hand. I be lost for real, so I wouldn't finish the piece.

Keith valued instruction that provided him with tools and resources he could use and found Mrs. Murray's modeling "good because she teaches you step-by-step." In the early stages of instruction, he lacked confidence in learning the strategy, which he gained through practice: "y'all kept telling me to do it and I was like 'All right!' but now I do it on my own and you don't have to tell me to do it." As Keith practiced the strategy, he began to see how reading and comparing his writing enabled him to keep creating ideas and adding to his work. He explained his affinity for adding as:

Like, I'm a little writer, so I don't have very much on my sheet of paper. I got a little paragraph. I add in front sentences because I don't think about it when I write, but when I read it, it comes to mind that another sentence needs to be in there.

As he saw his writing change, he began to transfer the strategy to other classes and attribute his success to it. With a braces-filled grin, he reported using it "in social studies, too. I got a 95." Keith embraced the strategy because he felt it improved the quality of his writing.

Dante. Like Keith, Dante felt like the strategy provided him with opportunities to build his ideas and alleviated the pressure of writing everything down before it left his brain: "When I use the strategy, it's like I can think of stuff and then do ideas to it and then go back over it and make more ideas and change stuff." This new understanding of revision as continual idea creation helped Dante cope with the stress he felt during timed writing assignments. He described time limits as "the hardest part of writing" because "when I have to rush, my brain moves fast and I write bigger and faster and sloppier and I can't get all my ideas down, but I can get like 50% of them down."

Dante also struggled with the reading component of the strategy and sometimes had a hard time differentiating between the original text and his revisions. This challenge became easier when he discovered that revising with

different colored ink helped him see his revisions: "See, like if you use a green pen you can see the mistakes you make and not make them again, and like using pencil, pencil is like the same color—it's going to be grey." After tailoring the strategy this way, Dante began to incorporate it into his regular writing process and reported using it on his high school application essay:

So I wrote the letter and reread it and I corrected all my words. I moved stuff around and I deleted some sentences, too, and I sent it. Normally, if I didn't know the strategy, I wouldn't have done that.

Dante's comment suggests that he found the strategy useful enough to use it in a high-stakes writing context. He valued the strategy once he was able to tailor it to meet his particular reading needs and because he felt it relieved the stress of writing everything down all at once.

Desiree. Desiree, an extremely social student, described writing time as the perfect opportunity for distraction: "Sometimes, like if we writing and I get off track, you know how people like daydream and stuff? I'll be like that." She approached writing as something to finish to "just do it and get it over with," so she did not have to face consequences like staying back after class to improve her work. Her need for efficiency was complicated by her uncertainty about revision. Before the strategy instruction, she did not remember anything about revising: "I forgot what revising means. Make sure there's no mess ups?"

As she progressed through the strategy instruction, Desiree recognized CDO-ADM as an efficient way to meet the criteria for quality writing and reported using it in science class so she would not have to stay after class. She explained that students failed to revise because of the perceived time commitment; however, she found that the strategy streamlined revision:

Like some people, they won't do it 'cause they think it will take more time than it will if you just leave it. Like if you just write and

don't even check it, you just say you do. But if you revise it, it takes no time. It makes it faster.

Desiree found the mnemonic particularly important to her learning process because it clarified what she thought was a difficult process. She explained:

I just remember thinking it was going to be hard. It wasn't that hard. It was easier. Like when I actually found out what it means and how to really do it, it was easier—when y'all explained what you really had to do to revise and stuff.

Desiree understood the strategy in relation to her need for efficiency and clarity. Once she realized that revision was worth the time investment, she embraced it.

Stephanie. Stephanie resisted the early strategy instruction and interpreted the operations as an intrusion into her writing world. She prioritized her planning process and considered revision the final stages of polishing her work. She explained:

It's just not for me. I don't understand the whole idea of revision.... I mean, why do they have to tell you to do it? People are supposed to do it naturally. Like if I'm reading something and I can tell it's messed up, I don't need the delete, add, change, move. I know this should go here and that should just go here. I mean if I read something and I can see that stuff, I just automatically correct it in my head.

As the instruction progressed, however, Stephanie incorporated the strategy into her planning process. She described using the strategy for an article in her journalism class:

I wrote my ideas down and then I moved it because I figured it would make more sense here than there and then I added some details to it to tie it altogether. It was like my first draft, but I got it to where I could type it and make a few changes and have a story.

Stephanie's strategy use reflected her commitment to planning while also revealing her ownership of the strategy. She described a shift in her approach to revision as looking for areas to improve instead of checking for mistakes. She explained this shift as a new way of reading, "You are actually looking and you know what to look for instead of just if you happen to find something that needs to be fixed." Stephanie understood the strategy in relation to her careful planning as well as her need to maintain her personal approach to writing.

More Global Understanding of Text

Document analysis of and interviews about pre- and postinstruction writing samples indicate that students gained a more global awareness of texts. Instead of making minimal changes at the word or phrase level, students began to make changes at the sentence and paragraph level.² Melanie and Desiree, who previously made changes at the word level only, progressed to deleting, adding, and rewriting phrases, sentences, and paragraphs. Dante progressed from lacking any revisions on his preinstruction sample to deleting, adding, and rewriting words, phrases, and sentences in his postinstruction response. Stephanie, who worked from an outline converted into sentences and paragraphs with few changes, progressed to adding and rewriting paragraphs and as well as individual words. These changes, made to larger units of text, indicate that students shifted their attention from words and phrases to sentences, paragraphs, and the overall structure of their texts.

Not every change, however, made a marked improvement on final drafts; there was not a significant difference between pre- and postinstruction scores. Table 1 contains examples of student revisions to postinstruction writing as well as student explanations of their revision decisions. Melanie and Stephanie both made changes that improved the overall quality of their response. Melanie improved her word choice and included more specific examples, while Stephanie added subheadings and quata-

TABLE 1
Examples of Student Revisions to On-Demand Writing Prompt

<i>Responses to Video Game Prompt</i>		
<i>Rough Drafts</i>	<i>Final Drafts</i>	<i>Student Explanations</i>
<p>Melanie In my opinion they are a bad influence. If you think about how many video games actually promote dangerous weapons and actions. Halo is one of the many video games who actually promotes many dangerous weapons and actions for those who play the game.</p>	<p>My opinion is video games are a bad influence on kids. If you think about how many video games promote dangerous actions, you would rethink buying or playing these games. It's dangerous for people to absorb violence in the games, because they may reenact what they see. For example, Halo is a game that promotes extreme violence. The point of Halo is to kill the enemy with any kind of weapon they can find.</p>	<p>I originally said "In my opinion they are a bad influence." That's not very clarified, so I took out the in and added, "My opinion is video games are a bad influence on kids" which sounded more mature, more understandable, and now you know I'm talking about video games and kids. Before you didn't know what I was talking about. It improved how I was speaking and it improved to show who I was talking to, who was my audience.</p>
<p>Derrick Video Games are a bad influence I think that videos are bad Because The influence you to Do Bad stuff for example: Drinking, Smoking and participate in illegal and Danger stuff. I Thank videos games are bad influences Because video can crupt you rmind for example: Say if you mom said Do your homework and you said im in The middle of a battle and it come time for school and you Didn't Do you home work</p>	<p>Video Games are a bad influence Because? <i>(title added)</i> Video Gamems are Bad Because The influence you to Do Bad stuff for example: Drinking, Smoking and participate in illegal and dangerous stuff Video games are bad Because They cruptp you mind fo example: Say you mom said do your home work and you replid back and said im in The middle of a battle in my game Then it comes time for school and you didn't Do you Homework and Now what you going to do for Homework.</p>	<p>It (pointing to the last line) was an idea that I knew but I forgot it. Then when I got down to the middle I thought, 'wait, I forgot something up here.' So I reread it and I had to plug in where it goes. I found that if goes right there after 'work' and then I had to find a way to put it in there so I drew a line to it and put it at the bottom.</p>

(Table continues on next page.)

TABLE 1
(Continued)

<i>Responses to Peer Pressure Prompt</i>		
<i>Rough Drafts</i>	<i>Final Drafts</i>	<i>Student Explanations</i>
<p>Stephanie My best friend had just moved into a new neighborhood. She didn't know very many people. There was a group of girls who always walked around the neighborhood, they were "The cool girls" My best friend wanted more than anything to be one of them. Sometimes they would look at her, but they never invited her to hang out.</p>	<p>New Kid on the Block (<i>subheading added</i>) My best friend Tyrie had just moved into a new neighborhood. She didn't know very many people except for one girl. Her "new friend" often put her in situations where she could either "do what she was told" or be "friendless."</p>	<p>I added details so they would get the emotion because in the prompt it specifically says emotions. So I took out less of the details and put more emotional details. This paragraph was like two paragraphs of just detail. It was like telling a story like, 'then, and next, and afterward' and it was just a lot of what I felt was unnecessary.</p>
<p>Desiree But one day him and his gang members were trying to set up another gang and also try to shoot a few of them because that's just what gangs do. So the person that was going to do all the shooting was going to be my cousin but he didn't really want to do all that because what if he got caught then he would be the only person who would go to jail or maybe get shoot or killed. So they kept pressuring him to do it. But my cousin was so scared because he didn't know what to do. So they let him think about it till it turned around when it was starting to get dark.</p>	<p>But one day him and his gang members were trying to set up another gang. So the person that was going to be doing all the shooting was going to be my cousin but he didn't really want to do all that. So they started pressuring him to do it. But my cousin was so scared because he didn't know what to do. So they gave him time to think about it</p>	<p>I went over it and all this stuff that I didn't want in there. After I read it over, 'cause I was just writing and when I went over it I seen all this stuff that didn't need to be in there or didn't really matter, I took it out. 'Cause some of it was like too much information. Like on some of them I accidentally put the name, which people didn't need to know and that's about it. It was too personal.</p>

Note: *Students chose to respond to one of two prompts: one addressing whether video games were good or bad for children and one addressing experiences with peer pressure.

tions as well as rewrote sentences in a more direct style that strengthened her tone. Interviews revealed that both students made these revision decisions based on what they believed about their audience and the effectiveness of their writing.

Desiree, who responded with a family story, made an intentional decision to cut portions from her draft because "it was too personal" and "people didn't need to know" the grittier details. While it is not clear that this decision strengthened her writing, it is clear that she intentionally thought about her school-based audience when deciding what to delete. Dante's writing, on the other hand, demonstrates that his attempt to improve his response was lost in his struggle with spelling and sentence fluency. The strategy enabled him to add an important idea, but it did not help him overcome surface structure challenges. While these changes did not significantly raise the overall quality of each student's postinstructional writing response, student interviews and document analysis indicate that students made larger changes to their writing and revised based on their understanding of audience and effective texts.

DISCUSSION

By incorporating a specific revision strategy into her existing process-based workshop instruction, Mrs. Murray shifted her instructional emphasis from one that relied primarily on planning techniques to one that valued specific revision behaviors and practices. As her instructional emphasis shifted, she had to conceive of new ways for students to use their writer's notebooks and embrace memorization as a new learning goal for students. These findings have implications for both teachers and teacher educators.

The first implication is that explicit revision strategies, such as the CDO-ADM strategy, provide teachers and teacher educators a clear sequence for discussing the evaluative and problem-solving components of revision. As

Witte's 2013 survey of teachers' revision practices and instruction indicates, defining revision can be a murky process and there is a gap between how teachers practice revision and how they teach it. Mrs. Murray's self-proclaimed success with teaching planning processes suggests her own discomfort with teaching revising. The data suggest that the CDO-ADM strategy provided Mrs. Murray with a step-by-step path for teaching her students about revision processes and behaviors all writers can use with all texts. This shift, from peer and teacher-led conferences focused on revising specific texts to a more general approach to revision, may enable teachers to explain, in concrete terms, what can seem like an otherwise opaque mental process.

The second implication is that instructional frameworks that emphasize learning through modeling and supported practice, like SRSD, provide students with low-risk opportunities to master new learning. SRSD's six-stage framework acted as a kind of checklist to insure Mrs. Murray provided ample amounts of practice before asking students to use the strategy independently. Expanding the use of writer's notebooks enabled students to learn the revision process without worrying about the quality or grade connected to a final product. This low-risk practice differed from her previous conference-based approach, which focused on revision only when students were producing final drafts. Using writer's notebooks as a space for revision practice as well as idea collection places a more equitable emphasis on revision and may foster student understanding of revision tools that transfer to a variety of writing tasks.

Finally, by asking students to memorize this strategy, Mrs. Murray guaranteed that students would no longer be left wondering what to do to revise. By teaching students to consider revision as a step-by-step process of comparing, diagnosing, and operating on texts, Mrs. Murray provided students with a clear set of actions to use when revising their work. Even if these actions do not immediately produce more effective texts, this foundation may con-

tinue to grow as students' larger writing knowledge continues to develop (MacArthur, 2013). It is also possible that this foundation may enable Mrs. Murray and her students to approach conferences with a common vocabulary that writers use to evaluate and revise texts and help these conferences focus on the writer instead of the writing (Calkins, 1986/1994; Murray, 1982). Further research should be conducted examining how specific revision strategies can be combined with and shape conference-based writing instruction.

In terms of student learning, data suggest that each of the five focal students gained a clear and applied understanding of the revision process in relation to their individual writing needs and identities. By the end of the study, all five students articulated a clear definition of revision and reported using the strategy in contexts other than language arts. How and why they valued the strategy differed, reflecting Boscolo and Gelati's (2013) assertion that a student's motivation to write is inextricable from how a student perceives his or her writing abilities. This finding confirms the role of individual writing needs and self-perception in each student's learning and indicates the importance of teachers understanding students' thoughts and feelings about different aspects of their writing process.

Finally, the data suggest that these five students increased their understanding of audience awareness even if this did not lead to higher writing scores. The compare and diagnose components of the strategy capitalize on audience awareness by explicitly asking writers to consider the meaning of their texts; however, students with different levels of audience awareness may use the strategy to different degrees of effectiveness. Schultz and Fecho (2000) assert that "writing growth can be said to occur in a nonlinear path" (p. 58) suggesting that students will take steps forward in development in some understandings while remaining stagnant or stepping back in others until a kind of equilibrium can be met. This nonlinear path suggests that students who embrace the

strategy with less success may eventually grow to use it more effectively.

Overall, the findings of this study support the need for instruction focused on revision and suggest the potential of specific revision strategies to support teacher and student growth. Strategies like CDO-ADM and instructional approaches like SRSD offer teachers and teacher educators a clear instructional starting point. Future research should address how specific revision strategies support and shape conference-based instruction.

NOTES

1. The statewide assessment system defined proficient achievement as demonstrating broad, applied content knowledge, appropriate use of strategies, and critical thinking skills. Apprentice achievement was defined as demonstrating basic content knowledge and reasoning abilities, limited use of strategies, and partially developed ideas (Kentucky Core Content Test Interpretive Guide, 2009).
2. Keith's writing is not included here because his postinstruction rough drafts were lost.

REFERENCES

- Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning* (2nd ed). Portsmouth, NH: Heinemann.
- Boscolo, P., & Gelati, C. (2013). Best practices in promoting motivation for writing. In S. Graham, C. A. MacArthur, & J. Fitzgerald (Eds.), *Best practices in writing instruction* (2nd ed., pp. 284-308). New York, NY: Guilford.
- Calkins, L. M. (1994). *The art of teaching writing*. Portsmouth, NH: Heinemann. (Original work published 1986)
- Charmaz, K. (2009). *Constructing grounded theory: A practical guide through qualitative analysis*. Los Angeles, CA: SAGE. (Original work published 2006)
- Council of Chief State School Officers. (2013). *Standards, assessment & accountability*. Retrieved from http://www.ccsso.org/what_we_do/standards_assessment_and_accountability.html

- Danoff, D., Harris, K., & Graham, S. (1993). Incorporating strategy instruction within the writing process in the regular classroom: Effects on the writing of students with and without disabilities. *Journal of Reading Behavior, 25*, 295–322.
- De La Paz, S., & Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge: Writing instruction in middle school classrooms. *Journal of Educational Psychology, 94*, 687–698.
- Dillon, D. R., O'Brien, D. G., & Heilman, E. E. (2000). Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly, 35*, 10–26.
- Erickson, F., & Shultz, J. (1992). Students' experience of the curriculum. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 465–485). New York, NY: Macmillan.
- Fidalgo, R., Torrence, M., & Garcia, J. N. (2008). The long-term effects of strategy-focused writing instruction for grade six students. *Contemporary Educational Psychology, 33*, 672–693.
- Fletcher, R. (1996). *A writer's notebook: Unlocking the writer within you*. New York, NY: Harper Collins.
- Fletcher, R., & Portalupi, J. (2001). *Writing workshop: The essential guide*. Portsmouth, NH: Heinemann.
- Graham, S., & Harris, K. (1993). Improving the writing of students with learning problems: Self-regulated strategy development. *School Psychology Review, 22*, 665–671.
- Graham, S., & Harris, K. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist, 35*, 3–12.
- Graham, S., & Harris, K. R. (2003). Students with learning disabilities and the process of writing: A meta-analysis of SRSD studies. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 323–344). New York, NY: Guilford.
- Graham, S., Harris, K. R., & MacArthur, C. (2006). Explicitly teaching struggling writers: Strategies for mastering the writing process. *Intervention in School and Clinic, 41*, 290–294.
- Graham, S., Harris, K. R., & Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Contemporary Educational Psychology, 30*, 207–241.
- Graham, S., MacArthur, C., & Schwartz, S. (1995). Effects of goal setting and procedural facilitation on the revising behavior and writing performance of students with writing and learning problems. *Journal of Educational Psychology, 87*, 230–240.
- Graham, S., & Perin, D. (2007a). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology, 99*, 445–476.
- Graham, S., & Perin, D. (2007b). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools—A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Harris, K. R., Graham, S., & Mason, L. H. (2006). Improving the writing performance, knowledge, and motivation of struggling writers in second grade: The effects of self-regulated strategy development. *American Educational Research Journal, 42*, 295–340.
- Harris, K. R., Graham, S., Mason, L. H., & Friedlander, B. (2008). *Powerful writing strategies for all students*. Baltimore, MD: Paul H. Brookes.
- Hayes, J. R. (2004). What triggers revision? In L. Allal, L. Chanquouy, & P. Largy (Eds.), *Revision: Cognition and instructional processes* (Vol. 13, pp. 9–20). Boston, MA: Kluwer.
- Hayes, J. R., & Flower, L. S. (1986). Writing research and the writer. *American Psychologist, 41*(10), 1106–1113.
- Klassen, R. (2002). Writing in early adolescence: A review of the role of self-efficacy beliefs. *Educational Psychology Review, 14*, 173–203.
- MacArthur, C. A. (2013). Best practices in teaching evaluation and revision. In S. Graham, C. A. MacArthur, & J. Fitzgerald (Eds.), *Best practices in writing instruction* (2nd ed., pp. 215–237). New York, NY: Guilford Press.
- Midgette, E. Haria, P., & MacArthur, C. A. (2008). The effects of content and audience awareness goals for revision on the persuasive essays of fifth- and eighth-grade students. *Reading and Writing, 21*, 131–151.
- Monroe, B., & Troia, G. A. (2006). Teaching writing strategies to middle school students with disabilities. *Journal of Educational Research, 100*, 21–33.
- Murray, D. M. (1982). Teaching the other self: The writer's first reader. *College Composition and Communication, 33*, 140–147.
- National Association of Educational Progress, (2007). *The nations report card: Writing report*

- card. Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/main2007/2008468.pdf>
- National Association of Educational Progress, (2011). *The nations report card: Writing 2011*. Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/main2011/2012470.pdf>
- National Commission on Writing in America's Schools and Colleges. (2004). *Writing: A ticket to work ... or a ticket out a survey of business leaders*. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/writing-ticket-to-work.pdf
- National Governors Association & Council of Chief School Officers. (2010). *Common Core Standards for English language arts & literacy in history/social studies, science, and technical subjects*. Washington, DC: Authors. Retrieved from http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf
- Packer, M. J., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist, 35*, 227–241.
- Portalupi, J., & Fletcher, R. (2001). *Nonfiction craft lessons: Teaching information writing K-8*. Portland, ME: Stenhouse.
- Pressley, M., & Harris, K. (2006). Cognitive strategies instruction: From basic research to classroom instruction. In P. A. Alexander & P. H. Wine (Eds.), *Handbook of educational psychology* (pp. 265–286). Mahwah, NJ: Erlbaum.
- Pritchard, R. J., & Honeycutt, R. L. (2006). The process approach to writing instruction: Examining its effectiveness. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 275–289). New York, NY: Guilford Press.
- Ray, K.W. (1999). *Wondrous words: Writers and writing in the elementary classroom*. Urbana, IL: National Council of Teachers of English.
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review, 7*, 351–371.
- Schultz, K., & Fecho, B. (2000). Society's child: Social context and writing development. *Educational Psychologist, 35*, 51–62.
- Sexton, M., Harris, K. R., & Graham, S. (1998). Self-regulated strategy development and the writing process: Effects on essay writing and attributions. *Exceptional Children, 64*, 295–311. Retrieved from <http://vnweb.hwwilsonweb.com/hee/results/results-single-ftPES.jhtml>
- Sommers, N. (1982). Revision. *Journal of Teaching Writing, 1*(2), 133–148.
- Witte, S. (2013). Preaching what we practice: A study of revision. *Journal of Curriculum and Instruction, 6*, 33–59.
- Zito, J. R., Adkins, M., Gavins, M., Harris, K., & Graham, S. (2007). Self-regulated strategy development: Relationship to the social-cognitive perspective and the development of self-regulation. *Reading and Writing Quarterly, 23*, 77–95.