Noting the powerful influence of writing skills on thinking skills, reading comprehension, and knowledge retention, this concept paper examines writing as it is used in the classroom, focusing specifically on the writing process. Following a rationale for teaching writing is a summary of related research that highlights practice as the most important element of becoming a better writer. The third section offers the writing process as a successful instructional approach and outlines some essential writing process concepts. The paper then discusses each step of the writing process: (1) prewriting (including issues involved in prewriting and the forms prewriting can take); (2) drafting; (3) revising; (4) editing and proofreading; and (5) publication (including teacher evaluation and school publications for fellow classmates). A conclusion discusses the role of the teacher in successful writing instruction. A bibliography is included. (JC)
Writing

Why Write?

For writing teachers of all grade levels, primary to high school, the first question to be addressed is, "Why write?"

Modern youngsters may view writing as an obsolete art in an electronic age. Many traditional functions of writing (for sending messages over long distances or keeping family histories, for example) have, in fact, been replaced by more convenient media — the telephone, video recorder, and computer. What reasons, then, can we give students for expending the energy necessary to master this complex skill?

Research and common sense indicate that writing has many powerful functions. Part of the power of writing is its positive influence on thinking. Writing researcher Donald Graves (1983) says, "Writing contributes to intelligence. The work of psycholinguists and cognitive psychologists shows that writing is a highly complex act that demands the analysis and synthesis of many levels of thinking." As it clarifies and reveals our thinking, writing proves to be a powerful act of cognition.

Writing can give young citizens a kind of public power — by the result of a clear consumer letter or the impact of a persuasive letter to the editor, for instance. Writing can be an effective tool for democratic participation.

Another part of writing's power is the chance to get feelings onto paper, to reflect on experiences, to find insights. Writing can offer the powerfully enjoyable challenge of creative expression through the invention of engaging stories, imaginative tales, thoughtful poems, or compelling arguments.

If students can experience all the potential power and value of writing by regularly engaging in meaningful writing activities in our classrooms, we will likely have given them the best answer possible to the question, "Why should I learn to write?"

SUMMARY OF RESEARCH

The Cornerstone of Learning to Write: Adequate Practice

Research confirms that writing is an incredibly complex act involving a dazzling diversity of mental events (Hillocks, 1986). It is one of the most sophisticated of all human inventions.

The writer has more things to keep in mind at one time than a juggler has bowling pins to keep in the air: the information or message, the audience's requirements, the demanding protocols of the language, the format, the look of the manuscript, the organizational structure, proper letter formation, appropriate word choice, correct punctuation and spelling and grammar, tone of voice, the urge to grab the reader's attention.
attention, and countless other details, rules, and issues large and small. Writers move back and forth between concerns, mixing rapid composing with quiet thinking and slow editing, planning ahead then circling back, writing and revising and endlessly tinkering, again and again (Flower and Hayes, 1983).

The first thing we must offer students, if we want them to master this dauntingly complex craft, is adequate time to practice it. Unfortunately, most students are not getting much practice time.

Surveys show that much of the effort required of students takes the form of exercises rather than the actual setting of pencil to paper and writing. Many elementary students spend far more time studying the subskills of writing — spelling, penmanship, grammar, vocabulary, mechanics — on worksheets than they do applying those subskills in the whole act of writing. Donald Graves (1983) says, "So much time is devoted to blocking and tackling drills that there is often no time to play the real game."

"Research confirms that writing is an incredibly complex act involving a dazzling diversity of mental events."

Recent research acknowledges the same problems facing high school students. Arthur Applebee (1981) found, for example, that high school students are rarely asked to produce original writings of more than a few sentences, and spend only about three percent of all school time — in class or for homework — writing anything a paragraph or more in length. Instead they do many fill-in-the-blank activities on worksheets and in textbooks in lieu of writing.

The most recent survey of writing released by the National Assessment of Educational Progress (Applebee and others, The Writing Report Card, 1986), the huge federally funded "report card" on the nation's schools, confirms these findings. For example, over a third of the high schoolers surveyed said they received little or no instruction in actual writing in their English classes. Not surprisingly then, the NAEP found a high proportion of inadequate performances at all grade levels in the most basic writing tasks — describing, explaining, and making a persuasive argument. The report says, "Most students . . . are unable to write adequately in response to the subskill drill and instruction to the exclusion of simplest of tasks . . . . Students at all grade levels are deficient in higher-order thinking skills."

One possible explanation for this poor showing is that teachers have concentrated on isolated practicing the whole act of writing. Writing is too intricate an act to break down into parts that can be individually learned and reintegrated later into a whole performance. This part-to-the-whole approach has apparently not borne fruit, so the assumption that subskill mastery will transfer to whole skill performance seems to be in error.

One area that exemplifies this troubling issue, and that has been exhaustively researched, is the relationship of the subskill of grammar to writing skill. The findings are overwhelmingly clear and perhaps surprising: the teaching of formal grammar has a negligible effect on the improvement of writing, and it can have a harmful effect if it displaces instruction and practice in actual composition (Hillocks, 1986, as well as many others). A knowledge of the labeling system of language seems to be significantly different than the ability to use language in the act of writing.

Additional research also confirms the limitations of spending an excessive amount of time on subskill drill and instruction to the detriment of direct writing practice. NAEP data (Applebee and others, The Writing Report Card, 1986) for example, show that even though student mastery of spelling, punctuation, capitalization, grammatical agreement, and sentence structure has improved slightly, overall writing scores have plummeted. Again, there seems to be more to mastering writing than mastering subskills.

"Writing deserves more time in the curriculum than it is currently receiving in most schools."

Other studies have found that students who write daily without formal instruction in certain subskills (such as spelling and punctuation) perform better in those areas than students who regularly study them, drill, and are tested, but who seldom write (Calkins, 1986). It seems to be only in the frequent concrete application that these linguistic abstractions make sense to young writers. Imagine how successful the students in these studies might have been with a program that
balanced both skills instruction and daily writing practice.

Writing deserves more time in the curriculum than it is currently receiving in most schools. Students from first grade on should be involved in the whole act of writing every day in school. It can be informal as well as formal writing, sometimes carefully monitored and sometimes left unedited, assigned as independent seatwork or as homework, done in journals or learning logs or short stories or persuasive essays or expository reports or research reviews, but students need to write, write, write.

**IMPLICATIONS FOR INSTRUCTION**

A Successful Instructional Approach: The Writing Process

Though giving students more practice is the cornerstone of writing instruction, research indicates that simply increasing the number of writing opportunities without providing instruction and guidance does not, in and of itself, result in a significant improvement of students' skills (California Department of Education, 1982). The increase in practice must be accompanied by effective teaching.

"Instruction during the act of writing is more effective than correction after the act of writing in affecting students' long-term learning."

One effective instructional method has come to be known as the writing process approach. This approach has developed from a fairly recent body of research on what happens to writers during the act of writing. Systematic investigation of the composing process began in the early 1970s, led by scholars who spent thousands of hours watching writers write (Emig, 1971, for example). Professional writers contributed to the inquiry by reflecting on what expert writers know and say about their own processes of writing (Murray, 1968).

Prior to this time, composition was generally taught and measured on the basis of a finished product. Instruction was traditionally confined to advice or direction given before the writing commenced and correction given after the writing concluded (Perl and Wilson, 1986). Writing process research has encouraged teachers to assess not only what students produce, but also how they produce it.

Unfortunately, this writing process research has been mistakenly used to justify some ineffective practices. Some educators have erroneously figured that a focus on the process meant they did not have to concern themselves with the final product, which is not what writing process researchers intended at all. Writing process advocates have also been criticized for not providing models of good writing to students, for designing programs consisting of nothing but extensive unstructured freewriting, and for having students lockstep their way through an arbitrary sequence (all students prewriting on Monday, drafting on Tuesday, revising on Wednesday, editing on Thursday, and so forth). The careless use of the notion of the writing process, thus, has been justifiably criticized for unsuccessful practices ranging from the chaotic to the over-regimented (Rodriguez, 1985).

What does writing process research actually say about effective practices? This recent inquiry into the process of writers at work has provided some fundamental insights into composing which are directly translatable into effective classroom activities.

**Some Essential Writing Process Concepts**

1. Writing is an extremely complicated process. It does not proceed so neatly as oversimplified writing process models in many
textbooks imply. We must be wary of reducing such a complex event to a recipe for all students to follow in an arbitrary fashion. Few writers work in a neat, linear manner (Calkins, 1983).

2. **Writing processes differ for different writers.** We must take care not to convey to students the mistaken notion that there is one generic writing process that everyone must go through in the same way. With the 25 or more students in a writing class, teachers have to accommodate each writer's temperament and style and experience as well as the context, task, purpose, and audience of the moment. We cannot thus help but tailor instruction to the particulars of each particular writing of each particular student. We cannot ignore an individual writer's singular development or needs for the sake of some standardized approach. There is no simple-answer approach, normative sequence or universal cure that will "fix" everything and teach every student to be a competent writer. The difficult truth about teaching writing is that we must individualize. Writing teachers need lots of skills and a willingness to try different approaches with individual students, to teach one-on-one. As writer and teacher David Bradley says, "To teach writing, you've got to get down in the mud with each student and wrestle."

3. **Teachers can teach while students write.** Writing process research provides an expanded view of teacher support and intervention. Involvement with students does not need to be limited to activities prior to writing (assigning the topic, form, length, and due date) and activities subsequent to writing (collecting, correcting, and grading). We can also fruitfully intervene along the way— involving ourselves in planning strategies, giving content response that teaches and encourages revision, providing proofreading resources prior to a final draft, and so on. Instruction during the act of writing is more effective than correction after the act of writing in affecting students' long-term learning, researchers tell us (Hillocks, 1986).

4. **Teachers can profitably provide time and attention for different parts of the writing process.** Teachers must recognize the multiplicity of skills involved in writing. Some researchers have found that writers, particularly in the elementary grades, cannot manage all the different demands of writing with equal attention (Clay, 1975). Even professional writers have to work hard to juggle all aspects of writing. Oregon poet and essayist Kim Stafford says, "Instead of trying to do everything at once — come up with good ideas, tell a story interestingly, organize it, spell it right, do all the punctuation correctly, and make it neat — I have to focus on things in turn."

Teachers can help students focus on things in turn — such as concentrating on content first and mechanics later, since research has found that students generate more ideas when encouraged not to worry about mechanics and grammar on first drafts (Hillocks, 1986). Increased knowledge about the writing processes of skilled writers encourages us to free students from the unrealistic pressure of doing a quality first-and-final draft in one sitting in class. We support growth in writing skill when we help our students identify different parts of the writing process and when we allow adequate time for them.
Elements of the Writing Process

Prewriting

“Prewriting” is a less-than-perfect term for a whole range of experiences and activities that are intended to help a student collect thoughts, generate information, find focus, and order ideas, all before the student feels pressure to complete a finished draft. Researchers have found that time spent on prewriting activities leads to improved student writing (California Department of Education, 1982).

1. Unfortunately, some researchers have found in recent years that very little time is spent in most classrooms on prewriting activities. Many teachers take two or three minutes to briefly explain the requirements of an assignment, but not much time is generally spent on discussion, brainstorming, or generating enthusiasm, or for the reflection and early experimentation many writers need (Applebee, 1981).

Writer Ken Macrorie tells of his high school English teacher who would put a weekly assigned writing topic on the chalkboard, such as “Types of Bells,” and would expect the students to write an essay on that subject without a word from the teacher. This is an instructive example, perhaps, of the kind of demoralizing writing situation where no attempt has been made to engage a student’s interest toward a topic, to explore possible approaches to the assignment, to get useful words swirling in the air, or to study models of the assigned form of writing. In short, none of the support of prewriting activities has been provided.

2. Teachers can organize structured activities to occur in the early stages of a writing project that can have a positive impact on the quality of students’ final papers. We might, for example, teach students some data- or word-generating strategies, such as making lists, producing rapid bursts of unedited writing, or clustering (a technique where students put a key word in the center of their page and quickly make a network of other connected words and ideas). The final goal is to give students a variety of strategies they can ultimately use independently on their own writing projects.

3. Oral language seems to be one of the most powerful bridges to writing. So whatever talk occurs — in whole groups, small groups, with individuals — can help students a great deal before they begin or while they are in the throes of their writing. Research indicates that giving students an opportunity to verbalize regularly as they write — discussing their goals and plans, talking over problems they are encountering, asking questions — helps them write better (Hillocks, 1986). The writing period needs to include time for oral questioning of writers: “What are you going to write? How is it so far? What are you pleased with? Any problems? What is going to happen next?” Classrooms can be organized for students to regularly talk with each other in writing groups, or teachers can be roving conversationalists. In whatever way it is provided, talking before or during the process of writing helps writers.

Prewriting, thus, is the part of the writing process where teachers can have the most impact on student motivation to write.”

Prewriting Issues: Topics

Some researchers have recently asserted that a
student’s investment in the topic is the single most important variable in peak writing performance (Graves, 1983). Finding "hot" topics, then, becomes a major concern of all teachers at all grade levels.

- **One instructional response is to give students regular opportunities to choose their own topics for writing.** Studies have shown that pupils generally write more and with more interest and control of the material when they choose their own topics (Graves, 1983). Veteran writing teachers attest to the effectiveness of students having "Things I Can Write About" lists where they keep track of experiences, interests, memories, and opinions that they feel they can use as material for composition. Regular journal writing or short freewriting activities may also be a spur to topic generation.

- **There are times, however, when teachers want to direct or assign topics.** In the outside-of-school world, we all have occasional "assigned" topics where the purpose and parameters are not generally ours to choose, from writing thank-you letters for gifts to writing for work. It makes sense to give students some experience with such assignments.

In other disciplines, the course of study often requires a teacher-assigned topic. Before students write a report for the insect unit they are studying or an essay on the novel they are reading or a research paper on Northwest Indian cultures that is the current focus of classroom inquiry, teachers should always provide some prewriting activities.

- **Balancing student-chosen topics with teacher-assigned topics is to give students a varied diet of writing experiences.** Prewriting activities such as a lively class discussion, a listing of subtopic possibilities, a group brainstorming session, an opportunity to do some clustering to gather and organize information, help to grab students with the topic, to call forth a wealth of memory content, to activate prior knowledge, to personalize the topic, to access pertinent language. The point of prewriting is always to more closely connect the student to the topic at hand.

**Prewriting issues: Forms**

Researchers have found that students need help in connecting the form a piece of writing takes with the topics (Calkins, 1986). Teachers, then, must have a clear understanding of the issues surrounding form as they plan prewriting activities.

- **One prewriting approach that needs to be carefully considered and sparingly used is the teaching of over-restrictive forms.** Students obviously need to learn about and internalize the structures of various written forms, but these must be presented in useful and flexible ways. It helps students immensely, of course, to learn the specific form of a business letter, but if teachers overregulate and demand a three-paragraph business letter, the students are not served well, since the structure of any specific business letter will be a function of the specific issue it is addressing.

There are other reasons to be wary of the exactly stipulated writing form. Researchers have found that the majority of real-world writing does not reflect the forms and structures most commonly taught in schools. For example, surveys have found that less than half the prose in magazines has explicit topic sentences or the organizational patterns generally found in language arts textbooks (Applebee, 1981). Furthermore, there is no regularly occurring forum for highly-stipulated forms such as the
"seven-paragraph essay." Human thought does not come so conveniently packaged in such standardized sizes, and it may do students' thinking a disservice to demand such.

- Students need opportunities to experiment with a variety of forms. Many students have written in only a handful of forms (some "creative" writing, some reports, some letters, and lots of exercises), for a single purpose (to have the work evaluated), for a single audience (the teacher). Teachers can help young writers expand their composing repertoires, since each new form will challenge them to explore organizational strategies and styles appropriate to each new purpose and audience. Students thus ought to be given the opportunity to experiment with poetry, personal narrative, short fiction, essay, exposition, dialogue and plays, autobiography, interviews, letters, journalism, directions, research reviews, and more. They ought to be given the opportunity to write for a variety of real purposes — books to be published, poems to be posted, recipes to be used, letters to be sent — and they ought to be given the opportunity to write for a variety of audiences, including their classmates, on a regular basis.

How do we teach our young writers about the general structure of various literary forms without impeding their thoughts and process of discovery? One successful method has recently come to be called the "inquiry" approach to writing. In this approach, models of some specific form (an editorial, for example) are studied. Then students are involved in discussing and defining criteria for evaluating successful editorials: what do editorialists have in common? What are the requirements of the form? What makes a good one? What is the range of subjects editorialists might write about? Then a concrete problem is given to solve: write an editorial. Peer interaction and the

"Research shows that skilled writers pay greater attention to matters of content and organization as they draft, and weaker writers tend to be overly preoccupied with mechanics, particularly spelling, too early."

collection and use of lots of real-world data are stressed. This is a research-supported approach for improving student skill at specific written forms (Hillocks, 1986).

Drafting

Students "draft," of course, throughout the writing process. The only instructional goals at this stage may be to give the students ample time to write and to remind them what writers usually mean by "rough draft." This is the time of word-spinning, of getting the pencil or cursor moving across the page. The focus is information; a concern for perfect spelling and neatness and punctuation can wait until later. Research shows that skilled writers pay greater attention to matters of content and organization as they draft, and weaker writers tend to be overly preoccupied with mechanics, particularly spelling, too early (Hillocks, 1986).

One additional important point for teachers of primary students needs to be added. Many early grades teachers may be uncomfortable with the idea of their students regularly doing any independent drafting, since these beginning writers' products are so often full of mistakes. Some teachers may feel that children's knowledge of phonics, in particular, is so rudimentary that they will misspell many words and thus be reinforcing error. So, in many schools, the primary grades writing program may be limited to children giving dictation, copying off the board, or composing only short works in a highly structured format such as a given pattern or a fill-in-the-blank.

Happily, much new information about the developmental writing and spelling of young children is being discovered, and researchers have come to believe that students can begin to write at the same time that they begin to read (Stuart and Graves, 1985). Once students know
most of their letter names and forms and can make the sound-symbol relationship with about ten consonants (knowledge that many entering first graders already have), they can begin to make approximations of many words they want to write (Graves, 1983). They may also use pictures and symbols or may dictate their writing to another.

Young students who are in classrooms where they are allowed to write often amuse us with their "inventive spelling," like Sarah's story "I youly go to Cadl (Seattle)." This phonetic spelling is more than just an amusement, however. Researchers are finding that inventive spelling, even when it is not correct, helps students strengthen their knowledge of phonetic relationships (Henderson and Beers, 1980). Teachers can be confident, then, that the independent writing of drafts by the youngest students does not teach them bad habits; rather, it teaches them in significant ways how the encoding system of our language works — all in the meaningful context of crafting their own messages.

A daily writing program can thus begin as soon as the first grade and can support the classroom reading and spelling programs as well as allowing students to get an early start on the joys of composing.

"Revision is an act of critical thinking, of analyzing and evaluating, of complex choice making and problem solving, of continually applying and reassessing our knowledge of logic and language and our audiences' requirements."

Revising

"Revising" used to have a narrower meaning than it does today in writing process theory. It meant, to many students and teachers, the drudgery of recopying to fix errors and to make the final manuscript tidy. Research reveals that "revising" in most classrooms has been concentrated at the level of proofreading skills and has involved little reassessment of content (Applebee, 1981).

- Revision at its early stage should focus on content, weighing clarity and cohesion and effectiveness, changing and adding and deleting words and phrases and segments, trying out other ways of expressing things, and experimenting until a composition sounds good to its author. Good writers, research shows, engage more often in these information-focused revising activities than do poor writers (Hillocks, 1986). This is the part of the writing process that most directly involves the higher-order thinking functions which the national assessments indicate are missing in so much of students' writing (Applebee and others, Writing Trends Across The Decade, 1974-84, 1986). Revision is an act of critical thinking, of analyzing and evaluating, of complex choice making and problem solving, of continually applying and reassessing our knowledge of logic and language and our audience's requirements.

- Teachers can support the growth of young writers by guiding them in this complicated process of revising. The first way to do this is to break ourselves of any habit we may have of expecting a first-and-final draft in one sitting, which does not give students time to revise much, nor does it reflect what we know about the processes of working writers. Another way to nurture revision is to make a clear distinction between the choices of revision and the necessities of proofreading. To do this, teachers can make sure that the first feedback given to a student on any paper is about content issues, and that this feedback leads students to think about the choices they have as writers.

Teachers need to hold off on the "fix this"
prescriptions of the red pen until later in the process. One more way to get across the idea of revision is to explain and model different revision strategies of expansion, deletion, and substitution, by writing in front of students on the chalkboard or overhead projector or by sharing samples of professional writers' rough drafts. Students can profit by seeing how writers need to be flexible and willing to work beyond the first words that come to mind.

One way for students to get regular responses to their works-in-progress. Classrooms can be organized so early drafts can be "tried out" on a supportive audience to get reactions, questions, and input on what is working well and what may need content revision. Research shows that providing such regular responses from peers or teachers produces superior results on student papers (Hillocks, 1986).

The prime requirement for successful response leading to revision is a safe and respectful classroom community. Constructive criticism can turn destructive quite quickly unless the teacher carefully creates and monitors an environment where reactions are offered helpfully and thoughtfully. A positive classroom climate supports writing growth, according to researchers (Graves, 1983).

Two current classroom practices that promote the response-revision cycle are peer writing groups and teacher-student writing conferences. Response to content and encouragement to revise can certainly be provided by the time-honored English teacher's method of taking home vast stacks of papers and writing marginal comments, but many contemporary teachers have found it less time-consuming and far more effective to structure their classes to provide individualized oral feedback to students.

One-on-one or small group response conferences with the teacher have proven effective at all grade levels. An informed teacher's comments, questions, and prompts are powerful gifts to give young writers. Running such writing conferences can be a challenge for any teacher, however. Classroom management may be an issue, since a class must be able to write independently without interrupting the conferences. More significantly, the actual activity of responding to a student's paper is a continual challenge, since it must be totally individualized. Every writing performance is unique, so there is no normative sequence of questions or standard responses we can give every student. We must address, on the spot, the issues of that specific paper at that specific moment.
moment. This takes much concentration, commitment, knowledge, and time. Research says it is well worth spending this time and energy. Nothing helps writers more (Calkins, 1986).

Peer writing groups have also proven particularly effective with upper elementary and secondary students when teachers have spent time working on group interaction skills, have provided or developed with the class a response model or routine, have given students lots of guided practice with appropriate forms of response, and have had students writing and working with their groups regularly.

One final note: revision just for the sake of revision is missing the point. When teachers ask every student to do two rough drafts without providing any individualized response, they have misunderstood a complex process. Automatic, required revision does not necessarily help writers, according to researchers (Graves, 1984). In fact, required revisions without any editing response are just as likely to result in worse papers. Merely changing words because the teacher said to does not teach students how to reassess their drafts. If teachers want to promote revision, there is no way around the challenge of finding classroom mechanisms to provide ongoing, specific response to students' works as they are writing.

Editing/Proofreading

Late in the writing process is an effective time for an instructional focus on what has come to be called the mechanics of writing — the language protocols of spelling, punctuation, usage, and so forth. The conventional way to address these issues has been for the teacher to correct them with the proverbial red pen and return them to the student, sometimes to be rewritten and sometimes with just the grade the student earned for whatever level of skill was demonstrated.

Unfortunately, this is not the most effective way to give feedback to students for the development of their future skill in using the mechanics. There are a number of reasons why this practice is ineffective.

- First, correcting is not the same thing as teaching. A student whose mistakes have been identified does not necessarily know what was wrong or how to fix errors.

- Second, this tradition of correction tends to be mostly negative. One survey of teacher corrections on student papers reported almost 90 percent of the notations or comments were negative (Cooper, 1974). No wonder students often cringe on the day papers are to be returned. But student attitude is not the whole issue. Research also shows that describing and praising specifically what students have done well improves their writing as much as correcting what they have done poorly (California Department of Education, 1982).
Third, intensive correction does no more to improve writing skills than moderate correction, according to researchers (California Department of Education, 1982). The time-consuming, conscientious effort to mark every error may not be time well spent. Students apparently can only focus on a limited number of new skills or problems that need to be rectified at one time. They cannot understand, internalize, and reapply new skills at anywhere near the rate teachers try to point them out in corrections. Thus, finding some way to focus students' attention more closely on one or two errors and then asking them to concentrate on those errors on subsequent papers seems to be far more valuable for learning transfer than marking every mistake.

Fourth, the mere identification of mistakes is a limited way for either a student or a teacher to judge writing performance. Researchers have found that the development of writing skills proceeds in an extremely irregular pattern (Graves, 1983). Often students will seem to have mastered one protocol only to have it drop by the wayside months or years later as their attention is focused on other conventions or issues. Furthermore, errors in writing are at times, paradoxically, signs of growth, indicating a willingness to try new challenges, express more complex thoughts, address new subjects, or use new forms. Research, for example, shows that some excellent writers make a higher proportion of spelling mistakes than some average writers because they are trying to use a more sophisticated vocabulary (Hillerich, 1976). The first grader who writes about the pterodactyl fossils she saw at the museum cannot be judged a failure solely on the basis of spelling errors she made on words way beyond the normal writing vocabulary of her peers. Thus, mere identification of errors as a primary means of writing instruction is not giving students a well-rounded picture of all that writing proficiency entails.

With these limitations of correcting in mind, what are some effective classroom practices to focus students on problems they are having with mechanics and to help them improve their performance on future work?

For one, teachers need to make sure they are focusing on mechanics at an appropriate time. Excessive attention to correctness too early in the writing process may not be helpful to writers. Thus, editing and proofreading activities should occur after students have had ample time to draft and work on revising their papers. They should have said what they want to say in the best way they can say it, in other words, before they finally look at the paper for errors in mechanics. Proofreading is often the very last act of accomplished writers and instructional procedures should reflect this (Applebee and others, 1987).

Secondly, editing activities need to be done for a reason. One of the best ways to motivate students to take this final, objective look at their work is to give it a real purpose, such as the ultimate goal of some kind of public sharing or publishing — some reason beyond merely being assessed by the teacher.

Beyond these general principles, many teachers have been experimenting with effective classroom techniques for drawing their students' attention to matters of mechanics during this stage of final proofreading. Students can engage in a variety of self-appraisal activities, for example, such as getting in the habit of reading their own paper out loud to themselves (since the ear is at times a better proofreader than the eye) or using a proofreading checklist provided by their teacher that draws their attention to a couple of specific skills to check on. Students can also get proofreading help using the resources of editing partners or groups, their parents, or others.

Finally, though, students will at times need direct guidance from teachers on proofreading issues. One important thing to remember is that it is not necessary to monitor and correct every writing students do. In fact, if students are writing as frequently as they need to improve
their writing skills, it is almost impossible to keep
up with them. If teachers insist on correcting
every writing performance, they become a funnel
through which all the verbal energy of 25
elementary or 125 secondary students must pour.
Whenever limited teacher correcting time is
Cutting down the amount of student practice time,
it indicates trouble. Learning theory shows that a
balance of some guided practice with lots of
independent practice is a responsible teaching
approach. Students can do much unedited,
uncorrected rough drafting as independent
practice and can still learn a great deal, as long
as teachers are willing to give them some direct
guidance on mechanics on a fairly regular basis,
perhaps holding a one-on-one skills conference
with them once every week or two. This can be a
rich instructional time, especially in contrast to
the low-transfer skills instruction of language arts
worksheets and the limitations of written
corrections made on papers.

Publication

Writing in school, researchers say, is most often
done with the purpose of producing work for a
teacher to evaluate (Applebee, 1981). Teachers
can expand a writer's purposes by regularly
providing other ways and means of sharing
student work — by posting it on the wall, by
making class or student books, by reading work
out loud to classmates, by sending letters written,
and on and on. School writing festivals and young
author's conferences provide a public opportunity
to celebrate student writing. We need to
remember that writing has to have functional
value to a student. Such forms of publishing give
validity and importance to writing.

CONCLUSION

Some researchers believe that the most
significant factor of all in the success of a
classroom writing program is the attitude of the
teacher. Researcher Sondra Perl, for example,
says, "We have been observing writing teachers
in their classrooms for four years now, and
haven't come up with any conclusions on the best
method for teaching writing . . . . The approach
seems less significant than the teacher. You can't
reduce the artistry of teaching to a single
prescription any more than the artistry of dance
or painting. The teachers who were most
effective, however, conveyed to students a belief
that the students were potential writers. They
gave the students confidence and inspiration. The
most powerful teaching technique may not be a
specific strategy but the message we give to
students — again and again — that they can do it,
they can write."

"Learning to write may be the most important
ing a young person can learn to do," says
Princeton University scholar and writer Carlos
Baker. "Learning to write is learning to think."

With this in mind, educators can't help but be
discouraged by the National Assessment of
Educational Progress research that shows
American students' writing skills in such poor
shape (Applebee and others, The Writing Report
Card, 1986). Luckily, however, the work of
classroom teachers and researchers from all
around the country offers hope. There are
effective practices that can address this problem.
There are effective teachers who are succeeding;
their students are writers.
ANNOTATED BIBLIOGRAPHY

Some of the citations in the bibliography do not have annotations. Titles are either self-explanatory or works were referred to on a limited basis in the paper.


Both of Applebee's works describe the instructional situations within which most secondary students are currently learning to write. His books are thought-provoking and suggest directions for the improvement of writing instruction and writing across the curriculum.


The three NAEP reports are an overview of the U.S. Department of Education-sponsored national survey of basic skills taken every five years. The results are disheartening in some areas, but need to be known by every writing teacher.


This is a brief but very useful handbook for looking at a school's overall writing program. The one-page research summary is thorough and readable.


Calkins is a researcher whose work is at the heart of the writing process movement. *Lessons from a Child* traces the development in writing of a group of New England school children. *The Art of Teaching Writing* is an excellent comprehensive overview for elementary teachers. Both are extremely well-written.


This volume includes essays by many writing teachers attempting to frame some of the research issues in the field of writing today: What should we be looking for in assessing students and teachers on writing performance, and how?


Both of these volumes, by Graves, a leading researcher and one of the major proponents of the writing process approach, are full of thoughtful observations about elementary school students. The first book is a best-selling resource for classroom teachers, with plenty of practical suggestions, a classic that has helped change the way writing is taught in American elementary schools. The second book is a collection of research and journal articles.


Hillocks' book is a thick "meta-analysis," a new study of all the experimental studies on writing between the years 1963 and 1982. It is full of data, graphs and research design issues, as well as an interesting analysis and criticism of the weaknesses of some writing process practices.


This is a series of theoretical essays on different facets of writing by the directors and participants in the influential Bay Area Writing Project. For those interested in 'research, Myers includes a discussion on “The Relationship between the Teacher and the Researcher.”'


This is an inspiring description by two anthropological style researchers of the two years they spent observing six writing teachers at different grade levels. Their insights are valuable.

