

# Teaching Elementary School Students to Be Effective Writers



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The goal of this practice guide is to offer educators specific, evidence-based recommendations that address the challenge of teaching writing in elementary school. The guide provides practical, clear information on critical topics related to teaching writing and is based on the best available evidence as judged by the authors.

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## Teaching Elementary School Students to Be Effective Writers

**June 2012**

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What Works Clearinghouse practice guide citations begin with the panel chair, followed by the names of the panelists listed in alphabetical order.

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## Teaching Elementary School Students to Be Effective Writers

### Table of Contents

<b>Review of Recommendations</b> . . . . .	<b>1</b>
<b>Acknowledgements</b> . . . . .	<b>2</b>
<b>Institute of Education Sciences Levels of Evidence for Practice Guides</b> . . . . .	<b>3</b>
<b>Introduction to the <i>Teaching Elementary School Students to Be Effective Writers Practice Guide</i></b> . . . . .	<b>6</b>
<b>Recommendation 1.</b> Provide daily time for students to write . . . . .	<b>10</b>
<b>Recommendation 2.</b> Teach students to use the writing process for a variety of purposes . . . . .	<b>12</b>
Understanding the Writing Process. . . . .	<b>14</b>
<b>Recommendation 2a.</b> Teach students the writing process . . . . .	<b>15</b>
<b>Recommendation 2b.</b> Teach students to write for a variety of purposes . . . . .	<b>20</b>
<b>Recommendation 3.</b> Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing . . . . .	<b>27</b>
<b>Recommendation 4.</b> Create an engaged community of writers . . . . .	<b>34</b>
<b>Glossary.</b> . . . . .	<b>40</b>
<b>Appendix A.</b> Postscript from the Institute of Education Sciences . . . . .	<b>43</b>
<b>Appendix B.</b> About the Authors . . . . .	<b>45</b>
<b>Appendix C.</b> Disclosure of Potential Conflicts of Interest . . . . .	<b>47</b>
<b>Appendix D.</b> Rationale for Evidence Ratings . . . . .	<b>48</b>
<b>Endnotes</b> . . . . .	<b>81</b>
<b>References.</b> . . . . .	<b>99</b>

## List of Tables

<b>Table 1.</b> Institute of Education Sciences levels of evidence for practice guides . . . . .	<b>4</b>
<b>Table 2.</b> Recommendations and corresponding levels of evidence . . . . .	<b>9</b>
<b>Table 3.</b> Examples of writing strategies. . . . .	<b>16</b>
<b>Table 4.</b> Purposes for writing . . . . .	<b>21</b>
<b>Table 5.</b> Examples of techniques within the four purposes of writing . . . . .	<b>26</b>
<b>Table 6.</b> Spelling skills by grade level . . . . .	<b>29</b>
<b>Table 7.</b> Activities for sentence-structure development . . . . .	<b>31</b>
<b>Table D.1.</b> Studies that contribute to the level of evidence for Recommendation 1 . . . . .	<b>51</b>
<b>Table D.2.</b> Supplemental evidence supporting the effectiveness of Recommendation 1 . . . . .	<b>52</b>
<b>Table D.3.</b> Studies that contribute to the level of evidence for Recommendation 2 . . . . .	<b>54</b>
<b>Table D.4.</b> Supplemental evidence supporting the effectiveness of Recommendation 2 . . . . .	<b>64</b>
<b>Table D.5.</b> Studies that contribute to the level of evidence for Recommendation 3 . . . . .	<b>73</b>
<b>Table D.6.</b> Supplemental evidence supporting the effectiveness of Recommendation 3 . . . . .	<b>74</b>
<b>Table D.7.</b> Studies that contribute to the level of evidence for Recommendation 4 . . . . .	<b>78</b>
<b>Table D.8.</b> Supplemental evidence supporting the effectiveness of Recommendation 4 . . . . .	<b>79</b>

## List of Figures

<b>Figure 1.</b> Gradual release of responsibility to students . . . . .	<b>18</b>
<b>Figure 2.</b> Handwriting-practice diagram . . . . .	<b>28</b>

## List of Examples

<b>Example 1.</b> Applying the writing process in an upper elementary classroom . . . . .	<b>20</b>
<b>Example 2.</b> Story emulation of <i>Rosie’s Walk</i> with 1st-grade students . . . . .	<b>23</b>
<b>Example 3.</b> Using text as a model . . . . .	<b>24</b>
<b>Example 4.</b> The Westward Movement prompt . . . . .	<b>36</b>
<b>Example 5.</b> “Star of the Day” . . . . .	<b>37</b>
<b>Example 6.</b> “Author’s Chair” . . . . .	<b>38</b>

# Review of Recommendations

## Recommendation 1.

*Provide daily time for students to write.*

## Recommendation 2.

*Teach students to use the writing process for a variety of purposes.*

### Recommendation 2a.

*Teach students the writing process.*

1. Teach students strategies for the various components of the writing process.
2. Gradually release writing responsibility from the teacher to the student.
3. Guide students to select and use appropriate writing strategies.
4. Encourage students to be flexible in their use of the components of the writing process.

### Recommendation 2b.

*Teach students to write for a variety of purposes.*

1. Help students understand the different purposes of writing.
2. Expand students' concept of audience.
3. Teach students to emulate the features of good writing.
4. Teach students techniques for writing effectively for different purposes.

## Recommendation 3.

*Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing.*

1. Teach very young writers how to hold a pencil correctly and form letters fluently and efficiently.
2. Teach students to spell words correctly.
3. Teach students to construct sentences for fluency, meaning, and style.
4. Teach students to type fluently and to use a word processor to compose.

## Recommendation 4.

*Create an engaged community of writers.*

1. Teachers should participate as members of the community by writing and sharing their writing.
2. Give students writing choices.
3. Encourage students to collaborate as writers.
4. Provide students with opportunities to give and receive feedback throughout the writing process.
5. Publish students' writing, and extend the community beyond the classroom.

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# Levels of Evidence for Practice Guides

## Institute of Education Sciences Levels of Evidence for Practice Guides

This section provides information about the role of evidence in Institute of Education Sciences' (IES) What Works Clearinghouse (WWC) practice guides. It describes how practice guide panels determine the level of evidence for each recommendation and explains the criteria for each of the three levels of evidence (strong evidence, moderate evidence, and minimal evidence).

The level of evidence assigned to each recommendation in this practice guide represents the panel's judgment of the quality of the existing research to support a claim that, when these practices were implemented in past research, positive effects were observed on student outcomes. After careful review of the studies supporting each recommendation, panelists determine the level of evidence for each recommendation using the criteria in Table 1. The panel first considers the relevance of individual studies to the recommendation and then discusses the entire evidence base, taking the following into consideration:

- the number of studies
- the design of the studies
- the quality of the studies
- whether the studies represent the range of participants and settings on which the recommendation is focused
- whether findings from the studies can be attributed to the recommended practice
- whether findings in the studies are consistently positive

A rating of *strong evidence* refers to consistent evidence that the recommended strategies, programs, or practices improve student outcomes for a wide population of students.<sup>1</sup> In other words, there is strong causal and generalizable evidence.

A rating of *moderate evidence* refers either to evidence from studies that allow strong causal conclusions but cannot be generalized with assurance to the population on which a recommendation is focused (perhaps because the findings have not been widely replicated) or to evidence from studies that are generalizable but have some causal ambiguity. It also might be that the studies that exist do not specifically examine the outcomes of interest in the practice guide, although they may be related.

A rating of *minimal evidence* suggests that the panel cannot point to a body of research that demonstrates the practice's positive effect on student achievement. In some cases, this simply means that the recommended practices would be difficult to study in a rigorous, experimental fashion;<sup>2</sup> in other cases, it means that researchers have not yet studied this practice, or that there is weak or conflicting evidence of effectiveness. A minimal evidence rating does not indicate that the recommendation is any less important than other recommendations with a strong evidence or moderate evidence rating.

In developing the levels of evidence, the panel considers each of the criteria in Table 1. The level of evidence rating is determined as the lowest rating achieved for any individual criterion. Thus, for a recommendation to get a strong rating, the research must be rated as strong on each criterion. If at least one criterion receives a rating of moderate and none receive a rating of minimal, then the level of evidence is determined to be moderate. If one or more criteria receive a rating of minimal, then the level of evidence is determined to be minimal.

## Levels of Evidence for Practice Guides *(continued)*

**Table 1. Institute of Education Sciences levels of evidence for practice guides**

Criteria	<b>STRONG Evidence Base</b>	<b>MODERATE Evidence Base</b>	<b>MINIMAL Evidence Base</b>
<b>Validity</b>	High internal validity (high-quality causal designs). Studies must meet WWC standards with or without reservations. <sup>3</sup> <b>AND</b> High external validity (requires multiple studies with high-quality causal designs that represent the population on which the recommendation is focused). Studies must meet WWC standards with or without reservations.	High internal validity but moderate external validity (i.e., studies that support strong causal conclusions but generalization is uncertain). <b>OR</b> High external validity but moderate internal validity (i.e., studies that support the generality of a relation but the causality is uncertain). <sup>4</sup>	The research may include evidence from studies that do not meet the criteria for moderate or strong evidence (e.g., case studies, qualitative research).
<b>Effects on relevant outcomes</b>	Consistent positive effects without contradictory evidence (i.e., no statistically significant negative effects) in studies with high internal validity.	A preponderance of evidence of positive effects. Contradictory evidence (i.e., statistically significant negative effects) must be discussed by the panel and considered with regard to relevance to the scope of the guide and intensity of the recommendation as a component of the intervention evaluated.	There may be weak or contradictory evidence of effects.
<b>Relevance to scope</b>	Direct relevance to scope (i.e., ecological validity)—relevant context (e.g., classroom vs. laboratory), sample (e.g., age and characteristics), and outcomes evaluated.	Relevance to scope (ecological validity) <u>may vary</u> , including relevant context (e.g., classroom vs. laboratory), sample (e.g., age and characteristics), and outcomes evaluated. At least some research is directly relevant to scope (but the research that is relevant to scope does not qualify as strong with respect to validity).	The research may be out of the scope of the practice guide.
<b>Relationship between research and recommendations</b>	Direct test of the recommendation in the studies or the recommendation is a major component of the intervention tested in the studies.	Intensity of the recommendation as a component of the interventions evaluated in the studies <u>may vary</u> .	Studies for which the intensity of the recommendation as a component of the interventions evaluated in the studies is low; and/or the recommendation reflects expert opinion based on reasonable extrapolations from research.

## Levels of Evidence for Practice Guides *(continued)*

**Table 1. Institute of Education Sciences levels of evidence for practice guides *(continued)***

Criteria	STRONG Evidence Base	MODERATE Evidence Base	MINIMAL Evidence Base
<b>Panel confidence</b>	Panel has a high degree of confidence that this practice is effective.	The panel determines that the research does not rise to the level of strong but is more compelling than a minimal level of evidence. Panel may not be confident about whether the research has effectively controlled for other explanations or whether the practice would be effective in most or all contexts.	In the panel's opinion, the recommendation must be addressed as part of the practice guide; however, the panel cannot point to a body of research that rises to the level of moderate or strong.
<b>Role of expert opinion</b>	Not applicable	Not applicable	Expert opinion based on defensible interpretations of theory (theories). (In some cases, this simply means that the recommended practices would be difficult to study in a rigorous, experimental fashion; in other cases, it means that researchers have not yet studied this practice.)
<b>When assessment is the focus of the recommendation</b>	For assessments, meets the standards of <i>The Standards for Educational and Psychological Testing</i> . <sup>5</sup>	For assessments, evidence of reliability that meets <i>The Standards for Educational and Psychological Testing</i> but with evidence of validity from samples not adequately representative of the population on which the recommendation is focused.	Not applicable

The panel relied on WWC evidence standards to assess the quality of evidence supporting educational programs and practices. The WWC evaluates evidence for the causal validity of instructional programs and practices according to WWC standards. Information about these standards is available at <http://ies.ed.gov/ncee/wwc/documentsum.aspx?sid=19>. Eligible studies that meet WWC evidence standards for group designs or meet evidence standards with reservations are indicated by **bold text** in the endnotes and references pages.

## Introduction to the *Teaching Elementary School Students to Be Effective Writers Practice Guide*

This section provides an overview of the importance of teaching writing and explains key parameters considered by the panel in developing the practice guide. It also summarizes the recommendations for readers and concludes with a discussion of the research supporting the practice guide.

**“Writing today is not a frill for the few, but an essential skill for the many.”<sup>6</sup>**

Writing is a fundamental part of engaging in professional, social, community, and civic activities. Nearly 70 percent of salaried employees have at least some responsibility for writing,<sup>7</sup> and the ability to write *well* is a critical component of being able to communicate effectively to a variety of audiences. Because writing is a valuable tool for communication, learning, and self-expression,<sup>8</sup> people who do not have adequate writing skills may be at a disadvantage and may face restricted opportunities for education and employment.

Students should develop an early foundation in writing in order to communicate their ideas effectively and efficiently—yet many American students are not strong writers. In fact, less than one-third of all students performed at or above the “proficient” level in writing on the 2007 National Assessment of Educational Progress Writing Assessment.<sup>9</sup>

The authors believe that students who develop strong writing skills at an early age acquire a valuable tool for learning, communication, and self-expression. Such skills can be developed through effective writing instruction practices that provide adequate time for students to write.<sup>10</sup> This guide, developed by a panel of experts, presents four recommendations that educators can use to increase writing achievement for elementary students and help them succeed in school and society. These recommendations are based on the best available research evidence, as well as the combined experience and expertise of the panel members.

### Scope of the practice guide

**Audience.** This guide is intended for use by teachers, literacy coaches, and other educators. The recommendations focus on activities and strategies teachers can implement in their classrooms to increase their students’ writing achievement. Principals, districts, and curriculum developers may also find the guide useful.

**Grade level.** The recommendations provide strategies for teaching writing to students in elementary school. The panel acknowledges that instructional practices in kindergarten and 1st grade, when students are just beginning to learn letters and to write, can and will differ from practices in later grades. Writing, like reading, is defined from a developmental standpoint, which begins with the acquisition of foundational skills and then leads to the application of more sophisticated techniques. For younger students, for example, “writing” activities could include interpretive drawing, invented spelling, or interactive writing. Although these activities are not often considered traditional writing experiences, they accomplish the same goals: helping students communicate thoughts and ideas to others, encouraging them to engage with the text to deepen their understanding of the content, and drawing connections to prior learning experiences. The panel recommends that teachers adapt the recommendations as appropriate for the range of grades addressed in this guide, and examples of such adaptations are included in the guide.

**Populations who are at risk for writing difficulties.** Learning to write can be particularly challenging for students with learning disabilities; those who find it difficult to regulate their behavior when they become frustrated; or those who struggle with related skills such as reading, spelling, or handwriting. While the recommendations in this guide are primarily intended for teachers to use with typically developing students, most teachers serve at least a few students with special needs in their classrooms; in some general education classrooms, these students comprise the majority. Research evidence reviewed for this guide indicates that the recommendations are appropriate for use with students with special needs when accompanied by appropriate modifications.

### Common themes

Underlying this guide are three common themes about the concept of writing, the role of technology, and the role of assessment.

**The writing process.** Writing is a process through which people communicate thoughts and ideas. It is a highly complex, cognitive, self-directed activity, driven by the goals writers set for what they want to do and say and the audience(s) for whom they are writing. To meet these goals, writers must skillfully and flexibly coordinate their writing process from conception to the completion of a text. Components of the writing process include planning; drafting; sharing; revising; editing; evaluating; and, for some writing pieces, publishing. (See Recommendation 2 for more information.)

**Technology.** Increasingly, the ability to use technology is vital for success in school and contemporary life. This requires that students learn to type and use a word processor, use the Internet to collect information, navigate computer- and web-based testing tools, and understand how different writing conventions apply to different media. The panel believes that integrating the use of technology into

writing instruction is critically important. For this reason, examples of how to do so are included in “technology tip” call-out boxes in this guide.

**Assessment.** Good instruction in any subject area requires that teachers continually assess the needs and skills of their students and modify their instruction to suit those needs. The panel encourages teachers to use assessment to guide their instruction and to determine when students are ready to move on to more challenging instruction.

### Summary of the recommendations

The recommendations in this guide cover teaching the writing process, teaching fundamental writing skills, encouraging students to develop essential writing knowledge, and developing a supportive writing environment. All of these practices are aimed at achieving a single goal: enabling students to use writing flexibly and effectively to help them learn and communicate their ideas.

A central tenet of this guide is that students learn by doing. Indeed, to become effective writers, students need daily opportunities to learn and practice writing skills, strategies, and techniques (Recommendation 1). Writing practice also can be integrated into instruction in other content areas to provide students with additional time to write.

Students need to think carefully about their purpose for writing, planning what to say and how to say it (Recommendation 2). While evidence supports Recommendation 2 as a whole, the steps to carry out this recommendation can be grouped into two categories. First, to help students think critically about writing, teachers should focus their writing instruction on teaching students to carry out the writing process effectively and flexibly (Recommendation 2a). This includes helping students learn how to engage in the writing process to meet their writing goals, as well as teaching students multiple strategies for carrying out the components of

the writing process. Second, because writing also is a form of communication with many purposes, teachers should help students develop an understanding of these purposes and learn to write well for a variety of real-life purposes and audiences (Recommendation 2b).

Writing places multiple simultaneous demands on the writer. Mastering the foundational skills of good writing, including handwriting, spelling, sentence construction, and typing, allows students to devote more of their attention to composing written texts by utilizing the strategies and techniques associated with the writing process. For this reason, it is important to teach students foundational skills (Recommendation 3).

When students are part of a community of writers, they collaborate with other writers, make decisions about what to write and how to write about it, and receive constructive feedback from peers and teachers. Teachers should create a supportive and motivating environment so that young writers feel safe engaging fully in the writing process (Recommendation 4).

### Defining and assessing good writing

Writing instruction is ultimately geared toward teaching students to produce high-quality writing for a variety of purposes. To assess whether the practices in this guide were effective, the panel considered their impact on overall writing quality. However, given that the students targeted by this guide are in the early stages of their writing development, and that the cost of administering and scoring assessments of overall writing quality can be prohibitive, the panel also considered the impact of practices on intermediary outcomes—including genre elements, ideation, mechanics, sentence structure, organization, output, vocabulary, and voice (see the glossary for descriptions and examples of each outcome). When measures of overall writing quality and measures of intermediary outcomes were both available, the panel prioritized evidence on overall writing quality.

Measures of **overall writing quality** assess the effectiveness of a piece of writing. These measures may take into account assessments of intermediary outcome categories—including writing output, mechanics, vocabulary, sentence structure, organization, ideation, voice, and genre (or text) elements—in a single assessment of the quality of a piece of writing.

One challenge for teachers and researchers alike is identifying what constitutes good writing. Unlike instruction in basic mathematics, where there typically is a correct answer and an incorrect answer, what constitutes good writing in one context is not always good writing in another. Assessing writing is a fundamentally subjective judgment and depends at least in part on the framework the reader brings to the task. Despite the subjective nature of writing assessment, there are some features that many can agree contribute to effective writing (e.g., following basic language conventions so a reader is able to interpret the text's meaning or developing a clear focus for the reader). In order to address some of the inherent subjectivity of writing measures, the panel included only outcomes for which the researchers demonstrated that multiple raters could evaluate the same students' work consistently. Exceptions were given to norm-referenced standardized tests and a small number of measures that were more objective (e.g., word count).

### Use of research

The literature used to create and support the recommendations ranges from rigorous experimental studies to expert reviews of practices and strategies in writing; however, the evidence ratings are based solely on high-quality experimental and quasi-experimental design studies that met What Works Clearinghouse (WWC) standards. These studies include both national and international studies of strategies for teaching writing to students in kindergarten through 6th grade.

Single-case design (SCD) studies that meet the WWC pilot standards for well-designed SCD research are also described, but these cannot raise the level of evidence above minimal.

The research base for this guide was identified through a comprehensive search for studies evaluating instructional practices for improving students' writing skills and techniques. An initial search for literature related to writing instruction and strategies in the past 20 years, supplemented with recommendations by the panel (including important studies conducted in 1970 or later), yielded more than 1,500 citations. Of these studies, 118 used experimental and group quasi-experimental designs to examine whether components of writing instruction increased students' writing achievement. From this subset, 41 met the causal validity standards of the WWC, and 34 were relevant to the panel's recommendations and were included as support or supplemental evidence for the recommendations in this practice guide.<sup>11</sup>

The strength of the evidence supporting each recommendation in this guide varies; one recommendation was supported by strong evidence, one by moderate evidence, and the remaining two recommendations by minimal evidence. Despite the varying levels of evidence, the panel believes that all of the recommendations in this guide are important for promoting students' writing achievement.

A rating of minimal evidence does not indicate that the practices described in a recommendation are ineffective or that the recommendation is any less important than the recommendations with ratings of strong or moderate evidence. Instead, it may indicate that little research has been conducted on the practices (or the combination of practices) described in the recommendation. Some of the evidence used to supplement the evidence of the effectiveness of the recommendations on typically achieving students comes from interventions administered to students who have been identified for special education services or who score below average on assessments of related skills.

Although all of the recommendations in this guide are primarily based on evidence from studies with rigorous designs, the panel members supplemented their explanation of how to execute the recommendations based on their expert judgment and experience applying the recommendations. Throughout the guide, statements not cited with studies are based on the panel's judgment.

Table 2 shows each recommendation and the strength of the evidence that supports it as determined by the panel. Following the recommendations and suggestions for carrying out the recommendations, Appendix D presents more information on the research evidence that supports each recommendation.

**Table 2. Recommendations and corresponding levels of evidence**

Recommendation	Levels of Evidence		
	Strong Evidence	Moderate Evidence	Minimal Evidence
1. Provide daily time for students to write.			◆
2. Teach students to use the writing process for a variety of purposes. 2a. Teach students the writing process. 2b. Teach students to write for a variety of purposes.	◆		
3. Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing.		◆	
4. Create an engaged community of writers.			◆