THE WRITING PROCESS:
An Overview of Research on Teaching Writing as a Process

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Purpose of Our Study

Contemporary literacy theory argues that teaching students how to write is a means to more fully engage them as readers and in literacy learning. The writing process is utilized in many U.S. classrooms. This method emphasizes the recursive processes of prewriting, drafting, editing, and revising. The purpose of this study reviews research about the evolution and effectiveness of the writing process.

What We Learned

• Based on research, writing instruction has moved from focusing on spelling, grammar, and other writing conventions, to a holistic view emphasizing writing as a recursive process.

• Specifically, research shows a direct correlation between instruction based on writing process techniques and students’ writing proficiency level.

• Pre-writing is essential to producing quality writing. Research indicates that skilled writers spend significantly more time organizing and planning what they are going to write.

• Teaching writing through inquiry also helps students improve in statistically significant ways.

Implications

• More large-scale research studies are needed; however current substantial evidence documents the benefits of the writing process on students’ writing.

• Teaching students to use one or two stages of the writing process enhances their writing abilities significantly.

• Findings provide a compelling rationale for using the writing process as a method of instruction in the classroom.
Teaching Literacy through Writing:  
An Overview of Research on Teaching Writing as a Process

Introduction

In today’s society, the act of writing is ingrained in every aspect of our lives and will continue to shape human interaction as we head full force into the 21st century. The ability to write articulately gives one the power and opportunity to share and influence thoughts, ideas, and opinions with others, not only in day-to-day situations, but across time and space. As Mary Heller writes, “The value that we place on reading and writing arises out of our shared need to be literate people, this is a function of our society and of our culture” (1991, p.13). As writers, it is important to produce quality works, and as educators, we have learned a great deal about what it means to teach others to do the same. This brief offers an overview of research and best practice in teaching the writing process.

Teaching Writing: Grammar versus Content and Style

Contemporary literacy theory argues that teaching students how to write is a means to more fully engage them in literacy learning. However, this was not always the case. Fifty years ago, writing was taught via the technical aspects of proper grammar, spelling, punctuation, and other conventions. Grammar instruction, or essentially “how the English language works,” was thought to be essential to learning how to write and therefore, a principal focus in teaching writing (Hillocks, 1987). Eventually, this rote approach came under increasing skepticism because it failed to engage and inspire student learning (Hicks, 1993; Hillocks, 1986).

Since then, research has helped identify more effective ways to improve the quality of writing. An early review of the literature found that teaching and studying grammar had no effect on the quality of one’s writing (Braddock, Lloyd-Jones, & Schoer, 1963). This conclusion was further supported by a carefully designed three year study in New Zealand. The study examined the effects of exposing randomly assigned students to intensive grammar instruction taking up the major part of the day compared to a control group of other students who did not have the treatment (Elley, Barham, Lamb, & Wyllie 1976). At the conclusion of the study, researchers found no statistically significant differences in writing quality between the grammar-focused treatment groups and the no-grammar treatment groups.

Further support of these findings emerged in an exhaustive research review by Hillocks (1987). After reviewing thousands of studies, the author concluded that studying grammar does not increase writing quality. He argues that these findings are not unexpected because, although knowledge of grammar is important to proper writing, the way that content is produced is not dependent upon correct grammar, but is more of an intuitive process. Furthermore, grammar is corrected, changed and accounted for during the editing or proofreading stages of the writing process, two stages believed to have little or no influence on the content or style of writing (National Center for Educational Statistics, 1996). Subsequent research shows that skilled writers focus more on content and organization, whereas less experienced writers are more concerned with writing mechanics such as spelling or diction (Hillocks, 1986).
The Writing Process Today

Writing instruction began to change throughout the United States as teachers found more holistic approaches to teaching writing (McCarthey, Hoffman, Stable, Elliott, Dressman, & Abbott, 1994). Responding to the need for innovative instruction and pedagogies, the last two decades saw an emergence of new practices that moved beyond rote repetition and technical instruction. Instead, writing was taught as a vehicle for creative expression and critical thought. Rather than focusing on spelling, grammar, and other writing conventions, the holistic process emphasizes the actual process of writing. It concentrates on writing as a recursive process in which writers have the opportunity to plan, draft, edit, and revise their work (Hillocks, 1987; Murray, 1982). The writer is taught to review and revise several drafts, which enables and encourages new ideas. Grammatical changes and conventional editing occur during the revision or editing stage (Ballator, Farnum, & Kaplan, 1999; Flower & Hayes, 1981). Furthermore, since grammar and conventions are not the focus of writing, the writing process may be adapted for use even with young writers in kindergarten (Sealey, Sealey, & Millmore, 1979).

Writing is a uniquely individual undertaking and the same individual may use different methods to express him or herself. Characteristically, the writing process approach recognizes that there are many stages to writing and that these stages are fluid and overlapping (Bereiter & Scardamalia, 1983; Flower & Hayes, 1980; Murray, 1982). However, researchers and educators have identified several logical steps that most writers go through, displayed in Figure 1.

Figure 1. The Writing Process

Existing Research about the Writing Process

Longitudinal brain research using neural imaging techniques demonstrates that whereas speech is a very natural developmental process in human cognition, reading and writing require specific training to achieve sophisticated development (Pugh et al., 2000). Studies to date indicate that the writing process is one effective way to teach students to be good writers. (Flower & Hayes, 1981; Greenwald, Persky, Campbell, & Mazzeo, 1999; Unger & Fleischman, 2004; National Center for Education Statistics, 1996). Students are taught how to share and communicate their ideas through

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1 Based upon research by Graves, 1983, 1991; Tompkins and Hoskisson, 1995; and Poindexter and Oliver, 1999.
words. In some classrooms, they share their work with peers through writing workshops and peer editing, teaching them to recognize the value of writing and the purpose in creating a solid and substantial work (Graves, 1983).

**Pre-writing**

Pre-writing, or planning out what is going to be written, is an essential step in the writing process and should account for 70 percent of the writing time (Murray, 1982). Research indicates that skilled writers spend significantly more time organizing and planning what they are going to write (Hillocks, 1986). Most students, however, spend on average only about 3 minutes to prepare for their writing (National Center for Educational Statistics, 1996). Students spend little time thinking and planning how to express their thoughts before writing them down and therefore are not accessing information and ideas that could possibly enhance their writing.

**Re-writing**

An important component to the writing process is its recursive nature, which allows writers to revise their work continually. Evidence shows that writers not only revise what they are writing, but also revisit their goals and plans for writing. This process allows writers to take into account new ideas and thoughts and to have the opportunity to incorporate it into their writing. Research by Bereiter et al. (1982) demonstrates that the processes involved in writing are hierarchically related and notably recursive. The research team also found that children have much more extensive knowledge about a topic than that reflected in their typical writings. They argue that when children stop writing it is not because they run out of things to say, but because they do not yet have adequate methods of articulating what they know. This research informs how we teach writing, because by allowing students to write and rewrite, we are helping them learn how to tap into their knowledge.

![Figure 2](image)

**Writing**

As methods of teaching writing have evolved, significant research has gone into understanding the process that a writer goes through when composing material and how to teach writing most effectively. In an effort to synthesize the findings, one comprehensive review looked at 2,000 studies focused on identifying school instructional methods that most successfully enhanced writing ability (Hillock, 1987). Several hundred of these studies used experimental treatments and interventions. After rigorous screening, meta-analysis was conducted on 60 of the latter studies containing variables that could be compared across studies.

The meta-analysis revealed that teaching through inquiry was the instructional method with the greatest impact on the quality of students writing (see Figure 2). In this method, students use sets

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2 Figure 2 is taken from Hillocks’ *Synthesis of Research on Teaching Writing* (1987, p.75), and shows graphically his analysis of six instructional focuses. These are the reported results in answer to his research question, “What is the difference between the experimental groups’ gains and the control groups’ gains in studies having a particular focus in common among the experimental groups?” These effect sizes are reported in standard deviations.
of data and, in a structured manner, incorporate them into their writing. Students may record, describe, and present evidence while taking into account set criteria. For example, students may be given information about a particular subject, such as pollution, prison rebellion, etc, and then be asked to consider ways to help solve the problem. This inquiry process leads students to develop better ideas, produce stronger support and evidence, and recognize and address positions that are in opposition to them.

The research findings indicate that having students go through the steps of observing and writing had greater impact on the quality of writing than did more traditional teaching using model writings. In fact, teaching through inquiry was 3.5 times more effective in improving writing quality than free writing techniques and more than 2.5 times more effective than the traditional study of model writing. However, consistent with earlier research, Hillocks also found that studying model writings or presenting students with good pieces of writing was significantly more effective in improving the quality of writing than was studying grammar.

Additionally, using sentence combining strategies to teach writing also showed positive effects (Hillocks, 1987). Directly teaching students how to achieve more complex syntactic structures enhances their writing quality and sophistication.

**Large-Scale Studies on the Writing Process**

Research using the National Assessment of Educational Progress (NAEP) writing assessments is consistent, showing a direct correlation between writing proficiency and teaching through process writing (National Center for Education Statistics, 1996). The NAEP has administered nationwide writing assessments to students for many years. Researchers analyzed responses from pre-writing activities and writing exercises, and collected information about students’ exposure to various methods of writing instruction. The results provide valuable information for educators who teach writing.

The 1992 NAEP writing assessment asked students about how much emphasis teachers placed on various components of the writing process and examined differences in writing scores based on the information. Students reported how many times their teachers asked them to complete the following aspects of the writing process: planning, defining the audience and purpose, using outside resources, and composing more than one draft. The results indicated that students who were more often exposed to these methods had higher than average writing scores than those students who used the techniques less often (National Center for Education Statistics, 1996).

In 1998, NAEP surveyed approximately 160,000 students nationwide, and found that school and home factors also affect students’ writing performance. Again, pre-writing exercises were the most important factor in helping students to improve their writing. Statistics show that students whose teachers talked to them beforehand about what to write scored higher than those students whose teachers never talked to them in advance. Findings also showed evidence that students who visibly planned out their writing scored higher than students who did no planning before writing. Having students save their work in portfolios and requiring the use of computers in at least one stage of the writing process were two other factors that contributed to higher writing scores. From these studies, researchers concluded that higher than average writing scores were attributable to writing techniques defined as the writing process (Greenwald et al., 1999).
The Need for More Research and Continuous Improvement

Although there is a wealth of knowledge to be gained from these research studies, there are some limitations to which these findings can be extended. The NAEP looked only at writing process techniques, which although effective, may not be the only way to improve students’ writing. It is important to note that there are variables and factors that are unaccounted for in the NAEP study. For example, a small scale study done by Stahl, Pagnucco, & Suttles (1996) found no difference in student writing ability produced by process versus traditional teaching methods after controlling for reading. This serves as a reminder that there may be many unexplored contextual and social variables that may influence writing proficiency (Unger, 2004).

In addition, aside from NAEP’s study, large-scale writing process studies do not exist. Although many smaller studies have been done at the classroom level, the results are challenged by small sample size and limited generalizability (Langer, 2001; Stahl, Pagnucco, & Suttles, 1996).

Conclusion and Implications

Writing instruction has come a long way. It has evolved from a rote, traditional method with an emphasis on writing conventions, maturing into a process that is able to accommodate a writer’s need to plan, brainstorm, seek feedback, and revise their work. Most importantly, however, substantial research has helped inform the way writing is taught.

The discussion here suggests that although there is a need for more research including large-scale studies, substantial evidence documents the benefits of the writing process to student writing. A few key determinants of producing quality writers stand out, including teaching students how to plan for writing (via pre-writing), to combine sentences, and to engage in the process of inquiry as they learn to write. Teaching students to use even one or two stages of the writing process enhances their writing abilities significantly. Together, these findings provide a compelling rationale for using the writing process as a method of instruction in all classrooms and in so doing, helping our children develop the skills they need to communicate for the future.
References


