

# FOCUS ON EXCEPTIONAL CHILDREN

## Effective Instruction in Written Language

*Stephen L. Isaacson*

Among the many skill deficiencies of mildly handicapped students, written expression is an often overlooked problem. Many learning disabled (LD) students are deficient in written language skills, as measured both by norm-referenced tests of written language (Poplin, Gray, Larsen, Banikowski, & Mehring, 1980) and by criterion-based analyses of their writing products (Anderson, 1982; Deno, Marston, & Mirkin, 1982; Morris & Crump, 1982; Nodine, Barenbaum, & Newcomer, 1985). Although reading, math, and spelling skills are emphasized in remedial programs, written expression has been given insufficient attention both in the curriculum and in educational literature (Roit & McKenzie, 1985).

As in regular education, special education has a need to identify and apply methods for effectively teaching written expression. In keeping with that aim, this article sets out to (a) identify current problems with existing instructional practices, (b) recommend a thorough model of written language on which curriculum should be based, and (c) discuss approaches and techniques that have been shown to be effective with both handicapped and nonhandicapped students.

### PROBLEMS IN CURRENT INSTRUCTIONAL PRACTICE

The teaching of written expression suffers from three problems. First, educators give insufficient attention to writing in the curriculum. Second, written language instruction is based on an incomplete model of written language. Third, teachers have inadequate information regarding effective approaches to teaching written language and the ineffective techniques to avoid. Each of these problems contributes to the lack of impact that traditional instruction has had on the writing abilities of both handicapped and nonhandicapped students.

#### Insufficient Attention to Writing

Several authors (Hughes, 1978; Bridge & Hiebert, 1985; Shanahan, 1980) have documented the extent to which writing is overlooked in the curriculum. In a comparison study of 19 pairs of classrooms in the United Kingdom and the U.S., matched according to socioeconomic status, Hughes found that British children spent an average of 9½ hours

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per week composing, while U.S. children spent an average of only 1½ hours per week, with some classrooms spending as little as 1½ hours *per month*. The compositions of British children were twice as long, syntactically more mature, and better organized than those of U.S. children. Leinhart, Zigmond, and Cooley (1980) found that LD students observed in the U.S. also spent less than ½ hour per day in writing, and 75% of that time was spent copying.

The insufficient amount of time devoted to written language instruction in special education occurs because of two misconceptions among teachers. The *first* misconception is that writing does not have to be taught. It often is thought to be an outgrowth of oral language development and exposure to written language through reading. Although writing is positively correlated to both of the other language dimensions (Dyson, 1983; Shanahan, 1980, 1984), correlations are not high enough to assume that one necessarily will follow from the other. Each must be taught.

The *second* misconception centers on *when* written expression should be introduced. Many teachers believe that writing necessarily must wait until a child is proficient in reading. Myklebust (1965) described language development along a hierarchy of language skills in which expressive

written language (writing) follows its receptive counterpart (reading). Other authors (Chomsky, 1976; Dyson, 1983; Graves, 1983) have suggested that development of literacy does not necessarily follow in that order. Most children attempt to write before they attempt to read. Writing is a means of becoming familiar with words and grapheme-phoneme correspondence. Waiting for the special education student to become proficient in reading before introducing writing may limit the growth of both literacy skills.

### Incomplete Theoretical Model

Writing instruction also suffers from an inadequate theoretical model of written language. Shuy (1981) wrote of the need for a "template" to provide a guide for assessment, diagnosis, and prescription. Too frequently, teachers look only at the more obvious, surface aspects of writing. When Shuy compared current instructional practices with his model of language development, the comparison revealed two problems: (a) Early writing skills are taught far longer than they should be, and (b) later strategies seldom are taught at all.

The National Council of Teachers of English defined writing as "the process of selecting, combining, arranging and developing ideas in effective sentences, paragraphs, and, often, longer units of discourse" (U.S. Department of Health, Education, & Welfare, 1979, p. 12). A model of writing instruction, therefore, should take into account the *process* ("selecting, combining, arranging, and developing ideas"), as well as the *product* dimensions of written language ("sentences, paragraphs, and . . . longer units"). In addition, the *purpose* of writing is important in determining the appropriate mode of written communication (letter, poem, narration, etc.) and choosing related writing assignments.

### Inadequate Information

Finally, writing instruction suffers from the lack of information that teachers have about validated teaching approaches and techniques. In his integrative review of studies on written language instruction, Hillocks (1984) concluded that the dimensions of effective instruction were quite different from what is commonly practiced in schools. What little research exists regarding writing instruction does not reach teachers in the field. When teachers in one district were asked to rate their teacher education programs in effectively preparing them to teach writing on a scale from 0 (poor) to 3 (excellent), teachers gave their undergraduate preparation a mean rating of 1 and their graduate preparation a mean rating of .8 (Bridge & Hiebert, 1985).

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## BEGINNING FROM A MODEL OF WRITTEN LANGUAGE

Planning written language instruction requires that teachers understand and consider all facets of the domain. A complete model of written language includes the dimensions of *process*, *product*, and *purpose*.

### Process

First, teachers must teach the writing process. Models of composing vary as to the number of steps or stages the process includes, from only two (Elbow, 1981) to five (Glatthorn, 1981). But most authors (Emig, 1971; Hayes & Flower, 1980; Nold, 1981) agree to variations of a three-step model that begins with a prewriting stage (sometimes referred to as *planning*) and includes a writing stage (*transcribing*) and a rewriting stage (*revising*). As Humes (1983) pointed out, the process does not move in a straight line from planning to transcribing to revising. Writers move back and forth among these subprocesses. The difference between skilled and unskilled writers throughout the process is summarized in Table 1.

During the writing process a struggle goes on throughout each of the recursive stages between two simultaneous roles of the writer. Smith (1982) described the two roles as *author* and *secretary*. The author has to get ideas, organize his or her thoughts, and select and arrange words and phrases. The secretary, on the other hand, deals with the physical effort of writing and is concerned with mechanical aspects of the writing task. In the *planning* stage the author has to get ideas while the secretary tries to remember the rule about paragraphs. During *transcribing* the author keeps the message and audience in mind while the secretary worries about spelling, punctuation, and legibility. When reviewing and *revising* what has been written, the author should review globally as the secretary proofreads at the word and sentence level. Mildly handicapped writers have difficulty with both roles, but educators do not agree as to which should be emphasized first in instruction.

### Product

Teachers also must consider all aspects of the written product. When various theories of written language are compared (Isaacson, 1984), five principal components seem to emerge: *fluency*—the amount written (number of words in the composition); *syntax*—complexity of the sentences; *vocabulary*—degree of sophistication in the student's choice of words; *content*—originality of ideas, organization of thought, maturity of style; and *conventions*—the mechanical

aspects, such as margins, verb endings, spelling, and punctuation, that teachers expect students to use.

### Purpose

Finally, writing must be taught across different purposes. Britton (1978) proposed just three functions of writing: expressive, transactive, and poetic. *Expressive* writing is relatively unstructured, relating the speaker's thoughts and feelings in a personal voice. *Transactional* discourse is language to get things done; it directs, persuades, and instructs. *Poetic* writing is patterned, verbalizing the writer's feelings and ideas within a superimposed structure (not restricted to poems). Awareness of purpose pervades all decisions the writer makes at both the global and the sentence level.

Britton believes that the starting point for developing content should be expressive writing focusing on the writer's experiences and feelings. A functional curriculum, however, requires that transactional writing tasks also be introduced, since future job-related writing may include writing letters, progress reports, requisitions, technical descriptions, resumes, contracts, advertisements, brochures, and project proposals (Phelps, 1986).

*The three dimensions of writing are interdependent.* One dimension cannot be addressed without affecting the other dimensions. For example, the purpose of the writing will determine the style and voice the author takes while transcribing (process). Careful planning and revising of the composition (process) will greatly enhance the quality of its content (product).

Taking into account all three dimensions, the task of writing obviously is complex and difficult. As Nold (1981) and Daiute (1984) pointed out, the demands for focal attention in each subprocess, across product components, and between the author and secretary roles place an enormous load on short-term memory. Flower and Hayes (1980) described writing as something of a juggling act. The writer must retrieve knowledge of the topic, use the linguistic conventions unique to written texts, take into account the audience and the constraints of the rhetorical problem itself while managing the motor skills required for putting it all on paper (or computer screen). The writer's challenge is to keep all the balls in the air given the limits of short-term memory. Even a skilled writer must employ strategies to handle the overload—such as using index cards to organize and sequence content material. To teach the beginning writer how to write, the task must be simplified somehow, giving the teacher time to introduce processes gradually and teach the necessary control strategies.

**TABLE 1**  
**The Writing Process of Skilled and Unskilled Writers**

Stage	Unskilled Writer	Skilled Writer
Planning	Does not participate in prewriting discussions.	Explores and discusses topic.
	Spends little time thinking about topic before beginning composition.	Spends time considering what will be written and how it will be expressed.
	Makes no plans or notes.	Jots notes; draws diagrams or pictures.
Transcribing	Writes informally in imitation of speech.	Writes in style learned from models of composition.
	Is preoccupied with technical matters of spelling and punctuation.	Keeps audience in mind while writing.
	Stops only briefly and infrequently.	Stops frequently to reread. Takes long thought pauses.
Revising	Does not review or rewrite.	Reviews frequently.
	Looks only for surface errors (spelling, punctuation).	Makes content revisions, as well as spelling and punctuation corrections.
	Rewrites only to make a neat copy in ink.	Keeps audience in mind while rewriting.

## DESIGNING A CURRICULUM

Teachers should not rely on basal texts to provide a complete writing program with sufficient and appropriate activities. Harrington-Brogan (1983) evaluated first, third, and fifth grade language arts textbooks and found that writing was not treated as a three-stage process; the texts neglected reviewing and revising activities almost entirely. Teacher strategy suggestions were few and often inconsistent with authoritative opinion. Content was not considered a major concern. Bridge and Hiebert's (1985) analysis revealed that by far the greatest number of textbook writing activities involved verbatim copying, focusing on the mechanics of grammar and punctuation.

Should instruction focus on the secretary's role or the author's role or both? Martin (1983) recommended that the two processes be separated and worked on at different times. Barenbaum (1983) advocated a focus on composition from the beginning of writing instruction, postponing the emphasis on mechanics until writers would gain confidence in

their ability to express their thoughts. Humes (1983) argued that higher level skills, such as sentence variation and figures of speech, are not possible until lower level skills—e.g., handwriting, spelling, word usage, punctuation—become automatic after years of practice.

As Scardamalia (1981) pointed out, a teacher's lack of emphasis on correctness does not necessarily free students from that concern. Students who are frustrated with the mechanics of writing will still go on worrying about them. Mastering the secretary functions of writing, however, does not ensure that the student will do a good job as author. Scardamalia found that removing concerns for correctness through, for example, dictation to the teacher does not appear to lower the demands of idea coordination or result in coherent ideas, at least among average sixth graders. MacArthur and Graham's (1986) findings were different for sixth grade LD students: Dictated stories were significantly longer, were of higher quality, and had fewer grammatical errors than handwritten stories or those composed on a word processor. A reasonable approach, therefore, seems to be the one prop-

osed by Roit and McKenzie (1985), who advocated the development of parallel skills—concept development and basic writing skills—taught concurrently rather than sequentially.

Teaching a variety of composition structures is important. Studies of mildly handicapped students (Anderson, 1982; Harris & Graham, 1985; Nodine, Barenbaum, & Newcomer, 1985) have investigated the abilities to write descriptive or narrative compositions. Learning expository text structures such as *comparison*, *causation*, *taxonomy*, and *persuasion* is also important (Giordano, 1983; Stewart, 1985), as these skills are important for report writing. Glatthorn (1981, pp. 39-40) includes *applied writing* (letters, memos, applications, resumes) as an important part of the writing curriculum.

A writing curriculum should address all facets of the written product as it incorporates all the stages of the writing process. Skilled writers produce good compositions, as detailed in Table 2. They usually write more words than writers who are less skilled (Deno et al., 1982), using longer, more complex sentences (Hunt, 1965; Loban, 1976; Morris & Crump, 1982). Skilled writers use mature words and fewer high-frequency, undistinguished words (Chatterjee, 1983; Finn, 1977; Deno et al., 1982). Their compositions are rated higher in terms of quality of ideas, awareness of audience, cohesiveness, and organization (Cooper, 1977; Irwin, 1982; North, 1981; Robinson, 1984). In addition, skilled writers are better at the mechanics of writing, such as spelling, punctuation, and correct verb endings (Videen, Deno, & Marston, 1982). Producing compositions with these qualities requires the direct teaching of necessary subskills.

### Fluency

The first goal for the remedial teacher is fluency—getting students to write simple declarative sentences and elaborate their thoughts into compositions of gradually increasing length. First writing attempts of young children may consist only of labeling the people or objects portrayed in their drawings (Dyson, 1982). Beginning fluency also develops as children write simple messages to each other and the teacher, reinforcing the function of written communication. Dyson reported that preschool children's "letters" do not always communicate any particular message but are written to initiate and maintain social contacts.

Sentence writing can be taught to beginning writers through sentence maps or patterned guides, such as the SIMS Written Language Program (Minneapolis Public Schools, 1977) or the Phelps Sentence Guide Program (Phelps-Terasaki & Phelps, 1980). In the *Expressive Writing* program, Engelmann and Silbert (1983) attempt to develop basic writing skills in highly structured tasks that limit con-

tent demands on the author. Children begin the program by copying sentences and short paragraphs while learning how to indent and use capitals and periods. Instruction quickly follows in writing simple declarative sentences describing picture scenes. Students are told how to begin their sentences, are told what the sentences should express, and are given the spelling of necessary vocabulary.

### Syntax

As the student masters the spelling of frequently used words and writes compositions of gradually increasing length, another instructional goal is for the student to use expanded, more complex sentences. Sentence combining exercises are an effective way to increase a student's syntactic maturity. The purpose of sentence-combining exercises is to make students more conscious of the transformational choices available to them for expressing their ideas (Mellon, 1981). For example, these two sentences

The man is in the kitchen  
He likes ice cream

can be combined into this longer sentence:

The man who likes ice cream is in the kitchen.

Studies conducted from the mid-1960s until the present have consistently shown the beneficial effects of sentence-combining exercises on students of various ages and ability levels (Doyle, 1983; Hillocks, 1984; Isaacson, 1985; Stotsky, 1975). In addition to increasing syntactic maturity, sentence combining has been shown to improve the overall quality of written expression. Mellon (1979) wrote, "I don't know of any component in our arsenal of literacy-teaching methods that is better supported empirically than sentence combining" (p. 35).

Although sentence-combining texts often are written for use with students at the secondary level, Ney (1975) and Isaacson (1985) have demonstrated that simple combining tasks can be taught successfully to second and third grade students, even those with learning problems. Cooper (1973) and Lawlor (1983) outlined sequences for sentence combining according to the difficulty of the required transformation. Nutter and Safran (1984) have described ways in which sentence combining can be introduced to LD students using the students' own reading and spelling vocabulary.

### Vocabulary

An important component of good writing is choosing correct and effective words. The direct way to address the

**TABLE 2**  
**The Writing Products of Skilled and Unskilled Writers**

Component	Unskilled Writer	Skilled Writer
Fluency	Writes few words in allocated times. Writes incomplete sentences.	Writes many words in allocated time. Writes complete sentences.
Syntax	Writes in simple S-V or S-V-O sentences.	Writes in longer, complex sentences with embedded clauses and phrases.
Vocabulary	Uses high-frequency words. Uses favored words repetitiously.	Uses mature words. Avoids repeating favorite words.
Content	Shows disregard of audience. Includes irrelevant information. Has poor organization and structure.	Uses style appropriate to topic and audience. Keeps to topic with good cohesion from sentence to sentence and overall. Produces compositions that have good beginning, logical development, and clear conclusion.
Conventions	Spells many words incorrectly. Omits punctuation or uses incorrectly. Writes illegibly. Errs in use of verb inflections and/or choice of pronouns.	Spells adequately. Uses correct punctuation. Writes legibly. Presents reasonably neat paper. Uses correct verb endings and pronouns.

problem is to teach synonyms for overused words (e.g., *said* or *awesome*). Synonym and antonym charts can be hung in the room for reference during writing periods. Mercer and Mercer (1985, p. 444) have recommended giving the student a short passage in which several words are underlined. The teacher then asks the student to substitute for the underlined word a more colorful or interesting word or phrase.

Giordano (1984, pp. 49-52) proposed a method for use with LD students that incorporates sentence writing, sentence transformation, and vocabulary practice in one activity. The CATS exercise has four steps, as described below:

- Copy:** The student says a sentence, the teacher writes it, and the student copies it on paper.
- Alter:** The teacher circles a content word in the sentence, and the student substitutes another word for it.
- Transform:** The student changes the sentence into a question, present

tense into past, or singular forms into plural.  
Supply: The teacher asks a question that the student can answer by writing an original sentence using familiar words and phrases.

#### **Content**

Young writers often are too preoccupied with the mechanics of writing to give thought to the prospective reader (Fontaine, 1984). Perl (1983) and Phelps-Terasaki, Phelps-Gunn, and Stetson (1983, pp. 371-372) have recommended group interaction and feedback for remedying a writer's difficulty in attending to audience and mode. Various group members offer different audience responses to compositions shared in the group and provide the impetus for the student to rearrange and rewrite the composition. Perl (1983) recommended an "active listening" procedure whereby one student

would respond to another's shared composition by paraphrasing what he or she thought the author intended to say. The listener's interpretation helps to the author evaluate his or her writing and make necessary revisions to accommodate the audience.

Teacher-directed inquiry activities are an extremely effective way to increase students' expository writing skills (Hillocks, 1984). The teacher provides sets of data (e.g. tools used by pioneers, boats for different uses, sources of energy) and teaches students strategies for dealing with the data in order to write something about it. Steps include observation, recording details, interpretation and, finally, writing. All are directed by the teacher as structured problem-solving activity. In group instruction, data often are organized on a grid or chart. In Hillock's integrative review of writing instruction research, inquiry activities had the highest mean effect size for any instructional focus aimed at improving the quality of content—including writing models, revision scales, and free writing.

Harris and Graham (1986) demonstrated that strategy training in identifying and using elements of a story schema can significantly increase the quality of narrative compositions by LD students. Posttraining stories included more story elements and were judged by independent raters to be superior to pretraining stories. The simplest stories contain just three elements: state, event, state (Prince, 1973):

e.g., John was sad. He found his lost dog.

Then he was happy again.

Harris and Graham taught a story grammar composed of seven elements using the mnemonic "W-W-W, What = 2, How = 2." The mnemonic stands for the following questions: *Who* is the main character? *When* does the story take place? *Where* does the story take place? *What* does the main character want to do? *What* happens when he or she tries? *How* does the story end? *How* does the main character feel? Thomas, Englert, and Morsink (1984) recommended a simplified four-part structure for special needs students: setting (which includes introduction of the character), problem, response, and outcome.

### Conventions

Spelling, punctuation, correct word usage, and handwriting are the writing factors most frequently taught by special education teachers, but they also are factors that should be approached most cautiously in the context of composition. Students in writing programs that emphasize mechanics and grammar achieve significantly lower qualitative gains in writing than students receiving instruction in which mechanics and grammar are considered irrelevant (Hillocks, 1984).

This is not to say that a remedial teacher should not teach spelling, punctuation, and handwriting; they are among the

factors that most influence judgments of quality (Brown, 1981). Initially, however, they should be taught separately, on a parallel track, and not interfere with or discourage beginning writers in their composition attempts. During composition the secretary should not compete with the author for the writer's attention. As fluency develops, conventions should be introduced as an editing task. Editing for writing conventions should begin with structured materials provided by the teacher and then, as editing skills become proficient, applied to the student's own work in the postwriting stage.

There is no evidence whatsoever that the teaching of grammar rules has any significant effect on either oral or written language (deVilliers & deVilliers, 1978; Glatthorn, 1981; Hillocks, 1984; Lash, 1970; Straw, 1981). Grammar is best learned indirectly through practice in expression and exposure to good language models.

### COMPOSITION STRATEGIES

Because writing is a complex task, the writer needs to learn ways to organize and monitor the process. The *metacognitive* skills required in writing—self-monitoring of task-related behavior, detection of contextual inconsistencies, and examination of alternatives—are aspects of being a writer that are routinely ignored by special educators (Roit & McKenzie, 1985). Few researchers have explored the teaching of metacognitive strategies as a means of increasing writing quality.

Scardamalia and Bereiter (1983) taught a control strategy to students in grades 4, 6, and 8 aimed at eliciting evaluative and tactical decisions during the composing process. The process involved three steps: compare, diagnose, operate (CDO). First, students were trained to compare what they intended to say with what they actually wrote, using a list of evaluative phrases reflecting probable reader reaction and their own personal satisfaction. Second, the students had to explain how the descriptor applied to what they had written. Finally, they did a self-evaluation, choosing a revision tactic and making the text change. Some of the students used the CDO strategy sentence by sentence as they wrote. Others employed it upon completion of the composition.

Most students reported that the strategy made the process easier, but their text revisions did not always result in better compositions. Scardamalia and Bereiter speculated that this may have been the result of concern with small units of language rather than overall text. When students were unable to rewrite a sentence, they often settled for minor word changes. Sentence combining and sentence transformation might have been appropriate prerequisite skills to teach before the CDO strategy.

A simpler and more effective strategy was taught to 12-year-old mildly handicapped students in a study by Harris

and Graham (1985). The goal of the strategy was to increase the number of action words, action helpers ("how" adverbs), and describing words in the students' compositions. The steps in the strategy were: (a) Look at the picture and write down good action words (or action helpers or describing words); (b) think of a good story idea to use the words in; (c) write the story—it should make sense and use action words; (d) read the story—is it good? Did I use action words? (e) fix the story if it requires changes. The strategy was taught using a modification of methods developed at the University of Kansas Institute for Research in Learning Disabilities (Schumaker, Deshler, Alley, Warner, & Denton, 1982).

Table 3 outlines the steps in the teaching procedure. Not only was the students' application of the strategy successful in increasing the rate of target words used but also in increasing the mean number of total words produced and ratings of story quality. Most of all, treatment effects generalized from the experimental setting to the resource room.

Similar instructional procedures were used by Moran, Schumaker, and Vetter (1981) to teach a paragraph organization strategy to LD adolescents. All students improved in their paragraph organization scores and successfully transferred use of the strategy to a text structure not used in training.

## ELEMENTS OF GOOD INSTRUCTION

Because educators give insufficient attention to writing in the curriculum, the *first* important function of the teacher is to establish sufficient time for writing to be taught and practiced. Research on effective teaching practices (Englert, 1984; Rosenshine, 1983) has revealed the primary importance of allocated instruction time and student engaged time in increasing pupil achievement. Engaged time is measured in terms of the student's active interaction with the teacher during direct instruction, as well as attention to academic materials during independent seatwork periods.

The teacher's *second* function is to plan instruction. Instructional planning must represent a complete model of written language that includes all aspects of process and product in their application across different purposes. Teachers cannot rely on basal texts or other commercial materials to provide a complete curriculum with sufficient writing activities.

*Third*, teachers must use theoretically sound and (when identified) empirically tested methods of teaching written language. Although studies of instructional variables are few, review of the literature reveals several components of writing instruction that have been shown to be important. They include those briefly described below.

**TABLE 3**  
**Seven-Step Procedure for**  
**Teaching a Control Strategy**

Step 1	<i>Pretraining</i> The teacher defines the target concepts (e.g., action words). The teacher and student generate examples.
Step 2	<i>Review Performance Level</i> The teacher and student review the student's current level of performance and discuss the training goal.
Step 3	<i>Describe Strategy</i> The teacher describes the strategy using small chart to list the steps.
Step 4	<i>Model Strategy</i> The teacher models the strategy, writing a story while "thinkig aloud" the steps.
Step 5	<i>Mastery of Strategy Steps</i> The student memorizes and rehearses the strategy steps.
Step 6	<i>Controlled Practice</i> The student applies the strategy while thinking aloud. The teacher prompts as necessary and provides feedback.
Step 7	<i>Data Collection</i> The student and teacher collect data on the student's performance.

Adapted from Graham and Harris (in press).

### Clear Objectives

The most effective instructional approaches are those with clear, specified objectives (Hillocks, 1984). Carefully chosen objectives ensure that all aspects of writing are considered and that instruction moves slowly and systematically from comprehension of written language structures to expression. Objectives written in behavioral terms separate out demands that are counterproductive to the instructional aim, such as penalizing the student for imperfect handwriting and spelling.

### Student Motivation and Interest

Several authors (Dagenais & Beadle, 1984; Roit & McKenzie, 1985) have stressed the importance of motivating students to write. Although motivation alone will not lead to good writing skills, teachers must be sensitive to negative attitudes that mildly handicapped students bring to the act of writing.



Interest is generated through verbal discussions and pre-writing activities. Part of the teacher's task is convincing students that they have within themselves an ample stock of ideas related to the topic. Choosing an appropriate topic is also a crucial task for the teacher. Writers with little knowledge about a topic tend to produce descriptive sequences that lack logical coherence (Stein, 1983).

Interest is increased through presentation of reasonable tasks appropriate to the student's current skills. Engelmann and Silbert (1983, p. 4) pointed out that starting instruction by requiring children to make up imaginary stories carries many risks. The mechanical and vocabulary skills required may be well beyond their abilities. Myers (1978) proposed that instruction should begin with the sentence because it provides discrete boundaries within which the teacher and student can examine the basic principles of composition. The teacher can sustain interest by selecting activities that ensure high levels of student success while providing enough of a challenge for the student to feel that positive feedback is well earned.

## Models

Models of good writing are important in providing students with opportunities to examine the structure of written language and the ways in which it differs from informal speech. Phelps-Terasaki, Phelps-Gunn, and Stetson (1983) stated that the first problem remediation programs must address is the student's reliance on speech structures as models for written expression (p. 363). Oral speech is characterized by false starts, vague vocabulary, and incomplete utterances, which would be unacceptable in written form. Models provide positive examples of appropriate *styles* and *text structures*. Selections from children's books and magazines or the teacher's own writing can serve as models. Marcus (1977, p. 150) and Myers (1978) pointed out the desirability of children borrowing heavily either the content or form of another's published work.

In addition to *product* models of written language, teachers must provide *process* models. The exclusive use of product models is less effective than methods that model evaluation, inquiry, and language problem solving (Hillocks, 1984). The process that is modeled should begin with the planning stage. Preparing to write is the most essential factor in helping students make decisions about content. Prewriting discussion can bring to the students' consciousness words and phrases necessary for shaping ideas and their expressions (Marcus, 1977, p. 146).

The teacher also should model *transcribing operations* to demonstrate the translation of idea material, notes, or planning charts into acceptable written sentences. One of the most important functions of the teacher is to teach the student *self-regulatory skills* that will assist in performing related

skills. The teacher models self-instructions by thinking aloud while performing the task. Graham and Harris (in press) recommend that the model's script be worked out in advance and matched to the student's verbal style and language ability.

Finally, the teacher should model *reviewing and revising strategies*. For beginning readers a review strategy may consist only of rereading the sentence to verify correct word usage, spelling, and punctuation. Oral proofreading (reading aloud) is more effective for elementary students than silent proofreading, although both are beneficial (Van De Weghe, 1978). There seems to be no difference between the two methods for secondary students.

## Guided Practice

As important as practice is to learning to write, the act of writing, in of of itself, does not necessarily improve writing quality (Dagenais & Beadle, 1984). Careful development of a limited number of papers under teacher guidance is better than independent production of many, frequent compositions (Glatthorn, 1981, p. 8). Teaching students how to read and respond to a piece of writing in progress is one of the the teacher's central tasks (Perl, 1983). Robinson (1983) found that *probing*—asking the student six to seven additional questions about the passage being written—significantly improves the quality of written expository tasks.

## Student Interaction

Hillocks (1984) found that the most effective approaches to writing instruction were those that maintained high levels of student interaction in response to structured problem-solving tasks. In this approach brief teacher-led presentation or discussion is followed by small-group, problem-centered activities. Phelps-Terasaki et al. (1983, pp. 371-372) also advocate closely supervised group instruction. In addition to providing a variety of audience responses, group members can help each other construct new sentence patterns, find effective words or phrases, and offer ideas and encouragement.

Interactive groups are also effective for planning processes. Crealock, Sitko, Hutchinson, Sitko, and Marlett (1985) developed a group brainstorming procedure effective with 10th grade mildly handicapped students. In group discussion the students first listed seven components of a good story (setting, hero/heroine, climax, etc.). Then, beside each component they listed 10 words or phrases for each category, forming a large 7 x 10 grid. After choosing one word or phrase from each category, they discussed with a peer how they would integrate the seven elements into a story.

Using the elements, the students then wrote a draft of the story, writing each sentence on individual strips of paper. After talking with the teacher, who gave them feedback regarding the content, the sentence strips were arranged with large spaces between them for writing detail and transitions. After the teacher made suggestions for technical improvements, the students completed their final copy.

### Selective Feedback

In regard to feedback on a student's composition, two principles apply. The first is to *praise* generously for descriptions, ideas, or humor expressed and be cautious in giving criticism. Keeping the student's objective firmly in mind, correction should be provided only for aspects of the composition that have been taught. For example, if the objective is to increase fluency, the student should be reinforced for increasing the length of compositions, and spelling and punctuation errors should not be marked in red pencil. If the objective is to state an opinion and give two supporting facts, deficiencies in the student's choice of vocabulary should not be pointed out.

Although authors disagree as to whether praise and criticism significantly affect composition quality (Dagenais & Beadle, 1984; Glatthorn, 1981; Taylor & Hoedt, 1966; Van De Weghe, 1978), the consensus is that positive and negative feedback differentially affects student attitudes toward writing.

The second principle addresses the specificity of feedback. Barrs (1983) pointed out that with the lack of good pedagogical knowledge about writing, the teacher's model has been the hard-boiled editor who tells the young reporter, "This is a good try, Becky . . . Try another beginning, okay?" Van De Weghe (1978) reported that among older students (ninth grade and above), text-specific comments have a greater positive effect on performance over longer periods of time than stock phrases such as, "Excellent! Keep it up" or, "Try to do better." It is reasonable to assume this holds true for beginning writers as well.

### SUMMARY

Although written expression is an important component of literacy, it suffers from insufficient attention in the curriculum. Instruction that is provided is often not based on a complete model of language or validated teaching methods. Planning for instruction should take into account three dimensions of written language: process, product, and purpose.

Writing is an extremely complex cognitive task, requiring the writer to coordinate its various processes and subtasks: getting ideas, organizing and sequencing thoughts, selecting words and phrases, and managing the mechanical demands

of putting words to paper. The task must be simplified for the beginning writer; processes must be introduced gradually, accompanied by teaching the necessary strategies. Especially important is for mildly handicapped students to learn a control strategy for organizing and monitoring the process of writing that will generalize to different writing tasks and environments.

The goals of writing instruction are based on the characteristics of good compositions. Components of the writing product that distinguish skilled from unskilled writers are fluency, syntax, vocabulary, content, and the conventions of standard grammar, spelling, punctuation, margins, and handwriting.

Three important functions of the teacher are: (a) establishing time for sufficient writing instruction and practice in the curriculum, (b) planning instruction that reflects all the dimensions of written language, and (c) using effective teaching methods. Although empirical studies of written language are few, several validated components of effective instruction can be found in the literature. They include:

- clear objective
- student motivation and interest
- models of both the writing product and process
- guided practice
- student interaction throughout the process
- selective feedback.

In Connally's (1983) words, "Education is inextricably linked with the capacity to produce visible language" (p. xi). Given the difficulty most handicapped students have in producing written language, teachers must begin to teach it often and teach it well.

### REFERENCES

- Anderson, P. L. (1982). A preliminary study of syntax in the written expression of learning disabled children. *Journal of Learning Disabilities, 15*, 359-362.
- Barenbaum, E. M. (1983). Writing in the special class. *Topics in Learning & Language Disabilities, 3*, 12-20.
- Barrs, M. The new orthodoxy about writing: Confusing process and pedagogy. *Language Arts, 60*, 829-840.
- Bridge, C. A., & Hiebert, E. H. (1985). A comparison of classroom writing practices, teachers' perceptions of their writing instruction, and textbook recommendations on writing practices. *Elementary School Journal, 86*, 155-172.
- Britton, J. (1978). The composing processes and the functions of writing. In C. R. Cooper & L. Odell (Eds.), *Research on composing: Points of departure* (pp. 13-28). Urbana, IL: National Council of Teachers of English.
- Brown, R. (1981). National assessments of writing ability. In C. H. Fredericksen & J. F. Dominic (Eds.), *Writing: The nature, development, and teaching of written communication: Vol. 2. Process, development, and communication* (pp. 31-38). Hillsdale, NJ: Lawrence Erlbaum.
- Cartwright, G. P. (1969). Written expression and spelling. In R. M. Smith (Ed.), *Teacher diagnosis of educational difficulties* (pp. 95-117).
- Chatterjee, J. B. (1983). A comparative analysis of syntactic density and vocabulary richness in written language of learning-abled and learning-disabled children at third- and fifth-grade levels. *Dissertation Abstracts International, 44*, 2436A. (University Microfilms No. 83-28234)

- Chomsky, C. (May, 1976). Approaching reading through invented spelling. Paper presented at the Conference on Theory and Practice of Beginning Reading Instruction, University of Pittsburgh. (ERIC Document Reproduction Service No. ED 155 630)
- Connally, K. (1983). Foreword to M. Martlew (Ed.), *The psychology of written language: Developmental and educational perspectives*. Chichester, England: John Wiley & Sons.
- Cooper, C. (1973). An outline for writing sentence combining problems. *English Journal*, 62, 96-102, 108.
- Cooper, C. (1977). Holistic evaluation of writing. In C. R. Cooper & L. Odell (Eds.), *Evaluating writing: Describing, measuring, judging*. Buffalo, NY: National Council of Teachers of English.
- Crealock, C. M., Sitko, M. C., Hutchinson, A., Sitko, C., & Marlett, L. (April, 1985). *Creative writing competency: A comparison of paper and pencil and computer technologies to improve the writing skills of mildly handicapped adolescents*. Paper presented at Annual Meeting of American Educational Research Association. (ERIC ED 259 531)
- Dagenais, D. J., & Beadle, K. R. (1984). Written language: When and where to begin. *Topics in Language Disorders*, 4(2), 59-85.
- Daiute, C. A. (1984). Performance limits on writers. In R. Beach & L. S. Bridwell (Eds.), *New directions in composition research* (pp. 205-224). New York: Guilford.
- Deno, S., Marston, D., & Mirkin, P. (1982). Valid measurement procedures for continuous evaluation of written expression. *Exceptional Children*, 48, 368-371.
- deVilliers, J. G., & deVilliers, P. A. (1978). *Language acquisition*. Cambridge, MA: Harvard University Press.
- Doyle, W. (1983). Academic work. *Review of Educational Research*, 53, 159-199.
- Dyson, A. H. (1982). Talking with young children writing. *Childhood Education*, 59, 30-35.
- Dyson, A. H. (1983). The role of oral language in early writing processes. *Research in the Teaching of English*, 17, 1-30.
- Elbow, P. (1981). *Writing with power: Techniques for mastering the writing process*. New York: Oxford University Press.
- Emig, J. (1971). *The composing processes of twelfth graders* (Research Report No. 13). Urbana, IL: National Council of Teachers of English.
- Engelmann, S. & Silbert., (1983). *Teacher presentation book: Expressive writing I*. Tigard, OR: C. C. Publications.
- Englert, C. S. (1984). Measuring teacher effectiveness from the teacher's point of view. *Focus on Exceptional Children*, 17(2), 1-14.
- Finn, P.A. (1977). Computer-aided description of mature word choices in writing. In C. Cooper & L. Odell (Eds.), *Evaluating writing: Describing, measuring, judging*. Buffalo, NY: National Council of Teachers of English.
- Flower, L. S., & Hayes, J. R. (1980). The dynamics of composing: Making plans and juggling constraints. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 31-50). Hillsdale, NJ: Lawrence Erlbaum.
- Fontaine, S. I. (1984). *Writing for an audience: How writers at three age levels demonstrate an awareness of the audience and respond with two contrasting audiences*. Unpublished doctoral dissertation, University of California, San Diego.
- Giordano, G. (1983). Metagrammars: A technique for disabled writers. *Academic Therapy*, 18, 499-505.
- Giordano, G. (1984). *Teaching writing to learning disabled students*. Rockville, MD: Aspen.
- Glatthorn, A. A. (1981). *Writing in the schools: Improvement through effective leadership*. Reston, VA: National Association of Secondary School Principals.
- Graham, S., & Harris, K. R. (in press). Improving composition skills with self-instructional strategy training. *Topics in Language Disorders*.
- Graves, D. (1983). *Writing: Teachers and children at work*. Exeter, NH: Heinemann Educational Books.
- Harrington-Brogan, V. S. (1983). Instructional writing suggestions in elementary school language arts textbooks: An analysis based upon opinions of writing authorities. *Dissertation Abstracts International*, 44, 1332A-1333A.
- Harris, K. R., & Graham, S. (1985). Improving learning disabled students' composition skills: Self-control strategy training. *Learning Disability Quarterly*, 8, 27-36.
- Hayes, J. R., & Flower, L. S. (1980). Identifying the organization of writing processes. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 3-30). Hillsdale, NJ: Lawrence Erlbaum.
- Hillocks, G., Jr. (1984). What works in teaching composition: A meta-analysis of experimental treatment studies. *American Journal of Education*, 93, 133-170.
- Hughes, T. (1978). *What the British tell the U.S. about writing and reading*. Paper presented at the 3rd Great Lakes Regional Conference of the International Reading Association, Cincinnati, OH. (ERIC Document Reproduction Service No. ED 175 020)
- Humes, A. (1983). Research on the composing process. *Review of Educational Research*, 53, 201-216.
- Hunt, K. W. (1965). *Grammatical structures at three grade levels* (Research Report No. 3). Urbana, IL: National Council of Teachers of English. (ERIC Document Reproduction Service No. ED 113 735).
- Irwin, J. W. (1982). A review of procedures for analyzing coherence in written language samples. *Diagnostique*, 8, 43-51.
- Isaacson, S. (1984). Evaluating written expression: Issues of reliability, validity, and instructional utility. *Diagnostique*, 9, 96-116.
- Isaacson, S. L. (1985). *Assessing the potential syntax development of third and fourth grade writers*. Unpublished doctoral dissertation, Arizona State University, Tempe.
- Lash, H. (1970). *The effect of instruction in transformational grammar on basic writing skills*. Unpublished doctoral dissertation, University of Alabama, University.
- Lawlor, J. (1983). Sentence combining: A sequence for instruction. *Elementary School Journal*, 84, 53-62.
- Leinhardt, G., Zigmond, N., & Cooley, W. W. (April, 1980). *Reading instruction and its effects*. Paper presented at the annual meeting of the American Educational Research Association, Boston.
- Loban, W. (1976). *Language development: Kindergarten through grade twelve* (Research Report No. 18). Urbana, IL: National Council of Teachers of English.
- MacArthur, C. A., & Graham, S. (May, 1986). *Learning disabled students' composing with three methods: Handwriting, dictation, and word processing*. Paper presented to the Annual Meeting of the American Educational Research Association, San Francisco.
- Marcus, M. (1977). *Diagnostic teaching of the language arts*. New York: John Wiley & Sons.
- Martin, N. (1983). Genuine communications. *Topics in Learning & Learning Disabilities*, 31, 1-11.
- Mellon, J. (1979). Issues in the theory and practice of sentence combining: A twenty year perspective. In D. A. Daiker, A. Kerek, & M. Morenburg (Eds.), *Sentence combining and the teaching of writing* (pp. 1-38). Akron, OH: L & S Brooks.
- Mellon, J. (1981). *Sentence-combining skills: Results of the sentence combining exercises in the 1978-79 National Writing Assessment* (Special Paper No. 10-W-65 prepared for the National Assessment of Educational Progress). (ERIC Document Reproduction Service No. ED 210 696).
- Mercer, C. D. & Mercer, A. R. (1985). *Teaching students with learning problems* (2nd ed.). Columbus, OH: Charles E. Merrill.
- Minneapolis Public Schools (1977). *SIMS written language program*. Minneapolis: Author.
- Moran, M. R., Schumaker, J. B., & Vetter, A. F. (1981). *Teaching a paragraph organization strategy to learning disabled adolescents* (Research Report No. 54). Lawrence: University of Kansas Institute for Research in Learning Disabilities.
- Morris, N. T., & Crump, D. T. (1982). Syntactic and vocabulary development in the written language of learning disabled and non-learning disabled students at four age levels. *Learning Disability Quarterly*, 5, 163-172.
- Myers, M. (1978). Five approaches to the teaching of writing. *Learning*, 6(8), 38-41.
- Myklebust, H. (1965). *Development and disorders of written language: Picture story language test*. New York: Grune & Stratton.
- Ney, J. W. (1975). *Linguistics, language teaching, and composition in the grades*. The Hague, Netherlands: Mouton.
- Nodine, B. F., Barenbaum, E., & Newcomer, P. (1985). Story composition by learning disabled, reading disabled, and normal children. *Learning Disability Quarterly*, 8, 167-179.

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- Nold, E. W. (1981). Revising. In C. H. Fredericksen & J. F. Dominic (Eds.), *Writing: The nature, development, and teaching of written communication: Vol. 2. Process, development and communication* (pp. 67-79). Hillsdale, NJ: Lawrence Erlbaum.
- North, S. (1981). Toward system in a student-centered curriculum. *English Record*, 32(3), 6-10.
- Nutter, N., & Safran, J. (1984). Improving writing with sentence combining exercises. *Academic Therapy*, 19, 449-455.
- Perl, S. (1983). How teachers teach the writing process: Overview of an ethnographic research project. *Elementary School Journal*, 84, 19-24.
- Phelps, T. O. (1986). What will they really write? *English Journal*, 75(3), 81-82.
- Phelps-Terasaki, D., & Phelps, T. (1980). *Teaching written expression: The Phelps sentence guide program*. Novato, CA: Academic Therapy Publications.
- Phelps-Terasaki, D., Phelps-Gunn, T., & Stetson, E. G. (1983). *Remediation and instruction in language: Oral language, reading, and writing*. Rockville, MD: Aspen.
- Poplin, M., Gray, R., Larsen, S., Banikowski, A., & Mehring, T. (1980). A comparison of components of written expression abilities in learning disabled and non-learning disabled children at three grade levels. *Learning Disability Quarterly*, 3, 46-53.
- Prince, G. (1973). *A grammar of stories*. The Hague, Netherlands: Mouton.
- Robinson, S. F. (1983). *Coherence in student writing*. Unpublished doctoral dissertation, Harvard University, Cambridge, MA. (University Microfilms No. DA 8421221)
- Roit, M. L., & McKenzie, R. G. (1985). Disorders of written communication: An instructional priority for LD students. *Journal of Learning Disabilities*, 19, 258-260.
- Rosenshine, B. (1983). Teaching functions in instructional programs. *Elementary School Journal*, 83, 335-351.
- Scardamalia, M. (1981). How children cope with the cognitive demands of writing. In C. H. Fredericksen & J. F. Dominic (Eds.), *Writing: The nature, development, and teaching of written communication: Vol. 2. Process, development, and communication* (pp. 81-104). Hillsdale, NJ: Lawrence Erlbaum.
- Scardamalia, M., & Bereiter, C. (1983). The development of evaluative, diagnostic, and remedial capabilities in children's composing. In M. Martlew (Ed.), *The psychology of written language: Developmental and educational perspectives* (pp. 67-95). Chichester, England: John Wiley & Sons.
- Schumaker, J. B., Deschler, D. D., Alley, G. R., Warner, M. M., & Denton, P. H. (1982). Multipass: A learning strategy for improving reading comprehension. *Learning Disability Quarterly*, 5, 295-304.
- Shanahan, T. (1980). The impact of writing instruction on learning to read. *Reading World*, 19, 357-368.
- Shanahan, T. (1984). Nature of the reading-writing relation: An exploratory multivariate analysis. *Journal of Educational Psychology*, 76, 466-477.
- Shuy, R. W. (1981). Toward a developmental theory of writing. In C. H. Fredericksen & J. F. Dominic (Eds.), *Writing: The nature, development, and teaching of written communication: Vol. 2. Process, development, and communication* (pp. 119-132). Hillsdale, NJ: Lawrence Erlbaum.
- Smith, F. (1982). *Writing and the writer*. New York: Holt, Rinehart & Winston.
- Stein, N. L. (1983). Methodological and conceptual issues in writing research. *Elementary School Journal*, 84, 100-108.
- Stewart, S. R. (1985). Development of written language proficiency: Methods for teaching text structure. In C. S. Simon (Ed.), *Communication skills and classroom success: Therapy methodologies for language-learning disabled students* (pp. 341-364). San Diego: College Hill Press.
- Stotsky, S. L. (1975). Sentence-combining as a curricular activity: Its effects on written language development and reading comprehension. *Research in the Teaching of English*, 9, 30-71.
- Straw, S. B. (1981). Grammar and teaching of writing: Analysis versus synthesis. In V. Froese & S. B. Straw (Eds.), *Research in the language arts: Language and schooling* (pp. 147-161). Baltimore: University Park Press.
- Thomas, C., Englert, C. S., & Morsink, C. (1984). Modifying the classroom program in language. In C. V. Morsink (Ed.), *Teaching special needs students in regular classrooms* (pp. 239-276). Boston: Little, Brown.
- U.S. Department of Health, Education and Welfare. (1979). *What do we know about standards for effective skills programs?* Washington, DC: Office of Education, Basic Skills Improvement Program.
- Van De Weghe, R. (1978). Research in written composition: Fifteen years of investigation (Research report). Las Cruces: New Mexico State University. (ERIC Document Reproduction Service No. ED 157 095)
- Videen, J., Deno, S., & Marston, D. (1982). *Correct word sequences: A valid indicator of proficiency in written expression* (Research Report No. 84). Minneapolis: University of Minnesota, Institute for Research in Learning Disabilities.