

Teaching Composition: Research on Effective Practices

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INTRODUCTION

Educators and their constituents have differing opinions as to what constitutes the "basic skills." Nearly everyone, however, would cite the "three Rs" -- Reading, w(R)iting and 'Rithmetic -- which have traditionally been regarded as the core of the educational program at all levels of instruction. The focus of the present report is the writing part of that core.

Given the broad general agreement about the importance of learning to write, it is disturbing to discover that "most researchers and educators agree that, with rare exceptions, students do not and cannot write well" (Amiran and Mann 1982, p. 3). In preparation for a report sponsored by the American Association of School Administrators, Neill (1982) conducted a survey of 425 school districts and found that 90 percent of the respondents considered student writing to be a problem -- either a serious problem (40 percent) or a minor problem (50 percent). Neill also quoted a late 1970s report stating that the reasons given by some corporations for leaving urban environments is that they couldn't find people for clerical jobs who are minimally competent in basic skills, including writing.

Unfortunately, writing is an area characterized by considerable divergence between research and practice. Smith (1982) notes that "much is known about which practices in teaching the writing process are effective, [but] several of these findings are in conflict with widespread practices in the schools" (p. 3). For example, staff of the ERIC Clearinghouse on Reading and Communication Skills reported in 1984 that "while most authorities of writing agree that children learn to write by writing, [there is] a distressing lack of classroom time devoted to extended periods of writing" (p. 1).

Still, writing remains a critical area of the school curriculum and an important part of students' lives after school. In addition to the insistence of many employers that employees possess well-developed communication skills -- including writing skills -- a variety of other purposes are served by writing and developing writing capability. Graves (1978) identified several ways that writing is important in our lives:

- As a contribution to the development of a person, no matter what that person's background and talents... Writing is a highly complex act that demands the analysis and synthesis of many levels of thinking.

- Writing develops initiative. In reading, everything is provided. In writing, the learner must supply everything: the right relationship between sounds and letters, the order of the letters and their form on the page, the topic, information, questions, answers, order.
- Writing develops courage. At no point is the learner more vulnerable than in writing.
- Writing, more than any other subject, can lead to personal breakthroughs in learning.
- Writing can contribute to reading from the first day of school. Writing, some say, is active, whereas reading is passive.
- Writing contributes strongly to reading comprehension as children grow older. The ability to revise writing for greater power and economy is one of the higher forms of reading. (pp. 5-6)

Ways to help students achieve these goals are discussed in a later section on composition research. To set a context for presenting this information, the next section discusses the research base concerning effective schooling in general.

THE EFFECTIVE SCHOOLING RESEARCH

The effective schooling research base has grown immensely in the past two decades. During this time, a great many researchers have looked at the factors which distinguish schools and classrooms with high achieving, appropriately behaving students from those in which student achievement, behavior and affect are less positive.

While the effective schooling research has contributed greatly to our knowledge about effective instructional, managerial and environmental elements, it is limited in that most of its findings pertain to students in general and instruction in general. It remains important to ask whether these general findings pertain to particular kinds of students (e.g., a given age/grade level or special needs population) and to specific areas of the curriculum.

In 1984, the School Improvement Program (then called the Goal Based Education Program) of the Northwest Regional Educational Laboratory published a synthesis of the research on effective schooling practices. This document presents, in list form, a distillation of the findings presented in nearly 300 research documents. Organized into sections on classroom, school and district characteristics and practices, this synthesis offers a wealth of information on approaches for improving student learning and behavior.

In the Classroom Characteristics and Practices section of the synthesis, over 50 major assertions are made (and supported) concerning instructional and behavior management techniques at the classroom level. These are organized into 12 clusters having to do with

such areas as expectations for student learning, monitoring student progress, and grouping students for instruction.

Looking at the effective schooling research, as outlined in the 1984 synthesis, and the research on composition reveals a high degree of congruence. Those familiar with the general effective schooling research will find nothing jarring or contradictory in the research base on effective practices in composition instructions. As the findings from the research on composition are discussed, references will be made to the ways these are corroborated by the research on effective schooling.

THE RESEARCH ON WRITTEN COMPOSITION

Thirty-six research documents were reviewed in preparation for this report. Sixteen were review/synthesis documents, fifteen were reports of experimental studies, two reported results of both a review and a study, one was a program evaluation document, and two reported on the same review effort. Nine of the documents concerned elementary students, another nine reported on research with secondary students, twelve had to do with the K-12 range, and two looked at the entire K-postsecondary span.

The outcome area of concern in 26 of the reports was writing achievement, either in general or as indicated by measures of syntactic maturity, fluency, various writing subskills, degree of change or degree of retention of skills over time. Seven reports presented findings on the affective outcomes of various approaches to instruction. These reported on student attitudes toward writing, self-esteem, motivation, and extent of cooperation and collaboration with others. Four studies looked at the effects of treatment on reading comprehension as well as writing achievement.

WRITING AS A PROCESS

The major general finding from the research on teaching writing is that student achievement is higher when the teaching approach emphasizes writing as a **process** rather than writing as a **product** (Parson 1985; Holdzkom, et al. 1982; Hillocks 1984, 1986; Wesdorp 1983; Amiran and Mann 1982; Keech and Thomas 1979; ERIC Clearinghouse 1984). As Parson (1985) points out, in the traditional product-oriented approach, form and correctness are the major concerns. The teacher provides drill work on specific skills, makes many of the major writing decisions for the students (topic, form, length, etc.) and serves as the sole audience/judge. Learning involves following rules, conforming to formulae, and achieving technical mastery of formal conventions and modes. Students work alone on their writing assignments, and while trying to figure out what they want to say, are reminded of such technical matters as using topic sentences and avoiding writing sentence fragments and run-ons.

Insofar as possible, the student in the product-oriented writing class tries to get it right the first time, because the paper turned in will be the only version. The teacher painstakingly marks all the mechanical errors in red ink and writes notes in the margins about the logic and clarity of the essay. Because the student will be doing nothing further with the piece, he/she often pays little attention to the teacher's comments. As Parson notes, under these conditions, there isn't much of a sense of ownership or investment in the writing.

Virtually all the various subparts of the traditional approach have been shown to be ineffective in producing capable writers. Parson identifies several reasons for the failure of this approach:

- It emphasizes form and mechanics before, and often at the expense of, ideas and meaning.
- It focuses on the product rather than the process.
- It seriously neglects the earliest stages of the writing process.
- It offers too many artificial contexts for writing.
- It isolates mechanical skills from the context of writing.
- Rather than being an outgrowth of research and experimentation, the traditional approach is based on sheer historical momentum of outmoded theoretical assumptions (p. 9).

From the experience of classroom teachers and from the research conducted during the past 15 years, there has emerged a **process-oriented** approach to teaching writing. Recognizing that writing is a complex, recursive, dynamic nonlinear process, experts in the field of composition have developed and tested instructional methods more in keeping with the true nature of the act of writing. Looked at this way, it becomes obvious that the process has a number of distinct stages (Parson 1985; Holdzkom, et al. 1982; Hillocks 1984, 1986; Wesdorp 1983; Applebee 1981). These include:

Prewriting. The writer gathers information and plays with ideas during the prewriting stage. Prewriting activities may include drawing, talking, thinking, reading, listening to tapes and records, discussion, role playing, interviews, problem-solving and decisionmaking activities, conducting library research, and so on. Research shows that students who are encouraged to engage in an array of prewriting experiences evidence greater writing achievement than those enjoined to "get to work" on their writing without this kind of preparation (Holdzkom, et al. 1982; Glatthorn 1981; Wesdorp 1983; Parson 1985).

Drafting. The writer develops his/her topic on paper (or a computer screen) during the drafting stage. Beginning may be painful and difficult, producing false starts and frustration in the writer. In the process-oriented approach, the focus is on content, not the mechanics of writing.

Revising. During this stage, the writer makes whatever changes he/she feels are necessary. Revision may involve additions and deletions; changes in syntax, sentence structure, and organization; and in some cases, starting over completely. According to

Glatthorn (1981), Wesdorp (1983) and other researchers, the revision stage is most productive of superior final products if it includes input from teachers or fellow students.

Editing. Polishing of the draft takes place in the editing stage. The writer gives attention to mechanics such as spelling, punctuation, grammar, and handwriting, and may also make minor lexical and syntactic changes.

Publication. Publication refers to the delivery of the writing to its intended audience. Sommers and Collins (1984), Smith (1982), Glatthorn (1981), Wesdorp (1983) and other investigators have found that student motivation and achievement are enhanced when student work is "published" for a larger audience than the teacher. Classmates, other students, parents and community members are among the potential audiences for students' written work.

INSTRUCTIONAL PRACTICES

In addition to investigating the overall process approach to writing and finding it superior to the traditional product-oriented method, researchers have also set up studies to determine the effectiveness of discrete practices used in teaching writing.

Grammar Instruction. "Perhaps the most widely ignored research finding is that the teaching of formal grammar, if divorced from the process of writing, has little or no effect on the writing ability of students" (Smith 1982). The ineffectiveness of teaching grammar in isolation from students' actual writing efforts is extremely well documented. Amiran and Mann (1982), Bivens and Edwards (1974), Glatthorn (1981), Hillocks (1984, 1986), Holbrook (1983), Holdzkom, et al. (1982), and Neill (1982) all report this finding. So do many other investigators who looked at the relative merits of traditional grammar instruction and other approaches, e.g., sentence combining. Moreover, Sealey (1987a) offers evidence that the traditional emphasis on grammar actually slows students' development as writers, because the insistence on "cosmetic correctness" inhibits them and reduces their willingness to experiment and invent.

On the other hand, Holbrook (1983), Smith (1982), Sealey (1987a) and others have shown that grammar instruction which relates directly to students' writing can enhance writing achievement. "We... need... to make a distinction between teaching writing and teaching grammar and mechanics... Research tells us that grammar instruction in response to students' needs is effective in improving writing. Grammar instruction that is concrete, relevant to the students' own writing, and focused on the process of writing develops mature writers" (Sealey, 1987a, p. 2).

Sentence Combining. Of all the techniques used by teachers to foster the development of writing skills, the one receiving the most support in the research is that of sentence combining. Sentence combining instruction involves teaching students ways to embed one sentence or idea into another sentence to create sentences which are more varied and

interesting, while at the same time learning a variety of syntactic patterns. "The underlying notion of sentence combining is that fluent writers use longer, more complex sentences than do less fluent writers. Through a series of guided exercises, students are shown how several short sentences may be combined into longer ones" (Holdzkom, et al. 1982, p. 64).

In experimental studies, Bivens and Edwards (1974), Bruno (1981), Combs (1976), Evans, et al. (1986), Keech and Thomas (1979), McAfee (1981) and O'Hare (1973) found sentence combining practice superior to traditional grammar instruction at both the elementary and secondary levels. Some researchers, such as Evans, et al., offer evidence that younger and lower-ability students benefit even more than other students from sentence-combining exercises.

Sentence combining is a good example of teaching the principles of grammar in a meaningful way, using students' own writing as the material with which to practice developing skills.

The school effectiveness literature emphasizes the importance of teachers' relating current lessons to previous ones and of reminding them of key concepts or skills previously covered (Goal Based Education Program 1984). Sentence-combining instruction, with its emphasis upon building more sophisticated sentence structures from structures previously learned, exemplifies this general principle.

Providing a Language-Rich Environment. Holdzkom, et al. (1982), Keech and Thomas (1979) and other researchers and reviewers have identified the provision of a language-rich environment as a producer of positive outcomes in writing achievement. In addition to the prewriting activities cited above, researchers have found the following to be conducive to enhancing writing motivation and skill:

- Using a letter box to increase student-teacher communication
- Journals, free writing , stream-of-consciousness writing
- Writing poetry, compiling lists, free association writing
- Genre schemes and special formats, e.g., journalistic forms and conventions
- Audio-visual stimulation, such as films, drama, photography, sculpture and dancing (Keech and Thomas 1979).

In general, practice of any of the language arts has been found to enhance facility in the others. Reading and writing skills are closely related, and researchers have found that increased reading experiences also enhance writing skill development (Bruno 1981; Stotsky 1983).

Teacher and Peer Evaluation. In traditional product-oriented writing instruction, teacher evaluation is limited to the teacher providing written commentary on the students' final product. Research conducted/reviewed by Sommers and Collins (1984), Smith (1982), Glatthorn (1981) and Wesdorp (1983) indicates that this approach is ineffective

in producing writing skill gains. Students often disregard the corrections and suggestions on their returned drafts, and even if they do try to learn from these, they are often confused by vagueness and even contradictions in teacher comments. Hancock (1983) gives the example of a paper on which the teacher indicates the need for some punctuation changes in a paragraph, then in the margin that the paragraph is unnecessary and should be deleted. This, notes Hancock, leaves the student to wonder if he/she is supposed to make the corrections before deleting the paragraph. Hancock suggests -- and research supports -- having students prepare more than one draft. Teachers (or other reviewers) should note content and organizational flaws on an early draft and lexical and mechanical errors on a later one. With young children, attention to spelling and mechanics should be de-emphasized in favor of focusing on children's communicative intent and providing plenty of opportunity for practice.

Language arts teachers are frequently overwhelmed by the sheer volume of paperwork involved in evaluating student compositions. And when research suggests, as it does, that students write more and prepare multiple drafts of each paper, teachers can understandably develop anxiety about the increased workload. Fortunately, recent research has demonstrated that **peer evaluation/tutoring/editing** can be just as effective as teacher evaluation of students' works in progress in leading to high quality final products (Amiran and Mann 1982; Beach 1979; ERIC Clearinghouse 1984; Sealey 1987b; Karegianes, et al. 1980). Peer editing, according to Sealey, allows students to practice learning to apply the mechanics and technical aspects of language. Sealey cites additional research on the benefits experienced by students who learn to evaluate one another's writing. These include:

- Learning new ideas, vocabulary, strategies of organization and style, and new attitudes in tone and voice
- Writing better, because they internalize the criteria/standards they apply to others writing
- Relating more immediately to peer models than to professional readings and having a live audience, which helps them assume a reader's perspective as they write (p. 2).

These findings corroborate some general findings from the effective schooling research, which has repeatedly indicated the importance of students receiving feedback and correctives on their work early in and throughout the learning process; and peer input serves this purpose very effectively. In addition, peer tutoring/criticism helps fulfill the effective schooling principle of using routine assessment procedures to check student progress. When such procedures are used, "students hear results quickly; reports to students are simple and clear to help them correct errors" (Goal Based Education 1984, p. 4).

Peer editing puts students into a cooperative mode, thereby fostering collaboration, self-esteem, new friendships and other benefits of cooperative learning approaches (Sealey 1987B; ERIC Clearinghouse 1984; Dickinson 1986).

Frequency and Amount of Writing. While it is clear that students require practice to become capable writers, Glatthorn (1981) and a number of other researchers point out that merely spending more time writing, or writing a greater number of papers does not, in itself, increase writing skill. However, when the approach to writing instruction emphasizes process, and when the instructional techniques used are those shown to be effective, increases in amounts of writing time and practice have been shown to improve achievement (ERIC Clearinghouse 1984; Finnemore, et al. 1980; Donohue 1985, Glatthorn 1981). In effective instructional settings, says the Goal Based Education Program's 1984 synthesis report, "students have plenty of opportunity for guided and independent practice with new concepts and skills" (p. 4). The research on composition underscores the importance of providing this opportunity.

Sequenced Writing. Writing achievement can be enhanced when young writers are allowed and encouraged to use their personal experiences as the basis of their writing (Amiran and Mann 1982; ERIC Clearinghouse 1984; Wesdorp 1983). Other researchers corroborate this finding, adding that student writing skills improve when instruction follows a sequence from personal and concrete to impersonal and abstract (Neill 1982), or as expressed in the 1984 report of the ERIC Clearinghouse on Reading and Communication Skills, from personal to analytical and from thesis to logical argument.

Models. It is common practice in language arts classes to provide students with models of good writing for analysis (e.g., how a given writer uses the technique of comparison and contrast) and to "get a feel" for good writing. Research supports the use of this practice, particularly when it used in combination with other proven instructional approaches (Finnemore 1980; Keech and Thomas 1979; Hillocks 1984, 1986; Smith 1982; Stotsky 1983; Neill 1982)

Writing Across the Curriculum. "In effective writing programs, writing is viewed as an integral part of all subjects. Such schoolwide emphasis is desirable because students will improve their understanding of the disciplines which emphasize writing, their writing will improve with opportunity for guided practice in several classrooms, students will grasp the importance of writing outside the English classroom, and effective schoolwide emphasis fosters interdepartmental cooperation" (ERIC Clearinghouse 1984). Providing language-rich environments in classrooms in all curricular areas has been shown to foster writing skill development, and some successful writing programs have included schoolwide inservice sessions to enable teachers to develop such environments (Neill 1982; Smith 1982).

Word Processing. The introduction of microcomputers into the writing curriculum has generated the same kinds of enthusiasm, resistance, controversy and mixed results as has the use of microcomputers in other curricular areas. Proponents allege that the flexibility and amenability to change which characterize word processing programs are highly compatible with the process approach to writing. These and other arguments in favor of using microcomputers are very appealing and, indeed, research indicates that certain applications of microcomputers in writing instruction are related to increased student achievement. In their 1984 review, Sommers and Collins found that using

microcomputers was effective when (1) used in conjunction with good teaching techniques which included conferences and interim evaluations and (2) used holistically (for exploration, reshaping, etc.) rather than using software which concentrates exclusively on subskills or isolates them prematurely. "Microcomputers are counter-productive when used in a theoretical vacuum" (p. 7).

Rodriguez and Rodriguez (1986) concur with this view, and they further point out that when students begin using word processing, many are frustrated in the short term. Generally, however, students grow to like the microcomputer when they gain facility in using it. Their review also included findings that microcomputer use leads to (1) greater student willingness to prewrite and revise, (2) greater pride in their work, (3) greater willingness to experiment with words and formats and (4) greater attention to teacher and peer comments.

Virtually all the research in this area indicates that writing with microcomputers has a positive effect on student attitudes. This echoes research findings on the use of computer assisted instruction in other curricular areas and appears responsible for at least part of the beneficial effects of microcomputer use on student achievement. In addition to the positive effects on student attitudes toward writing, Dickinson (1986) found that using microcomputers to teach writing increased the amount of peer cooperation and collaboration in classrooms.

INSTRUCTIONAL MODES

In 1984 George Hillocks, Jr. of the University of Chicago published the results of a meta-analysis of virtually all available studies on written composition conducted between 1963 and 1982. The description of the procedures and outcomes of the meta-analysis fills an entire book and will not be detailed here. However, one element worth noting is that, in addition to citing discrete instructional practices and their relative effect sizes, Hillocks gives attention to the more inclusive matter of "instructional modes" and the effects of their use on writing achievement. Hillocks describes instructional mode as "the role assumed by the classroom teacher, the kinds and order of activities present, and the specificity and clarity of objectives and learning tasks" (Hillocks 1986, p. 113). He identifies three major instructional modes found in classrooms -- the presentational, natural process and environmental modes.

The **presentational mode** of writing instruction is characterized by (1) relatively clear and specific objectives; (2) lecture and teacher-led discussion dealing with concepts to be learned and applied; (3) the study of models and other materials which explain and illustrate the concept; (4) specific assignments or exercises which generally involve initiating a pattern or following rules that have been discussed previously and (5) feedback, primarily from teachers to students about their writing. The presentational mode is the most widespread approach to writing instruction used by teachers and the *least* effective of the three Hillocks identified and studied.

The **natural process** mode is characterized by (1) general objectives (e.g., to increase fluency and skill in writing); (2) free writing about whatever interests the students; (3) writing for audiences of peers; (4) generally positive feedback from peers; (5) opportunities to revise writing and (6) high levels of interaction among students. Hillocks' meta-analysis found this mode to be 50 percent more effective than the presentational mode.

In the **environmental mode**, instruction is characterized by (1) clear and specific objectives; (2) materials and problems selected to engage students with each other in specific processes important to some particular aspect of writing and (3) activities, such as small-group, problem-centered discussions, conducive to high levels of peer interaction concerning specific tasks. "In contrast to the natural process mode, the concrete tasks of the environmental mode make objectives operationally clear by engaging students in their pursuit through structured tasks" (p. 122). An example of such a task would be to write about one of thirty seashells so that the reader would be able to pick out the seashell written about.

The environmental mode was found to be over four times more effective than the traditional presentational mode and three times more effective than the natural process mode. This mode is also congruent with several major findings emerging from the effective schooling research. For example, both emphasize the importance of clearly delineated objectives. Both call for guided and independent practice with new skills and concepts. Both emphasize giving students practice tasks which truly match and illustrate the lesson or concept taught. And both underscore the importance of using small group structures for specific activities.

TEACHER TRAINING

Given what is known about effective instructional practices for teaching students to write, it is reasonable to ask what research says about training teachers to implement these practices. That is, what does research say about the relationship between teacher training in these practices and student outcomes?

A great many experimental studies and program evaluations have been conducted concerning the staff development approach originally known as the Bay Area Writing Project (Neill 1982; Goldberg 1983). To shorten a long and very interesting story, this project began at the University of California at Berkeley in 1973. It involved bringing together the best writing teachers in the Bay Area schools to teach and learn from one another through a summer institute program. The success of the project occasioned the spread of the model throughout California (the California Writing Project) and across the United States (National Writing Project). Today, variations of the model can be found operating in every state.

Basically, the model involves teachers in intensive summer institute programs which immerse them in activities which reflect writing as a process. They participate in daily writing activities and sharing/critiquing sessions. This is accompanied by numerous individual conferences with their instructor. At the beginning of the school year, they begin implementation of a similar program in their classrooms which includes teachers participating in daily writing activities with their students (Neill 1982). As the year progresses, teachers participate in ongoing, voluntary staff development programs which include the following elements: (1) theory and research findings regarding effective composition instruction; (2) a focus on practical applications of theory and research; (3) attention to specific skill development; (4) time and opportunity to build writing and teaching skills; (5) opportunities to observe in other teachers' classrooms and (6) the involvement and support of administrators.

This structure is congruent with the effective schooling research, which states that in effective schools, "staff development opportunities are provided; emphasis is on skill building; content addresses key instructional issues and priorities. Inservice activities are related to and build on each other" (Goal Based Education Program 1984, p. 10).

As the number of National Writing Project sites and similar programs continues to grow, research results continue to indicate that this approach to teacher training does, in fact, result in students becoming more capable writers (Alloway, et al. 1979; ERIC Clearinghouse 1984; Neill 1982). Indeed, the approach has produced such positive outcomes that, as Goldberg (1983) writes, "the National Writing Project is arguably the most successful inservice effort in the history of teacher education" (p. 10).

While it is not necessary for staff development programs to follow or adapt the National Writing Project model in order to be effective, research does indicate that the writing-as-a-process approach and ongoing skill-building sessions are essential components of effective inservice programs.

CONCLUSION

When looking at the research on composition together with the effective schooling research, the following points can be made:

1. The composition research corroborates the general effective schooling research; what works in a general way also works in this specific curricular area. Some effective schooling research findings are, of course, more relevant than others to the process of teaching writing.
2. There are no instances of out-and-out contradiction between the effective schooling research and the research on teaching writing.
3. Those effective schooling research findings which are most relevant to composition instruction are those which emphasize the importance of:
 - o Clarity of objectives

- Continuity and sequencing of instruction
- Opportunities for guided and independent practice (homework)
- Alignment of practice activities with concepts studied
- Frequent monitoring of student learning
- Providing feedback and correctives while student work is in progress
- Small group learning for some classroom activities
- Strong instructional leadership
- Staff development which is geared to skill building and key instructional issues

As research findings become more available to practitioners, an opportunity is created for the gap between research and practice to be closed. This would be extremely beneficial to the nation's students for many personal, academic and vocational reasons. Perhaps the most important of these reasons is that cited by writing authority Donald Graves: "In writing, kids find themselves."

REFERENCES

Alloway, E., et al. THE NEW JERSEY WRITING PROJECT. A Consortium Project of Rutgers University, The Educational Testing Service, and Nineteen New Jersey Public School Districts, 1979. (ED 178 943).

Reports the results of a year-long writing project involving over 1,600 students in grades seven through twelve and their teachers. A 60-hour teacher training component focusing on writing as a process was followed by classroom implementation and ongoing staff development and assessment. Treatment students significantly outperformed controls.

Amiran, E., and Mann, J. WRITTEN COMPOSITION, GRADES K-12: LITERATURE SYNTHESIS AND REPORT. Portland, OR: Northwest Regional Educational Laboratory, 1982.

Presents theoretical, conceptual, research, implementation and evaluation information drawn from an analysis of 160 documents on composition and writing instruction. Includes a summary of research on effective instructional practices.

Applebee, A. N. "Looking at Writing." EDUCATIONAL LEADERSHIP 38(1981): 458-462.

Traces the development of educators' and researchers' views of writing from a product-oriented to a process-oriented approach. Describes writing assessment issues and processes and discusses appropriate inservice activities for teaching writing.

Beach, R. "The Effects of Between-Draft Teacher Evaluation Versus Student Self-evaluation on High School Students' Revising of Rough Drafts." RESEARCH IN THE TEACHING OF ENGLISH 13(1979): 111-119.

Investigates the effect of teacher evaluation of written drafts, guided self-evaluation and non-guided self-evaluation on the writing of tenth, eleventh and twelfth graders. Treatment students' work exhibited greater degree of change, fluency and support, but no differences were noted in sequence or focus.

Bivens, W. P., III, and Edwards, A. B. TRANSFORMATIONAL GRAMMAR AND WRITING IMPROVEMENT. Paper presented at the Annual Meeting of the Conference on College Composition and Communication, 1974. (ED 101 361).

Examines the effects of sentence-combining activities on the writing ability of eleventh graders. Experimental students outperformed controls (traditional instruction).

Brown, W. C., Jr. "An Investigation of the Effects of a Literacy Training on the Composition Skills of Fourth Grade Students." DISSERTATION ABSTRACTS INTERNATIONAL 42(1982): 3430A.

Examines the effects on children's writing of teaching literary elements such as main idea, mood, imagination, use of precise nouns, etc. Treatment students (56) significantly outperformed controls (49).

Bruno, B. J. "The Effects of Sentence Combining on the Writing of Ninth Graders." Dissertation Abstracts International 41(1981): 4352A.

Examines the effect of sentence-combining exercises, direct writing instruction and extra reading time on the writing ability of ninth graders. The first group outperformed the second, which outperformed the third.

Combs, W. E. "Further Effects of Sentence Combining Practice on Writing Ability." Research in the Teaching of English 10(1976): 137-149.

Replicates previous studies on the effects of sentence combining, using a delayed rather than immediate posttest. The 100 seventh grade participants were divided into two control and two treatment classes. Treatment students outperformed controls on overall writing quality and retention.

Daker, L. P. "The Comparative Effects of Two Composition Methodologies on the Syntactic Maturity, Writing Apprehension and Overall Writing Ability of Ninth and Tenth Grade Students." Dissertation Abstracts International 41(1981): 4954A.

Examines the effects of sentence combining and journal writing (treatment) versus those of studying grammar, usage and models (control). Results are inconclusive, with the treatment group outperforming controls on some measures but not others.

Dickinson, D. K. "Cooperation, Collaboration and a Computer: Integrating a Computer into a First-Second Grade Writing Program." RESEARCH IN THE TEACHING OF ENGLISH 20(1986): 357-378.

Presents a review of research on the use of microcomputers in writing programs, followed by the report of a study conducted by the author. The use of the microcomputer fostered cooperation and collaboration.

Donohue, C. A Study of the Impact of a Special Writing Program on the Reading and Writing Achievement of Gates Students in a New York City Junior High School Remediation Program. Ph.D. Dissertation, Columbia University Teachers College, 1985.

Studies the effect on reading comprehension and writing quality of a highly structured, time-intensive writing program for remedial seventh grade students. No significant reading comprehension differences were noted, but treatment students significantly outperformed controls in writing.

ERIC Clearinghouse on Reading and Communication Skills. QUALITIES OF EFFECTIVE WRITING PROGRAMS. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills, 1984.

Summarizes research on effective practices in composition instruction and cites ways that administrators can foster the development of effective programs.

Evans, R.; Venetozzi, R.; Bundrick, M.; and McWilliams, E. THE EFFECTS OF SENTENCE-COMBINING INSTRUCTIONS ON CONTROLLED AND FREE WRITING AND ON SCORES FOR STANDARDIZED TESTS OF SENTENCE STRUCTURE AND READING COMPREHENSION. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, 1986. (ED 269 739).

Investigates the effects of sentence-combining exercises on the skill levels of college juniors, twelfth graders and sixth graders. A review of research precedes the study.

Finnemore, S. H.; Breunig, D. W.; and Taylor, R. G. "The Effect of Intensive Instruction in Writing on Ten Measures of Performance." READING IMPROVEMENT 17(1980): 158-162.

Examines the effects of intensive writing lessons and practice on the writing skills of seventh graders. The treatment involved more instruction, more writing practice, and contact with local authors and their work. Treatment students made significantly higher gains than controls.

Glatthorn, A. A. WRITING IN THE SCHOOLS: IMPROVEMENT THROUGH EFFECTIVE LEADERSHIP. Reston, VA: National Association of Secondary School Principals, 1981.

Presents information to help principals improve school writing programs through evaluation, staff development, curriculum development, supervision, involving parents, etc. Includes a summary of research findings regarding effective and ineffective approaches to teaching writing skills.

Goal Based Education Program. EFFECTIVE SCHOOLING PRACTICES: A RESEARCH SYNTHESIS. Portland, OR: Northwest Regional Educational Laboratory, 1984.

Goldberg, M. F. "Writing Objectives: The National Writing Project." NAASP BULLETIN 67(1983): 110-111.

Describes the objectives of the Shoreham-Wading River Writing Project in New York. This project was developed based on the National Writing Project, in which half the S-WR teachers had received training.

Graves, D. H. BALANCE THE BASICS: LET THEM WRITE. New York: Ford Foundation Papers on Research About Learning, 1978.

Presents research findings and instructional theory about writing in the context of other basic skills.

Hancock, K. "A Review of Research on Revision." In RESEARCH IN THE TEACHING OF THE ENGLISH LANGUAGE ARTS. Athens, OH: Department of English Language and Literature; Southeastern Ohio Council of Teachers of English, 1983.

Reviews research on the revision process and offers guidelines for implementing findings in the classroom.

Hillocks, G., Jr. RESEARCH ON WRITTEN COMPOSITION: NEW DIRECTIONS FOR TEACHING. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills, 1986. (ED 265 552).

Examines the research conducted on written composition over a 20-year period using the techniques of meta-analysis. Both effective practices and their relative effectiveness are identified. [This report is an expansion of the information provided in Hillocks, 1984.]

———. "What Works in Teaching Composition: A Meta-analysis of Experimental Treatment Studies." AMERICAN JOURNAL OF EDUCATION 93(1984): 133-170.

Uses a meta-analysis technique to determine the effect sizes of the instructional practices found in over 500 experimental studies conducted between 1963 and 1982. Identifies and describes the effectiveness of various instructional modes as well as discrete instructional practices.

Holbrook, H. T. "Whither (Wither) Grammar." LANGUAGE ARTS 60(1983): 259-263.

Provides an overview of the history of grammar instruction in the U. S. in the current century, identifies the strengths and weaknesses of such instruction, and suggests ways that teachers can effectively incorporate grammar activities in their classrooms.

Holdzkom, D.; Reed, L.; Porter, H. J.; and Rubin, D. L. RESEARCH WITHIN REACH: ORAL AND WRITTEN COMMUNICATION. St. Louis, MO: CEMREL, Inc., 1982.

Provides research-supported responses to specific questions generated by kindergarten through twelfth grade teachers. Topics include the place of communication skills in the school curriculum, classroom considerations, language diversity and evaluation.

Karegianes, M. L., Pascarella, E. T., and Pflaum, S. W. "The Effects of Peer Editing on the Writing Proficiency of Low-Achieving Tenth Grade Students." JOURNAL OF EDUCATIONAL RESEARCH 73(1980): 203-207.

Investigates the effects on the achievement of 49 students of highly-structured peer editing of compositions, as opposed to teacher editing. Treatment (peer editing) students significantly outperformed controls.

Keech, C., and Thomas, S. COMPENDIUM OF PROMISING PRACTICES IN COMPOSITION INSTRUCTION. EVALUATION OF THE BAY AREA WRITING PROJECT. Berkeley, CA: California University School of Education, 1979.

Identifies practices shown to be effective in the Bay Area Writing Project.

McAfee, D. C. "Effect of Sentence-Combining Instruction on the Reading and Writing Achievement of Fifth Grade Children in a Suburban School District." DISSERTATION ABSTRACTS INTERNATIONAL 42(1981): 156A.

Reports the results of a study comparing the effects of sentence-combining exercises with those produced by traditional language arts instruction. Treatment students outperformed controls on both reading and writing measures.

Melvin, M. P. THE EFFECTS OF SENTENCE-COMBINING INSTRUCTION ON SYNTACTIC MATURITY, READING ACHIEVEMENT, AND LANGUAGE ARTS SKILLS ACHIEVEMENT. Oxford, OH: Miami University, 1980. (ED 191 007).

Investigates the effects of sentence-combining exercises on the reading and writing of third, fourth, fifth and sixth graders. There were no differences between experimental and control groups.

Neill, S. B. TEACHING WRITING: PROBLEMS AND SOLUTIONS. Arlington, VA: American Association of School Administrators, 1982. (ED 219 776).

Describes issues in the provision of writing instruction in elementary and secondary schools and suggests ways to address these. Includes findings from research on writing instruction.

O'Hare, F. SENTENCE COMBINING: IMPROVING STUDENT WRITING WITHOUT FORMAL GRAMMAR INSTRUCTION. Urbana, IL: National Council of Teachers of English, 1973. (ED 073 483).

Investigates the effects of a series of sentence-combining exercises designed to be independent of the students' (seventh graders) previous knowledge of grammar. The writing of treatment students was judged to be more mature and of higher quality than that of students who did not have the sentence-combining practice.

Parson, G. HAND IN HAND: THE WRITING PROCESS AND THE MICROCOMPUTER. TWO REVOLUTIONS IN THE TEACHING OF WRITING. A MANUAL FOR SECONDARY TEACHERS. Juneau, AK: Alaska State Department of Education, June 1985. (ED 264 598).

Provides an overview of the change from traditional to research-based writing instruction, followed by a discussion of the use of microcomputers in the writing curriculum. Teaching suggestions and a listing of resources are included.

Phelps, S. F. "The Effects of Integrating Sentence-Combining Activities and Guided Reading Procedures on the Reading and Writing Performance of Eighth Grade Students." DISSERTATION ABSTRACTS INTERNATIONAL 40(1979): 179A.

Investigates the effects of sentence-combining exercises used with guided reading instruction on the writing performance of subjects. No significant differences were noted between treatment and control students on any of the variables studied.

Pisano, R. C. "The Effectiveness of an Intervention Study in Critical Thinking Skills Designed to Improve Written Composition in Eleventh and Twelfth Graders." DISSERTATION ABSTRACTS INTERNATIONAL 41(1980): 192A.

Reports findings from a study designed to determine the effects on students' writing of providing them with instruction in critical thinking skills. Experimental students wrote more and higher quality essays.

Rodriguez, D., and Rodriguez, R. J. TEACHING WRITING WITH A WORD PROCESSOR, GRADES 7-13. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teacher of English, 1986.

Presents research findings and implementation guidelines regarding the use of word processing programs in composition instruction. A series of lesson ideas is appended.

Sealey, J. "Grammar Instruction." R&D INTERPRETATION SERVICE BULLETIN 9/1(1987a): entire issue.

Presents research findings and classroom guidelines regarding the role of grammar instruction. Includes information on sentence-combining and sample exercises.

———. "Peer Editing Groups." R&D INTERPRETATION SERVICE BULLETIN 9/2(1987b): entire issue.

Discusses peer editing as an effective strategy to use in composition instruction. What peer editing is, how it works, and why it is effective are outlined. Includes research findings on the effects of peer editing.

Smith, T. R., ed. HANDBOOK FOR PLANNING AN EFFECTIVE WRITING PROGRAM: KINDERGARTEN THROUGH GRADE TWELVE. Sacramento, CA: California State Department of Education, 1982.

Addresses the content and teaching methodology of writing programs, including (1) background, (2) a discussion of the writing process, (3) suggestions for implementing a schoolwide writing program, (4) staff development for teaching writing and (5) a checklist for assessing writing programs. Includes a summary of research on writing instruction.

Sommers, E. A., and Collins, J. L. WHAT RESEARCH TELLS US ABOUT COMPOSING AND COMPUTING. Paper presented to the Computer Educators League, Buffalo, NY, September 29, 1984. (ED 249 497).

Discusses the research on effective practices for teaching writing and the role of computers in fostering writing skills.

Stotsky, S. "Research on Reading/Writing Relationships: A Synthesis and Suggested Directions." LANGUAGE ARTS 60(1983): 627-642.

Reviews the research on reading and writing, offers instructional implications of that research and suggests areas for further study.

Wesdorp, Hildo. ON THE IDENTIFICATION OF CRITICAL VARIABLES IN WRITTEN COMPOSITION INSTRUCTION. SCO Cahier No. 16. Amsterdam: Amsterdam University, 1983. (ED 258 167).

Examines approximately 170 studies to determine the variables leading to success in written composition instruction.