

A National Survey of Revising Practices in the Primary Classroom

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A random national sampling of primary grade teachers in the United States were surveyed to determine how they teach revising to writers in the elementary grades. Our findings suggest that in our sample of teachers, little time is dedicated in the school day to writing and especially revising. The teachers believed that more time spent revising did not necessarily lead to better revisions. Peer-support structures were widely employed and the use of rubrics during revision was widespread, but unevenly effective and less effective when utilized during peer-grouping structures. Teachers generally did not use strategies or commercial programs for writing or revising. Teachers reported that their students primarily made surface level revisions that generally did not improve their compositions. Finally, the presence of students with disabilities did not necessarily alter the type of writing and revising instruction delivered in classrooms.

Keywords: writing, revising, survey, peer conferencing, rubrics

INTRODUCTION

While composing, a writer works through several theoretical processes of text production: a proposal for an idea that needs expressing, a translation of that idea into linguistic strings, a transcription of those strings into graphical text, and a revisal that evaluates and makes changes to written language (Chenoweth & Hayes, 2003). These processes are recursive, and are revisited by the writer as new text is produced.

Revising is an essential element of this process, and in fact is so important that some would say that writing *is* revising (Murray, 1978). Revision can help transform and clarify a piece of writing (National Writing Project, 2006). When a writer revises they rethink, re-evaluate, re-consider, and clarify their text on several levels to try and resolve the potential dissimilarities between what they intended to say and what the text actually states. For example, a writer could change text at the macro level where they wrestle with content or ideas associated with the overall structure of the text, down through the micro level where paragraphs, sentences, and words are considered (Scardamalia & Bereiter, 1986). These changes may occur reactively as the writer evaluates text written against pre-established goals, or proactively as ideas are identified in the initial draft that will be further developed in subsequent iterations of the text (Galbraith & Torrance, 2004). Ideally, through these revisal cycles, successive drafts continually come closer to that elusive final product that most approxi-

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mates the writer's aim; the final version representing the writer's perception of the reader's needs.

Understandably, as anyone who has revised a piece of writing can attest, these cycles require skill and motivation to do well (Flowers, Hayes, Carey, Schriver, & Stratman, 1986). Making effective revisions can be difficult even for very skilled writers. In fact, detecting even obvious errors within a text may not be as easy as teachers sometimes believe (Flowers et al., 1986). It seems, however, the ability to make effective changes to a text is a defining attribute separating skilled and less-skilled writers (Hayes & Flowers, 1986).

Effective revisers

An effective reviser can improve the quality of the text they generate (Flowers et al., 1986). Skilled revisers conceptualize the act of revising as one of discovering content, structure, and voice (Flowers et al., 1986). In addition, they spend considerably more time rewriting their work than drafting it. In fact, the more skilled the writer, the greater proportion of time they will spend in revision (Hayes & Flowers, 1986). Finally the types of changes a skilled reviser makes to their compositions differ from less skilled revisers. Skilled revisers' will critically read their work first focusing on the macrostructure and meaning of their compositions, rather than surface-level textual features of discrete sentences and words, such as spelling, grammar, punctuation, and capitalization.

Less effective revisers

The revising behaviors of less skilled revisers, including those with learning disabilities (LD) differ from those of skilled revisers. Whereas skilled revisers spend significant time altering the conceptual aspects of their compositions, less skilled revisers, including those with LD often devote negligible time to revising and therefore make few changes. In addition they often focus on surface-level changes that have little appreciable impact on the overall quality of their writing (e.g., Graham & Harris, 2003; MacArthur, Graham, & Schwartz, 1991).

Lack of revising

Despite the importance of revising, children rarely revise their work (Bereiter & Scardamalia, 1987; Van Gelderen, 1997). There are several reasons to explain this lack of involvement with such a critical element within the writing process. First, they may assume readers will believe their writing is clear and therefore see no need to revise it. Second, they may have difficulties determining what parts of their writing they need to change (Fitzgerald, 1987). Finally, they may lack the skill to make the changes they do detect.

What works?

Although there are many potential reasons that writers, particularly less skilled writers, struggle with the intricacies of revision, research indicates young writers can create effective and meaningful changes when provided with supports including time to revise, teacher-to-student and student-to-student conferences, rubrics, and revising strategies (Van Gelderen, 1997).

Time. One way teachers can emphasize revising is through spending time engaged in revision. Prior research (e.g. Cutler & Graham, 2008; Gilbert & Graham, 2010) emphasizes the need for more time spent writing in general. Logically, given the complexities of making effective revisions, how often a student spends revising would be a natural pre-condition for improvements in revising.

Conferencing and Peer supports. Writing conferences that allow for face-to-face discussion about written work between teachers and students are a well-recognized staple of writing process approaches (Atwell, 1987; Bayraktar, 2013; Calkins, 1994; Graves, 1983). Conferencing with writers was a noted adaptation utilized by the majority of teachers once a week or more frequently in two recent writing surveys (Cutler & Graham, 2008; Graham, Harris, Fink, & MacArthur, 2003).

Another way to conference about writing is between peers. Instructional arrangements that allow children to work together while writing have a strong positive effect on writing outcomes (Graham, McKeown, Kiuahara, & Harris, 2012; Tsai & Chuang, 2013). For example, peer conferencing helped students develop a sense of audience in their writing while improving the cogency and clarity of their arguments during the composing of opinion essays (Wong, Butler, Ficzere, & Kuperis, 1996). Furthermore, peer conferencing has been suggested as a method of enhancing revisions for some students (Keen, 2010), specifically the quantity of revisions (Kinzierski, 1997; Saddler & Asaro, 2008), quality of rough drafts and finished pieces after revising (MacArthur, Schwartz, & Graham, 1991), and promotion of clarity and cohesiveness after revising (Wong et al., 1996).

Rubrics. Rubrics may be another method to improve revising. Rubrics have a long history of support for improving writing. For example, Hillocks (1986) found that writing quality generally improves when students used a writing scale or guide to evaluate their work. Rubrics could help increase the awareness of the criteria that people apply for the successful transmission of ideas in written communication (Van Gelderen, 1997). Using guides and rubrics to teach and assess revisions may provide writers with useful feedback on how to improve and increase their revising behaviors (Saddler & Andrade, 2004). In addition, they offer students concrete tasks and clear-cut goals that focus on particular elements to revise, and may make the revision process less daunting (Williams, 1998).

Strategy instruction. A lack of revision may be the result of insufficient or ineffective revising strategies being taught to students. In general, strategy instruction as a vehicle to teach elements of the writing process is crucial, especially for students with learning difficulties. Strategy instruction has been successful with several areas of the writing process, most notably planning and drafting (Graham, McKeown, Kiuahara, & Harris, 2012; Graham & Perin, 2007; Rogers & Graham, 2008). In fact, explicit instruction, including the direct teaching of strategies, had the highest effect on writing in a recent meta-analysis (Graham et al., 2012) with an effect size (ES) of 1.02.

Research also suggests that when children are explicitly taught how to revise via strategies, they are more likely to write effectively (c.f. Graham et al., 2012; Rogers & Graham, 2008; MacArthur, Graham, & Schwartz, 1991). For example, when writers increase knowledge of the critical elements of the revising process and are provided with procedural support to systematically implement them, their revisions improve (e.g., Fitzgerald & Markham, 1987; Graham, 1997; Graham et al., 2003). Strategy in-

struction has also been found to improve revision efforts and judgments (Fitzgerald & Markham, 1987), time spent revising, overall quality and number of substantive changes (Graham, 1997), and mechanical aspects of revising (Reynolds, Hill, Swasing & Ward, 1988).

Current study

Despite the theoretical and empirical importance of revising, and the existent research support for certain teaching practices to improve the revising abilities of children, we actually know little about how revising is taught to young, elementary aged writers. In fact, very little research has been conducted on how to teach revising despite the fact that many students, especially struggling learners, seldom revise (Hooper, Wakely, de Kruif, & Swartz, 2006). Furthermore, there have been only a few efforts to document elementary teachers' revising practices in today's schools through national surveys (Graham et al., 2003; Cutler & Graham, 2008; Gilbert & Graham, 2010). However, these extensive surveys of writing focused on the overall writing process and generally did not discuss revising in isolation from other elements of writing. For example, in Graham et al. (2003) and Gilbert and Graham (2010), peer collaboration was a widely employed strategy, however the researchers did not document which parts of the writing process (planning, drafting, revising, or editing) were usually discussed. In addition, use of rubrics was queried in Cutler and Graham (2008), but to what extent the rubric was used during revising was not specified. Rubric use was not surveyed in Gilbert and Graham (2010).

Although these comprehensive prior surveys yielded important information about how writing is taught or adapted for different writers, we believe that revising is such an essential aspect of writing that it needs to be explored in greater depth. The improvement of writing practices must be based on a thorough understanding of the current instructional landscape delivered by teachers, yet, at the moment, we know little about the nature of classroom revising instruction. Therefore, to address this gap in the literature, we replicated and extended prior surveys of writing in the elementary grades by investigating to what extent research supported revising practices such as peer conferencing, rubrics, and strategies are actually implemented within classrooms.

Whereas in prior surveys teachers were queried on their use of evidenced based practices across the writing process, we focused on the effect some of these practice might have on revising specifically. In addition, because our knowledge of the types of revisions young writers make is limited, we sought to provide an expanded view of the varieties and quality of revisions young writers attempt. Finally, in response to a recommendation in Cutler and Graham (2008) for future research, we analyzed the differences between revising practices in classrooms with and without students with disabilities.

To gather this important information, we created a short questionnaire. The instrument included items concerning teacher and classroom demographics while also allowing participants to describe their approach to revising, their utilization of several research supported methods of revising, and the impact these methods had on students. We randomly surveyed primary grade teachers in the United States to document their classroom revising practices in terms of time spent revising, strategies

and grouping structures utilized to teach revising, types of revisions attempted, and the quality of those revision efforts. In addition, we documented the differences in instruction in classrooms with and without children with learning disabilities (LD).

We sought to answer four questions: First, what time is dedicated to revising in primary grades and does extra time lead to better revising? Second, to what extent are peer supports, rubrics, and strategies utilized to support revising? Third, what types of revisions do students make? Fourth, is revising instruction different in classes with and without students with LD?

We operated from several theoretical premises. First, teachers would spend very little time revising. We believed this because previous research found that teachers dedicated little time to writing (e.g., Applebee & Langer, 2011; Cutler & Graham, 2008; Gilbert & Graham, 2010). Therefore it is logical to believe that revising practice represented only a small part of the overall time spent writing.

Our second premise was a correlate of our first. We believed that a student's writing ability with a particular component of writing, such as revising, was influenced by the amount of time engaged in that practice within the classroom (Graham, Harris, Mason, Fink-Chorzempa, Moran, & Saddler, 2008). Overall, we know that learning to write requires time and instruction (National Commission on Writing, 2003). In our case we felt that students who spent more time revising would produce better revisions.

Our third premise was that there would be widespread use of peer grouping arrangements and strategies for revision, since both were well utilized by teachers in prior surveys of writing (Graham et al., 2003; Gilbert & Graham, 2010) In addition, we believed that rubrics would be widely utilized, and that teachers would find rubrics to be an effective method to improve revisions based on prior research (Cutler & Graham, 2008).

Our fourth premise was that the majority of revisions attempted would be surface level changes. We know that writers may sometimes overly focus on superficial textual features such as appearance and mechanics, rather than the meaning or substance of the content (e.g., Graham & Harris, 2003). Therefore, we assumed teacher in our survey would report a higher number of these types of revisions in their students' writing.

Our final premise was that teachers' revising practices may look different depending on whether or not the class contained students with LD. We believed this because an important dimension in providing instruction to struggling writers involves adjusting the intensity or quantity of specific aspects of instruction (Graham et al., 2003). In addition, there is evidence to suggest that teachers more frequently teach revising to weaker writers than to average writers (Graham et al, 2003). We therefore reasoned that if students with LD, who are known to struggle with writing and revising, were present in a classroom, likely the instructional environment and supports would be different (i.e. more extensive use of peer supports, strategies, and rubrics) in that class to accommodate their individual needs.

METHOD

Participants

A random national sample of 500 elementary grade teachers in the United States participated in this study. The list of teachers was obtained from the National Council of Teachers of English (NCTE). All of the participants were members of that organization. Of the 500 teachers identified, 46% (N = 232) returned usable surveys. Participant demographic information is presented in Table 1.

Table 1. Participant Characteristics

Variable	
Gender of teacher	
Male	8% (N = 19)
Female	92% (N = 213)
Number of years of teaching	
M	14.9
SD	9.2
Range	0 to 42 years
Grade	
First	17% (N = 39)
Second	15% (N = 35)
Third	19% (N = 44)
Fourth	14% (N = 32)
Fifth	23% (N = 53)
Sixth	12% (N = 29)
Location	
Urban	29% (N = 67)
Suburban	51% (N = 119)
Rural	20% (N = 46)
Class size	
M	24.1
SD	5.2
Range	10 to 37 students
Number of children who receive free or reduced lunch	
M	8.7
SD	6.5
Range	0 to 35
Racial identity of students	
White	59% (N = 136)
African American	26% (N = 60)
Hispanic	8% (N = 19)
Asian	5% (N = 12)
Other	2% (N = 5)
Number of students with disabilities	
M	3.2
SD	3.9
Range	0 to 16
Number of classes with students with disabilities	
With	75% (N = 174)
Without	25% (N = 58)

As can be seen in Table 1, the participating teachers were mostly female (92%) and averaged 14.9 years of teaching experience (range = 0 to 42; SD = 9.2). They taught in mostly suburban classrooms (51%), followed by urban (29%) and rural (20%) to an average class size of 24.1 (range = 10 to 37; SD = 5.2). This sampling compares favorably to the demographics of teachers in the United States. According to Feistritz (2011), teaching is still an overwhelmingly female occupation with only 16% of the force being male. In terms of years of teaching, approximately 42% of the teaching force has over 15 years of experience and these teachers primarily teach in the suburbs (48%) followed by urban (28%) and rural settings (24%). These teachers teach on average 25 students (Sparks, 2010).

Seventeen percent of the teachers taught first grade, 15% taught second grade, 19% taught third grade, 14% taught fourth grade, 23% taught fifth grade, and 12% taught sixth grade. Approximately 59% of the children in the participating teachers' classes were White, 26% were African American, 8% were Hispanic, 5% were Asian, and 2% were identified as other. Thirty seven percent of the students were receiving free or reduced-lunch and 13% of the children in these classes were receiving special education services for LD. The majority (n = 174) had at least one child with LD in their classrooms whereas 25% of the teachers (n = 58) did not have any students with LD in their classrooms.

Instrument

Teachers were asked to complete a brief, seventeen-question survey created by the first author (see Figure 1).

Figure 1. The Revision Survey

Revision Survey

1. Please check your sex. Female _____ Male _____
2. How many years have you taught? _____
3. Please indicate the grade level you currently teach. _____
4. How many children are in your classroom? _____
5. How many children in your classroom receive a free or reduced lunch? _____
- How many children in your classroom are:
 - Hispanic _____ White _____
 - Black _____ Asian _____ Other _____
- How many children in your classroom receive special education services? _____
6. During an average week, how many minutes do your children spend in the following writing activities:
 - planning _____ drafting _____
 - revising _____ editing text _____
7. Do you use a commercial program to teach writing, handwriting, spelling, or any other aspect of composing? Yes _____ No _____
 What program? _____

8. Check how often you talk with students about revising their writing?

I	I	I	I	I	I	I
Never	Several Times a Year	Monthly	Weekly	Several Times a Week	Daily	Several Times a Day

9. Check how often your students work with each other to revise their writing?

I	I	I	I	I	I	I
Never	Several Times a Year	Monthly	Weekly	Several Times a Week	Daily	Several Times a Day

10. During an average week, how many minutes do your students spend revising their writing? (Do not include editing time)

11. What types of changes do your students usually make when they revise? (Please rate each change in order of frequency, beginning with **1** for the type of change you most frequently see students make and ending with **5** for the type of change your students make the least)

- Word changes, additions, deletions _____
- Sentence additions, deletions, combinations _____
- Surface level changes (i.e. punctuation, spelling
verb tense, capitalization, handwriting improvement) _____
- Changes in organization of the text (i.e. rearranging
sentences, paragraphs) _____
- Adding, deleting ideas or details _____

12. In general, to what extent do the revisions your students make improve their writing?
Considerable _____ Somewhat _____ Not at all _____ Make worse _____

13. Do your students use a rubric to help guide revision? Yes _____ No _____
If you answered yes, please continue. If you answered no, you are finished with the survey.

14. Please check how effective you believe the rubrics you use are in helping your students improve their writing.
Very Effective ___ Effective ___ Little Effect ___ No Effect ___

15. If your students use a rubric, do they use the rubric while working with a peer to revise?
Yes _____ No _____
If you answered yes, please continue. If you answered no, you are finished with the survey.

16. Please check how effective you believe the rubrics you use are in helping your students improve their writing when they work with a peer to revise.
Very Effective ___ Effective ___ Little Effect ___ No Effect ___

17. Check how often you provide a scoring rubric to the students for writing assignments.

I	I	I	I	I	I	I
Never	Several Times a Year	Monthly	Weekly	Several Times a Week	Daily	Several Times a Day

Procedure

A cover letter, survey, and a stamped, addressed envelope were mailed to each teacher. The cover letter explained that we were conducting a brief survey to gather information on the revising practices occurring at the primary grade level. Teachers were prompted to return the completed survey within 2 weeks. A follow up reminder postcard was mailed three weeks after the initial mailing to everyone on the list. The purpose of the postcard was to thank the persons who had returned the survey and to remind those who did not to return the survey. Of the 500 surveys sent to teachers, 232 returned usable surveys providing a response rate of 46.4%. One hundred and fifty-three surveys (65.95%) were completed and returned after the first mailing with an additional seventy-nine surveys (34.05%) received after the postcard reminder.

Frequencies, percentages, and measures of central tendency were used to describe the data. Pearson Product Moment Correlations were used to determine what relationships existed in the data. T-tests for independent samples were used to determine if there were significant differences between the groups. The alpha level was set at $p < .05$ to determine significant associations.

RESULTS

Our first question was, "During an average week, how many minutes did children spend planning, drafting, revising, and editing their writings?" On average, teachers reported that their students spent 32 minutes a week planning (range = 5 to 100 min; SD = 21.5), 54 minutes drafting (range = 5 to 200 min; SD = 47.3), 29 minutes revising (range = 5 to 200 min; SD = 27.2), and 24 minutes editing (range = 5 to 125 min; SD = 17.8). Similar results were obtained in classrooms with and without children with LD. Teachers without children with LD ($n = 58$) reported that their students spent 32 minutes a week planning (range = 10 to 100 min; SD = 23.5), 53 minutes drafting (range = 10 to 200 min; SD = 45.2), 27 minutes revising (range = 10 to 100 min; SD = 19.4), and 23 minutes editing (range = 10 to 90 min; SD = 13.9). Teachers with children who have LD ($n = 174$) reported that their students spent 32 minutes a week planning (range = 5 to 100 min; SD = 20.8), 55 minutes drafting (range = 5 to 200 min; SD = 48.1), 30 minutes revising (range = 5 to 200 min; SD = 29.4), and 25 minutes editing (range = 5 to 125 min; SD = 18.9). There were no significant differences between classrooms.

Our next question asked teachers to provide the name, if applicable, of any particular strategy or commercial program they utilize to teach revising or any other aspect of composition. Only 45 teachers (15% of the total) indicated they utilized any particular strategy or commercial writing programs in their classrooms. Thirty-eight of these teachers were in classrooms with children who have LD (22% of the 174 teachers in this category) and seven in classrooms without children who have LD (12% of the 58 teachers in this category). Handwriting programs were listed most often ($n = 30$), followed by spelling programs ($n = 12$), and computer programs ($n = 3$). The only strategy listed was daily oral language. No programs or strategies that directly taught revising were indicated.

Table 2. *Teacher-to-Student/Student-to-Student conferencing and Rubric Utilization*

Statements	Teacher	N		ST/Y		M		W		ST/W		D		ST/D		M	SD
		n	%	n	%	n	%	n	%	n	%	n	%	n	%		
1. How often teachers talk with students about revising their writing	No children with LD (n = 58)	0	0	1	2	12	21	15	26	10	17	10	17	10	17	3.79	1.45
	Children with LD (n = 174)	0	0	0	0	32	18	43	25	38	22	43	25	18	10	3.84	1.28
	All Teachers (n = 232)	0	0	1	.4	44	19	58	25	48	21	53	23	28	12	3.83	1.32
2. How often students work with each other to revise their writing	No children with LD (n = 58)	4	7	1	2	9	16	21	36	10	17	4	7	9	16	3.38	1.61
	Children with LD (n = 174)	7	4	0	0	27	16	63	36	42	24	17	10	18	10	3.47	1.37
	All Teachers (n = 232)	11	5	1	.4	36	16	84	36	52	22	21	9	27	12	3.45	1.43
3. How often teacher provides a scoring rubric to the students for writing assignments	No children with LD (n = 58)	9	16	7	12	11	19	14	24	13	22	4	7	0	0	2.47	1.52
	Children with LD (n = 174)	28	16	22	13	33	19	38	22	37	21	16	9	0	0	2.47	1.57
	All Teachers (n = 232)	37	16	29	13	44	19	52	22	50	22	20	9	0	0	2.47	1.55

Note: N = never, ST/D = several times a day, M = monthly, W = weekly, ST/W = several times a week, D = daily, ST/Y = several times a year

Three Likert-type questions were asked in order to discover how often teachers talked with their students about revising their writing, how often students work with each other to revise their writing, and how often teachers provided a scoring rubric to the students during writing assignments. Table 2 includes the frequency and the percentage for each category. Applying a significance test for the differences between the classrooms without children with LD and those classrooms that included children with LD showed that there was no significance difference between the two groups for all three questions.

Next, teachers were asked to rate the types of changes students made during revisions in order of frequency, beginning with 1 for the type of change they most frequently saw students make and ending with 5 for the type of change students made the least. Types of changes included a) word level changes such as word changes, additions, and deletions; b) sentence level changes such as sentence additions, deletions, and combinations; c) surface level changes such as punctuations, spelling, verb tense, capitalization, and handwriting improvement; d) organizational changes such as rearranging sentences and paragraphs; and e) idea changes such as adding and deleting ideas or details. Table 3 shows the results of the teachers' ratings for the types of changes students made when revising. The rating from the most frequent type of change made by students to the least frequent type of change made by students was as follows: surface level changes, word level changes, sentence level changes, idea changes, and organizational changes. The same order of rating was observed for teachers with and without children who have LD in their classes, and there were no significant differences between the classrooms without children with LD and those classrooms that included children with LD.

A four-point Likert-type question was asked in order to find out to what extent the revisions made improved students' writing. Table 4 includes the frequency and the percentage for each category. Overall, eighty two percent of the teachers indicated that the revisions their students made somewhat improved their writings. Applying a significance test for the differences between the two percentages for teachers without children with LD in their classrooms and those whose classrooms included children who have LD showed that there was significance difference between the groups for the not at all category ($p < .002$) and the somewhat category ($p < .01$).

We then compared the amount of time spent revising during an average week and the extent the teachers felt the revisions attempted by their students improved their writing, and discovered that there was no significant relationship for classrooms without students with LD ($r = .0073$) or classrooms with students with LD ($r = .0405$).

More than half of the teachers surveyed, 62.3%, indicated they use a rubric to help guide revision. From those teachers who used a rubric, 62.5% indicated that students used the rubric while working with a peer to revise. Table 5 shows how effective teachers believed rubrics were in helping students improve their writing, and Table 6 shows how effective rubrics were in helping students improve their writing when they work with a peer to revise. There were no significant differences between the classrooms with and without children who have LD for the effectiveness of rubrics in general or when working with a peer.

Table 3. Types of Textual Revisions

Type of Change	Teacher	Rating									
		1		2		3		4		5	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Surface Level	No children with LD (<i>n</i> = 58)	36	62.1	12	20.7	8	13.8	1	1.7	1	1.7
	Children with LD (<i>n</i> = 174)	106	61.3	45	26	15	8.7	0	0	7	4
	All Teachers (<i>n</i> = 232)	142	61.5	57	24.7	23	10	1	.4	8	3.5
Word Level	No children with LD (<i>n</i> = 58)	20	34.5	30	51.7	0	0	6	10.3	2	3.4
	Children with LD (<i>n</i> = 174)	61	35.3	93	53.8	2	1.2	17	9.8	0	0
	All Teachers (<i>n</i> = 232)	81	35.1	123	53.2	2	.9	23	10	2	.9
Sentence Level	No children with LD (<i>n</i> = 58)	1	1.7	6	10.3	34	58.6	17	29.3	0	0
	Children with LD (<i>n</i> = 174)	0	0	16	9.2	94	54.3	62	35.8	1	.6
	All Teachers (<i>n</i> = 232)	1	.4	22	9.5	128	55.4	79	34.2	1	.4
Idea	No children with LD (<i>n</i> = 58)	1	1.7	9	15.5	11	19	16	27.6	21	36.2
	Children with LD (<i>n</i> = 174)	6	3.5	17	9.8	42	24.3	57	32.9	51	29.5
	All Teachers (<i>n</i> = 232)	7	3	26	11.3	53	22.9	73	31.6	72	31.2
Organizational	No children with LD (<i>n</i> = 58)	0	0	1	1.7	5	8.6	18	31	34	58.6
	Children with LD (<i>n</i> = 174)	0	0	2	1.2	20	11.6	37	21.4	114	65.9
	All Teachers (<i>n</i> = 232)	0	0	3	1.3	25	10.8	55	23.8	148	64.1

Note. Teachers rated each item ranging from 1 (most frequent type of change) to 5 (least frequent type of change)

Table 4. Revision Improving Writing

Teacher	Rating							
	Make Worse		Not at all		Somewhat		Considerably	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No children with LD (<i>n</i> = 58)	0	0	1	1.7	53	91.4	4	6.9
Children with LD (<i>n</i> = 174)	4	2.3	19	11	137	79.2	13	7.5
All Teachers (<i>n</i> = 232)	4	1.7	20	8.7	190	82.3	17	7.4

Table 5. Effectiveness of Rubrics in Helping Students Improve Writing

Teacher	Rating									
	NA		No Effect		Little Effect		Effective		Very Effective	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No children with LD (<i>n</i> = 58)	9	15.5	19	38.7	6	12.2	16	32.7	8	16.3
Children with LD present (<i>n</i> = 174)	28	16.0	82	56.2	33	22.6	21	14.4	10	6.8
All Teachers (<i>n</i> = 232)	37	15.9	101	51.8	39	20.0	37	18.9	18	9.2

Note. Effectiveness ratings are calculated based on the numbers of teachers who used rubrics (*n* = 49 and *n* = 146)

Table 6. Effectiveness of Rubrics to Improve Writing when Working with a Peer

Teacher	Rating									
	NA		No Effect		Little Effect		Effective		Very Effective	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No children with LD (<i>n</i> = 58)	9	15.5	35	71.4	3	6.1	11	22.4	0	0
Children with LD present (<i>n</i> = 174)	28	16.0	101	69.2	8	5.5	35	24.0	2	1.4
All Teachers (<i>n</i> = 232)	37	15.9	136	69.7	11	5.6	46	23.6	2	1.0

Note: Effectiveness ratings are calculated based on the numbers of teachers who used rubrics (*n* = 49 and *n* = 146)

DISCUSSION

Answering the Research Questions

Writing is an essential skill for success while in school and a threshold skill for employment later in life (National Writing Project, 2006). Revising is a critical element of composition, as writing is literally a process of revising or re-seeing your work (National Writing Project, 2006). Despite the importance of revising, children rarely revise, and when they do, their revisions often do not lead to improvements in the quality of their work (Bereiter & Scardamalia, 1987; Van Gelderen, 1997). Although there is some evidence to support certain instructional practices for revising, the improvement of revising practices must be based on a clear understanding of the instructional landscape currently existing in classrooms. Unfortunately, very little research on how to teach revising exists, and we currently know little about the nature of revising instruction within classrooms because the few national surveys of elementary writing practices (Graham et al., 2003; Cutler & Graham, 2008; Gilbert & Graham, 2010) focused on the overall writing process and often did not discuss revising in isolation from other elements of writing.

Therefore, to address this gap in the literature, we replicated and extended prior surveys of writing by investigating the extent teachers implement revising practices such as strategies, peer conferencing, and rubrics within their classrooms. Primary grade teachers in the United States were randomly surveyed to document their classroom revising practices in terms of time spent revising, strategies and grouping structures utilized to teach revising, types of revisions attempted, and the quality of those revision efforts. In addition, we documented the differences in instruction in classrooms with and without children with LD.

How Much Time is Dedicated to Revising in Primary Grades and does extra time lead to better revising?

Our first premise was that teachers would spend very little time revising based on the overall amounts of time dedicated to writing in general in previous research (e.g., Applebee & Langer, 2011; Cutler & Graham, 2008; Gilbert & Graham, 2010), and our second premise was that more time spent revising would equate to better revising. On average, teachers in our study reported that their students spent 32 minutes a week planning, 54 minutes drafting, 29 minutes revising, and 24 minutes editing, with no significant differences between the classrooms with and without children with LD. When converting this to a daily rate, students spent 139 minutes weekly or approximately 28 minutes daily engaged in some aspect of the writing process.

These results are disappointing, because we know that learning the craft of writing requires frequent, supported practice (National Writing Project, 2006). They are not surprising, however, as they are consistent with other surveys of writing. For example, Applebee and Langer (2011) reported that approximately 5 minutes of a 50-minute period is dedicated to teaching strategies and the use of rubrics. Graham and colleagues reported slightly more time a day spent in writing, with teachers in Cutler and Graham (2008) reporting about 20 minutes of writing occurring daily, and Graham et al. (2003) reported 30 minutes a day. Furthermore, teachers in the

Gilbert and Graham (2010) study reported that their students averaged 25 minutes per day writing and only 15 minutes per day were spent in writing instruction.

When considering time dedicated for revising in our survey, revising practices accounted for approximately 21% of the total weekly and daily time allotted to writing, with the majority of teachers indicating revising was discussed weekly to several times per day. These results are similar to Cutler and Graham (2008) where roughly 60% of the teachers indicated that students engaged in revising from several times per month to several times per week, and Graham et al. (2003) where revising was taught by roughly half of the teachers at least weekly or several times per week.

Unfortunately, more time dedicated to revising did not lead to better revisions. When comparing the amount of time spent revising during an average week and the extent the teachers felt the revisions attempted by their students improved their writing, there were no significant differences. This is also a disappointing, but not unexpected outcome, as allowing more time to revise would seemingly be necessary for improvements to occur, but likely not sufficient to ensure improvements. Logically what matters more is what is accomplished during that time. For example, Graham et al. (2008) determined that the effectiveness of handwriting instruction was not dependent on providing instruction alone, but what happens when instruction is delivered.

To what extent are conferencing and peer supports, rubrics, and strategies utilized to support revising?

Conferencing and Peer supports. Our third premise was that there would be widespread use of peer grouping arrangements and strategies for revision. In our study, conferencing about revising was separated into teacher-to-student and student-to-student dialogues. All of the teachers in our survey indicated that they talked with their students, and almost all of the teachers in our survey (95%) reported that their students worked with each other to revise their writing. In both cases conferencing occurred weekly on average (Table 2). The frequency of use of peer supports during revising in our survey is encouraging as instructional arrangements wherein children work together while writing has a strong positive effect on writing outcomes (Graham, McKeown, Kihara, & Harris, 2012) and can support improved aspects of revision for some students (e.g., Keen, 2010; Kindzierski, 1997; Saddler & Asaro, 2008).

These results were similar to prior research that focused on peer arrangements for the overall writing process. For example, Applebee and Langer (2011) found that 60.4 percent of the teachers in their survey asked students to work together to plan, edit, or revise their work. A similar result was found in Graham et al. (2003), as most teachers (71%) reported children helped each other with their writing with more than half of these teachers (56%) noting that this occurred either daily or several times a week. Peer supports in Cutler and Graham (2008), which included all types of writing activities (planning, drafting, revising, and editing), was utilized by 88% of the teachers in the survey, but occurred with great variability from several times per month to daily.

Rubrics. We believed that rubrics would be widely utilized and that teachers would find rubrics to be an effective method to improve revisions. In our study 84% of the teachers utilized rubrics for revising with the majority of use occurring month-

ly on average (Table 2). Our results were similar to general use of rubrics in other surveys. For example, in Applebee and Langer (2011) 82.2 percent of the teachers in English classes, where writing was primarily accomplished, provided rubrics for writing with an unknown frequency of use, whereas in Cutler and Graham (2008), 68% of the teachers surveyed utilized rubrics for some part of the writing process on average between monthly and several times per year.

Rubric use was widespread in our study, but not perceived as an effective method of revision when used by a single student or when peers worked together. For example, over half of the teachers utilizing rubrics (52%, $n = 101$) reported the rubrics were not effective in improving revisions (Table 2), with pronounced differences between classes with and without children with LD. In the classes without children with LD, 50.9% of the teachers believed the rubrics had little or no effect, a percentage that climbed to 72% in classes with children with LD (Table 2). Similarly, 70% ($n = 136$) of the teachers believed that rubrics were not helpful when peers utilized them to jointly revise their work, with little difference between classes with and without children with LD (Table 5).

These are curious findings with several possible reasons. First, teachers may believe the rubrics were not effective because they really did not know if the rubrics made a difference or not, as they had not directly compared quality of their students writing before and after rubric use. It may also be possible that the rubrics used by the teachers were not effectively designed or “user-friendly” and were not a robust enough guide to help students improve their work. Another possibility is the rubrics were effective, but the children were not trained to utilize them strategically, either alone or when in peer grouping arrangements.

Strategies. In our study only 15% of the teachers indicated use of any program or strategy to teach revising or any other aspect of composition, with the majority of these teachers in classrooms with children who have LD. The programs used focused on basic writing components such as handwriting and spelling. Comments regarding the use of programs were decidedly negative, for example: “NEVER,” “No Way,” “I am a Donald Graves type person,” “Ugh,” and “Only because I am told to.”

Strategy use was particularly lacking in this sample of teachers with the only listed strategy being daily oral language. This finding differs from some of the prior research. For example, in Applebee and Langer (2011), 90.1 percent of teachers taught specific writing strategies whereas in Gilbert and Graham (2010), strategies were used infrequently by 60% of the teachers. However, this result is supported by Graham et al. (2003) where only 10% of the teachers claimed that they provided struggling writers with additional adaptations such as strategies.

One reason for the low number of teachers utilizing strategies in our survey may be that they did not understand what was meant by the term “strategy” and therefore did not know how to respond. Based on this premise, teachers could be utilizing strategies but not calling them by that term. Secondly, our survey instrument may be to blame, as we did not provide a menu of options to select from, but rather kept this question open-ended by allowing the teachers to write in their response. Perhaps if we had listed several research-supported strategies, the teachers would have reported greater use.

What Types of Revisions do Students Make?

Our fourth premise was that the majority of revisions attempted would be surface level changes. Our results supported this premise, as surface level changes were rated the most frequent type of change followed by word level changes, sentence level changes, idea changes, and finally organizational changes. The same order of rating was observed for teachers with and without children with LD in their classes.

We also analyzed the effectiveness of the revisions made, discovering that there were significant differences in ratings of revisions between classes. Specifically, teachers reported that revisions rated as making no improvements occurred more frequently in classrooms with children with LD and those revisions that somewhat improved the text were likelier to occur in classrooms without children with LD (Table 4).

The finding that surface level revisions were the most common type of textual change provides further support for the idea that in general, writers with disabilities may overly focus on superficial textual features such as appearance and mechanics, rather than the meaning or substance of the content (e.g., Fitzgerald, 1987; Graham & Harris, 2003; 2005; MacArthur, Graham, & Schwartz, 1991). Our survey results suggest that this pattern of revision is very similar for all young writers.

One reason for a lack of global, meaning changing revision making might be the hypothesized least-effort principle: young writers will change first what is easiest to change (Hunt, 1983). Therefore according to this logic, it is possible that a young writer's first choice would be surface level changes and the last choice language restructuring. This least-effort principle may be believable as, in many cases, it would seem that the ability to transcend an original writing decision may depend on having mindful access to alternatives (Bereiter & Scardamalia, 1987). Perhaps these writers did not know how to say things in a different way or they may not have had the skill to detect where more extensive revisions may have been required.

Is revising instruction different in classes with and without students with LD?

Our final premise was that a teacher's revising practices may look different depending on whether or not the class contained students with LD. We believed this because an important dimension in providing instruction to struggling writers involves adjusting the frequency or quantity of specific aspects of instruction (Graham et al. 2003). In addition, there is some evidence to suggest that teachers more frequently teach revising to weaker writers than to average writers (Graham et al., 2003). Our premise was not supported, as there was no statistical differences between the classes in terms of time spent revising, teacher-to-student or student-to-student supports, use of rubrics, and strategy use. This is a disappointing finding because it implies that there are not unique support in place for struggling writers and we know that without such supports writers with disabilities may continue to struggle with written expression (Graham et al., 2003). This finding is especially troubling because it is in harmony with prior research. For example, Graham et al. (2003) discovered that few adaptations were used by teachers to support struggling writers, and then only be a minority of teachers.

SUMMARY OF THE MAIN FINDINGS

Overall, this research suggests several interesting ideas. First, that in our sample of teachers, little time is dedicated in the school day to writing and especially revising. Secondly, more time spent revising did not necessarily lead to better revisions. Third, peer-support structures are widely employed. Fourth, the use of rubrics during revision is widespread, but unevenly effective and less effective when utilized during peer-grouping structures. Fifth, teachers generally do not use strategies and commercial programs for writing or revising. Sixth, young writers primarily make surface level revisions and that these changes generally do not improve the compositions written by children with learning disabilities. Finally, that the presence of students with LD does not necessarily alter the type of writing and revising instruction delivered in classrooms. These results present a rather grim picture of the state-of-the-art in teaching a critical component of writing, and therefore the next reasonable question is what to do about these findings?

First, our results suggest a need to increase the amount of time and effort spent directly developing the revising skills of young students than is currently occurring in schools. We know that learning to write requires time and instruction (National Commission on Writing, 2003). Therefore, young writers need to spend more time writing (Cutler & Graham, 2008). However along with more time, a greater emphasis needs to be placed on revising skills and strategies.

Teachers need to be aware that writing development and performance, and by extension revising development and performance, are enhanced when teachers engage in research supported activities including blending process-embedded skills and strategy instruction with writing workshop elements while providing more intense, individualized, and explicit instruction to students as needed. Additionally teachers should create a collaborative climate in the classroom and provide extended writing and revising opportunities with authentic, relevant, and engaging tasks representing multiple genres. They should clarify criteria for successful writing and utilize multiple resources, including peers and technology (e.g., Bereiter & Scardamalia, 1987; Cutler & Graham, 2008; Graham & Harris, 2003; Graham & Perin, 2007; Gilbert & Graham, 2010; Hooper, Wakely, de Kruif, & Swartz, 2006; Wong, 2000). Finally, although we separated the revision process from the other aspects of writing for analytical purposes in this study, in classrooms revision should be well-integrated into the writing process.

Limitations

First, our results are based on a small sample of teachers ($n = 232$), meaning that generalization of our findings must be approached with caution. Second, although we asked teachers to report the presence of students with LD in their classrooms, the LD label is too general and not descriptive enough to support firm conclusions about the characteristics of these students. These children may have had a disability in math that did not impact their writing skills. Third, we do not know what was discussed in the conferences nor how the children were trained to work together during peer-arrangements and therefore solid conclusions about the quality of peer-conferencing cannot be reasonably made, only that teachers utilized this arrangement and found it generally useful. Fourth, in survey research there exists the danger that

responses may have been inflated because the teachers wanted to report what they thought we desired to hear; therefore they may have responded in socially desirable ways by indicating they are engaging in a practice that they are not (Cutler & Graham, 2008). Fifth, respondents were members of NCTE, which could make them less than perfectly representative of the general teaching population, however our sample aligned closely with national statistics in terms of gender, experience, location, and class size. Finally, the results are naturally dependent on the survey instrument and in one instance, the question may have not been clear. Specifically, we did not explain what a “strategy” was when inquiring about strategy use and therefore the teachers may not have know how to respond. In addition, we could have provided a menu of strategies as options to select from, which may have led to the teachers reporting greater use.

Future Research

Since there are few national surveys of writing, these results need to be replicated. In future surveys, researchers should investigate the types of revising instruction provided to all writers through combining direct observations with teacher reporting of practices in a similar fashion to Applebee and Langer (2011). During these observations, particular emphasis should be placed on the teaching of strategies, what is said during the peer conferences and how students are trained to work together while writing and revising, and finally, the types of rubrics used and the training students receive to utilize the rubrics.

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