

10-3-2019

Secondary Teachers' Beliefs About Teaching Writing to Typically Achieving and Struggling Adolescent Writers

Apryl L. Poch

Morgan Hamby

Xiaohan Chen

Follow this and additional works at: <https://digitalcommons.unomaha.edu/spedfacpub>



Part of the [Special Education and Teaching Commons](#)

Please take our feedback survey at: https://unomaha.az1.qualtrics.com/jfe/form/SV_8cchtFmpDyGfBLE

Secondary Teachers' Beliefs About Teaching Writing to Typically Achieving and Struggling Adolescent Writers

Apryl L. Poch, Morgan Hamby, and Xiaohan Chen

Duquesne University, Pittsburgh, PA, USA

To cite this article: Apryl L. Poch, Morgan Hamby & Xiaohan Chen (2020) Secondary Teachers' Beliefs About Teaching Writing to Typically Achieving and Struggling Adolescent Writers, *Reading & Writing Quarterly*, 36:6, 497-520, DOI: <https://doi.org/10.1080/10573569.2019.1666759>

ABSTRACT

Writing is a critical component of many secondary classrooms, but little is known about teachers' beliefs and assumptions surrounding their teaching of writing at the secondary level (particularly including the beliefs of special educators) and teaching writing to students with disabilities. Yet, teachers' beliefs impact their own perceptions and judgments, which can then affect their behavior (i.e., instructional decisions) within their classrooms. The purpose of this study was to describe middle and high school general and special educators' beliefs about writing. Results of this study demonstrated that secondary teachers (a) felt somewhat self-efficacious about teaching writing and somewhat less self-efficacious about effecting change in students' writing, (b) moderately emphasized explicitly teaching writing, (c) were less likely to make adaptations for struggling writers across several writing practices, and (d) placed less emphasis on teaching basic transcription skills. Although limitations related to sample size preclude further disaggregated analyses, this study offers an early examination of teachers' writing beliefs across several content domains. Changing writing practices in secondary classrooms will necessitate instructional methods that are individualized to meet students' needs as well as a personal examination of one's own beliefs to ensure that what one believes is not inhibiting the delivery of effective instructional writing practices.

Introduction

Writing is a critical component of many secondary classrooms. However, the writing performance of secondary students nationally is disappointing, particularly for students with disabilities (SWDs). According to the National Assessment of Educational Progress, 97% of 8th graders and 95% of 12th graders with disabilities (excluding those with a 504 plan) scored at or below basic compared to 71% for students without disabilities at each grade level (National Center for Education Statistics, 2014). Perhaps because of these startling statistics, considering what teachers understand and believe about writing across the secondary grades—including their sense of self-efficacy and the types of writing practices that they emphasize in their instruction—is critically important.

The importance of writing for secondary students

Over about the last 20 years, reoccurring calls for a focus on writing have been issued (e.g., National Commission on Writing in America's Schools & Colleges, 2003; National Governor's Association & State Education Chiefs, 2010; National Center for Education Research (NCER) and National Center for Special Education Research (NCSER), Institute of Education Sciences (IES), 2017), including more recent recognition from the NCER and NCSER within IES (2017) to address the writing needs of secondary students. Once viewed as the *neglected R* (National Commission on Writing in America's Schools & Colleges, 2003), writing plays a critical role in not only academic success but also postsecondary and life success. In school, weaker writing skills are typically linked to retention, failure, increased risk of school dropout, and reduced opportunities for attending college (Graham & Perin, 2007). Outside of school, the need to write effectively is an essential skill in the majority of fields, seen as critical by professionals and employers alike, and can inhibit postsecondary and employment opportunities, with American businesses spending billions of dollars annually to remediate employers' writing skills (National Commission on Writing for America's Families, Schools, & Colleges, 2004).

Moreover, writing instruction across the content areas is not widely

researched, and many teachers do not feel that they have been adequately prepared to teach writing (Gillespie, Graham, Kiuahara, & Hebert, 2014; Kiuahara, Graham, & Hawken, 2009). Recent national surveys of high school and middle school teachers in the four core content areas (i.e., English language arts, social studies, science, and mathematics) have revealed that most teachers receive minimal or no formal training in teaching writing (Gillespie et al., 2014; Graham, Capizzi, Harris, Hebert, & Morphy, 2014; Kiuahara et al., 2009). At the high school level, 71% of all teachers reported minimal to no preparation during college (i.e., pre-service preparation) on teaching writing (Kiuahara et al., 2009). For middle school teachers, 48% indicated minimal and 16% indicated no preparation during college (whether this was also pre-service preparation was not defined by the authors; Graham et al., 2014). Similar trends were also reported for in-service preparation in writing—44% of high school teachers reported little support for teaching writing (Kiuahara et al., 2009), and 40% and 4% of middle school teachers reported minimal or no in-service preparation, respectively (Graham et al., 2014). The percentage of teachers reporting adequate or extensive writing preparation during pre-service programs is also very small across both studies (27% and 9%, respectively, of middle school teachers, and 47% of high school teachers reporting adequate pre-service preparation within their content area or discipline; Graham et al., 2014; Kiuahara et al., 2009). These numbers are similar for middle school teachers who report their in-service preparation in writing as adequate (41%) or extensive (14%; Graham et al., 2014), whereas 58% of high school teachers report their in-service preparation to teach writing within their content area or discipline as adequate (Kiuahara et al., 2009).

While current practice and belief suggests that adolescents are assumed to have mastered writing and the writing process so as not to require instruction in writing past the elementary grades, it equally seems that current practice and belief suggest that secondary teachers are foremost content experts rather than writing experts. Such assumptions erroneously discredit the role of writing across the secondary content areas and potentially positions secondary educators to overlook the importance of teaching writing within their content domain. However,

understanding teachers' beliefs about writing is not readily researched (as discussed below), necessitating a more current update and expansion of the existing literature. The lack of information makes it difficult to determine what educators know, feel, and are able to do to reach the varied writing needs of the students that they work with daily.

Social cognitive and cognitive underpinnings of learning and writing

To better understand teachers' beliefs, this study draws from two theoretical frameworks—Bandura's social cognitive theory and Graham's Writer(s)-Within-Community model of writing. Bandura's social cognitive theory is rooted in human agency. And, foundational to human agency is the belief of personal efficacy. As Bandura acknowledges, individuals are not incentivized to act unless they believe that they can produce desired—rather than undesired—actions (Bandura, 2000). Consequently, it would seem that self-efficacy beliefs are agentive (Bandura, 1982), influencing the actions one might take as a result of whether he/she believes that he/she can produce a desired outcome. Thus, for teachers, self-efficacy beliefs about writing would influence what instructional practices one might engage in depending on whether he/she thinks that he/she can elicit change in students. Because teachers serve as models when teaching writing, they are not only teaching their students but also building their own self-efficacy for effecting change in the classroom (Schunk, 2012). In doing so, they simultaneously contribute to building a writing community. As Graham (2018) states, the premise behind his Writer(s)-Within-Community model “is that the community in which writing takes place and the cognitive capabilities and resources of those who create writing, simultaneously shape and constrain the creation of written text” (pp. 272–273). Because writing takes place in classrooms, classrooms assume the role of a writing community. However, because teachers come to those classrooms with varying degrees of writing knowledge and self-efficacy within their given content domain, the *tools* (e.g., pen, paper, digital and electronic writing and planning tools) and the *actions* (e.g., typical practices) that they use or are willing to use can vary, influencing the *writing goals* that are set and the *written products* that are produced.

These four components—tools, actions, writing goals, and written products—are at the core of Graham’s (2018) model and depend upon “multiple interacting features of the writing community including its purposes, members, physical/social environment, and collective history” (p. 280).

To this writing community, individuals also bring a set of cognitive resources, of which Graham (2018) identifies beliefs as a component of long-term memory resources. Specifically, he identifies six broad sets of beliefs that can both help and hinder the process of writing: (a) judgments about the value and utility of writing, (b) personal competence as writers, (c) judgments about why one engages in writing, (d) judgments about why one is or is not successful in writing, (e) beliefs about one’s personal identity as a writer, and (f) beliefs about the writing community itself (e.g., its success, its value, one’s place within the community, the climate of the classroom/ community, personal interactions, and why the community engages in certain writing practices; pp. 292–294). As a contributing and evaluative member of this community of writers, teachers’ beliefs about writing and their personal beliefs about their own abilities influence the role writing plays within their instructional practices.

The role of teacher self-efficacy in teaching writing

As Pajares (1992) has noted, few would disagree that teachers’ beliefs impact their own perceptions and judgments, which can then affect their behavior (i.e., instructional decisions) within their classrooms. Moreover, teacher practice and instruction are directly related to an individual teacher’s self-efficacy beliefs and his/her beliefs or theories about instruction. These beliefs can also impact student learning and the quality and type of activities/practices that teachers implement in the classroom (Graham, Harris, MacArthur, & Fink, 2002; Tschannen-Moran & Chen, 2014). Teachers’ self-efficacy beliefs (i.e., their confidence in effecting student learning) have been powerfully linked to both teacher practice and student outcome (Graham, Harris, Fink, & MacArthur, 2001; Tschannen-Moran, Hoy, & Hoy, 1998; Tschannen-Moran & Barr, 2004). Teachers with a stronger sense of self-efficacy are more likely to be willing to try different practices to support student learning, are

typically better organized, plan more, provide higher quality instruction, attend longer to students who are struggling, are less critical of students when they make errors, and are less likely to refer students for special education services (Allinder, 1994; Gibson & Dembo, 1984; Graham et al., 2001).

The role of theoretical orientations in teaching writing

Beyond self-efficacy, teachers' theoretical orientations—the beliefs and assumptions that teachers hold about teaching and learning—have been suggested to have important implications for teaching literacy and writing (Fitzgerald, 1993, 1999; Graham et al., 2002; Lipson, Mosenthal, Daniels, & Woodside-Jiron, 2000; Troia, Lin, Cohen, & Monroe, 2011). That is, teachers' beliefs about how writing should be taught and learned influence the ways in which they teach writing (Cunningham & Fitzgerald, 1996). Perhaps one of the most controversial and paradigmatic shifts in writing instruction is the juxtaposition between explicit and systematic approaches to teaching writing and a more natural approach captured frequently by a writer's workshop model that emphasizes writing as a process. This underlying contention in approach to writing instruction dates back to the early 20th century. However, despite a recent reliance on process approaches to writing instruction (Kiuvara et al., 2009), Langer (2001) found that the most successful English teachers use a combination of explicit isolated skill instruction, application and practice, and integrated practice of skills and knowledge in embedded activities. Troia and Maddox (2004) also found that middle school general and special educators valued a balanced approach to writing instruction, but they were unsure as to how such an approach might be accomplished when “teaching lower level writing skills and higher level composing strategies within a process-oriented framework” (abstract). They identified several challenges to delivering effective writing instruction: (a) expansive subject content, (b) large class sizes, (c) variation in students' abilities, (d) decreased student motivation, (e) meeting the needs of SWDs within general education class-rooms, and (f) ineffective district-mandated writing curriculum. Similar findings of teachers integrating both explicit skills and natural approaches to writing have been

reported at the elementary level (Pressley, Rankin, & Yokoi, 1996). Process approaches to writing also do not always result in more positive motivational beliefs about writing (Honeycutt & Pritchard, 2005; Troia, Lin, Monroe, & Cohen, 2009), although process approaches like the writer's workshop have been associated with improved writing quality for students in general education classes (Graham & Perin, 2007; Graham & Sandmel, 2011). Despite the limited research examining teachers' theoretical orientations (Graham et al., 2002), teachers' views about the different approaches to teaching writing are linked to the classroom and instructional writing practices that they implement with their students, as well as their self-efficacy beliefs.

The role of instructional practices and adaptations in teaching writing

Basic writing skills have been a tenet of elementary classrooms, whereas text generation and organization have been more critical to secondary classrooms. Graham, Harris, Fink-Chorzempa, and MacArthur (2003) noted that the majority of primary teachers emphasized basic writing skills at least several times a week, whereas several text writing processes were only emphasized weekly or less. Middle school special educators have also emphasized basic transcription skills over text generation and organization for their SWDs (Troia & Maddox, 2004), despite that general secondary instruction is often more concerned with text generation and organization as higher-order writing processes.

Teachers must also ensure that their instruction is responsive to students' individual and unique needs. Individualizing instruction is particularly critical for students who are struggling in writing and for students who receive specially designed instruction as stipulated by their individualized education plans. While adapting instruction is an important teaching technique, limited empirical data are available on the different types of adaptations that teachers make (Graham et al., 2003). Where data are available, outstanding literacy teachers report providing more intensive and individualized supports for basic writing skills (e.g., decoding), which oftentimes are not addressed within the secondary grades (Pressley, Yokoi, Rankin, Wharton-McDonald, & Mistretta, 1997; Pressley et al.,

1996; Rankin-Erickson & Pressley, 2000). However, other researchers have found that K–12 teachers make few if any adaptations for struggling students in general education classrooms (Baker & Zigmond, 1990; Fuchs & Fuchs, 1998; McIntosh, Vaughn, Schumm, Haager, & Lee, 1993). More recently, Graham et al. (2014) found that while more than half of middle school teachers responding to their survey employ a number of adaptations for struggling writers at least every two months, the majority of teachers reported only using one adaptation at least weekly (i.e., *extra encouragement*) and one adaptation at least monthly (i.e., *extra time to complete writing assignments*). Further, the majority of teachers rarely provided supports in spelling and revising. At the high school level, Kiuvara et al. (2009) found that language arts teachers made more adaptations than science and social studies teachers. Additionally, most adaptations occurred infrequently. Only the adaptations *increase writing about what was read* and *extra instruction on text organization* were used by the majority of teachers at least once or twice a month. Interestingly, 73% to 87% of teachers never made the adaptations *increase publishing or writing* and *extra handwriting instruction*.

Purpose

The purpose of this study was to describe middle and high school general and special educators' beliefs about writing using three scales developed by Graham and colleagues (see Graham et al., 2001, 2002, 2003)—one on self-efficacy beliefs, one on theoretical orientations, and one on writing practices and adaptations. While Graham and colleagues (Graham et al., 2001, 2002, 2003) sought to provide an early 2000s perspective on primary grade teachers' beliefs about writing, little is currently known about secondary teachers' beliefs and assumptions surrounding the teaching of writing (particularly including the beliefs of special educators) and teaching writing to SWDs (Graham et al., 2002; Pajares, 1992; Troia & Graham, 2017; Troia & Maddox, 2004), making this an important area for continued research. Moreover, because Graham and colleagues had updated previous scales, all specific to the act of writing, this study sought to provide greater evidence for the scales across the secondary grade levels.

Working from existing scales is preferred so as to grow the research supporting their sensitivity to working with other populations than it is to start with the creation of a new scale. Furthermore, although designed for primary grade teachers, these surveys are well known in the special education research, are specific to just writing rather than the larger construct of literacy, and could be used independently without collecting subsequent teacher- or student-level data (though such data would be of benefit to confirm teachers' self-reported beliefs). The following research questions were examined: (a) How self-efficacious do secondary teachers feel about teaching writing to their middle and high school students? (b) What are teachers' beliefs about the role of correctness, explicit instruction, and natural learning in the teaching of writing? (c) What writing practices did teachers emphasize in their instruction? (d) Do statistically significant differences exist on factor scores for the self-efficacy, writing orientation, and teaching writing scales across participants who provided demographic data, the state in which a teacher teaches, or on time of data collection? (e) How do teachers' writing instruction practices vary between average and struggling writers? (f) What other adaptations to writing instruction do secondary teachers make for struggling writers?

Methods

Sampling procedures

In the summer and early fall of 2016, superintendents across six school districts in the Midwest and Northeast United States were contacted (via phone and e-mail) to obtain permission to distribute a survey to middle and high school content and special education teachers. Content teachers were defined as communication arts/English language arts, math, social studies, science, and foreign/world language teachers. If permission was granted, an e-mail was sent to the superintendent or another identified district employee (e.g., building principal, Coordinator for Social Studies and Secondary Language Arts) describing the survey and the research study along with an online link to the survey to be forwarded to teachers. Representatives from three of the districts agreed to distribute the initial e-mail and two follow-up e-mails containing the survey link to their teachers once a month from

October through December. The survey link remained active for four months.

District representatives were asked to provide the number of teachers in their district who received the survey link. It was during this time that the lead author learned that two of the district representatives also sent the survey to other members of their faculty (e.g., intervention teachers). Representatives in these three districts distributed the survey to 277 middle school teachers and 331 high school teachers (see Table 1). Eighty-six total responses were received; twenty-eight were eliminated from analysis because they were either blank or they did not contain at least one completed scale. This left 58 useable responses. Thus, of received responses (regardless of completion level), a response rate of 14.14% was calculated.

In March of the same academic year, 18 additional school districts across the same Midwestern state were contacted via e-mail to obtain permission to distribute the same survey to their middle and high school content and special education teachers. The same procedures (described above) were followed. Two districts granted permission for participation. Representatives distributed the survey to 155 middle school and 175 high school teachers between March and May of the academic year (see Table 1). One of the schools also sent the survey to other members of their faculty (e.g., elective, intervention, and gifted teachers, as well as counselors and library personnel). Thirty-one total responses were received; eleven were eliminated from analysis because they were either blank or they did not contain at least one completed scale. This left 20 useable responses. Thus, of received responses (regardless of completion level), a response rate of 9.39% was calculated. For the complete study, combining data from both fall and spring administration of the survey, this left 78 useable responses. Of all received responses across both administration periods (regardless of completion level), a response rate of 12.47% was calculated. At both data collection periods, responses completed by other teachers or school faculty were retained if respondents had answered at least one complete scale as it was not possible to determine whether responses containing no demographic data were answered by a “content teacher” or special educator.

Participants

Partial or complete data were available from 78 teachers (or school personnel). However, completed demographic data were only available from 47 teachers. Participants described themselves as primarily female (66%), White or European American (89%), and between the ages of 30 and 39 (34%). More teachers taught in high schools (68%), and more teachers reported teaching in the Midwestern states (79%). Most participants had completed both bachelor's and master's degrees in their field (45%). More teachers identified as either 11th- or 12th-grade teachers (51% equally) or communication arts/English language arts teachers (36%). Slightly more than one-third of teachers (36%) reported class sizes between 21 and 30 students. Moreover, teachers stated that they had between one and five SWDs (57%) and between one and five English language learners (ELLs; 62%) in their classrooms. Teachers had been teaching between one and 28 years and had been teaching in the secondary grades between one and 26 years. The complete demographic table is available in Table 2.

Additionally, teachers slightly agreed that they had received adequate pre-service preparation in teaching writing ($M = 3.17$, $SD = 1.48$). Approximately 62% of the subgroup of teachers providing demographic information slightly to strongly agreed that their pre-service training was adequate. When evaluating their in-service preparation in writing, teachers moderately agreed that their training was adequate ($M = 2.94$, $SD = 1.57$). Approximately 66% of the subgroup of teachers providing demographic information slightly to strongly agreed that their in-service preparation in teaching writing was adequate.

Setting

The first participating school district was located in a mid-sized Midwestern city, included six middle and four high schools (including one alternative high school), and had a total enrollment of 17,383 students with 41.8% and 35.3% of students at the middle and high school levels qualifying for a free or reduced-price lunch. At the two levels, 3.8% and 3.0% qualified as ELLs, and 10.5% and 9.3% qualified for special education services, respectively. The second and third districts

Table 1. Counts by school.

Teacher	Middle school (grades 6-8)					High school (grades 9-12)				
	Fall School 1	Fall School 2	Fall School 3	Spring School 1	Spring School 2	Fall School 1	Fall School 2	Fall School 3	Spring School 1	Spring School 2
English Language Arts	48	5	3	16	6	55	5	4	22	5
Mathematics	37	5	3	16	6	48	5	4	18	5
Social Studies	38	3	3	16	5	45	5	4	18	5
Science	46	3	3	16	5	48	7	4	18	5
Foreign/World Language	24	3	2	6		36	3	2	13	3
Special Educators	37	3	4	14	5	40	5	5	18	8
Other (please specify)		4 (2 ELA, 2 Math AIS)	3	PE = 5; Electives = 23; Counselors = 2; Library = 2; Intervention = 8; Gifted = 4				6	37 (Music/ Art/PE/ Academy/ Engineering)	
SCHOOL TOTAL	230	26	21	128	27	272	30	29	144	31
MS/HS TOTAL			432					506		
GRAND TOTAL					938					

Note. ELA = English Language Arts; AIS = Academic Intervention Services; PE = Physical Education; MS = Middle School; HS = High School.

Table 2. Available respondent demographics across schools by state and time of data collection.

Description	Fall School 1 (<i>n</i> = 24) <i>n</i> (%)	Fall Schools 2 and 3 (<i>n</i> = 10) <i>n</i> (%)	Spring Schools 1 and 2 (<i>n</i> = 13) <i>n</i> (%)	Total (<i>n</i> = 47) <i>n</i> (%)
Gender				
Male	7 (29.17)	3 (30.00)	6 (46.15)	16 (34.04)
Female	17 (70.83)	7 (70.00)	7 (53.85)	31 (65.96)
Race/Ethnicity				
Asian American/Pacific Islander	–	1 (10.00)	1 (7.69)	2 (4.26)
Hispanic/Latino(a) American	1 (4.17)	–	–	1 (2.13)
White/European American	21 (87.50)	9 (90.00)	12 (92.31)	42 (89.36)
Other	2 (8.33)	–	–	2 (4.26)
Age				
20–29 years	3 (12.50)	1 (10.00)	3 (23.08)	7 (14.89)
30–39 years	8 (33.33)	5 (50.00)	3 (23.08)	16 (34.04)
40–49 years	6 (25.00)	4 (40.00)	3 (23.08)	13 (27.66)
50–59 years	6 (25.00)	–	4 (30.77)	10 (21.28)
60+ years	1 (4.17)	–	–	1 (2.13)
Building Type				
Middle School	7 (29.17)	3 (30.00)	5 (38.46)	15 (31.91)
High School	17 (70.83)	7 (70.00)	8 (61.54)	32 (68.09)
Degree^a				
Associate	1 (4.17)	3 (30.00)	1 (7.69)	5 (10.64)
Bachelor's	18 (75.00)	9 (90.00)	6 (46.15)	33 (70.21)
Master's	17 (70.83)	9 (90.00)	12 (92.31)	38 (80.85)
Grade^a				
6th	3 (12.50)	2 (20.00)	4 (30.77)	9 (19.15)
7th	4 (16.67)	2 (20.00)	4 (30.77)	10 (21.28)
8th	4 (16.67)	3 (30.00)	4 (30.77)	11 (23.40)
9th	12 (50.00)	5 (50.00)	5 (38.46)	22 (46.81)
10th	11 (45.83)	4 (40.00)	5 (38.46)	20 (42.55)
11th	13 (54.17)	6 (60.00)	5 (38.46)	24 (51.06)
12th	14 (58.33)	5 (50.00)	5 (38.46)	24 (51.06)
Content^a				
Communication Arts/ELA	10 (41.67)	2 (20.00)	4 (30.77)	16 (34.04)
Mathematics	2 (8.33)	1 (10.00)	1 (7.69)	4 (8.51)
Science	3 (12.50)	–	1 (7.69)	4 (8.51)
Social Studies	8 (33.33)	2 (20.00)	3 (23.08)	13 (27.66)
Foreign/World Language	–	2 (20.00)	1 (7.69)	3 (6.38)
Special Education	7 (29.17)	4 (40.00)	1 (7.69)	12 (25.53)
Other	2 (8.33)	2 (20.00)	2 (15.38)	6 (12.77)
Average Class Size				
Fewer than 10 students	6 (25.00)	3 (30.00)	2 (15.38)	11 (23.40)
11–20 students	5 (20.83)	7 (70.00)	2 (15.38)	14 (29.79)
21–30 students	8 (33.33)	–	9 (69.23)	17 (36.17)
31–40 students	1 (4.17)	–	–	1 (2.13)
More than 40 students	4 (16.67)	–	–	4 (8.51)
Average Number of SWDs in Classes				
None	1 (4.17)	1 (10.00)	–	2 (4.26)
1–5 students	11 (45.83)	5 (50.00)	11 (84.62)	27 (57.45)
6–10 students	4 (16.67)	–	2 (15.38)	6 (12.77)
More than 10 students	2 (8.33)	–	–	2 (4.26)
Teach Special Education—all SWDs	6 (25.00)	4 (40.00)	–	10 (21.28)
Average ELLs in Classes				
None	5 (20.83)	9 (90.00)	1 (7.69)	15 (31.91)
1–5 students	16 (66.67)	1 (10.00)	12 (92.31)	29 (61.70)
6–10 students	2 (8.33)	–	–	2 (4.26)
More than 10 students	1 (4.17)	–	–	1 (2.13)

Note. ELA = English Language Arts; SWDs = Students With Disabilities; ELL = English Language Learners.

^aWill not sum to zero as teachers could have several degrees, and teach at a variety of grade level and in multiple content areas.

were located in rural areas in the Northeast United States. The second district contained one middle and one high school and had a total district enrollment of 1,708 students. One percent of students were identified as ELLs, 10% qualified as SWDs, 28% were eligible for a free lunch, and 7% were eligible for a reduced-price lunch. The third district contained one combined middle/high school building and had a total district enrollment of 857 students. No students qualified as ELLs, 17% qualified as SWDs, 42% were eligible for a free lunch, and 6% qualified for a reduced-price lunch. The fourth district was located in a mid-sized Midwestern city with two middle schools and one high school and a total district enrollment of 6,495 students during the 2016 school year. District-wide, 17.1% were eligible for a free/reduced-price lunch, 4.3% qualified as limited English proficient, and 12.9% qualified for special education. The fifth district was located in a rural Midwestern community with one middle school, one high school, and a career center. The district enrolled approximately 2,282 students during the 2016 school year with 58.3% and 43.4% of students qualifying for free/reduced price lunch at the middle and high school levels, respectively. District-wide, 3.8% qualified as limited English proficient and 9.3% qualified for special education.

Instrumentation

Middle and high school teachers completed three brief writing scales that were embedded within one electronic survey in Qualtrics. The survey was completely anonymous and the researcher did not receive access to teachers' e-mail addresses. Instead, Qualtrics randomly generated a unique ID for each respondent. Completion of the survey served as an acknowledgement of consent to participate in a research study. All university- and district-level requirements for conducting research with human subjects were followed and approved. Following the introductory "Dear Teacher" letter embedded in the electronic survey, participants were instructed, "As you begin, please keep in mind that any reference to the term 'student,' 'child,' or 'children' should be construed as an individual in grades 6–12."

The Teacher Efficacy Scale for Writing (Graham et al., 2001) is a 16-item

questionnaire on a 6-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire is specific to writing and originally modified from the work of Gibson and Dembo (1984) and Woolfolk and Hoy (1990). The 16 items exhibit factor loadings of .45 or higher on one of two factors: Personal Self-Efficacy and General Self-Efficacy (Graham et al., 2001). The scale includes items such as “When a student’s writing performance improves, it is usually because I found better ways of teaching that student” and “Even a good writing teacher may not reach many students.” All items are presented in Table 3.

The Writing Orientation Scale (Graham et al., 2001, 2002), based on earlier work by DeFord (1985) and Dreher (1990), is an 18-item questionnaire on a 6-point Likert scale ranging from strongly disagree to strongly agree. Internal consistency of the three factors (i.e., Correct Writing, Explicit Instruction, and Natural Learning) ranges from .60 to .70 (see Graham et al., 2001, 2002). Following a factor analysis, Graham et al. (2002) eliminated five items from the scale. For the purposes of this study, the original 18 items were administered, but eliminated items were not utilized when calculating mean factor scores. The scale includes items such as “Students need to meet frequently in small groups to react to and to critique each other’s writing” and “It is important to teach students strategies for planning and revising.” All items are presented in Table 4.

The Teaching Writing Scale (Graham et al., 2003) is a 19-item scale designed to assess how often teachers use common instructional practices when teaching writing to typically achieving writers and struggling writers and writers with disabilities. This questionnaire uses a 7-point Likert scale ranging from never to several times a day. Three items utilize a modified 7-point Likert scale where 1 = *never*, 4 = *half of the time*, and 7 = *always*. Following a factor analysis, Graham et al. (2001) eliminated 9 items from the scale, leaving 10 items representing four factors (i.e., Teaching Spelling, Teaching Grammar and Usage, Teaching Writing Processes, and Students Working Together). The 10 retained items across the four factors accounted for 41% of the total variance and the eigenvalues of all factors were >1.0 (Graham et al., 2001). These 10 items also had factor loadings of at least .40, loaded only on one factor, and exhibited good conceptual fit with the other

Table 3. Teacher efficacy scale for writing.

Item	Fall Schools (<i>n</i> = 58)		Spring Schools (<i>n</i> = 20)		All Schools (<i>n</i> = 78)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. When a student's writing performance improves, it is usually because I found better ways of teaching that student.	4.43	0.70	4.80	0.62	4.53	0.70
2. Even a good writing teacher may not reach many students.	3.38	1.42	3.25	1.33	3.35	1.39
3. If a student did not remember what I taught in a previous writing lesson, I would know how to increase his/her retention in the next lesson.	4.43	0.88	4.05	1.10	4.33	0.95
4. The hours in my class have little influence on students' writing performance compared to the influence of their home environment.	4.19	1.23	3.90	1.37	4.12	1.27
5. If a student masters a new writing concept quickly, this is because I knew the necessary steps in teaching the concept.	3.91	0.90	4.30	0.66	4.01	0.86
6. If I try really hard, I can help students with the most difficult writing problems.	4.64	1.10	4.75	1.07	4.67	1.09
7. When a student does better than usual in writing, it is because I exerted extra effort.	3.55	0.98	4.10	0.72	3.69	0.94
8. If students are not disciplined at home, they are not likely to accept any discipline during the writing period.	3.53	1.44	3.65	1.69	3.56	1.50
9. When a student is having difficulty with a writing assignment, I would have no trouble adjusting it to his/her level.	4.74	1.31	4.45	1.19	4.67	1.28
10. The influence of a student's home experience on writing can be overcome by good teaching.	4.34	1.02	4.10	1.07	4.28	1.03
11. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her writing achievement.	3.88	1.17	3.90	1.17	3.88	1.16
12. If one of my students could not do a writing assignment, I would be able to assess accurately if the assignment was at the correct level of difficulty.	4.53	0.94	4.65	0.88	4.56	0.92
13. The amount a student can learn in writing is primarily related to family background.	4.67	1.16	4.20	1.20	4.55	1.18
14. If a student becomes disruptive and noisy during writing time, I feel assured that I know some techniques to redirect him/her quickly.	4.98	0.89	5.00	0.80	4.99	0.86
15. When students' writing performance improves, it is usually because I found more effective teaching approaches.	4.31	0.73	4.50	0.61	4.36	0.70
16. If parents would do more in writing with their children, I could do more.	2.97	1.11	2.65	1.09	2.88	1.11

Note. All items worded in a negative manner (items 2, 4, 8, 11, 13, and 16) were recoded (i.e., 1 = 6, 2 = 5, etc.) so that a higher score represented a more positive sense of efficacy. These are the same items that Graham et al. (2001) found loaded higher on the General Efficacy factor.

Table 4. Writing orientation scale.

Item	Fall Schools (n = 51)		Spring Schools (n = 18)		All Schools (n = 69)	
	M	SD	M	SD	M	SD
1. A good way to begin writing instruction is to have students copy good models of each particular type of writing. ^{CW}	3.76	1.37	3.94	1.16	3.81	1.31
2. Instead of regular grammar lessons, it is best to teach grammar when a specific need for it emerges in a student's writing. ^{NL}	3.88	1.56	3.61	1.20	3.81	1.47
3. Students need to meet frequently in small groups to react to and critique each other's writing. ^{NL}	4.45	1.05	4.94	0.73	4.58	0.99
4. The act of composing is more important than the written work children produce. ^{NL}	3.86	1.20	3.78	1.22	3.84	1.20
5. Before students begin a writing task, teachers should remind them to use correct spelling. ^{CW}	3.35	1.47	3.94	1.35	3.51	1.45
6. With practice writing and responding to written messages, students will gradually learn the conventions of adult writing. ^{NL}	4.43	1.10	4.78	0.88	4.52	1.05
7. Being able to label words according to grammatical function (e.g., nouns, verbs) is useful in proficient writing. ^{CW}	4.02	1.16	4.17	1.38	4.06	1.21
8. It is important for students to study words in order to learn their spelling. ^{EI}	4.45	0.76	4.39	1.24	4.43	0.90
9. It is a good practice to let students write in their own dialect without correcting it for conventional English.	3.12	1.29	2.78	1.40	3.03	1.32
10. Formal instruction in writing is necessary to ensure the adequate development of all the skills used in writing. ^{EI}	4.90	0.90	4.83	1.10	4.88	0.95
11. Students need to practice writing letters to learn how to form them correctly. ^{EI}	4.94	0.83	4.50	1.25	4.83	0.97
12. Student's initial attempts to write should focus on content or meaning, not on mechanics or form.	4.90	1.06	3.78	1.56	4.61	1.30
13. Teachers should aim at producing writers who can write good compositions in one draft. ^{CW}	2.47	1.14	2.44	1.04	2.46	1.11
14. Rather than spelling words for students during a writing session, a teacher should encourage students to spell words the best they can.	4.04	1.23	3.61	0.85	3.93	1.16
15. Before they begin a writing task, students who speak a nonstandard dialect of English should be reminded to use correct English. ^{CW}	3.18	1.31	3.11	1.37	3.16	1.31
16. Students should select their own topics for writing.	4.51	1.07	4.33	1.14	4.46	1.08
17. It is important to teach students strategies for planning and revising. ^{EI}	5.59	0.64	5.78	0.43	5.64	0.59
18. Exposure to a print-rich environment will result in the development of writing skills without the need for formal instruction.	3.27	1.46	3.22	1.48	3.26	1.45

Note. Following a factor analysis, Graham et al. (2002) eliminated five items (items 9, 12, 14, 16, and 18). Item-level means and standard deviations have been maintained in this table, but were not utilized when calculating mean factor scores.

CW = Correct Writing; EI = Explicit Instruction; NL = Natural Learning.

items on the factor (Graham et al., 2001). For the purposes of this study, the original 19 items were administered, but eliminated items were not part of further analyses. Moreover, teachers were asked to respond to several additional items taken from a national survey of high school teachers (Kuhara et al., 2009) within this portion of the survey to enrich our understanding of teachers' instructional writing practices. What participants saw within the online survey is provided in

Appendix A. Please note that parallel items were also presented concerning struggling writers and writers with disabilities. The retained scale includes items such as “Check how often you teach students how different texts are organized” and “Check how often students help their classmates with their writing.” All items are presented in Table 5.

The final section of the survey asked teachers to respond to general demographic questions about themselves (e.g., sex, race/ethnicity, adequacy of in-service and pre-service preparation in teaching writing, years teaching) and the buildings that they worked in (e.g., subject(s) taught, grade(s) taught, class size, school location, number of students receiving special education services, number of students qualifying as English language learners, percentage of students qualifying for free and reduced lunches). This section contained 19 questions that utilized one of the following question formats: multiple choice, multi-select (with and without room for elaboration), and short response.

Research design and data analysis

For Likert-type items across the three scales, quantitative descriptive statistics and frequencies (i.e., mean, standard deviation, and percentage) were used. Descriptive statistics and frequencies of scales' factor scores were also calculated and a multivariate analysis of variance (MANOVA) was conducted to examine statistical difference across demographics (i.e., provided or not provided), state (i.e., not provided, Midwest, Northeast), and data collection cycle (i.e., fall or spring). One item on the Teaching Writing Scale asked teachers to identify any additional adaptations that they provide to struggling adolescent writers, and the final question within the demographic questions asked teachers whether they wanted to provide any additional information about their beliefs specific to writing. Responses to these two items were analyzed qualitatively with thematic analysis, but only for supplementing teachers' supports for struggling writers and for providing context for teachers' responses, respectively. The extent of the data provided for these two items was not sufficient for identifying and extracting saturated codes and themes as is commonly the practice in qualitative data analysis.

Table 5. Teaching writing scale (n = 55).

Writers' activities (Check how often [you teach] students . . .)	Never n (%)	Several Times a Year n (%)	Monthly n (%)	Weekly n (%)	Several Times a Week n (%)	Daily n (%)	Several Times a Day n (%)
How different texts are organized							
<i>Fall</i>							
Average	2 (4.88)	13 (31.71)	7 (17.07)	9 (21.95)	6 (14.63)	3 (7.32)	1 (2.44)
Struggling	4 (9.76)	11 (26.83)	7 (17.07)	11 (26.83)	4 (9.76)	3 (7.32)	1 (2.44)
<i>Spring</i>							
Average	1 (7.14)	2 (14.29)	2 (14.29)	4 (28.57)	3 (21.43)	2 (14.29)	–
Struggling	1 (7.14)	4 (28.57)	3 (21.43)	3 (21.43)	2 (14.29)	1 (7.14)	–
<i>Total</i>							
Average	3 (5.45)	15 (27.27)	9 (16.36)	13 (23.64)	9 (16.36)	5 (9.09)	1 (1.82)
Struggling	5 (9.09)	15 (27.27)	10 (18.18)	14 (25.45)	6 (10.91)	4 (7.27)	1 (1.82)
Planning strategies							
<i>Fall</i>							
Average	2 (4.88)	9 (21.95)	7 (17.07)	10 (24.39)	5 (12.20)	7 (17.07)	1 (2.44)
Struggling	3 (7.32)	5 (12.20)	10 (24.39)	16 (39.02)	3 (7.32)	3 (7.32)	1 (2.44)
<i>Spring</i>							
Average	–	1 (7.14)	3 (21.43)	3 (21.43)	4 (28.57)	3 (21.43)	–
Struggling	–	2 (14.29)	3 (21.43)	4 (28.57)	3 (21.43)	2 (14.29)	–
<i>Total</i>							
Average	2 (3.64)	10 (18.18)	10 (18.18)	13 (23.64)	9 (16.36)	10 (18.18)	1 (1.82)
Struggling	3 (5.45)	7 (12.73)	13 (23.64)	20 (36.36)	6 (10.91)	5 (9.09)	–
Revising strategies							
<i>Fall</i>							
Average	2 (4.88)	8 (19.51)	12 (29.27)	10 (24.39)	4 (9.76)	5 (12.20)	–
Struggling	3 (7.32)	11 (26.83)	11 (26.83)	10 (24.39)	1 (2.44)	5 (12.20)	–
<i>Spring</i>							
Average	–	4 (28.57)	1 (7.14)	5 (35.71)	2 (14.29)	2 (14.29)	–
Struggling	1 (7.14)	3 (21.43)	2 (14.29)	1 (7.14)	6 (42.86)	–	1 (7.14)
<i>Total</i>							
Average	2 (3.64)	12 (21.82)	13 (23.64)	15 (27.27)	6 (10.91)	7 (12.73)	–
Struggling	4 (7.27)	14 (25.45)	13 (23.64)	11 (20.00)	7 (12.72)	5 (9.09)	1 (1.82)
Help their classmates with their writing							
<i>Fall</i>							
Average	2 (4.88)	11 (26.83)	9 (21.95)	11 (26.83)	3 (7.32)	5 (12.20)	–
Struggling	6 (14.63)	14 (34.15)	10 (24.39)	9 (21.95)	1 (2.44)	1 (2.44)	–
<i>Spring</i>							
Average	–	3 (21.43)	1 (7.14)	5 (35.71)	2 (14.29)	3 (21.43)	–
Struggling	1 (7.14)	4 (28.57)	1 (7.14)	3 (21.43)	2 (14.29)	2 (14.29)	1 (7.14)
<i>Total</i>							
Average	2 (3.64)	14 (25.45)	10 (18.18)	16 (29.09)	5 (9.09)	8 (14.55)	–
Struggling	7 (12.73)	18 (32.73)	11 (20.00)	12 (21.82)	3 (5.45)	3 (5.45)	1 (1.82)
Share their writing with their peers							
<i>Fall</i>							
Average	1 (2.44)	11 (26.83)	8 (19.51)	10 (24.39)	8 (19.51)	3 (7.32)	–
Struggling	2 (4.88)	12 (29.27)	9 (21.95)	12 (29.27)	1 (2.44)	5 (12.20)	–
<i>Spring</i>							
Average	–	4 (28.57)	3 (21.43)	5 (35.71)	1 (7.14)	1 (7.14)	–
Struggling	1 (7.14)	3 (21.43)	2 (14.29)	3 (21.43)	2 (14.29)	3 (21.43)	–
<i>Total</i>							
Average	1 (1.82)	15 (27.27)	11 (20.00)	15 (27.27)	9 (16.36)	4 (7.27)	–
Struggling	3 (5.45)	15 (27.27)	11 (20.00)	15 (27.27)	3 (5.45)	8 (14.55)	–
Spelling words							
<i>Fall</i>							
Average	18 (43.90)	3 (7.32)	5 (12.20)	10 (24.39)	2 (4.88)	2 (4.88)	1 (2.44)
Struggling	17 (41.46)	6 (14.63)	4 (9.76)	10 (24.39)	–	2 (4.88)	2 (4.88)
<i>Spring</i>							
Average	7 (50.00)	1 (7.14)	1 (7.14)	4 (28.57)	–	1 (7.14)	–
Struggling	6 (42.86)	5 (35.71)	–	2 (14.29)	–	1 (7.14)	–

(continued)

Table 5. Continued.

Writers' activities (Check how often [you teach] students . . .)	Never <i>n</i> (%)	Several Times a Year <i>n</i> (%)	Monthly <i>n</i> (%)	Weekly <i>n</i> (%)	Several Times a Week <i>n</i> (%)	Daily <i>n</i> (%)	Several Times a Day <i>n</i> (%)
<i>Total</i>							
Average	25 (45.45)	4 (7.27)	6 (10.91)	14 (25.45)	2 (3.64)	3 (5.45)	1 (1.82)
Struggling	23 (41.82)	11 (20.00)	4 (7.27)	12 (21.82)	—	3 (5.45)	2 (3.64)
Strategies for spelling unknown words							
<i>Fall</i>							
Average	14 (34.15)	7 (17.07)	5 (12.20)	8 (19.51)	2 (4.88)	3 (7.32)	2 (4.88)
Struggling	10 (24.39)	8 (19.51)	6 (14.63)	10 (24.39)	3 (7.32)	2 (4.88)	2 (4.88)
<i>Spring</i>							
Average	4 (28.57)	3 (21.43)	1 (7.14)	2 (14.29)	2 (14.29)	—	2 (14.29)
Struggling	3 (21.43)	6 (42.86)	1 (7.14)	—	2 (14.29)	2 (14.29)	—
<i>Total</i>							
Average	18 (32.73)	10 (18.18)	6 (10.91)	10 (18.18)	4 (7.27)	3 (5.45)	4 (7.27)
Struggling	13 (23.64)	14 (25.45)	7 (12.73)	10 (18.18)	5 (9.09)	4 (7.27)	2 (3.64)
Phonics for spelling							
<i>Fall</i>							
Average	23 (56.10)	6 (14.63)	1 (2.44)	5 (12.20)	2 (4.88)	3 (7.32)	1 (2.44)
Struggling	22 (53.66)	5 (12.20)	4 (9.76)	5 (12.20)	1 (2.44)	3 (7.32)	1 (2.44)
<i>Spring</i>							
Average	8 (57.14)	2 (14.29)	2 (14.29)	1 (7.14)	—	1 (7.14)	—
Struggling	8 (57.14)	3 (21.43)	2 (14.29)	—	—	1 (7.14)	—
<i>Total</i>							
Average	31 (56.36)	8 (14.55)	3 (5.45)	6 (10.91)	2 (3.64)	4 (7.27)	1 (1.82)
Struggling	30 (54.55)	8 (14.55)	6 (10.91)	5 (9.09)	1 (1.82)	4 (7.27)	1 (1.82)
Grammar skills							
<i>Fall</i>							
Average	4 (9.76)	10 (24.39)	10 (24.39)	9 (21.95)	2 (4.88)	2 (4.88)	2 (4.88)
Struggling	6 (14.63)	9 (21.95)	6 (14.63)	13 (31.71)	2 (4.88)	3 (7.32)	2 (4.88)
<i>Spring</i>							
Average	2 (14.29)	2 (14.29)	3 (21.43)	5 (35.71)	2 (14.29)	—	—
Struggling	1 (7.14)	5 (35.71)	2 (14.29)	2 (14.29)	3 (21.43)	1 (7.14)	—
<i>Total</i>							
Average	6 (10.91)	12 (21.82)	13 (23.64)	14 (25.45)	6 (10.91)	2 (3.64)	2 (3.64)
Struggling	7 (12.73)	14 (25.45)	8 (14.55)	15 (27.27)	5 (9.09)	4 (7.27)	2 (3.64)
Punctuation and capitalization skills							
<i>Fall</i>							
Average	4 (9.76)	11 (26.83)	9 (21.95)	9 (21.95)	3 (7.32)	5 (12.20)	—
Struggling	9 (21.95)	6 (14.63)	8 (19.51)	11 (26.83)	3 (7.32)	4 (9.76)	—
<i>Spring</i>							
Average	2 (14.29)	5 (35.71)	2 (14.29)	2 (14.29)	2 (14.29)	1 (7.14)	—
Struggling	3 (21.43)	6 (42.86)	1 (7.14)	1 (7.14)	2 (14.29)	1 (7.14)	—
<i>Total</i>							
Average	6 (10.91)	16 (29.09)	11 (20.00)	11 (20.00)	5 (9.09)	6 (10.91)	—
Struggling	12 (21.82)	12 (21.82)	9 (16.36)	12 (21.82)	5 (9.09)	5 (9.09)	—

— = 0 or 0.00% as item was not selected by any participants.

Table 6. Teacher efficacy scale for writing between-subject effects.

Variable	Factor	<i>F</i>	<i>p</i>
Demographic Data	Personal Self-Efficacy	.321	.573
	General Self-Efficacy	.322	.572
State	Personal Self-Efficacy	1.897	.173
	General Self-Efficacy	.052	.819
Time of Data Collection	Personal Self-Efficacy	.011	.915
	General Self-Efficacy	.003	.960

Results

Secondary teachers' self-efficacy beliefs

Self-efficacy beliefs were assessed on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). For the subsample of 78 teachers, and using the same two-factor solution identified by Graham et al. (2001), teachers expressed that they felt somewhat self-efficacious about teaching writing (i.e., Personal Self-Efficacy: $M = 4.41$, $SD = 0.50$). Seventy-eight percent of teachers obtained mean Personal Self-Efficacy scores of 4.0 (slightly agree) or higher. However, teachers were somewhat less self-efficacious about effecting change in students' writing despite outside influences like those originating from the family or a student's home environment (i.e., General Self-Efficacy: $M = 3.72$, $SD = 0.79$). Only 38% of teachers obtained mean General Self-Efficacy scores of 4.0 (slightly agree) or higher. Table 3 provides item-level mean and standard deviation scores by administration collection period.

The two factors—General and Personal Self-Efficacy—exhibited moderate and acceptable Cronbach's alpha scores of .683 and .713, respectively. Results of a 2 x 3 x 2 MANOVA using factor scores as the dependent variable demonstrated non-significant differences based on the availability of demographic data ($k = .991$, $F = .342$, $p = .711$), the state in which the teacher taught ($k = .973$, $F = .990$, $p = .377$), and time of data collection ($k = 1.000$, $F = .007$, $p = .993$). The multivariate effects were confirmed by the between-subject effects (see Table 6), finding no statistically significant differences between the Personal and General Self-Efficacy factors of the scale when exploring the same variables. Interaction effects could not be calculated due to sample size limitations; however, because the goal of the study was not to run a factorial design, interaction effects were not of interest across all multivariate analyses within this study.

Secondary teachers' writing orientation beliefs

Teachers' writing orientation beliefs were also assessed on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Using the same three-factor solution identified by Graham et al. (2002), it is evident that teachers

placed less emphasis on correctness in writing (i.e., Correct Writing: $M = 3.40$, $SD = 0.84$), moderate emphasis on explicitly teaching writing (i.e., Explicit Instruction: $M = 4.95$, $SD = 0.56$), and slight emphasis on natural approaches to writing (i.e., Natural Learning: $M = 4.19$, $SD = 0.75$). For this subsample of 69 teachers, 97% agreed that explicit writing instruction was important as evidenced by a mean score of 4.0 or higher on the Likert scale for this factor. Sixty-four percent of the teachers also believed that the natural learning approach to writing was important. However, only 29% of teachers believed that correctness in writing was important when teaching secondary students. Table 4 provides item-level mean and standard deviation scores by administration collection period.

The three factors—Correct Writing, Explicit Instruction, and Natural Learning—exhibited low to moderate Cronbach’s alpha scores of .661, .538, and .499, respectively. Results of a $2 \times 3 \times 2$ MANOVA using factor scores as the dependent variable demonstrated nonsignificant differences based on the availability of demographic data ($k = .959$, $F = .877$, $p = .458$), the state in which the teacher taught ($k = .944$, $F = 1.218$, $p = .311$), and time of data collection ($k = .983$, $F = .352$, $p = .788$). The multivariate effects were confirmed by the between-subject effects (see Table 7), finding no statistically significant differences between the Correct Writing, Explicit Instruction, and Natural Learning factors of the scale when exploring the same variables.

Table 7. Writing orientation scale between-subject effects.

Variable	Factor	F	p
Demographic Data	Correct Writing	1.604	.210
	Explicit Instruction	.328	.569
	Natural Learning	.390	.535
State	Correct Writing	.566	.455
	Explicit Instruction	.006	.939
	Natural Learning	3.328	.073
Time of Data Collection	Correct Writing	1.041	.312
	Explicit Instruction	.032	.859
	Natural Learning	.005	.943

Secondary teachers’ writing practices and adaptations

Moreover, the writing practices that teachers use in class along with the adaptations they make for struggling writers were examined using the Teaching

Writing Scale (Graham et al., 2003). Because we were only interested in the 10 items of the Teaching Writing Scale (Graham et al., 2001), respondents who had answered at least the 10 required items were counted; this provided 55 usable responses (with 47 being completed responses). The frequency with which teachers taught/emphasized a number of writing instructional practices for average and struggling writers (expressed as a percentage) was assessed using a 7-point Likert scale ranging from 1 (*never*) to 7 (*several times a day*). Refer to Table 5. Examining the responses of elementary teachers, Graham et al. (2001) identified four factors: Teaching Spelling, Teaching Grammar and Usage, Teaching Writing Processes, and Students Working Together.

The four factors—Teaching Spelling, Teaching Grammar and Usage, Teaching Writing Processes, and Students Working Together—exhibited moderate and acceptable Cronbach's alpha scores of .869, .654, .695, and .700, respectively, for typically developing writers and .896, .650, .807, and .789, respectively, for struggling writers. Results of a 2 x 3 x 2 MANOVA using factor scores as the dependent variable demonstrated nonsignificant differences based on the availability of demographic data ($k = .939$, $F = .769$, $p = .551$), the state in which the teacher taught ($\lambda = .881$, $F = 1.482$, $p = .223$), and time of data collection ($\lambda = .940$, $F = .750$, $p = .563$), for typically developing writers. For struggling writers, nonsignificant differences were also found for the availability of demographic data ($\lambda = .960$, $F = .491$, $p = .742$), the state in which the teacher taught ($\lambda = .834$, $F = 2.333$, $p = .069$), and time of data collection ($k = .958$, $F = .520$, $p = .721$). The multivariate effects were confirmed by the between-subject effects (see Table 8), finding no statistically significant differences among the Teaching Spelling, Teaching Grammar and Usage, Teaching Writing Processes, and Students Working Together factors of the scale when exploring the same variables, with the exception of Teaching Spelling for the state in which the teacher taught for both typically developing writers and for struggling writers.

Consistent with the work of Graham et al. (2003), we also examined individual items by subtracting teachers' scores for average or typically achieving students from scores for struggling writers. A positive score indicated that the

instructional strategy or activity occurred more often for struggling writers. A negative score indicated that the instructional strategy or activity occurred more often for typically achieving writers. A score of zero reflected no adaptations. We discuss these findings next by the four scale factors identified by Graham et al. (2001).

Table 8. Teaching writing scale between-subject effects.

Variable	Factor	F	p
Typically Developing Writers			
Demographic data	Teaching Spelling	1.482	.229
	Teaching Grammar and Usage	.547	.463
	Teaching Writing Processes	.796	.377
	Students Working Together	2.235	.141
State	Teaching Spelling	5.462	.023*
	Teaching Grammar and Usage	1.106	.296
	Teaching Writing Processes	.047	.830
	Students Working Together	.096	.758
Time of Data Collection	Teaching Spelling	.009	.926
	Teaching Grammar and Usage	.536	.468
	Teaching Writing Processes	.503	.481
	Students Working Together	.031	.861
Struggling Writers			
Demographic Data	Teaching Spelling	.962	.331
	Teaching Grammar and Usage	.143	.707
	Teaching Writing Processes	.273	.603
	Students Working Together	.937	.338
State	Teaching Spelling	8.263	.006*
	Teaching Grammar and Usage	1.314	.257
	Teaching Writing Processes	.790	.378
	Students Working Together	.089	.767
Time of Data Collection	Teaching Spelling	.077	.782
	Teaching Grammar and Usage	.273	.604
	Teaching Writing Processes	.431	.514
	Students Working Together	1.486	.229

* $p \leq .05$.

Teaching spelling

Secondary teachers in this study placed considerably less emphasis on teaching basic transcription skills. For both average and struggling writers overall, approximately 40% or fewer of teachers reported teaching spelling words, phonics skills, and spelling strategies to spell unknown words at least weekly. Difference scores suggest that teachers made slightly fewer adaptations for struggling writers on teaching spelling words (-.09) and teaching phonics skills for spelling (-.02). However, teachers made slightly more adaptations for struggling writers when teaching strategies for spelling unknown words (.05). Paired sample *t* tests revealed no statistically significant differences between average and struggling writers.

Teaching grammar and usage

Approximately 50% of teachers reported teaching grammar skills and punctuation and capitalization at least weekly. Difference scores suggest that teachers made slightly more adaptations for struggling writers when teaching grammar (.02), but slightly fewer adaptations when teaching punctuation and capitalization (-.18). Paired sample *t* tests revealed no statistically significant differences between average and struggling writers.

Teaching writing processes

Approximately 50% of teachers reported teaching how different texts are organized (text organization) and revising strategies to both average and struggling writers at least weekly. Teaching planning strategies received a slightly stronger emphasis; 50% to 60% of teachers reported teaching these skills at least weekly for both average and struggling writers. Difference scores suggest that teachers made slightly fewer adaptations for struggling writers when teaching how texts are organized (-.22), revising (-.18), and planning (-.24). Paired sample *t* tests revealed no statistically significant differences between average and struggling writers.

Students working together

Approximately 50% of teachers reported that students shared their writing with their peers at least weekly for both average and struggling writers. Although slightly more teachers (53%) reported that average writers in their classes helped their classmates with their writing, significantly fewer teachers (35%) reported that struggling writers helped their classmates with their writing at least weekly. Difference scores suggest that teachers made slightly fewer adaptations for struggling writers when having them share their writing (-.07) and help their classmates with their writing (-.60). Paired sample *t* tests revealed statistically significant differences between average and struggling writers for helping classmates with their writing ($t = 3.462$, $df = 54$, $p = .001$).

Adaptations for struggling writers

Teachers' responses to the open-ended question about any additional adaptations for struggling writers were collected and analyzed by type. Of the 47 available responses, 12 provided useful responses, 31 said none, one was undecipherable, one listed supports he/she provides for all students, one said the survey was getting too long, and one talked about his/her classes and ELL students. In total, the 12 usable responses named 30 additional adaptations. Iterative regroupings from specific examples (e.g., extended time, speech-to-text technology) to broader categories (e.g., standard instructional supports/techniques, technology supports) revealed overlap with five of the six categories identified by Graham et al. (2003): (a) supporting writing processes, (b) supporting basic skills, (c) instructional supports, (d) supporting writing assignments, and (e) providing students with extra assistance.

The majority of adaptations (14 of the 30 named or 46.67%) were specific to supporting writing processes. These adaptations were focused around ways to support students' use and application of writing processes and procedures from pre-planning to revising and editing. For example, teachers mentioned highlighters for identifying important information in text; providing guides and checklists; modeling writing, spelling, and penmanship; reading back written text; drawing a picture and then writing; as well as options for typing assignments and using computer and online composing programs.

In contrast to the above analyses, teachers emphasized the need to support students' basic writing skills (7 out of 30 named, or 23.33%), that is, helping students overcome transcription barriers. Specifically, teachers mentioned technology for auto-correcting spelling, using technology to look up spellings of unknown words, using letter tiles to help students with spelling, and providing word banks and keyboarding/handwriting instruction.

Five of the 30 adaptations (16.67%) were classified as other instructional supports; these were traditional supports found as classroom accommodations and modifications. Examples included discussions, extended time, using multiple choice items for completing sentences, and the use of a scribe for writing tasks. Relatively

few adaptations addressed writing assignments (3 of the 30 named, or 10.00%) such as specific types of writing assignments (e.g., writing letters in science), or providing supports to build a writing assignment (e.g., providing prewritten words/phrases or giving introductory and conclusion sentences and using fill-in-the-blank and close-type writing or sentence activities). Only one named adaptation (3.33%) specified the provision of extra assistance. This was usually construed as one-on-one and may have included mini-lessons provided before or after school.

Discussion

The purpose of this study was to extend the literature as it relates to secondary teachers' beliefs about writing, as little is known about these teachers' beliefs and assumptions surrounding the teaching of writing (particularly including the beliefs of special educators) and teaching writing to SWDs (Graham et al., 2002; Pajares, 1992). In doing so, we used three writing scales developed earlier by Graham and colleagues (see Graham et al., 2001, 2002, 2003).

Teachers' self-efficacy beliefs

Our findings resemble those of the limited previous research supporting elementary general educators' self-efficacy beliefs about writing (Personal: $M = 4.58$, $SD = 0.69$; General: $M = 3.67$, $SD = 1.01$; Graham et al., 2001) as well as middle school special (Personal: $M = 4.63$, $SD = 0.82$; General: $M = 3.15$, $SD = 1.52$) and general educators (Personal: $M = 3.74$, $SD = 1.18$; General: $M = 3.28$, $SD = 1.44$; Troia & Maddox, 2004). That teachers in this study (like in the earlier studies) felt somewhat confident about teaching writing is encouraging. That they do not feel confident to effect change in their students given family/home circumstances, however, is concerning, suggesting that teachers believe their own self-efficacy is no match for outside influences on students' lives, leaving them unable to affect students' writing. Moreover, although teachers in this study indicated that they had received adequate pre- and in-service preparation in writing, nationally, teachers do not believe that they have received adequate training (Gillespie et al., 2014; Graham et al., 2014; Kiuahara et al., 2009). This is concerning when one might

expect that stronger preparation in writing would result in teachers having stronger self-efficacy beliefs. Thus, it may be possible that teachers overestimate their confidence in their abilities despite their training. This level of overconfidence may have serious ramifications. Namely, it may make it more difficult for teachers to accept or seek remediation to improve their teaching of writing because they already believe that they are effective.

Teachers' theoretical orientations about writing

Secondary teachers' emphasis on explicitly teaching writing, followed by natural approaches to writing, again align with the beliefs of elementary general educators regarding correct, explicit, and natural writing ($M = 3.17$, $SD = 1.07$; $M = 5.26$, $SD = 0.68$; $M = 4.11$, $SD = 0.88$, respectively; Graham et al., 2002). Similarly, Troia and Maddox (2004) found that special and general educators emphasized explicit ($M = 4.72$, $SD = 0.92$; $M = 5.23$, $SD = 0.95$) and natural ($M = 3.81$, $SD = 1.35$; $M = 4.48$, $SD = 1.22$) approaches to writing, respectively, over correctness ($M = 3.00$, $SD = 1.52$; $M = 3.02$, $SD = 1.66$). Despite the recent popularity of writing workshop approaches, it seems that teachers in this study, like the teachers of earlier research, recognize and utilize a more blended approach borrowing from both explicit and natural approaches to teaching writing. Although correctness has consistently received less emphasis, at the secondary level, that correctness still maintains moderate emphasis might be in part due to the somewhat unconscious belief that better writing is marked by more correct writing.

Teachers' writing practices and adaptations

Approximately half of teachers reported teaching skills related to grammar and usage, the writing process, and supporting collaborative writing to both typically developing and struggling writers at least weekly. However, fewer teachers reported teaching spelling skills and that struggling students helped their peers with their writing at least weekly. At the middle school level, Troia and Maddox (2004) found that the majority of special education teachers reported spending more time teaching spelling, grammar, punctuation, and capitalization

at least weekly to SWDs. Writing practices seem to be influenced by the content that one is teaching and the curriculum(s) used at the school (Troia & Maddox, 2004). The variability present in how often teachers use certain writing practices parallels the variability seen in teachers' use of adaptations.

Unlike Graham et al. (2003), who found statistically significant differences in favor of struggling students for several statements with elementary general educators, teachers in this study rarely reported making adaptations for struggling writers, which is consistent with the national survey literature (e.g., Kiuvara et al., 2009). Troia and Maddox (2004) identified several barriers to the teaching and learning of writing which likely influences the writing instructional practices teachers choose to engage in in their classroom and the adaptations that they make for their struggling writers and writers with disabilities.

Moreover, the additional adaptations that teachers named in this study were consistent with the work of Graham et al. (2003). Teachers in this study specified more adaptations focused on writing processes. Unlike Graham et al. (2003) where providing one-on-one help was the most frequent adaptation, only one named adaptation by teachers in this study was focused on providing extra assistance. Interestingly, while it seems that teachers can name adaptations, implementation of these adaptations and others is very inconsistent.

Limitations

A few limitations must be considered when interpreting the results of this study. First, this study lacked a sufficient number and equivalent representation of teachers from various content backgrounds and did not constitute a national representation of teachers. Thus, limitations in sample size and composition precluded any further analyses, particularly factorial analyses that could have examined the factor structure of the scales at the middle and high school levels and tests of significance to examine differences across content domain. Second, the response rate was low despite the number of teachers who received the link to participate in the study. Third, not all teachers completed all scales or provided demographic details, which precluded an examination of teacher performance

across subsequent scales. Fourth, this study relies on teacher self-report data and runs the risk of teachers not accurately disclosing their beliefs and self-efficacy. Finally, unlike other surveys (e.g., Gillespie et al., 2014; Graham et al., 2014; Kiuahara et al., 2009), most teachers in this study agreed that they had received adequate pre-service and in-service training in writing instruction. This may have affected overall self-efficacy and thus the results of the study.

Implications for research

The research reported here offers a necessary step in advancing secondary teachers' knowledge and beliefs about writing by incorporating special educators as part of the study sample. Although Kiuahara et al. (2009) and Gillespie et al. (2014) provide initial findings specific to a national sample of high school teachers, special educators seem to have been excluded from these studies, as well as others by Graham et al. (2014) and Troia and Graham (2017). Only Troia and Maddox (2004) included a subsample of special educators. Because special educators are likely to provide individualized and intensive interventions to struggling writers with disabilities, more needs to be known about how they approach writing and what they believe about writing. Moreover, additional research is needed in understanding the beliefs of secondary teachers across the content areas. Research that replicates and expands the work begun here, along with Graham and colleagues' work with exploring the beliefs of elementary educators, would allow researchers to evaluate the factor structure with secondary educators and would also allow for an examination of beliefs across content areas. Even though some researchers (i.e., Gillespie et al., 2014; Graham et al., 2014; Kiuahara et al., 2009; Troia & Graham, 2017) have considered secondary-level educators, their research has primarily relied on surveys containing extensive numbers of items. Validating and identifying scales of more manageable length with adequate technical adequacy with secondary educators is needed.

The research reported here relied solely on self-report of beliefs. Future research might consider collecting additional forms of data (e.g., focus group data like Troia and Maddox [2004] to triangulate quantitative results). In continuing to

explore secondary educators' beliefs about writing, researchers should consider the impact of teachers' beliefs on the success of both typically achieving and struggling writers (including SWDs) across the content areas and on state and end-of-course examinations. Researchers might also evaluate teachers' own writing abilities along- side the self-report of their beliefs about writing, observe teachers' use of adaptations within instruction, and match teachers' beliefs to actual classroom practice.

Implications for practice

The need for knowing how to teach and support writing is a pedagogical imperative that is critical for the success of struggling and typically achieving writers. Teachers are encouraged to consider their own personal beliefs about writing and teaching writing, to revisit what they know and believe about different methods or orientations for teaching writing, and seek out opportunities for expanding their pedagogical and content knowledge related to writing. Moreover, it is possible that middle and high school teachers will need greater support incorporating adaptations for struggling writers into their content instruction. To ensure that teachers are knowledgeable of and know how to implement effective writing instructional practices and adaptations, administrators need to provide opportunities for teachers to acquire updated learnings in writing. Administrators might also provide observational feedback on how teachers address writing in lessons and require teachers to identify how writing fits with each lesson.

Because the majority of SWDs spend 80% or more of their day in general education classes (McFarland et al., 2018), districts are encouraged to consider how they might find opportunities for special and general educators to plan and assess writing together (Troia & Maddox, 2004). Special and general educators bring varying domains of knowledge about child and adolescent development, content standards, and the scope and sequence of curriculum, that collectively they could help each other better match student needs with the practices and adaptations that they have named. Schools might also consider how writing coaches might be used to infuse and rethink how writing is taught, discussed,

and applied across grades and across curriculum.

Writing continues to demand a stronger focus within schools. Writing should not be viewed as only a means through which students demonstrate content knowledge, but needs to be seen as a content and skill worthy of individual attention. Yet, focusing solely on the practices that teachers should engage in will be unsatisfactory if research, local education agencies, and teacher preparation programs fail to consider teachers' beliefs, how those beliefs developed, and why they hold the beliefs that they do. Teachers serve as models of writing in their classrooms and their self-efficacy beliefs influence the actions that they make. Teachers' agency, as demonstrated through self-efficacy beliefs, is essential for building a community of writers.

Conclusions

Writing is a key component of many secondary classrooms, yet secondary teachers report not feeling prepared to teach writing (Gillespie et al., 2014; Kiuvara, et al., 2009). Exploring secondary teachers' writing beliefs and self-efficacy are important for understanding teachers' ideas about writing. The depth and inflexibility of such beliefs can impact student learning and influence the ways in which teachers support and teach writing in their classes. Changing writing practices in secondary classrooms will necessitate instructional methods that are individualized to meet students' needs as well as a personal examination of one's own beliefs to ensure that what one believes is not inhibiting the delivery of effective instructional writing practices.

References

- Allinder, R. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education, 17*(2), 86–95. doi:10.1177/088840649401700203
- Baker, J. M., & Zigmond, N. (1990). Are regular education classes equipped to accommodate students with learning disabilities? *Exceptional Children, 56*(6), 515–526. doi:10.1177/001440299005600603

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 32(2), 122–147. doi:10.1037/0003-066X.37.2.122
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9(3), 75–78. doi:10.1111/1467-8721.00064
- Cunningham, J., & Fitzgerald, J. (1996). Epistemology and reading. *Reading Research Quarterly*, 31(1), 36–60. doi: 10.1598/RRQ.31.1.3
- Deford, D. E. (1985). Validating the construct of theoretical orientation in reading instruction. *Reading Research Quarterly*, 20(3), 351–367. doi:10.2307/748023
- Dreher, M. J. (1990). Preservice early childhood teachers' attitudes toward the process approach to writing. *Early Child Development and Care*, 56(1), 49–64. doi:10.1080/0300443900560106
- Fitzgerald, J. (1993). Teachers' knowing about knowledge: Its significance for classroom writing instruction. *Language Arts*, 70(4), 282–289.
- Fitzgerald, J. (1999). What is this thing called "balance"? *The Reading Teacher*, 53(2), 100–107.
- Fuchs, L., & Fuchs, D. (1998). General educators' instructional adaptation for students with learning disabilities. *Learning Disability Quarterly*, 21(1), 23–33. doi:10.2307/1511370
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569–582. doi:10.1037/0022-0663.76.4.569
- Gillespie, A., Graham, S., Kiuahara, S., & Hebert, M. (2014). High school teachers use of writing to support students' learning: A national survey. *Reading and Writing*, 27(6), 1043–1072. doi:10.1007/s11145-013-9494-8
- Graham, S. (2018). A writer(s)-within-community model of writing. In C. Bazerman, A. N. Applebee, V. W. Berninger, D. Brandt, S. Graham, J. V. Jeffery, P. K. Matsuda, S. Murphy, D. W. Rowe, M. Schleppegrell, and K. C. Wilcox (Eds.), *The lifespan development of writing* (pp. 272–325). Urbana, IL: NCTE.
- Graham, S., Capizzi, A., Harris, K. R., Hebert, M., & Morphy, P. (2014). Teaching writing to middle school students: A national survey. *Reading and Writing*, 27(6), 1015–1042. doi:10.1007/s11145-013-9495-7

- Graham, S., Harris, K. R., Fink-Chorzempa, B., & MacArthur, C. (2003). Primary grade teachers' instructional adaptations for struggling writers: A national survey. *Journal of Educational Psychology, 95*(2), 279–292. doi:10.1037/0022-0663.95.2.279
- Graham, S., Harris, K. R., Fink, B., & MacArthur, C. (2001). Teacher efficacy in writing: A construct validation with primary grade teachers. *Scientific Studies of Reading, 5*(2), 177–202. doi:10.1207/S1532799Xssr0502_3
- Graham, S., Harris, K. R., MacArthur, C., & Fink, B. (2002). Primary grade teachers' theoretical orientations concerning writing instruction: Construct validation and a nationwide survey. *Contemporary Educational Psychology, 27*(2), 147–166. doi:10.1006/ceps.2001.1085
- Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology, 99*(3), 445–476. doi:10.1037/0022-0663.99.3.445
- Graham, S., & Sandmel, K. (2011). The process writing approach: A meta-analysis. *The Journal of Educational Research, 104*(6), 396–407. doi:10.1080/00220671.2010.488703
- Honeycutt, R. L., & Pritchard, R. J. (2005). Using a structured writing workshop to help good readers who are poor writers. In G. Rijlaarsdam, H. van den Bergh, & M. Couzijn (Eds.), *Studies in writing: Vol. 14. Effective teaching and learning of writing* (2nd ed., pp. 141–150). Amsterdam, Netherlands: Kluwer.
- Kiuhara, S. A., Graham, S., & Hawken, L. S. (2009). Teaching writing to high school students: A national survey. *Journal of Educational Psychology, 101*(1), 136–160. doi:10.1037/a0013097
- Langer, J. A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal, 38*(4), 837–880. doi:10.3102/00028312038004837
- Lipson, M. Y., Mosenthal, J., Daniels, P., & Woodside-Jiron, H. (2000). Process writing in the classrooms of eleven fifth-grade teachers with different orientations to teaching and learning. *The Elementary School Journal, 101*(2), 209–231. doi:10.1086/499665

- McFarland, J., Hussar, B., Wang, X., Zhang, J., Wang, K., Rathbun, A., ... Bullock Mann, F. (2018). *The Condition of Education 2018 (NCES 2018-144)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved 05 September 2018 from <https://nces.ed.gov/pubs2018/2018144.pdf>
- McIntosh, R., Vaughn, S., Schumm, J., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children*, 60(3), 249–261. doi:10.1177/001440299406000306
- National Center for Education Research (NCER) and National Center for Special Education Research (NCSE), Institute of Education Sciences (IES). (2017). *Future directions for writing research at the secondary level*. Retrieved from <https://ies.ed.gov/ncer/whatsnew/techworkinggroup/pdf/WritingTWG.pdf>
- National Center for Education Statistics. (2014). *NAEP Data Explorer*. Retrieved from <http://nces.ed.gov/nationsreportcard/naepdata/>
- National Commission on Writing for America's Families, Schools, & Colleges (2004). *Writing: A ticket to work ... or a ticket out: A survey of business leaders*. Retrieved from https://www.nwp.org/cs/public/download/nwp_file/21479/writing-a-ticket-to-work-or-a-ticket-out.pdf?x-r=pcfile_d
- National Commission on Writing in America's Schools & Colleges. (2003). *The neglected R: The need for a writing revolution*. New York, NY: College Board. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/neglectedr.pdf
- National Governor's Association & State Education Chiefs. (2010). *Common core state standards for English language arts*. Retrieved from <http://www.corestandards.org>
- Pajares, F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332. doi:10.2307/1170741
- Pressley, M., Rankin, J., & Yokoi, L. (1996). A survey of instructional practices of primary teachers nominated as effective in promoting literacy. *The Elementary School Journal*, 96(4), 363–384. doi:10.1086/461834

- Pressley, M., Yokoi, L., Rankin, J., Wharton-McDonald, R., & Mistretta, J. (1997). A survey of the instructional practices of grade 5 teachers nominated as effective in promoting literacy. *Scientific Studies of Reading, 1*(2), 145–160. doi:10.1207/s1532799xssr0102_3
- Rankin-Erickson, J., & Pressley, M. (2000). A survey of instructional practices of special education teachers nominated as effective teachers of literacy. *Learning Disabilities Research and Practice, 15*(4), 206–225. doi:10.1207/SLDRP1504_5
- Schunk, D. H. (2012). *Learning theories: An educational perspective* (6th ed.). Boston, MA: Pearson.
- Troia, G. A., & Graham, S. (2017). Use and acceptability of writing adaptations for students with disabilities: Survey of grade 3-8 teachers. *Learning Disabilities Research and Practice, 32*(4), 257–269. doi:10.1111/ldrp.12135
- Troia, G. A., & Maddox, M. E. (2004). Writing instruction in middle schools: Special and general education teachers share their views and voice their concerns. *Exceptionality, 12*(1), 19–37. doi:10.1207/s15327035ex1201_3
- Troia, G. A., Lin, S. C., Cohen, S., & Monroe, B. W. (2011). A year in the writing workshop: Linking writing instruction practices and teachers' epistemologies and beliefs about writing instruction. *The Elementary School Journal, 112*(1), 155–182. doi:10.1086/660688
- Troia, G. A., Lin, S. C., Monroe, B. W., & Cohen, S. (2009). The effects of writing workshop instruction on the performance and motivation of good and poor writers. In G. A. Troia (Ed.), *Instruction and assessment for struggling writers: Evidence-based practices* (pp. 77–112). New York, NY: Guilford.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools, 3*(3), 189–209. doi:10.1080/15700760490503706
- Tschannen-Moran, M., & Chen, J. A. (2014). Focusing attention on beliefs about capability and knowledge in teachers' professional development. In L. E. Martin, S. Kragler, D. J. Quatroche, & K. L. Bauserman (Eds.), *Handbook of professional development in education: Successful models and practices, PreK-12* (pp. 246–264), New York, NY: Guilford Press.

Tschannen-Moran, M., Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202–248.

doi:10.3102/00346543068002202

Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82(1), 81–91.

doi:10.1037/0022-0663.82.1.81

Check how often . . .

	Never	Several Times a Year	Monthly	Weekly	Several Times a Week	Daily	Several Times a Day
You teach strategies for editing written materials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You teach strategies for summarizing reading material into a written product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You establish specific goals for what students are to include in their written assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students collaborate when writing (e.g., students work together to plan, draft, revise, and edit).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students engage in prewriting activities (e.g., reading and completing a graphic organizer) to help them gather and organize possible writing ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students engage in inquiry/research activities that result in a writing product, where they gather, organize, and analyze information they collect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You use a process approach to writing instruction in the classroom (e.g., emphasize a cycle of planning, drafting, editing, and revising).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students study and emulate/imitate models of good writing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students use writing as a tool for subject-matter learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have students use self-monitoring strategies to monitor their writing performance and writing goals (e.g., rubrics or checklists).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Although every point on the following scale does not contain a descriptor, you should utilize the complete scale (e.g., if 5 represents how often the item is completed, then select 5).

Check how often . . .

	Never (1)	(2)	(3)	Half of the Time (4)	(5)	(6)	Always (7)
Students select their own writing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students are allowed to complete writing assignments at their own pace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You encourage students to use invented spellings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much time during an average week ...

	Number of Minutes
Do your students spend writing text?	
Is spent teaching planning strategies?	
Is spent explicitly teaching writing?	
Is spent teaching revising strategies?	
Is spent teaching grammar and usage?	
Is spent teaching handwriting?	
Is spent teaching spelling?	