
Featured Research Commentary

The Common Core State Standards and Evidence-Based Educational Practices: The Case of Writing

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Abstract. Although writing plays an important role in the academic, psychosocial, and economic success of individuals, typical writing instruction and assessment in the United States generally does not reflect evidence-based practices. The Common Core State Standards (CCSS) place a great deal of emphasis on written expression and may encourage an increased focus on writing in schools and help to positively shape the practices of educators. In this article, we summarize a theoretically grounded content analysis of the writing and language standards of the CCSS to identify apparent strengths and limitations in the standards. We also note the degree to which the CCSS may support the adoption of evidence-based practices for writing instruction and assessment by teachers based on the content. The CCSS for writing and language appear to be succinct and balanced with respect to the content addressed, but some aspects of writing are not covered well (e.g., spelling) or at all (e.g., motivation). Out of 36 evidence-based writing instruction and assessment practices, the CCSS signal less than half of these in any given grade, suggesting that practitioners will need to consult other resources to acquire knowledge about such practices and how to exploit them to facilitate students' attainment of the standards. Finally, we recommend ways in which school psychologists can function as a valuable resource for teachers and schools in their efforts to deploy evidence-based practices, especially for students who struggle with writing.

The current educational zeitgeist of evidence-based practices and interventions rings loudly in the offices of school administrators, professional organizations and research cen-

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ters, hallways and meeting rooms of schools, colleges of education and government entities, the host of media, and the education research literature. This is likely as it should be because education professionals, scholars, policymakers, and the public at large all should have an abiding interest in the academic, social, physical, and psychological well-being of children and adolescents. Although many efforts have been made to bolster the well-being of students (e.g., free and reduced-price meal programs, reductions in class size, data-based decision-making and accountability), teaching practices are perhaps what matters most in helping students become well adjusted individuals within the classroom.

Evidence-based practices (EBPs) are a *prima facie* mechanism for promoting positive educational outcomes because they are methods, programs, or procedures that integrate the best available research evidence with practice-based professional expertise in the context of student and family characteristics, values, and preferences (see American Psychological Association, 2005; Institute of Medicine, 2001; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). Moreover, the use of EBPs in schools is now codified in law and associated regulatory statutes (e.g., No Child Left Behind Act of 2001). Although students benefit from EBPs in all academic areas, the importance of writing in kindergarten through twelfth grade (K–12) and postsecondary education settings, the workplace, and communities highlights the importance of EBPs for writing instruction and assessment.

Teaching and Learning Writing in the United States

Academic writing is an essential part of the K-12 experience, as students are expected to compose texts to demonstrate, support, and deepen their knowledge and understanding of themselves, their relationships, and their world (Bangert-Drowns, Hurley, & Wilkinson, 2004; Graham, 2006; Graham & Perin, 2007a, 2007b, 2007c; Keys, 2000; Shanahan, 2009; Sperling & Freedman, 2001). In addition,

writing appears to be crucial for students' success on high-stakes achievement tests that have become a linchpin in school reform efforts in the United States, which have been motivated in part by global competitiveness (e.g., Jenkins, Johnson, & Hileman, 2004; Reeves, 2000). Likewise, there is a growing trend to use writing proficiency as one determinant of graduation eligibility and in making decisions regarding grade retention and promotion (Conley, 2005; Zabala, Minnici, McMurrer, & Briggs, 2008).

In postsecondary education, universities use writing to evaluate applicants' qualifications, and proficient writing is expected for completion of a college degree (National Commission on Writing for America's Families, Schools, and Colleges, 2003, 2004, 2005; Smith, 2000). Once students leave an educational setting, writing serves as a gateway for employment and promotion (National Commission on Writing for America's Families, Schools, and Colleges, 2004). It is logical to conclude that, as the United States further transitions to an economy based in large part on information, technology, and services, the demands for proficient writing in the workplace will continue to escalate (Bazerman, 2006; Smart, 2008; Yates, 2005). Of course, writing also serves many purposes in today's civic life. In a nationally representative sample of 700 adolescents, 85% reported using some form of electronic personal communication (e.g., text messages, social network posts, blogs, e-mails) for daily social interaction, self-exploration and expression, and reflection on current events (National Commission on Writing for America's Families, Schools, and Colleges, 2008). Writing also may reduce psychological and physical distress and, consequently, health care utilization (Harris, 2006). Thus, the importance of writing extends far and wide in today's society, from everyday communication to personal health. Given the necessity of proficient writing in today's society, the failure of schools to adequately deploy EBPs for writing has serious consequences for students in K–12 schools and beyond.

Unfortunately, EBPs do not appear to be frequently implemented in many classrooms

(e.g., Burns & Ysseldyke, 2009). For instance, according to self-report data from a national sample of elementary teachers, instruction in planning and revising strategies for composing texts occurs less than 10 min a day (Cutler & Graham, 2008). In secondary classrooms (see Applebee & Langer, 2006, 2011; Kiuahara, Graham, & Hawken, 2009), teachers report frequently giving writing assignments that require little analysis, interpretation, or actual composing (i.e., abbreviated responses, worksheets) and devote less than 3 hr per *marking period* to instruction related to writing strategies (and even less time to other aspects of instruction). A large percentage of primary-grade teachers report making few or no adaptations for struggling writers (Graham, Harris, Fink-Chorzempa, & MacArthur, 2003), and high school teachers infrequently adapt their teaching for lower performing writers (Kiuahara et al., 2009). Not surprisingly then, nearly three-quarters of the nation's children and youth are not able to produce texts that are judged to fully meet grade-level expectations (National Center for Education Statistics, 2012; Persky, Daane, & Jin, 2003; Salahudin, Persky, & Miller, 2008). Likewise, nearly a third of high school graduates are not ready for college-level composition courses (ACT, 2007) and three-quarters of college faculty and employers rate students' and employees' writing as only fair or poor (National Commission on Writing for America's Families, 2004; Public Agenda, 2002).

Why are EBPs for writing not more widespread in American classrooms? The answer to this question is undoubtedly multifarious because teaching writing and learning to write are complex cognitive, linguistic, affective, and even sometimes physical acts that take place in socially constructed and constrained environments (e.g., Troia, 2006; Troia, Lin, Monroe, & Cohen, 2009). A few potential moderators of EBP implementation include (1) variability in teachers' experiences, values, beliefs, and attitudes regarding writing and writing instruction (e.g., Graham et al., 2001; Graham, Harris, MacArthur, & Fink, 2002; Lipson, Mosenthal, Daniels, & Woodside-Jiron, 2000); (2) inadequate profes-

sional development and knowledge in this domain (e.g., Cutler & Graham, 2008; Pritchard & Honeycutt, 2006; Troia & Maddox, 2004); and (3) a lack of clear, coherent, and consistent learning standards and associated research-based curriculum materials to guide teachers' writing instruction (Duke, 2000; Dutro & Valencia, 2004; Gilbert & Graham, 2010; Troia & Maddox, 2004; Spillane, 1998). This last factor is the one we take up in this commentary. With the advent of the Common Core State Standards (CCSS) it is conceivable that these new standards will help facilitate an increased emphasis on EBPs for writing in the classroom through a downward shaping of practices through policy.

The goal of standards-based reforms like the widespread adoption of the CCSS is to increase student achievement through the specification of academic content standards and assessments (Stecher, Hamilton, & Gonzalez, 2003). Content standards are designed, ideally, to inform curriculum development, guide instruction and assessment, provide clear goals for student achievement, and raise performance expectations. There is a limited body of literature that indicates states' writing standards and assessments do influence *what* is taught in the classroom and *how* it is taught. For example, in response to changes in their state writing standards and tests, teachers reportedly increased instructional emphasis on writing for specific audiences and purposes, at least those valued in the state assessments (Hillocks, 2002; Stecher, Barron, Chun, & Ross, 2000), writing across the curriculum (Applebee & Langer, 2011; Taylor, Shepard, Kinner, & Rosenthal, 2002), and the amount of daily writing time (Stecher et al., 2000). However, the effect of these changes on actual student writing performance was found to be negligible. One possible explanation for this finding may be related to the degree to which a set of writing standards emphasize or downplay EBPs. Unfortunately, little is known about the degree to which writing standards reflect research generally and EBPs specifically, although available evidence does not suggest a strong alignment with research for current state standards (e.g., Duke, 2001).

Moreover, according to a study examining a sample of seven states' writing standards conducted by Troia et al. (2013), there is great variability in states' attention to authentic and diverse writing purposes, generally poor specificity related to the knowledge and skills required at each grade, and large differences in the explication of environmental supports for helping students attain mastery of writing skills and strategies. Given that academic content standards and their associated assessments appear to shape teacher behavior, perhaps the new CCSS for Writing and Language (CCSS-WL) are a step in the right direction for classroom writing instruction, although the transformative effects of new standards are unlikely to be realized without substantial investments in capacity, willingness, and expertise to upgrade the seriously troubled state of writing instruction in U.S. schools (Graham & Harris, 2013).

The Common Core State Standards for Writing and Language

The CCSS have been formally adopted by 45 states and the District of Columbia. Those states that have adopted the standards are in various phases of rolling them out for implementation, with some states using a staggered rollout by grade level. Virtually all adopting states intend to completely phase in the new standards by the 2014–2015 school year, the year in which the two federally funded assessment consortia, the Partnership for Assessment of Readiness for College and Careers (19 member states and DC) and the Smarter Balanced Assessment Consortium (25 member states), plan to deploy fully operational next-generation assessments aligned with the CCSS. The CCSS, although vetted by a large number of stakeholders, need to be thoroughly evaluated for content clarity, breadth, emphasis, and rigor. Standards can be expected to effectively guide curriculum and instruction only if they are well articulated, comprehensive, and derived from theoretical models of learning specific to the content being taught.

In a study examining the breadth of content coverage, the frequency with which content was referenced, and the balance of content coverage of the CCSS-WL, Troia et al. (2013) found several strengths and weaknesses in the core standards. Content of the CCSS-WL was evaluated using a coding taxonomy of seven strands (and over 100 indicators across these strands) that were derived from several theoretical frameworks to assure a broad representation of current thinking about writing development, instruction, and assessment. Specifically, the study authors drew upon Hayes' cognitive model of writing (Flower & Hayes, 1981; Hayes, 1996) to inform the development of the strands for writing processes (1) and writing metacognition and knowledge (2). Sociocultural theory (Prior, 2006) was used to inform the development of a strand related to instructional and task context (3). Genre theory (Dean, 2008) informed the development of two other strands, writing purposes or genres (4) and writing components (5) the elements, features, or characteristics of the text. Linguistic models of writing (Faigley & Witte, 1981) were used to develop the writing conventions (6) strand. The seventh strand, writing motivation, was inspired by both cognitive and motivation theories of writing (Troia, Shankland, & Wolbers, 2012). Although other writing theories could have been applied, they made no additional contributions for the purpose of coding content in the standards. Two sets of raters completed the evaluation and reached an average inter-rater reliability of .88 (Troia et al., 2013).

Strengths

As for strengths, the CCSS-WL are succinct. For example, they mention specific content on average between 1.3 and 1.9 times in any given grade, which is consistent with the intent of the National Governors Association and Council of Chief State School Officers to create standards that are precise and yet interpretable by the public at large. A high degree of repetitiveness could logically impede interpretation by teachers and others because they would have to sift through redundancies to

isolate kernels representing the core knowledge and skills expected of students. Also, the relative emphasis on the range of content within the standards appears to be well balanced and the standards are consistent with respect to coverage of content from one grade to the next once an aspect of writing is introduced. Such consistency provides a coherent framework to guide instruction and assessment and may help to ensure greater opportunities for student mastery of writing expectations because the content does not drastically change across grades and all expectations receive relatively equal emphasis. As might be expected, the CCSS-WL reflect spiraling standards, in that the range of expectations in many areas increases across grades. For instance, in the early elementary grades, fewer aspects of the writing process and fewer components of written texts are expected of students, but in later grades more aspects of process and more components in text are required. Perhaps not surprisingly, writing conventions show a reverse pattern, with a higher number of conventions addressed in the early grades than in the later grades, presumably because it is important to master the conventions of writing early in development (e.g., Berninger & Amtmann, 2003).

Weaknesses

As for weaknesses, the CCSS-WL do not address (or do so in a limited fashion) some aspects of writing that represent current theoretical models of writing and that have been shown through research to be strongly related to better student writing outcomes. For example, a recent meta-analysis by Graham, Harris, and Hebert (2011) found an average weighted effect size of 0.77 (a large effect) on the quality of students' papers associated with verbal and written peer or teacher feedback on students' texts or their attainment of writing skills or strategies. This effect size was derived from eight studies with participants in Grades 2–9. The CCSS-WL address feedback in kindergarten and first grade, but not in later grades. Another recent meta-analysis (Graham & Perin, 2007a, 2007c) found a small but

significant average weighted effect size of 0.25 on writing quality from six studies with preadolescent and adolescent participants for the study of text models. The CCSS-WL make limited reference to the use of text models. This same meta-analysis found a large effect (average weighted effect size of 0.82) for teaching strategies to support the writing process from 20 studies with participants in Grades 4–10, but the core standards do not refer to strategies at all.

The CCSS-WL devote considerable attention to grammar in K–4. In and of itself, this is not problematic, but without deep understanding of the development of morphological and syntactic skills and of effective methods of grammar instruction (e.g., sentence combining), educators are likely to employ a traditional decontextualized approach to teaching grammar (i.e., using worksheets, diagramming sentences, studying parts of speech), which has consistently been found to yield negative effects on student writing performance (Graham, McKeown, Kihara, & Harris, 2012; Graham & Perin, 2007a, 2007c). The standards do not provide guidance on how to teach grammar skills in writing. With regard to text transcription skills (i.e., spelling, handwriting, and keyboarding), the core standards cover a variety of specific aspects of spelling in K–3, but then rely on general references to spelling such as “spell grade-appropriate words correctly” and “spell correctly” in Grades 4–12. General references to handwriting (kindergarten and Grade 1) and keyboarding (Grades 3–6) are made in the standards. Text transcription skills have been found to play a vital role in the development of accomplished writing (e.g., Graham, Berninger, Abbott, Abbott, & Whitaker, 1997; McCutchen, 1996) and instruction in which has a moderate effect (average weighted effect size of 0.55) on writing quality (Graham et al., 2012). Therefore, at least a more thorough treatment of spelling in later grades in the CCSS-WL is desirable.

The CCSS-WL do not address writing motivation at all, although there is evidence that at least two aspects of motivation, goal setting and self-efficacy, directly affect writing performance and are amenable to instruction (e.g., Graham & Perin, 2007a, 2007c;

Pajares, 2003; Schunk & Swartz, 1993). Finally, as Graham and Harris (2013) state, the CCSS-WL performance benchmarks lack precision and accuracy with respect to what precisely students should be able to do and when; they are educated guesses because we simply do not have a refined understanding of how varied aspects of writing develop across childhood and adolescence.

Implications of CCSS-WL for School Psychologists

Of course, school psychologists are most likely concerned with how the CCSS will affect at-risk students and those identified with disabilities. Because the standards generally represent a fundamental shift in the sophistication of written language expectations for all students (although it is important to note that the CCSS-WL are less demanding than some states' existing writing standards), struggling writers will be required to meet higher standards, which may present significant challenges for educators and related services personnel because students with disabilities (at least learning disabilities) exhibit poorer performance on every single measured aspect of writing when compared to their typically developing peers, from motivation to write to knowledge about writing to varied aspects of text content, organization, style, and productivity (Graham, Collins, & Rigby-Wills, 2013). Although the evidence base for effective instruction and assessment practices in writing for students with disabilities is relatively less developed than that for general education students without disabilities (only some practices, such as strategy instruction and transcription skills instruction, have been examined separately for such students), we do have meaningful insight into what works for the majority of students learning to write. When the extant meta-analyses and research syntheses related to writing instruction and assessment are examined, there are 36 different practices with varying degrees of research evidence associated with them (see Table 1; 80% of these practices have either strong or moderate research support).

The CCSS-WL and Evidence-Based Practices for Writing Instruction and Assessment

Academic standards, including the CCSS-WL, do not usually specify the “how” of instruction but rather the “what.” Nevertheless, standards can and often do signal for educators particular ways in which the standards can be attained via instructional practices and, as mentioned previously, standards do appear to influence not only what is taught but how it is taught. For example, a focus on writing process in a set of standards implies that educators must have students engage in the process of planning, drafting, revising, editing, and publishing text and consequently use a process-based approach to teach writing in at least some circumstances. Likewise, a call to provide guidance, support, and feedback in early elementary standards but not standards for later grades does, in fact, specify instructional action—in this case scaffolding.

We examined the CCSS-WL to identify what EBPs for writing from Table 1 are suggested, or signposted, in the standards. We also noted what practices, although important, are not signaled within the CCSS-WL and thus must be supported through external sources of pedagogical knowledge. The EBPs were coded using our content coding taxonomy described earlier and relevant key words or phrases (e.g., the EBP of sentence-combining instruction was signaled by the presence of the content codes associated with sentence fluency or grammar plus the key word “combining” or “rearrange”). Interrater agreement was 100% between two raters.

Based on our analysis, the CCSS-WL signal between 13 (36%) and 17 (47%) of the EBPs listed in at least one grade within each of the grade bands noted (i.e., K–2, 3–5, 6–8, and 9–12). Again, the CCSS-WL are not intended to designate specific instructional practices (or even a specific curriculum), so our findings are neither an indictment nor endorsement of the CCSS-WL. Moreover, there is no current evidence to suggest standards with lower proportions of EBPs signaled are any worse than those with higher proportions of EBPs signaled in terms of student writing out-

Table 1
Evidence-Based Writing Instruction and Assessment Practices Signaled by
the Common Core State Standards for Writing and Language

Evidence-Based Practice for Writing	Evidence Base	Signaled by CCSS-WL			
		Grades K–2	Grades 3–5	Grades 6–8	Grades 9–12
<i>Providing Extra Time for Writing:</i> Duration and/or frequency of sustained student writing are increased (e.g., write frequently).	Strong	No	Yes	Yes	Yes
<i>Free Writing:</i> Permit students to write about their choice of topic without concern for grading (e.g., journaling).	Strong	No	No	No	No
<i>Process Writing Instruction:</i> An instructional approach with a focus on writing processes that involves: <ol style="list-style-type: none"> 1. writing for real/authentic/multiple purposes and audiences (e.g., other than teacher); 2. engaging in cycles of planning, translating, and reviewing; and 3. personal responsibility and ownership of writing projects (e.g., student choice and student-directed decision making). 	Strong	No	No	No	No
<i>Comprehensive Writing Instruction:</i> An instructional approach with a focus on writing process plus strategy instruction, skill instruction, and/or text structure instruction.	Strong	No	No	No	No
<i>Strategy Instruction:</i> An instructional approach in which students are explicitly and systematically taught (through modeling and guided practice with feedback) one or more strategies for planning, drafting, revising, and/or editing text with the goal of independent strategy usage.	Strong	No	No	No	No
<i>Teaching Prewriting/Planning/Drafting:</i> Teach using activities (e.g., using graphic organizers, brainstorming ideas, strategies) that are designed to help students generate and/or organize ideas prior to writing and/or write a first draft that later will be reworked.	Strong	Yes	Yes	Yes	Yes
<i>Creativity/Imagery Instruction:</i> Teach students to use visual images or other means to enhance creativity in writing.	Strong	No	Yes	Yes	Yes
<i>Text Structure Instruction:</i> Teach students how different types of texts are structured and formed.	Strong	Yes	Yes	Yes	Yes
<i>Utilizing Text Models:</i> Students read and analyze examples of one or more texts in order to recognize and emulate the patterns or forms in these examples in their own writing.	Strong	Yes	No	No	No

(Table 1 continues)

Table 1
Continued

Evidence-Based Practice for Writing	Evidence Base	Signaled by CCSS-WL			
		Grades K–2	Grades 3–5	Grades 6–8	Grades 9–12
<i>Utilizing a Word Processor:</i> Students use a computer application as a primary tool for the production (including composition, editing, formatting, and possibly printing) of text.	Strong	Yes	Yes	Yes	Yes
<i>Utilizing Assistive Technology:</i> Students use computers that are packaged with other software or hardware that supports the writer, such as spelling and grammar checkers, software for formatting text, speech synthesis (typed text is converted to speech), speech recognition (writers' speech is converted to typed text), planning and outlining software, software for prompting students while writing, as well as software that provides feedback on specific aspects of the written text.	Strong	No	No	No	No
<i>Transcription Skills Instruction:</i> Teach students spelling, handwriting, and keyboarding (typing) skills to improve quality of writing.	Strong	Yes	Yes	Yes	Yes
<i>Sentence-Combining Instruction:</i> Teach students to construct more complex and sophisticated sentences through exercises in which two or more basic kernel sentences are combined into a single sentence.	Strong	Yes	Yes	No	No
<i>Decreasing Spelling Errors:</i> The use of varied means to help students identify and correct spelling errors in their written work and understand that misspelled words influence the readers' judgments about the message and the person who wrote it.	Strong	Yes	Yes	No	No
<i>Decreasing Grammar Errors:</i> The use of varied means to help students identify and correct grammar errors in their written work and understand that grammar errors influence the readers' judgments about the message and the person who wrote it.	Strong	No	Yes	Yes	No
<i>Taking Notes:</i> Teach students to take notes on texts, possibly using structured formats (e.g., a flowchart, outline, or concept map) to support note taking.	Strong	No	Yes	No	No
<i>Summarization Instruction:</i> Teach students how to summarize text through explicit and systematic instruction that focuses on either strategies for summarizing text or activities designed to improve students' text summarization skills.	Strong	No	No	No	No

(Table 1 continues)

Table 1
Continued

Evidence-Based Practice for Writing	Evidence Base	Signaled by CCSS-WL			
		Grades K–2	Grades 3–5	Grades 6–8	Grades 9–12
<i>Writing to Learn:</i> Writing is used as a mechanism for learning content area or topical information using active, personal, and constructive processes that are refined by feedback.	Strong	No	No	No	No
<i>Write in Response to Text:</i> Teach students to read and respond to texts through brief (e.g., questions and answers) and extended (e.g., reactions, interpretations) responses.	Strong	Yes	Yes	Yes	Yes
<i>Self-Regulation & Metacognitive Reflection:</i> Teach students to regulate the quality and productivity of their writing or their content learning through monitoring, reflection, and evaluation of behaviors and performance through tracking (e.g., graphing).	Strong	No	No	No	No
<i>Setting Product Goals:</i> Teachers or students set observable, specific, and individual goals for what students are to accomplish in their writing (e.g., how much students should write).	Strong	No	No	No	No
<i>Peer Collaboration:</i> Students cooperatively work with their peers to plan, draft, revise, and/or edit their compositions.	Strong	Yes	Yes	Yes	Yes
<i>Utilizing Rubrics:</i> Teach students to apply the criteria embodied by the scale or series of questions on the rubric and formulate possible revisions or ideas for revisions.	Strong	No	No	No	No
<i>Feedback:</i> Verbal or written information received from peers and/or adults, including praise, in response to an author’s work or a group’s efforts at any point in the writing process.	Strong	Yes	No	No	Yes
<i>Construct Representation and Scoring in Writing Assessment:</i> Evaluations of writing performance must be based on multiple samples of varied types of writing using consistent scoring methods and multiple raters.	Strong	No	No	No	No
<i>Presentation Effects on Writing Assessment:</i> Handwriting, spelling, and grammar errors have a significant detrimental impact on the evaluation of students’ writing quality and/or content.	Strong	No	No	No	No
<i>Vocabulary Instruction:</i> Teach students genre- and topic-specific vocabulary to use in their compositions.	Moderate	No	Yes	Yes	Yes
<i>Inquiry Instruction:</i> Teach students to develop content for writing by analyzing data derived from investigations/experimentation, textual/source analysis, or already provided information.	Moderate	Yes	Yes	Yes	Yes

(Table 1 continues)

**Table 1
Continued**

Evidence-Based Practice for Writing	Evidence Base	Grades K–2	Signaled by CCSS-WL		
			Grades 3–5	Grades 6–8	Grades 9–12
<i>Motivation:</i> Teachers reinforce positive student attitudes and beliefs toward writing, partly by encouraging a sense of ownership and pride in one’s writing through sharing, public displays, and more formal publishing opportunities.	Moderate	No	No	No	No
<i>Teaching Revising and Editing:</i> Teach checking routines (e.g., read-aloud to locate and correct errors) or other means by which to correct errors in written work, including usage, capitalization, punctuation, and spelling mistakes.	Limited	Yes	Yes	Yes	Yes
<i>Paragraph Structure Instruction:</i> Teach students how to organize information into paragraphs.	Limited	No	Yes	No	No
<i>Grammar/Usage Instruction:</i> Teach students correct application of capitalization, punctuation, and grammatical knowledge in the context of composing text.	Limited	Yes	Yes	Yes	Yes
<i>Conferencing:</i> Discussion with teacher (or peer) about the writer’s goals, thoughts, and behaviors, the writing process, the writing task, or the written product to promote growth as a writer.	Limited	No	No	No	No
<i>Teacher Modeling:</i> Teachers demonstrate enthusiasm for writing and regularly display the writing skills, strategies, and processes they wish students to emulate.	Limited	No	No	No	No
<i>Authentic and Relevant Writing Tasks:</i> Writing activities are personally relevant for students and undertaken for authentic purposes and audiences.	Limited	No	No	No	No
<i>Adaptations:</i> Teachers adapt the environment, tasks and materials, instruction, and evaluation to accommodate individual writer’s needs.	Limited	No	No	No	No

Note. CCSS-WL = Common Core State Standards—Writing and Language; RCT = randomized clinical trial. Strong evidence base = at least four quasi-experimental studies with equivalent group pretest performance and independent replication by multiple research teams; *or* one RCT plus one quasi-experimental study with equivalent group pretest performance; *or* five or more single-case experimental studies with a demonstrated functional relationship between the treatment and outcomes and independent replication by multiple research teams). Moderate evidence base = at least three quasi-experimental studies with equivalent group pretest performance and independent replication by multiple research teams; *or* at least three single-case experimental studies with a demonstrated functional relationship between the treatment and outcomes and independent replication by multiple research teams. Limited evidence = at least one RCT; *or* at least one quasi-experimental study with equivalent group pretest performance; *or* one or more single-case experimental studies with a demonstrated functional relationship between the treatment and outcomes; *or* at least three qualitative studies with credible data sources.

comes or the quality of instruction. We currently are conducting research to examine this issue to determine how standards shape educational practices and academic outcomes. What our analysis does suggest is that educators cannot rely on standards alone to point them to *how* to teach writing—other resources must be consulted if they are to be well informed about what works in the teaching and assessment of writing.

The Role of the School Psychologist in Implementing the CCSS and EBPs for Writing

School psychologists (and other consultants and specialists) can be a key resource for teachers in the domain of writing. School psychologists typically have a strong understanding of both what constitutes good research evidence and a broad knowledge of what practices are currently supported through research. Moreover, school psychologists appreciate the effects of teacher expertise and student/family values on the implementation of EBPs within an implementation science framework, or the “scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice” (Eccles & Mittman, 2006, p. 1). More specifically, school psychologists routinely integrate classroom exigencies, extant research, and the unique needs and desires of children and their families to accommodate the deployment of EBPs in clinical practice with individuals and organizations (i.e., schools). In addition, their knowledge of individual difference variables that affect writing performance (e.g., gender, working memory, psychomotor speed and automaticity; see Berninger, Nielsen, Abbott, Wijsman, & Ras-kind, 2008; Graham et al., 1997; McCutchen, 1996) afford them an appreciation of how such factors may affect the success of EBPs with individual students. What school psychologists may not be as informed about are the limits of standards for informing classroom practices as discussed here and how educational policy and systemic supports in general can facilitate or impede the use of EBPs (e.g.,

Fixsen, Blase, Metz, & van Dyke, 2013). We would encourage school psychologists and other resource personnel to become more familiar with these issues in order to more effectively consult with other educators about EBPs in writing and other domains (see Honig, 2006, and Nelson, Leffler, & Hansen, 2009, for discussion about policy and practice issues).

Many educators prefer to rely on the advice of successful teachers of writing (e.g., Atwell, 1998) or professional authors (e.g., King, 2000) to guide their own writing instruction because they mistrust educational research, which is the foundation of EBPs (e.g., Boardman, Arguelles, Vaughn, Hughes, & Klingner, 2005; Jones, 2009). Thus, school psychologists must help inform teachers and other practitioners about the benefits of using rigorous replicated research to select teaching practices (and the plausible constraints of the research for employing a practice with a particular student) and the limitations of practices derived from isolated case studies and professional wisdom, particularly those practice recommendations that fall outside the list of EBPs for a domain or that counter prevailing EBPs. In this way, school psychologists can help address the moderators of successful EBP implementation identified previously and promote sustained change in schools as these organizations transition to data-based decision making and EBPs as routine. These efforts are most critical when educators are faced with the issue of treatment integrity, which may conflict with their perception that one’s role as an educator is to adapt curricula and program materials with embedded EBPs to meet unique learning needs (O’Donnell, 2008). School psychologists can assist teachers with negotiating adherence to essential program components and practices, one of several dimensions of EBP implementation (Dane & Schneider, 1998; Durlak & DuPre, 2008), while integrating professional expertise and student and family needs and desires with program implementation.

Next Steps

We would like to make two broad recommendations for the field of school psychol-

ogy with regard to EBPs for writing instruction and assessment and the CCSS-WL. First, school psychologists should be involved with professional development efforts aimed at writing instruction and assessment and in-services about the CCSS. They will benefit from the information pertaining to writing instruction and assessment and the core standards offered through this venue and gain insight into the environmental context variables that may affect implementation (e.g., school climate, school leadership, complementary and competing policies and efforts; see Fishbein, 1995). In turn, school psychologists will have a platform for (a) disseminating information about EBPs and research used to establish EBPs for writing, (b) offering their expertise on accommodating the needs of students with disabilities and other at-risk learners who may have difficulty meeting the CCSS-WL, (c) discussing variables that affect the use of EBPs for writing (e.g., acceptability), and (d) clarifying the need to supplement the CCSS-WL with other pedagogical knowledge and skills to increase the effectiveness of classroom writing instruction.

Second, school psychologists should endeavor to build networks of research and practice to facilitate the inclusion of other practitioners in the research process and to collaborate with them to identify and address contextual variables that may affect the implementation of EBPs (Keith, 2000; Kratochwill & Stoiber, 2000). Such networks enhance the evidence base for EBPs in real-world contexts because issues affecting EBP implementation (e.g., mechanisms for implementation monitoring and evaluation, variations in dosage, costs and benefits, treatment integrity, barriers to effectiveness, necessary adjustments for success) can be tackled “in the trenches” by multiple stakeholders. School psychologists and other specialists with intensive research backgrounds and clinical training (e.g., speech-language pathologists, physical therapists) can bring field-based data about EBPs back to their professional organizations and ensure the realities of practice are reflected in future research efforts.

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