Developing Self-Regulated Writers

THE INCLUSION OF STUDENTS with learning disabilities (e.g., resource students) in state-mandated accountability testing is standard in many U.S. schools. General and special education teachers strive to ensure that all students are able to complete the required writing components. Nonetheless, the writing difficulties of students with learning disabilities when compared to their non-disabled peers are well documented in the literature (Englert et al., 1991; Graham, Harris, MacArthur, & Schwartz, 1991; Wong, 1998). These students produce writing that is shorter, less cohesive, and poorer in overall quality. In addition, they have demonstrated a progressively more negative attitude towards writing (Harris & Graham, 1999).

With these problems in mind, it is not surprising that author Linda Mason was anxious about the inclusion of her class of third-grade written language resource students in state-selected random testing groups. These students had been placed in groups—separated from their general classroom teacher, resource teacher, and peers—for practice testing weeks before the actual testing dates. After the first practice testing session, one of the third grade teachers asked Linda, "What is a Ms. Mason paragraph?" Apparently, two resource students had

Karen R. Harris and Steve Graham are professors, Linda H. Mason is a faculty research assistant, and Bruce Saddler is a doctoral candidate, all at the University of Maryland. asked this teacher if they could write a paragraph the same way they had practiced in the resource classroom. When given permission to do so, the students wrote paragraphs equivalent to the paragraphs written by an average peer.

The writing instruction utilized in Ms. Mason's resource classroom included Self-Regulated Strategy Development (SRSD) (Harris & Graham, 1996), which focuses on the development of composition and self-regulation strategies in tandem. One goal of SRSD, which includes imbedding selfregulation procedures (e.g., self-instructions, goal setting, self-monitoring, and self-reinforcement) within strategy development, is to make the use of strategies automatic, routine, and flexible. Ms. Mason's students had been able to internalize and generalize their writing strategies effectively enough to perform an unfamiliar writing task successfully during practice testing. These students with writing disabilities had learned a structure, a "trick," for writing.

Although the students in Ms. Mason's class had diagnosed writing disabilities, difficulties with writing are not limited to students with special needs. Writing is not effortless or easy for most people. It is a highly complex and demanding task that requires that a number of skills be performed simultaneously. Writers must negotiate rules and mechanics while maintaining a focus on the overall organization, form and features, purposes and

goals, and audience needs and perspectives. As Flower and Hayes (1980) observed, "a great part of skill in writing is the ability to monitor and direct one's own composing processes" (p. 39). Writing is hard work, and to do it well, a writer must self-regulate this intricate process.

Even professional writers use strategies when writing (Graham & Harris, 1994; Zimmerman & Risemberg, 1997). For example, before writing Setting Free the Bears and Cider House Rules, John Irving invested considerable amounts of time planning, gathering information, making notes, seeing, witnessing, observing, and studying (Plimpton, 1967). Irving typifies how a skilled author might engage in the use of strategies needed for effective writing.

Skilled writers are able to use strategies to help them accomplish specific writing tasks. Students who experience significant difficulties with writing do not; they may not know how to selfregulate their behavior before, during, and after writing. In addition, students with writing difficulties often lack important knowledge of the writing process and have trouble generating ideas and selecting topics (Harris & Graham, 1999). The knowledge-telling behavior of these students frequently replaces planning, ignores audience and topic, and interferes with the organization of the text and the development of rhetorical goals. This retrieve-andwrite process operates like an automated and encapsulated program, largely without mindful control (McCutchen, 1988). Though this is not a thoughtless process, it is largely a linear process, with little recursive interplay (Scardamalia & Bereiter, 1986).

Students may also experience problems with attitudes, beliefs, and emotions about writing. Failure, self-doubts, learned helplessness, and poor self-efficacy and motivation negatively affect a student's ability to write well (Sawyer, Graham, & Harris, 1992). In addition, other characteristics such as impulsivity, difficulty with memory or other aspects of information processing, low task engagement and persistence, devaluation of learning, and low productivity, may undermine a child's writing ability. Students with these characteristics need writing instruction that will help them become more goal-oriented, resourceful, and reflective (Graham, Harris, & Troia, 1998). They need support not only

in the development of skills, but also in developing composition strategies, understandings about the writing process, and positive attitudes about themselves as writers.

Self-Regulated Strategy Development (SRSD)

Developed more than 20 years ago, SRSD has proven to be an effective tool for improving writing achievement for students with low writing performance. The composition strategies and imbedded selfregulatory mechanisms address the affective, behavioral, and cognitive characteristics of struggling writers. SRSD integrates research that has focused on cognitive development and learning, behavior, and the role of affect in learning and development (Brown & Campione, 1981; Englert, Raphael, Fear, & Anderson, 1988; Flower & Hayes, 1980; Kaamann & Wong, 1993; Meichenbaum, 1977; Scruggs & Mastropieri, 1990; Vygotsky, 1962). SRSD is a flexible and modifiable approach that meets the styles and needs of both teacher and student. SRSD has been empirically validated in over 20 studies implemented in small groups and whole classrooms, and in one-to-one tutoring sessions by pre-service and in-service teachers. SRSD appears to be a powerful instructional method not only in writing but also in mathematics and reading (Case, Harris, & Graham, 1992; Johnson, Graham, & Harris, 1997). It can be successfully incorporated with other methods, such as writers' workshop.

SRSD is designed to help students become fluent, independent, self-regulated, goal-oriented learners (Graham, Harris, & Reid, 1992). SRSD can help writers in three ways. First, strategy usage assists students in developing knowledge about the writing process, thereby increasing the skills students need for effective planning, writing, revising, and editing. Next, students are supported in the development of the self-regulation procedures needed to monitor and manage their own writing. Finally, development of positive attitudes about writing and views of themselves as writers is supported. After working through the SRSD process, improvements in quality, length, mechanics, and structure of normal and low achieving students' compositions, as well as their attitudes and beliefs about writing, have been maintained over time and

generalized across settings (Harris & Graham, 1996; Graham, Harris, & Troia, 1998).

Stages of SRSD

Within the SRSD framework, six basic stages of instruction introduce the strategies and self-regulation components. These stages—develop and activate background knowledge, discuss the strategy, model the strategy, memorize the strategy, support the strategy, and independent performance—are designed to be revisited, reordered, modified, or combined to meet the needs of the students and teacher. Four basic components of self-regulation self-instruction, goal setting, self-monitoring, selfreinforcement—can be combined or used individually to help students in the development of strategy acquisition and usage. SRSD allows teachers to use the level of support (e.g., explicit instruction, guided discovery, and/or individualized assistance) needed for student success. Using this approach in the classroom is illustrated here, and suggestions for implementation and evaluation are provided.

Mike, a fifth-grade student with a learning disability, claimed to "very much dislike writing" and was described by his teacher as a "non-writer" (Harris, Schmidt, and Graham, 1998). Mike wrote the following story prior to SRSD instruction:

The boy is running through the meadow where there is a lot of water and trees and high hills. He is running up and down to get to another side and he must be happy or he would stop running.

This paragraph is quite short and was completed without planning or revision. Within the six stages of SRSD instruction, Mike's teacher inserted the following basic three-step planning strategy, including a story-writing component called SPACE:

- 1. Think Who will read this? Why am I writing this?
- 2. Plan what to say Use SPACE (Setting, Purpose, Action, Conclusion, and Emotions)
- 3. Write and say more. (Harris, Schmidt, & Graham, 1998)

Stage 1: Develop and activate background knowledge

An obvious, but sometimes neglected, element of any instructional method is the development of

pre-skills needed for the task and the activation of what the student already knows about the subject. During the first stage of instruction, and continuing through the third stage, Mike acquired the skills he would need to implement the strategy. Examples of stories were read and discussed, and (using SPACE) the parts of a good story were identified in each. Two self-regulation procedures, goal setting and self-monitoring, were introduced and initiated. Mike and his teacher selected several stories that he had previously written and graphed the number of story elements identified for each story. For future stories, the goal was to include all five story parts: (a) setting (this includes locale, time of the story, and introduction to the main character/other characters); (b) purpose (what the main character strives to achieve); (c) action (what is done to achieve the goal); (d) conclusion (the results of the action); and (e) emotions (the main character's and other characters' reactions and feelings about various events in the story).

Stage 2: Discuss the strategy

The second stage of instruction included teacher and student discussions about the purpose and benefits of the strategies. Strategy components were tailored to meet Mike's individual needs. Mike was given a chart that contained the threestep strategy and a mnemonic for SPACE. Mike and his teacher discussed when and how to use the strategy steps, including real-world examples for application to other tasks. Self-regulated goals for monitoring his writing, as well as personal and specific self-instructions, were developed and refined during this stage. Mike's teacher modeled the use of positive statements such as "let my mind be free," "think of fun ideas," and "take my time, good ideas will come to me."

Stage 3: Model the strategy

Enthusiastic and natural modeling of the strategy by the teacher or a peer can be a powerful tool for self-regulated strategy development. Mike's teacher knew that effective modeling should include examples of self-statements and self-instructions, and actual demonstration of the three-step strategy and mnemonic while writing. After modeling, Mike and his teacher discussed the strategy steps and the instructional components, brainstormed additional self-statements and instructions, and made modifications where needed.

Stage 4: Memorize the strategy

Students begin to commit the acronym and strategy steps to memory in this stage, and can keep working on memorization as they proceed to the next stage. Those students with memory difficulties may need more support in order to memorize the acronym and strategy steps, while other students may be able to skip this step. Initially, Mike needed support (e.g., a chart showing the steps) before he could retrieve the strategy automatically.

Stage 5: Support the strategy

For most students with writing problems, actual strategy use is neither internalized nor mastered at this stage. Mike's teacher scaffolded instruction, writing stories with Mike while providing assistance and support, until he became independent in using the strategy. During this time, Mike's self-instructions and writing goals were reviewed. Mike and his teacher set a personal criterion for his performance and developed a method for self-reinforcing his success by counting the number of story parts included (see Stage 1) and graphing the number on his chart.

Stage 6: Independent performance

When the student is able to use the strategy independently, the self-regulation procedures and mnemonics can be faded as appropriate. Mike moved to this stage when his teacher determined he was ready. He was asked to use his three-step strategy chart only if necessary, and to try to produce the mnemonic by memory and then use it when writing.

Mike and his teacher planned booster sessions for maintenance and generalization and developed a method for evaluating the effectiveness and performance of his strategy use. Mike continued to self-monitor and self-reinforce his writing by graphing his story parts. After eight instructional sessions, Mike independently wrote the following story:

Once upon a time long ago an animal was shipped to a small country in Brazil. The man that lived there did not know what had happened. He came out, took the box to a top of a hill because whatever was in the box he did not want it to kill his men. The man got a net and went to open the box. He opened the box. The animal got out and bit him and was running toward his men. The men did not want to get hurt, so they ran into their tent with fear and the animal ran away. The leader got a bandage for his leg and got the net and started after him. He finally caught the animal and found out it was only a scared lion and carried him back. He told his men to come out and look. They walked out slow. The leader said, "Look, it is only a baby lion." They all pet it and played with it, fed it and they all became good friends with the lion. They were all happy, but pretty soon after that, the tiger got bigger and wasn't friendly any more. So they let it go free. They were all upset, but then they remembered all the good time they had with the lion.

Characteristics of SRSD

Mike's teacher used all six steps of SRSD to teach him the strategy. However, teachers can adapt these steps as needed. One teacher might utilize the full model stage by stage in the classroom, while another may delete or combine stages. Some teachers might use all of the stages and components with some students, but not with others who do not need them. SRSD can be implemented effectively in any classroom because the method is flexible and accommodates individual and/or group needs. Several characteristics, however, have been identified by teachers and researchers as critical to effective implementation.

First, it helps to anticipate and plan for glitches or areas of instruction that may be problematic. For example, if the teacher anticipates that a particular student or group of students will be resistant to self-speech (not uncommon among older students), these students may be given the option of reading their statements to themselves rather than talking aloud, whispering quietly to themselves, or talking into a tape-recorder as they work. Or, if the selected strategy is too difficult for some students, ways to break the strategy down further or a simpler strategy might be considered (for examples, see Harris & Graham, 1996). Teachers and students also need to work collaboratively through a process where initial, enthusiastic teacher scaffolding and support are gradually faded and transferred to the student. In addition, instruction should be individualized as

much as possible to reflect the students' characteristics, skills, strengths, and needs. To facilitate mastery, the instruction should be criterion-based rather than time-based; students should be given all of the time and support necessary for them to internalize the strategies being taught.

A supportive network of fellow teachers and administrators who can problem solve while sharing successes and failures can be helpful to strategy teachers. The teacher should understand unique needs of individual student's development as a writer and self-directed learner to take full advantage of the SRSD model.

Evaluating the Effects

The effects of strategy instruction should be evaluated during and after instruction by both the students and the teacher. Student/teacher partnerships in ongoing evaluation can foster a student's sense of ownership of achievement, reinforce a student's self-monitoring of progress, and reduce responsibility for evaluation normally assigned solely to the teacher. Teachers will need to share in student reflections.

Evaluation should also include assessment of the teacher's instruction, strategy methods, and procedures. Teachers should attend to the students' strategy use, the subsequent effect on performance, and the students' perspective about the effectiveness and utility of the strategy. Using self-monitoring students can evaluate their own writing, determine if each step of the strategy was completed to criterion, and evaluate their writing. Teacher monitoring through observation and discussion helps to ensure that students are implementing the strategy, and that student-made changes to the strategy are beneficial.

Students should be asked to share the purpose of the strategy along with its application and any modifications needed for other situations. Generalization and maintenance need to be corroborated not only by the student's teacher but also by other classroom/content teachers.

Student portfolios can be used to organize the many evaluation components of strategy instruction. Throughout the evaluation process, the teacher has the opportunity to acknowledge the student as a writer and learner. At the same time, the student learns that writing is a reflective process and that the long-term activity of developing writing skills is as important as the current writing products.

Tips and Considerations

Implementing effective self-regulated strategy development instruction takes an investment in teacher time and effort. Teachers new to SRSD report that it is helpful to begin by teaching selected, proven strategies. Strategies should be taught over time and in depth so students have the opportunity to understand, maintain, and generalize what they have learned. Students should be included in the development and selection of strategy procedures, instructional goals, and evaluation. Active involvement by students in the creation and implementation of strategies to be applied to additional situations can enhance performance across settings. Similarly, self-instructions are most effective when constructed by the student in the student's own words.

Finally, in order to facilitate growth in strategy use by the student, all of the student's teachers should collaboratively support strategy use and development across subjects and classrooms. If students are supported in the development of writing strategies across grades, genres, and settings, a powerful repertoire of writing and self-regulation strategies will become theirs. Using these strategies across grades and writing demands will enhance students' development as life-long strategic learners.

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