Chapter 10

Changing How Writing Is Taught

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If students are to be successful in school, at work, and in their personal lives, they must learn to write. This requires that they receive adequate practice and instruction in writing, as this complex skill does not develop naturally. A basic goal of schooling then is to teach students to use this versatile tool effectively and flexibly. Many schools across the world do not achieve this objective, as an inordinate number of students do not acquire the writing skills needed for success in society today. One reason why this is the case is that many students do not receive the writing instruction they need or deserve. This chapter identifies factors that inhibit good writing instruction, including instructional time; teachers' preparation and beliefs about writing; national, state, district, and school policies; and historical, social, cultural, and political influences. It then examines how we can address these factors and change classroom writing practices for the better across the world by increasing pertinent stakeholders' knowledge about writing, with the goal of developing and actualizing visions for writing instruction at the policy, school, and classroom levels. This includes specific recommendations for helping politicians, school administrators, teachers, and the public acquire the needed know-how to make this a reality.

Writing is a fundamental skill. More than 85% of the population of the world can now write (Swedlow, 1999). Writers use this versatile skill to learn new ideas, persuade others, record information, create imaginary worlds, express feelings, entertain others, heal psychological wounds, chronicle experiences, and explore the meaning of events and situations (Graham, 2018a). In school, students write about the materials read or presented in class to enhance their understanding (Bangert-Drowns, Hurley, & Wilkinson, 2004; Graham & Hebert, 2011). At work, white- and blue-collar workers commonly use writing to perform their jobs (Light, 2001).

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At home, writing provides a means for initiating and maintaining personal connections, as we tweet, text, email, and "friend" each other using a variety of social networks and media (Freedman, Hull, Higgs, & Booten, 2016).

The importance, versatility, and pervasiveness of writing exacts a toll on those who do not learn to write well, as this can limit academic, occupational, and personal attainments (Graham, 2006). While children typically begin learning how to write at home (Tolchinsky, 2016), a basic aim of schooling is to teach students to become competent writers. Do schools successfully meet this obligation? The available evidence indicates that this objective is met for some students but not all. Take, for instance, the United States, where approximately two thirds of 8th- and 12th-grade students scored at or below the basic level (denoting only partial mastery of grade-level writing skills) on the most recent Writing Test administered by the National Assessment of Educational Progress (National Center for Educational Statistics, 2012). The relatively poor performance over time on this and other indicators of students' writing skills led the National Commission on Writing (NCOW, 2003) to label writing a neglected skill in American schools.

Unfortunately, concerns about students' writing development are not limited to the United States but are common across the globe (see Graham & Rijlaarsdam, 2016). While there are many factors that influence children's development as writers, including poverty, genetics, and biological functioning (Graham, 2018a), many children do not receive the writing instruction at school that they deserve or need. The current chapter examines how this situation can be productively changed. We begin this exploration by examining how writing is currently taught in elementary and secondary schools. Without such background information, it is difficult to craft effective solutions. We then consider how writing practices in schools can be changed to make them more effective.

WRITING INSTRUCTION AT SCHOOL: HOW IS WRITING TAUGHT?

Most of what we know about how writing is currently taught in school settings comes from surveys asking teachers about their instructional practices in writing (e.g., Gilbert & Graham, 2010; Tse & Hui, 2016), observational studies designed to describe how writing is taught at school (e.g., Applebee & Langer, 2011; Rietdijk, van Weijen, Jassen, van den Bergh, & Rijlaarsdam, 2018), and mixed method investigations designed to provide a rich description of writing instruction through both interviews and observations (e.g., Hertzberg & Roe, 2016; McCarthy & Ro, 2011). Findings from 28 survey, observation, and mixed method studies involving the writing practices of more than 7,000 teachers are summarized in this section.[1] While two thirds of these studies were conducted in the United States, the other investigations provided information on writing instruction in Europe (e.g., De Smedt, van Keer, & Merchie, 2016), China (e.g., Hsiang, Graham, & Wong, 2018), South America (Margarida, Simao, Malpique, Frison, & Marques, 2016), and New Zealand (Parr & Jesson, 2016). Even though the findings from these studies do not cover all aspects of

writing instruction in schools across the globe, they do provide an up-to-date (if incomplete) picture of how writing is now taught in schools (all the studies were published in the past 15 years).

There were two basic overall findings from the 28 studies that examined how writing is taught in contemporary classrooms. One, some teachers provide students with a solid writing program, and in some classrooms this instruction is exemplary (e.g., Wilcox, Jeffrey, & Gardner-Bixler, 2016). Two, this is not typically the case, as writing and writing instruction in most classrooms are inadequate. These findings were generally universal, applying across countries and grades.

In terms of providing students with a solid writing program, it was consistently the case that in each study reviewed (e.g., Cutler & Graham, 2008; Dockrell, Marshall, & Wyse, 2016; Hsiang & Graham, 2016), there were teachers who committed a considerable amount of time to teaching writing. This included elementary grade teachers who devoted 1 hour a day to writing and writing instruction (as recommended by the *What Works Practice Guide* for elementary writing instruction; Graham et al., 2012) and who used a variety of instructional practices to promote students' writing success and growth, including applying evidence-based practices. In the elementary grades, these evidence-based practices included writing for different purposes, teaching strategies for carrying out writing processes such as planning and revising, conducting formative assessments to guide writing instruction, and teaching students foundational writing skills like handwriting, spelling, and sentence construction. At the secondary level, this included the same instructional practices (except that handwriting and spelling were not typically taught) as well as using writing as a way to support reading and learning. As Applebee and Langer (2011) observed, some teachers create rich and engaging writing programs, using instructional practices with a proven record of success (as identified in recent reports and meta-analyses: Graham, Bruch, et al., 2016; Graham & Perin, 2007).

It is also important to note that there were several studies (e.g., Cutler & Graham, 2008; Parr & Jesson, 2016) where the majority of teachers devoted considerable time to writing instruction and used a variety of evidence-based and other instructional practices to teach writing (e.g., conferencing). Likewise, several survey studies found that (a) middle and high school teachers across disciplines reported using writing to support student learning (Gillespie, Graham, Kiuhara, & Hebert, 2014; Ray, Graham, Houston, & Harris, 2016), (b) primary grade teachers indicated that they taught handwriting or spelling using evidence-based practices (Graham, Harris, et al., 2008; Graham, Morphy, et al., 2008), and (c) elementary and middle school teachers commonly made a variety of adaptations for struggling writers in their class (Troia & Graham, 2017).

Some of the positive findings from these studies must be tempered by other issues that emerged in these and other investigations. For example, in Parr and Jesson (2016), teachers placed little emphasis on two important types of writing: persuasive and expository writing. Primary grade teachers in the Cutler and Graham (2008) study overemphasized teaching basic writing skills (grammar, handwriting, and

spelling) while placing little emphasis on teaching students how to carry out critical writing processes such as planning and revising. This lack of attention to teaching students how to plan and revise was also a common theme in other studies (e.g., Dockrell et al., 2016; Rietdijk et al., 2018). While a majority of the middle and high school teachers in the investigations conducted by Gillespie et al. (2014) and Ray et al. (2016) frequently used writing to support learning across the disciplines, most of the writing activities applied for this purpose involved writing without composing (e.g., filling in blanks on a work sheet, note taking, and one-sentence responses to questions). Writing without composing was also quite common in other studies examining writing practices in both English and content classes at the secondary level (e.g., Applebee & Langer, 2011; Graham, Cappizi, Harris, Hebert, & Morphy, 2014; Kiuhara, Graham, & Hawken, 2009).

While it is essential to recognize that many teachers provide their students with strong, even exemplary writing instruction, it is equally important to draw a picture of common classroom practices. Unfortunately, the overall picture that emerged from the 28 studies reviewed was that writing instruction in most classrooms is not sufficient. One indicator of this inadequacy was that a majority of teachers did not devote enough time to teaching writing (e.g., Brindle, Harris, Graham, & Hebert, 2016; Graham et al., 2014; Kiuhara et al., 2009). Writing is a complex and challenging task, requiring a considerable amount of instructional time to master (Graham, 2018a). At both the elementary and the secondary level, the typical teacher devoted much less than 1 hour a day to teaching writing (e.g., Coker et al., 2016; Drew, Olinghouse, Luby-Faggella, & Welsh, 2017). In some instances, the amount of time committed to teaching writing was severely limited. Typical elementary grade teachers in the Netherlands, for example, reported that they conducted a writing lesson once a week or less often (Rietdijk et al., 2018). In China, elementary and middle school teachers held a writing lesson just once every 2 to 3 weeks (e.g., Hsiang et al., 2018; Hsiang & Graham, 2016).

A second indicator of insufficient writing instruction was that students in a typical class did not write frequently. While teachers commonly assigned a variety of different types of writing over the course of a year, students engaged in most of these activities no more than once or twice during the year (e.g., Brindle et al., 2016; Kiuhara et al., 2009; Koko, 2016). The writing activities most commonly assigned to students involved very little extended writing, as students were seldom asked to write text that was a paragraph or longer (e.g., Gilbert & Graham, 2010).

A third indicator of insufficient writing instruction involved the use of teaching procedures. While the typical teacher applied a variety of different instructional practices (e.g., McCarthy & Ro, 2011; Tse & Hu, 2016) and made many different instructional adaptations over the course of the school year (e.g., Troia & Graham, 2017), most of these teaching procedures were applied infrequently, often less than once a month (e.g., Graham et al., 2014; Graham, Harris, MacArthur, & Fink-Chorzempa, 2003; Hertzberg & Roe, 2016). This included teachers' use of evidence-based practices for teaching writing (e.g., Drew et al., 2017; Gilbert & Graham,

2010). Undoubtedly, how frequently teachers applied specific instructional practices, made particular instructional adaptations, or assigned different types of writing was related to the time they devoted to teaching writing. Even so, these findings draw into question the depth and intensity of writing instruction in the typical classroom.

A fourth indicator of the insufficiency of writing instruction in the typical classroom was the notable absence of the use of digital tools for writing. While most writing outside of school today is done digitally (Freedman et al., 2016), the use of digital tools for writing or writing instruction was notably absent in the typical classroom (e.g., Applebee & Langer, 2011; Coker et al., 2016; Simmerman et al., 2012).

Finally, a variety of specific issues involving classroom writing practices emerged within the context of individual studies. This included concerns that the primary audience for students' writing was the teacher (Applebee & Langer, 2011), writing involved little collaboration among students (De Smedt et al., 2016), the time spent in preparing for high-stakes writing tests was excessive (Applebee & Langer, 2011), classroom resources for teaching writing were inadequate (Dockrell et al., 2016), formative evaluation occurred infrequently (Rietdijk et al., 2018), motivation for writing was largely ignored (Cutler & Graham, 2008; Wilcox et al., 2016), and the writing needs of students with a disability or who were learning a second language were not sufficiently addressed (Dockrell et al., 2016). It is possible that these issues are prevalent in most classrooms, but they were not widely examined in the studies reviewed.

In summary, it is evident that teachers can, and some do, devote considerable time and effort to teaching writing. Most teachers are also familiar with a broad array of instructional methods, activities for composing, and possible adaptations for struggling writers. Nevertheless, the typical teacher does not devote enough time to writing and writing instruction. Students do not write often enough, and they are seldom asked to write longer papers that involve analysis and interpretation. Teachers apply the instructional procedures they are familiar with infrequently, including evidence-based practices and adaptations for struggling writers. Digital technology, including word processors and computers, are not an integral part of most writing instruction in schools. For many students worldwide, the NCOW (2003) report was correct: Writing is a neglected skill.

CHANGING WRITING PRACTICES IN SCHOOLS

If writing practices in schools are to change, it is important to identify the factors that inhibit good writing instruction. One critical contributor to quality writing instruction is time.

Writing is an extremely complex skill (Hayes, 2012), and learning how to write requires time and good instruction (Graham et al., 2012). Concerns about how much time is devoted to teaching writing led the NCOW (2003) report to assert that "in today's schools, writing is a prisoner of time" (p. 20). This position is supported

by the consistently replicated finding that teachers who devote more time to teaching writing apply more instructional writing practices more often (e.g., Coker et al., 2016; Hsiang et al., 2018; Koko, 2016).

The composition of the classroom is also a contributing factor in how writing is taught. As NCOW (2003) noted, it becomes increasingly difficult to provide writing instruction responsive to students' needs as the number of students in a classroom increases. I am not implying that teachers do not try to meet such challenges, as illustrated by findings that they apply more writing instructional practices when their class contains more students experiencing difficulties learning to write (e.g., Gilbert & Graham, 2010; Gillespie et al., 2014).

Classroom writing practices are further influenced by teachers' beliefs and knowledge (Graham & Harris, 2018). Teachers devote more time and attention to teaching writing if they are better prepared to teach it, feel more confident in their capabilities to teach it, derive greater pleasure from teaching it, and consider it an important skill (e.g., Brindle et al., 2016; De Smedt et al., 2016; Hsiang & Graham, 2016; Kiuhara et al., 2009; Rietdijk et al., 2018; Troia & Graham, 2016). They are also more likely to apply specific writing practices they view as acceptable (e.g., Troia & Graham, 2017).

Factors that contribute to how writing is taught go well beyond the classroom and teacher determinants identified above. For instance, how much time is devoted to writing and the number and type of students in a classroom are related to national, state, district, and school policies. In the Netherlands, for instance, teachers can meet the expectations established by the Dutch Inspectorate by teaching writing just two times a month (Rietdijk et al., 2018). Similarly, the importance placed on teaching writing and preparing teachers to do so depends on a complex mix of historical, social, cultural, political, and institutional influences (Graham, 2018a). For example, writing and reading are both valued historically, socially, and culturally in China, but reading enjoys primacy over writing in schools because reading is valued more than writing and it is commonly believed that students learn to write through reading (see Hsiang et al., 2018). Moreover, writing instruction in schools involves a complex interaction between teachers and factors outside their control. Take, for instance, preparation to teach writing. Teachers can and do learn how to teach writing through their own efforts and experiences, but their preparation also rests on institutional programs such as the preservice and in-service training they receive at college and as a teacher, respectively. Such institutional preparation is often viewed by teachers and those who deliver such instruction as inadequate (e.g., Brindle et al., 2016; Myers et al., 2016), potentially undercutting teachers' own personal efforts to become good writing teachers.

Consequently, changing classroom writing practices involves more than changing teachers. As Bransford, Darling-Hammond, & LePage (2005) argued, dramatic educational change is not possible without addressing "both sides of the reform coin: better teachers and better systems" (p. 38). I suggest that efforts to change writing instruction in the United States and beyond need to be even broader. If writing and writing instruction are not valued and understood by society at large, as well as

policymakers and school personnel more specifically, the potential impact of changing writing instruction for the better will be restricted.

Particularly important to changing classroom writing practices is to enhance teachers', principals', and policymakers' knowledge about writing. Each of these stakeholders need to acquire specific know-how, which includes knowledge about writing, a vision for teaching writing, and professional commitment. In addition, the success of efforts to increase their know-how rests in part on society's knowledge about writing, its importance, and the need to teach it.

A pertinent question at this point is why I am emphasizing knowledge about writing as a lever for changing classroom writing practices. In terms of teaching writing, good instruction requires rich and interconnected knowledge about subject matter and content, students' learning and diversity, and subject-specific as well as general pedagogical methods (Feltovich, Prietula, & Ericsson, 2018; Grossman & McDonald, 2008; Russ, Sherin, & Sherin, 2016; Schoenfeld, 1998; Shulman, 1987); a professional vision of teaching as well as adaptive skills for applying this knowledge productively, strategically, and effectively (Ball & Cohen, 1999; Stigler & Miller, 2018); and a professional commitment to ensure that this knowledge and needed actions are applied day in and day out (Bransford et al., 2005). If teachers acquire the needed knowledge, vision, and commitment, they are more likely to become masterful, efficacious, and motivated writing teachers, devoting more time to teaching it. This is a necessary but not a sufficient solution for improving writing instruction in classrooms worldwide. Policymakers, district personnel, and principals also need to acquire specific know-how about writing in order to make writing instruction an educational priority so that teachers' efforts are valued and supported. In addition, society needs to view writing as valuable, as this lays the framework for more general expectations that writing must be emphasized and taught.

In the next section, I examine the types of knowledge needed to change how writing is typically taught worldwide. The most critical aspects of knowledge in this section are italicized. Once these different forms of knowledge are presented, I consider how this knowledge can be actualized through the development and actualization of visions for writing instruction, emphasizing that it is advantageous if visions for teaching writing are coherent, well constructed, and consistent across all levels (i.e., national, state, district, school, and classroom) or as many levels as possible. To change how writing is taught, either locally or more broadly, pertinent stakeholders need to acquire the needed knowledge about writing, so recommendations for helping policymakers, school administrators, teachers, and the public to acquire the needed know-how are offered.

WRITING KNOWLEDGE

Knowledge includes all mental structures in long-term memory, including facts, opinions, concepts, theories, beliefs, attitudes, and orientations (Graham, 2018b). If teaching practices in elementary and secondary schools are to be transformed, relevant

stakeholders need to acquire knowledge about the subject of writing, how students learn and develop as writers, and effective practices for teaching writing.

Knowledge About Writing

Writing instruction may receive little emphasis in most schools because it is not valued. In a school curriculum that is overcrowded, those subjects that are viewed as most important to students' current and future success are likely to receive the greatest attention. As a result, society, policymakers, school administrators, and teachers *need to know why writing is important* and why it must be included as a central and prized component of the school curriculum (NCOW, 2003).

One reason why schools need to place more emphasis on writing is that it *enhances students' performance in other important school subjects*. Students understand and retain material read or presented in science, social studies, and mathematics when they are asked to write about it (Bangert-Drowns et al., 2004; Graham & Hebert, 2011; Graham & Perin, 2007). Increasing how much they write and teaching writing improves reading skills (Graham & Hebert, 2011). Making writing a part of reading instruction further enhances how well students read (Graham, Liu, Aitken, et al., 2018). In essence, students are unlikely to maximize their growth in other school subjects if writing is notably absent.

Writing is equally *important to students' future success*. Students who graduate from high school with weak writing skills are at a disadvantage in college and the world of work. For instance, writing competence is used by employers to make decisions about hiring and promotion in white-collar jobs, and approximately 90% of blue-collar jobs require some form of writing (NCOW, 2004, 2005). Furthermore, writing is now a central feature of social life, as it is used to communicate, share ideas, persuade, chronicle experiences, and entertain others (Freedman et al., 2016).

The value attributed to writing depends on understanding not only why it is important but also *how writing achieves its effects*. For example, writing about something read can facilitate comprehension because writing "provides students with a tool for visibly and permanently recording, connecting, analyzing, personalizing, and manipulating key ideas in text" (Graham & Hebert, 2011, p. 712). Likewise, writing instruction enhances students' skills as readers because writing and reading share a close and reciprocal relation, relying on common knowledge and processes (Shanahan, 2006). Instruction that improves writing skills and processes should improve reading skills and processes, and vice versa.

As this discussion implies, knowledge of writing involves knowing about other related skills. This includes *how writing and reading are connected* (see Fitzgerald & Shanahan, 2000). For instance, writing and reading can be used together to accomplish specific learning goals (e.g., reading source material to write a paper about the impact of plastics on wildlife), and engaging in the act of writing can provide insight into reading, and vice versa (e.g., writers need to make premises explicit and observe the rules of logic when composing text, so this should make them aware of the same

issues when reading). In addition to reading, it is *important to know how writing and language are connected*, because oral language serves as a foundation for writing, as writers draw on their knowledge of phonological awareness, vocabulary, syntactic structures, discourse organizations and structures, and pragmatics (Shanahan, 2006).

Although writing draws on knowledge gained through language development, *writing* r*equires the development of specialized knowledge* too (Graham, 2018b). Writers must learn the purposes and features of different types of texts (e.g., how writing is used to accomplish different purposes, the features of different types of text, attributes of strong writing, specialized vocabulary for specific types of text, and rhetorical devices for creating a specific mood) as well as how to transcribe ideas into text (e.g., spelling, handwriting, typing, and keyboarding), construct written sentences (e.g., punctuation, capitalization, more frequent use of subordinate clauses when writing specific types of text), carry out processes for creating and revising text (e.g., schemas for text construction and strategies for setting goals, gathering and organizing possible writing content, and drafting text, as well as monitoring, evaluating, and revising plans and text), use the tools of writing (e.g., paper and pencil, word processing), and respond to an absent audience (e.g., consider what an audience knows about the topic).

Four other forms of knowledge about writing are important to designing better writing instruction. One, it is important to realize that *writing is not a single unitary skill* (Bazerman et al., 2017). It involves many different forms, and how well a student writes varies across forms (Rijlaarsdam et al., 2012). Even within a single form of writing, the quality of students' writing may differ from one assignment to the next depending on a variety of factors, including their knowledge of the topic (Olinghouse, Graham, & Gillespie, 2015) or their motivation to write (Knudson, 1995).

Two, a basic assumption behind school-based writing instruction is that it prepares students for the writing they will do outside school. This assumption has been challenged repeatedly (e.g., Hull & Schultz, 2001), and consequently, *knowing what types of writing students do at home, in college, and at work is important* to deciding what types of writing should be emphasized in school. In addition, knowing what types of writing students do outside school is essential if such writing is to be integrated into school activities. This may increase the value of school-based writing in students' views (Freedman et al., 2016).

Three, one's *beliefs about writing can foster or hinder writing* in various ways. Such beliefs influence whether one engages in writing, how much effort is committed, and what resources are applied (Graham, 2018a). They include judgments about the value and utility of writing, the attractiveness of writing as an activity, why one engages in writing, one's competence as a writer, and why one is or is not successful when writing. They also include beliefs about one's identity as a writer, which can differ from one writing community to the next.

Four, *writing is a social activity*, situated within specific contexts (Bazerman, 2016; Graham, 2018a), such as classrooms, places of work, or online communities. Within these communities, what is written is accomplished by writers (and possibly

collaborators) for specific audiences. As a result, writing involves an interaction between the context in which it occurs and the mental and physical resources writers and their collaborators (including teachers and mentors) bring to the task of writing (Graham, 2018b). Efforts to change writing instruction in schools must take into account both the social and the individual aspects of writing.

The importance of knowledge about how to write, as represented by a teacher's capabilities as a writer, to changing school-based writing practices is unclear. While skilled writers can describe some of the things they do when writing, their descriptions are incomplete (Hayes & Flower, 1980). It is probably more important for relevant stakeholders to have a *positive identity as a writer* (Woodward, 2013). This increases the likelihood that they will write, enjoy writing, and see the value of writing and teaching it.

Knowledge About How Writing Develops

Earlier it was established that many students spend little time writing or learning how to write in school. This situation is inconsistent with what we know about how writing develops. *Writing develops across the life span, some forms of writing take many years to master, and writing growth is a consequence of writing and deliberate practice* (Bazerman et al., 2017; Graham, Harris, & Chambers, 2016; Kellogg & Whiteford, 2009).

The factors that shape writing development are multifaceted and overlapping. For example, *writing development is shaped by participation in various writing communities* (Bazerman, 2016; Graham, 2018b). For instance, as students participate in a 10th-grade English class, they acquire one or more identities as a writer, learn more about the audiences and the particular purposes for writing in that context (including goals, norms, values, and stances), and obtain typified actions (routines or schemas) for carrying out writing tasks. In many instances, learning acquired in one writing community can be useful in other writing communities, as when young children use writing skills learned at home in school.

Writing development is further shaped by a variety of processes operating at the individual level (see Graham, 2018b). It includes learning as a consequence of action. Students acquire knowledge and beliefs about the cognitive and physical actions they use when writing by evaluating the effectiveness of these operations. It involves learning by expansion. Students acquire writing knowledge and confidence through nonwriting activities, as when insight into writing is obtained through reading (e.g., Graham, Liu, Bartlett, et al., 2018). It entails learning by observing. Students acquire knowledge and specific dispositions by observing others engage in the act of writing. It includes learning through deliberate agency. Students make conscious decisions to apply a previously learned writing skill to new situations. It involves learning through accumulated capital. Writing growth serves as a catalyst for additional growth (e.g., increased knowledge about how to write enhances motivation to write).

Writing development is also shaped through instruction (Graham, Harris, et al., 2016). Students acquire knowledge and beliefs about how to write through

mentoring, feedback, collaboration, and instruction. This can be provided by a teacher, another adult such as a parent or peer, or even a machine (Graham, Harris, & Santangelo, 2015; Graham, Hebert, & Harris, 2015). Moreover, teachers can arrange the writing environment to facilitate student growth, as happens when students are asked to evaluate what actions worked best while writing (learning as a consequence of action).

Regardless of the processes that shape students' growth as writers, *writing development is variable*, with no single path or end point (Bazerman et al., 2017). It is uneven, as students are better at some writing tasks than at others (Graham, Hebert, Sandbank, & Harris, 2016). It does not follow a steady progression from point A to point B, as students' growth can accelerate, plateau, or regress. It varies from one student to the next, because students' experiences as writers differ, as does their genetic and neurological makeup (Graham, 2018a). There is no prespecified sequence of normal development in writing, just social norms of what might be expected, as is the case with the *Common Core State Standards* (CCSS; National Governors Association & Council of Chief School Officers, 2010).

Even though students' path to writing competence is variable and uncertain, this does not mean that it is without form. For example, instruction designed to enhance specific aspects of writing (e.g., writing knowledge, strategies, and motivation) results in students' writing growth (Graham, 2006). Increasing young writers' facility with foundational writing skills such as handwriting, spelling, typing, and sentence construction reduces cognitive overload, freeing up mental resources for other important aspects of writing. Additionally, growth does not occur in a vacuum; *writing development influences and is influenced by development in speech, reading, learning, emotions, identity, a sense of efficacy, and collective actions* (Bazerman et al., 2017).

Finally, *writing development is influenced by gender, family wealth, culture, neurological functioning, and genetic factors* (Graham, 2018a). This does not mean that an individual child's future growth as a writer is somehow fixed and nothing can be done to change this path. For instance, students with disabilities experience difficulty learning to write, but there is evidence that their writing development can be accelerated through explicit and systematic instruction (e.g., Gillespie & Graham, 2014). If the writing development of all students is to be maximized, knowledge is needed about the writing experiences, interests, characteristics, and development of students whose backgrounds differ by gender, class, culture, race, ethnicity, language, and disability status. *Equally important is the belief that all children can learn to write well.*

Knowledge About Teaching Writing

At the most basic level, effective writing instruction depends on time (NCOW, 2003). Teachers who devote more time to writing instruction apply multiple methods more often to promote writing growth (e.g., Gilbert & Graham, 2010; Hsiang et al., 2018). In effect, *quality writing instruction cannot occur if sufficient time is not available.*

Time alone is not sufficient to ensure that students receive strong writing instruction. In addition, *goals for instruction must be identified, the curriculum content specified, and effective instructional practices applied* (Bransford et al., 2005). If high-stakes assessments used to measure students' writing were used as a guide, the primary goal for writing at national, state, and local levels would be to capably write specific kinds of text, for no real audience or purpose (other than testing), using information held in long-term memory (Mo & Troia, 2017). If writing instruction is to be changed for the better, *goals for writing need to focus on using writing for real purposes and writing in a more realistic fashion* (e.g., access to source material, engaging in critical thinking). Moreover, goals need to address motivation (e.g., writers who are efficacious, value writing, and develop a positive identity as a writer), knowledge (e.g., writers who know how to use a variety of writing tools to meet their writing objectives), process (e.g., writers who can flexibly use writing skills and strategies to meet different writing demands), and social contexts (e.g., writers who can adjust their writing to fit the context).

In terms of writing curriculum, *there is no single agreed-on set of skills, knowledge, processes, or dispositions for teaching writing*. Recent efforts like the CCSS (National Governors Association & Council of Chief School Officers, 2010) represent an ambitious attempt to identify what needs to be taught at a minimal level, but they do not address all of the goals for writing identified above, nor do they align well with many procedures shown to improve students' writing (Troia et al., 2015). *Writing instruction is likely to be more effective when goals, curriculum, instructional methods, and assessment are aligned.*

Recent work by Graham and his colleagues to identify evidence-based practices in writing (Graham, Harris, et al., 2016; Graham, Harris, et al., 2015; Graham, Hebert, et al., 2015; Graham, Liu, Aitken, et al., 2018; Graham, Liu, Bartlett, et al., 2018) provides insight into writing curriculum and instruction. Their work draws on empirical intervention studies and qualitative investigations with exceptional literacy teachers. At a macro-level, they found that *effective writing instruction involves (a) writing frequently for real and different purposes; (b) supporting students as they write; (c) teaching the needed writing skills, knowledge, and processes; (4) creating a supportive and motivating writing environment; and (5) connecting writing, reading, and learning.* At a more micro-level, this work provides a partial (not complete) frame for identifying curricular objectives in writing (and instructional procedures for addressing them). Based on this framework, curricular objectives should address basic foundational skills (handwriting, spelling, and typing), sentence construction skills, knowledge about different types of text, the characteristics of good writing, vocabulary for writing, and processes for planning, drafting, evaluating, and revising text. Curricular objectives should further focus on establishing classroom routines where students' writing is supported (e.g., peers work together, students receive useful and timely feedback), students act in a self-regulated fashion (e.g., taking ownership of their writing, doing as much as they can on their own), writing is used to support students' learning and reading in multiple disciplines, and students learn to apply traditional

as well as 21st-century writing tools (e.g., digital tools that allow for multimodal writing).

Beyond the principles established by Graham and colleagues above, instructional practices in writing need to address the following: applying effective strategies for managing the classroom and student behavior (Bransford et al., 2005), connecting writing within and outside school (Freedman et al., 2016), using formative assessment to improve learning and instruction (Graham, Hebert, et al., 2015), and implementing experiences that help students grow as writers. In addition, attention needs to be aimed at ensuring that students use correct grammar and usage in their writing. A meta-analysis by Graham, Harris, and Hebert (2011) found that grammar miscues negatively influence readers' perceptions about the writer's message.

While many of the instructional procedures in writing that are effective with students in general are also effective for students whose backgrounds differ by gender, class, culture, race, ethnicity, language, and disability status (e.g., Gillespie & Graham, 2014; Graham, Harris, & Beard, in press), *improving how writing is taught in schools requires that instruction is differentiated to meet students' needs*. This includes designing instructional lessons so that they are tailored to address the needs of different students (e.g., incorporating culturally responsive instruction), using instructional methods that are particularly effective with these students (e.g., feedback and progress monitoring, cooperative learning, and tutoring students of low socioeconomic status; Dietrichson, Bog, Filges, & Jorgensen, 2017), making adaptations in writing assignments and instruction for particular students (e.g., providing additional time for writing), providing accommodations to address particular challenges (e.g., allowing a student with a physical disability to use a word prediction word processor program), identifying and addressing roadblocks to learning (e.g., frequent absences), and expecting that each child will learn to write well (Graham, Harris, & Larsen, 2001).

Finally, *teachers' disposition toward teaching writing is an important ingredient in delivering high-quality writing instruction*. Teachers who are more self-efficacious about their instructional capabilities, enjoy teaching writing, and view instructional practices as acceptable are more likely to teach writing (e.g., Brindle et al., 2016; Troia & Graham, 2016, 2017).

DEVELOPMENT AND ACTUALIZATION OF VISIONS FOR TEACHING WRITING

Developing a Vision for Teaching Writing

Imagine asking teachers, principals, district superintendents, or policymakers involved in crafting educational goals for writing to describe their vision for teaching writing, and they were unable to answer this question or each had different answers! If students are to receive the writing instruction they need and deserve, there must be a coherent vision for how writing is taught in the classroom, across classrooms and grades in a school, within the district and across districts within a state, across states, and within the nation. While I realize that this may not be possible in all situations,

the goal should be to have a coherent, well-constructed, and consistent vision for teaching writing on as many levels as possible.

Developing such a vision for writing instruction does not mean that each teacher, school, or district has to do the same thing but that everyone is rowing together in the same direction. This requires a set of common goals for writing (as is the case with the CCSS in the United States) and decisions about what will be taught and who will be responsible for what aspects of writing instruction. It should not be limited to just writing but should also address how the teaching of writing, reading, and learning are integrated and used to support one another. Furthermore, it should go beyond the classroom, connecting writing in and out of school.

The development of such a plan is likely to be more effective if it is (a) informed by the types of knowledge about writing, development, and teaching presented in the previous section; (b) developed with the help of teachers; and (c) supported by those who implement it (including principals and teachers). There is an important caution in developing specific visions for teaching writing that must be acknowledged. While specific visions can provide districts, schools, and individual teachers with a valuable road map, they can become a straightjacket, needlessly constraining how writing is taught. They are never complete, nor should they be viewed that way. Teachers and schools need the flexibility to apply their professional knowledge to develop a vision for teaching writing that is responsive to their students and situation. Moreover, visions for teaching writing at any level should not be viewed as set in concrete but are subject to change as needed.

Even when goals for writing and decisions about what to teach and who teaches what are made collectively (at any level), each teacher must still make a host of other decisions before or after instruction starts that shape the actualized vision for teaching writing. This includes deciding the value placed on writing, what kinds of writing are assigned, who serves as the audience, classroom norms for writing, and the writing identity of the class (Graham, 2018b). Teachers must further make decisions about the roles and responsibilities of students, methods for fostering positive social interactions, the amount of power students exercise, the physical arrangement of the class, the tools used for writing, typified routines for accomplishing writing and classroom goals, and instructional procedures for teaching writing. These decisions should take into account the characteristics of the students in the class and are influenced by teachers' beliefs about how students learn to write.

Putting Visions for Teaching Writing Into Action

It is not enough to know what to do; knowledge and vision must be enacted if meaningful change is to take place. To illustrate, school districts need to engage in a number of processes in order to enact their visions of writing instruction. This includes developing an implementation plan, making decisions and judgments about what to do and who is responsible, monitoring and evaluating the plan as it is enacted, reflecting on what did and did not work, and engaging in problem solving throughout (these same processes apply, often at a more abstract level, for visions enacted by

states and nations). Teachers must also engage in the same processes as they translate their vision for teaching writing into daily lessons and longer units or put into place procedures for differentiating instruction, to provide two examples.

Because teaching writing is a complex process and the actions and reactions of those providing and receiving instruction are not fully predictable, schools and teachers develop schemas for operationalizing their visions (Feltovich et al., 2018). For example, a teacher may apply a commonly used routine where students are expected to plan, draft, edit, revise, and publish their compositions. The advantage of such an approach is that these are important components of the writing process and uncertainty is reduced as students know what they are to do. The disadvantage is that writing does not always follow such a linear progression. Thus, the routines created by schools and teachers should be viewed as permeable and flexible, with schools and teachers monitoring, evaluating, and modifying their use to ensure effectiveness.

An important ingredient in operationalizing a vision for teaching writing is to apply methods with a proven track record of success (Graham, Bruch, et al., 2016). A number of evidence-based writing practices were identified earlier that have been applied effectively in multiple settings. The use of such practices may have a "wanted" side effect. They should enhance teachers' efficacy and attitude toward teaching writing as there is a good chance they will work. Even so, caution must be exercised when applying these procedures as there is no guarantee that they will be successful. As a result, the implementation of an evidence-based practice involves the same analytic problem-solving processes identified above—planning, implementing, observing, evaluating, and reflection, leading to decisions about whether to continue using the practice, modify it, or drop it. Again, the same processes should be used when schools or teachers apply other instructional writing practices, such as the ones they create through their own experiences.

While individual teachers do make a difference (Ball & Cohen, 1999), this is not enough. Students need to receive high-quality writing instruction from one class to the next. This requires a system approach, as noted earlier. Enacting visions for teaching writing will be best served through an approach where the knowledge acquired at each level is used to improve practice at all levels. This means that teachers and principals within schools as well as principals and district personnel need to establish lines of communications and trust so that acquired knowledge, observations, critical feedback, and possible solutions can flow easily from teacher to teacher, teachers to administrators, and administrators to district leaders. The same premise applies to communication between school districts and policymakers at the state level as well as between policymakers at the state and national levels.

MAKING SURE RELEVANT STAKEHOLDERS ACQUIRE THE NEEDED WRITING KNOW-HOW

The task proposed here is no small undertaking. Writing instruction is not adequate in many classrooms across the globe. Changing this situation requires considerable engagement, effort, fortitude, and professionalism from all relevant stakeholders:

policymakers, school administrators, and teachers. Furthermore, the success of their efforts will be constrained if society does not value writing or view it as important. Recommendations for helping these stakeholders acquire the knowledge about writing each needs to accomplish this task are presented next, with a particular focus on how this might be done in the United States. Many of the proffered suggestions can be applied in other countries too.

Policymakers

The level of know-how needed by specific stakeholders differs. At a minimal level, policymakers need to know that (a) writing is important; (b) writing and writing instruction promote writing, reading, and successful learning; (c) writing in and outside school is connected; (d) the time spent writing and teaching writing is not sufficient in most classrooms; and (e) many students (especially in their district or state) are not developing the writing skills needed for success in school, college, or work.

How can policymakers' knowledge be increased? One way is for organizations like the National Writing Project (NWP), American Federation of Teachers, National Council of Teachers of English (NCTE), and International Literacy Association (ILA) to band together and coordinate an informational campaign (involving print material, television, radio, and personal contacts) directed at policymakers (as well as the public at large). These organizations can further encourage their members, especially teachers, to contact politicians and policymakers (by email, letter, or meeting in person) to advocate on behalf of writing. In turn, teachers can encourage parents to do the same. This last recommendation will likely be more successful if teachers help parents understand why writing is so critical.

Organizations like the ones above can also form working coalitions with organizations like the Carnegie Foundation for the Advancement of Teaching, Bill and Melinda Gates Foundation, and Chan Zuckerberg Initiative, as well as local private and corporate foundations. This can increase the impact and broaden the scope of organizations like NCTE and ILA to advocate for writing and inform policymakers and the public about why it is so important and how we can do a better job of teaching it (e.g., solicit funds to hire lobbyists to promote more and better writing instruction). In any event, it will take a coordinated and substantive effort to make strong writing instruction a priority with policymakers at the local, state, and national levels. We need to create and take advantage of every "opportunity to call attention to the urgent need to improve writing" (Graham, Heller, Applebee, Olson, & Collins, 2013, p. 16).

If a policymaker is directly involved in creating the actual vision for teaching writing at the local, state, or national level, then greater know-how about writing is needed. One way to ensure that the needed know-how is available when such work takes place is to include representation from professional organizations focused on writing, teachers and school administrators knowledgeable about teaching writing, and scholars of writing and writing instruction. The direct participation of these parties in the vision-crafting process will provide policymakers with external pools of

knowledge about writing, increasing the likelihood they create a vision for writing instruction that is well-informed and viewed as acceptable by those charged with enacting it. Regardless, it is critical that state and district academic standards assign clear, coherent, and realistic responsibilities for writing instruction in all subject areas. Moreover, policymakers need to identify levers for encouraging schools and teachers in each discipline to take responsibility for teaching writing.

Teachers and School Administrators

Those who teach writing and reading, or use writing to support learning need to be knowledgeable about writing, its development, and writing instruction. They also need to learn how to apply this knowledge to create, enact, sustain, and modify (as needed) a vision for teaching writing in their particular class and context that is reasonably consistent with any school, district, state, or national goals that are applicable to their situation and context. Such knowledge is needed by virtually every teacher in a school (if not all), as writing can facilitate reading and content learning (Bangert-Drowns et al., 2004; Graham & Hebert, 2011). School principals, and to a lesser degree district administrators, also need to acquire the same types of knowledge and expertise. However, instead of learning how to implement the constructed vision in a classroom (although such knowledge would be advantageous), they need to learn how to successfully shepherd it through a school or district, respectively. To illustrate, principals who have strong knowledge and beliefs about effective writing practices act in ways that help teachers do their best work (McGhee & Lew, 2007).

A traditional partner in preparing teachers (and school administrators) are universities. As noted earlier, these programs are not viewed positively by a majority of their clientele. As an example, 76% of third- and fourth-grade teachers in Brindle et al. (2016) rated their college preparation as inadequate and indicated that they were less prepared to teach writing than any other subject. Only 17% of teachers took at least one writing course, 68% took one or two courses that included some writing instructional content, and just 20% taught writing as part of their field experience. Furthermore, faculty focused on literacy instruction in universities (the ones who are most likely to teach writing know-how) report that there is a lack of time for writing in their educational programs, and they are only moderately positive about their success in teaching writing to preservice teachers (Myers et al., 2016). While there are clearly some universities that do a good job of preparing students to teach writing, this is not typically the case, making them an unreliable partner in changing classroom writing practices. This situation cannot be easily changed, and it requires both bottom-up and top-down approaches if change is to occur broadly, with faculty interested in writing constantly pushing for greater emphasis on methods for teaching writing in their programs, as well as changes in state certifications that require universities to place greater emphasis on teaching writing.

This situation places much of the load on school districts for ensuring that teachers and school administrators acquire the needed writing know-how. Changing

teaching practices in writing will require a systematic and extended effort on the part of schools and school districts. This can be facilitated with greater funding from state and national governments, which accentuates the need to lobby these entities by all parties interested in improving writing instruction. The good news is that principles for providing high-quality and effective professional development (PD) are available (e.g., Ball & Cohen, 1999; Darling-Hammond & Bransford, 2005), and a small but growing body of research demonstrates that basing PD on these principles can change teachers' writing practices and improve students' writing performance (e.g., Gallagher, Arshan, & Woodworth, 2017; Harris et al., 2012; Wolbers, Dostal, Skerrit, & Stephenson, 2017). The elements of such PD for writing are described below. The identified principles address both system-level and classroom change.

- Redesign the school schedule so that there is adequate time for PD and ongoing learning efforts by teachers and principals.
- Ensure that PD aligns with the district's learning standards and vision for teaching writing (strong alignment with the school's and teachers' visions is highly preferred).
- Design PD to improve writing instruction within and across grades as well as to support reading and learning, providing a set of shared expectations among teachers and administrators.
- Ensure that writing PD complements other ongoing reform efforts.
- Conduct needs assessments to determine content and the pedagogical needs of teachers and principals as well as the characteristics, strengths, and needs of students (paying special attention to students who may be most vulnerable). Such assessments can involve input from parents and students.
- Pay particular attention to the needs of new teachers or teachers new to the school system.
- Seek active participation from teachers and principals in designing and delivering PD.
- Focus PD on changing classroom practices to ultimately promote students' growth as writers, increase the value students place on writing, and improve their ability to use writing flexibly for different purposes.
- Deliver PD that is intensive and sustained over time.
- Create a trusting and respectful PD environment for teachers and principals, where they can freely voice their opinion, collaborate, take risks, reflect, question, engage in discourse around the targeted instructional practices, and solve problems.
- Provide teachers and principals the opportunity to see and analyze the methods to be learned, engage in active and deliberate practice with feedback to apply these methods while learning, and receive long-term support and feedback as they are applied in class or school.
- Use the same instructional materials during PD that are to be applied in the classroom.

- Use technological tools to support PD, such as podcasts, blogs, or digital spaces where teachers or principals can share their successes and seek assistance.
- Collect data on whether the instructional practices presented in PD achieve the intended effects; readjust and modify as needed.

Another avenue for advancing writing instruction know-how for teachers and school administrators involves their own personal efforts. For example, many teachers are positive about their own efforts to become better-prepared writing teachers (e.g., Gilbert & Graham, 2010). This path to stronger competence should be encouraged and rewarded. One way of doing this is to provide school time for principals and teachers to share new ideas and skills learned through personal activities like reading professional material, attending conferences, observing colleagues, and so forth. School personnel can be encouraged to create learning communities where they meet and share new ideas. This can be done in person, online, or both. Teachers and principals can coach one another (Kraft, Blazar, & Hogan, 2018). These kinds of activities should enhance teaching skills, efficacy, and attitudes toward teaching writing.

School personnel can also improve writing knowledge and skills by taking advantage of services offered by professional organizations, the most notable of which is the NWP (https://www.nwp.org/). It has sites in every state in the United States and provides services through summer institutes and ongoing, school-based in-service programs. A notable feature of the NWP is that it emphasizes teachers teaching teachers. Other professional organizations, like NCTE and ILA, offer a range of resources for teaching writing, such as conferences, books, research and teacher-oriented journals, and position papers. While such organizations provide invaluable services to teachers and schools, they reach a relatively small proportion of teachers in schools. There is a need for a professional organization in writing that reaches even more teachers.

Teachers and school administrators can also benefit from programs that offer one or more forms of in-service for teaching writing. For instance, two organizations, SRSD Online and thinkSRSD, offer programs on how to implement self-regulated strategy development (Harris, Graham, Mason, & Freidlander, 2008), an evidence-based practice that has been scientifically tested in more than 100 investigations and shown to be effective with a broad range of students (Graham, Harris, & McKeown, 2013). There are a variety of such programs available, with some focusing on digital writing tools and others that provide in-service centered on specific materials or methods (Calkins, 2014). Those who use such programs need to apply due diligence, making sure that the program selected is a good match to their vision for teaching writing and there is solid evidence (not testimonials) that they work.

Another avenue for changing writing practices is university and school partnerships. To illustrate, West and Saine (2016) described a project where secondary students received writing feedback from virtual writing mentors who were preservice teacher candidates. There are many forms that such partnerships can take, ranging

from tightly focused partnerships such as the one above to ones aimed at broadly changing how writing is taught. Such partnerships can potentially provide a useful and collaborative means for improving writing instruction.

Society at Large

I have repeatedly noted that the public needs to value writing if efforts to change writing practices are to be successful. This includes knowing that writing is important, it needs to be taught, schools must devote time to teaching it, and many students do not acquire the needed writing skills. For parents of school-age children, it is also beneficial if they know the value of sharing their writing with their children, demonstrating a positive attitude toward writing, acting as a positive and constructive sounding board for their children's writing, and serving as both partner and instructor (when appropriate) in the child's journey as a writer. The more people acquire such knowledge, the more likely the public will view writing as valuable and indispensable, demanding and supporting both local and broader efforts to improve writing instruction in schools.

As noted earlier, public campaigns designed to inform policymakers and the public about the importance of writing is one way of increasing society's relevant know-how. Such endeavors are likely to be most successful when they combine a variety of different formats: television and radio advertisements, print and online materials, and local forums. Teachers and school administrators are another important source for increasing the public's knowledge about writing. Schools should make sure that parents know why writing is critical and how they can help their children become better writers. This can include bringing some aspect of school writing instruction into the home (e.g., asking parents to read and respond positively to what their children write) or some aspect of writing at home into the school (e.g., asking students to share at school something written at home).

Other potential sources of information about writing and its importance are parent organizations concerned with some aspect of education or child development. For example, the Learning Disabilities Association provides parents with information about the importance of reading and writing, the challenges faced by students who have difficulty mastering these literacy skills, and the consequences of not doing so (https://ldaamerica.org/parents/). I am not familiar with any similar parent organization focused on writing, but the creation of such groups would enhance public knowledge about writing and its importance.

FUTURE DIRECTIONS

Changing classroom writing practices on a broad scale as advocated here is a formidable challenge. It requires that relevant stakeholders pull together in their efforts rather than work at cross-purposes. This necessitates keeping an open mind about different approaches to teaching writing, views on how it develops, and ways to promote better classroom instruction. This may be more of an obstacle for scholars in

writing (e.g., Prior, 2017) than for school personnel, as teachers have demonstrated a capacity to be flexible in their orientation to teaching writing (Brindle et al., 2016; Graham, Harris, Fink, & MacArthur, 2002).

As the field of writing and its many supporters move toward the future, it is essential to realize that all changes leading to better writing instruction, no matter how small, are a move toward the goal of changing classroom practices broadly. As a result, the efforts of individual teachers contribute significantly to the more collective efforts of groups of teachers, schools, school districts, states, nations, and so forth.

It is relatively easy to envision how one or more entities (e.g., teacher, school, or school district) might take up the ideas presented here to change and improve writing instruction. The real challenge is how to put into action the forces needed to develop and successfully implement a coherent, well-constructed, and consistent vision of writing instruction that cuts across multiple levels (moving from national goals to teacher goals, or vice versa). While I offer a set of ideas and recommendations for accomplishing this task, many different parties would need to step forward to accomplish this objective. Other approaches for broadly changing writing classroom practices are also possible, and I am hopeful that my ideas serve as a springboard for action on the part of many different stakeholders as well as the development of even better recommendations for improving classroom writing instruction.

Future efforts to improve writing instruction will emanate from multiple sources, ranging from more organic actions that emerge at the grassroots level to highly systematic and planned actions undertaken by organizations and governments. Scholars need to study these efforts to determine if and how writing practices in the classroom are changed. Moreover, complex problems like learning to write are not just the responsibility of schools (Harris, 2018), as there are many aspects of writing acquired outside school in a variety of writing communities (Graham, 2018b). We need to develop a science that integrates in-school and out-of-school learning so that we take a broader, systems approach to the study of writing, the acquisition of writing skills, and the promotion of writing instruction.

For the particular set of ideas and actions recommended in this chapter, research is needed to expand what is known about writing and its acquisition. While significant strides toward understanding writing, in and out of school, were made in the past 50 years (see MacArthur, Graham, & Fitzgerald, 2016), this knowledge is incomplete. Furthermore, we know virtually nothing about how teachers, school administrators, and policymakers construct their visions for writing; the types of knowledge needed to do so; and how to put the resulting plans into action. Moving forward, it is critical to understand these processes so that such efforts can be better facilitated and evaluated.

Last, there is a need to test new as well as old methods for helping relevant stakeholders acquire the needed writing know-how. For instance, we are not well-informed about how to provide PD effectively at scale. Just as worrying, practitioners generally view their college preparation of teaching writing as inadequate (e.g., Kiuhara et al., 2009). We need to explore how to change this so that colleges

can become a reliable and trusted partner in improving writing instruction in the future.

NOTE

[1] A table summarizing these studies is available from the author: steve.graham@asu.edu.

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