



AN ANALYSIS OF CLASSROOM TEACHING PRACTICES  
ASSOCIATED WITH MIDDLE SCHOOL STUDENTS'  
SELF-EFFICACY FOR WRITING

A Thesis Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
of the Requirements for the Degree

Master of Education

by

Liesl Parker Johnson

May, 2014

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May, 2014

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## Abstract

This study explores the strength of correlations between 109 middle school students' levels of self-efficacy for writing and 9 of their language arts teachers' practices in the classroom as perceived by the students. Four of those teaching practices correlated positively and significantly, but not strongly, with students' self-efficacy for writing, and multiple regression provided a moderate improvement in predictive power. These results indicate that increasing the consistency of implementing the following practices may result in approximately a 10% or higher increase in students' writing self-efficacy: assigning tasks of appropriate challenge, using students' exemplary writing as models, and offering both verbal feedback on and verbal praise of students' writing. The findings add new information to the literature on developing self-efficacy for writing and may allow middle school language arts instructors to make informed decisions about teaching practices that influence their students' motivation for writing.

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## **Introduction**

For many students, writing is a difficult task associated with boredom, avoidance, and stress (Bruning & Horn, 2000). Even though writing is an important skill that generates social and intellectual benefits (Bruning & Horn), students often fail to learn to write well (Klassen, 2002). Such failure may be the result of poor motivation for writing (Bruning & Horn). Seeking to explain this lack of motivation for writing, researchers have pointed out that writing is complex, involving both cognitive and affective factors at once (Hidi & Boscolo, 2006) and requiring constant metacognitive monitoring (Bruning & Horn). Because writing is so complicated and demanding, it is no wonder that motivating students to write constitutes a serious challenge (Bruning & Horn). In adolescence, especially, writing skills become more important—yet motivational factors are in a period of flux (Klassen) and students' confidence in their writing skills actually decreases, even if their skills improve (Pajares, Johnson, & Usher, 2007). Still, motivational factors like self-efficacy for writing are linked directly to positive writing outcomes like competence and achievement (Anderman, 1992; Pajares & Johnson, 1994; Pajares & Valiante, 1999; Pintrich & DeGroot, 1990; Shell, Colvin, & Bruning, 1995; Zimmerman & Kitsantas, 1999; see also Hidi & Boscolo, 2006). Thus, writing competence may be strongly associated with motivation for writing. It is necessary to discover the best ways to develop middle school students' self-efficacy for writing: this study takes a step toward doing so.



## **Review of Related Literature**

### **The Construct and Measurement of Self-Efficacy for Writing**

Bandura (1986), the founder of social cognitive theory, explained that self-efficacy is a person's beliefs or judgments of his own ability to perform a task successfully in order to achieve a certain goal. Since the establishment of this construct, many researchers have used it to investigate motivation in educational contexts (Bandura, 1997). Within educational psychology, the operational definition of self-efficacy has become consistent over time, and it has proven to be an accurate predictor of variance in outcomes like course grades in studies of motivation (Bong & Clark, 1999). This explanatory power may stem from the fact that self-efficacy is much more focused on individual tasks than are more global measures of self-judgments, such as self-esteem or self-worth. In particular, self-efficacy for writing has been conceptualized as a personal perception of one's competence in writing (Pajares & Valiante, 2006). For instance, a student may believe he is able to write an interesting, clear story or poem. Another student may believe she is incapable of completing these tasks. Whether the beliefs are accurate is not the issue; it is the belief itself that matters.

In general, self-efficacy has a strong impact on engagement and academic outcomes: it affects how students act, think, and feel while engaging in a task (Linnenbrink & Pintrich, 2003). First, self-efficacy predicts a student's voluntary choice of task. Students seek out activities for which they predict success, while shunning those for which they predict failure. Self-efficacy research supports this notion (Linnenbrink & Pintrich) by revealing that high self-efficacy leads to voluntary participation in activities

while low self-efficacy leads to abstaining from the activities. Second, self-efficacy also bears on effort and engagement once the task has been initiated (Bandura, 1997). In particular, persistence is affected by self-efficacy: students with high self-efficacy for a task tend to continue working on it even when it proves difficult, while the less self-efficacious students tend to give up faster (Bandura). Third, help-seeking is also a positive outcome of high self-efficacy, which influences success on a task (Linnenbrink & Pintrich). Lastly, having low self-efficacy for a task can result in anxiety and stress (Schunk et al., 2008) while having high self-efficacy may lead to both pride and happiness as well as more specific emotions directed at academic topics, such as interest, value, and perceived utility (Linnenbrink & Pintrich). For all of these reasons, self-efficacy, especially for the important skill of writing, is a key motivational construct that merits exploration.

Measuring self-efficacy for writing has been given attention in recent years (Pajares & Valiante, 2006). In particular, Pajares and Valiante (1999) developed the Writing Self-Efficacy Scale (WSES), which has been used often in studies of writing self-efficacy (Pajares, 2007). This instrument presents students with ten statements describing writing skills and asks those students to indicate how confident they are, on a scale of zero to one hundred, that they can perform each of those skills, such as “Write simple sentences with good grammar” (see Appendix B). This scale of zero to one hundred has been found to be a stronger psychometric indication of writing self-efficacy compared to Likert-type scales (Pajares & Valiante, 2006), and its reliability and validity have been established (Pajares). When the WSES was administered to 497 middle school

students, the resulting data approximated a normal curve, with acceptable, non-significant levels of skewness and kurtosis (Pajares). In that same study, which included not only middle school students but also elementary and high school students, the WSES was found to have a Cronbach's alpha coefficient of .91. Similarly, the WSES was found to have a coefficient alpha reliability of .92 for middle school students (Pajares, Johnson, & Usher, 2007). These high reliability coefficients have also been found when other researchers used the WSES. For instance, in a study that included 80 middle school students and three administrations of the WSES over time, its reliability coefficients were .91, .92, and .91 (Andrade, Wang, Du, & Akawi, 2009). Regarding validity, students' scores on the WSES have been found to predict theoretically linked constructs, such as academic performance and teachers' ratings of how competent those students are in writing (Pajares, Johnson, & Usher). Scores on the WSES also predicted success on a timed writing assignment (Pajares & Valiante, 1999). Additionally, middle school language arts teachers agreed that the WSES items are appropriate for middle school students (Pajares). A review of the literature did not reveal any particular weaknesses of the WSES, but its age of nearly a quarter of a century might call into question the appropriateness or applicability of the way in which the writing skills it measures are worded. On inspection, though, the reader can see the simplicity and clarity of each item's wording; each is free from any potential old-fashioned or unclear phrasing. The WSES is therefore an appropriate tool for measuring the writing self-efficacy of middle school students, and its ubiquity contributes to the standardization of what is meant by self-efficacy for writing.

### **Linking Self-Efficacy for Writing to Positive Outcomes**

Self-efficacy for writing is often a strong predictor of positive writing outcomes. Even when influential covariates such as writing aptitude and previous performance in writing are removed, self-efficacy for writing remains a strong predictor (Pajares & Graham, 1999; Pajares & Valiante, 2006). Specifically, links have been established between self-efficacy for writing and writing competence, performance, and achievement (Anderman, 1992; Pajares & Valiante, 1999; Pintrich & DeGroot, 1990).

First, Pintrich and DeGroot (1990) found self-efficacy for tasks to be performed in English class to be one of the best predictors of achievement on classroom assignments. These investigators used a self-efficacy measure with 173 students in the seventh grade. Soon afterward, Anderman (1992) replicated these findings in a larger study of middle school students that involved 678 subjects and more rigid measures of achievement outcomes: not only grades in English class but also scores on standardized tests of language. Anderman determined that self-efficacy for writing was the most powerful predictor of success, compared to other motivational and cognitive factors such as the use of deep processing strategies. Later, Pajares and Valiante (1999) found support for the link between writing self-efficacy and competence, focusing on a more immediate measure of competence: the students' ability to produce a short piece of writing. Using the WSES with 742 middle school students, they found that self-efficacy for writing predicted students' performance on the timed essay over and above the predictive power of the students' previous performance in writing. Among middle school students, then, writing self-efficacy consistently correlates with writing success. Similar results have

been found for students in high school (Zimmerman & Kitsantas, 1990) and college (Pajares & Johnson, 1994; Shell, Murphy, & Bruning, 1989) as well as for students as young as in the fourth grade (Shell, Colvin, & Bruning, 1995), although methods of measuring writing self-efficacy and writing outcomes varied in these studies.

With self-efficacy for writing predicting success so consistently, one might wonder if this construct is a redundant measure of writing ability, rendering the relationship between self-efficacy and achievement outcomes tautological. However, self-efficacy for an activity may be underestimated, accurate, or overestimated, and when it comes to choosing to engage in that activity, a student is likely to act on her self-efficacy beliefs rather than any empirical measure of her real competence (Bandura, 1986). Many students have inaccurate self-efficacy beliefs, and one study has illustrated that self-efficacy and true ability are quite different and have separate effects on success in math (Pajares & Graham, 1999). Working with 273 sixth graders, researchers administered a self-efficacy instrument and collected data on students' performance on a high-stakes math test. After controlling for previous performance in math, these researchers found that self-efficacy alone made an independent contribution to the math test scores. It can be reasoned logically that the same disparity between skills and confidence in math may exist in writing, although research has yet to confirm it. Thus, real competence is not the same thing as self-efficacy, and it is well-established that self-efficacy for writing is associated with success in it.

### **Fostering Self-Efficacy for Writing**

It is clear from the studies above that self-efficacy plays a role in writing achievement and competence in students in the middle grades. Also, studies have established that the classroom environment and teaching practices do influence students' motivation for achievement (see Kaplan, Middleton, Urdan, & Midgley, 2002). What is less clear from the existing research is how middle school teachers can use specific instructional practices to foster self-efficacy for writing, an important type of motivating belief. Although the theory on self-efficacy offers broad recommendations for developing it (Bandura, 1986, 1997; Schunk, 2008), very few studies focusing on the particular domain of middle school writing have confirmed these recommendations or brought them into clear focus by identifying explicit teaching practices that align with them.

Theoretical influences on self-efficacy in general have been identified by Bandura (1986; 1997) and can be applied to self-efficacy for writing. These include mastery experiences, also referred to as “performance outcomes” (Schunk et al., 2008) or “personal performance accomplishments” (Lent, Lopez, & Bieschke, 1991) in which a student recognizes that he is successful in writing or developing skills in writing. In other words, students have mastery experiences when they believe their efforts in writing have been successful, such as when they earn high scores on writing assignments (Pajares, Johnson, & Usher, 2007). Influences on self-efficacy also include modeling (vicarious experiences) and verbal persuasion (Schunk et al.). Students will generally raise their self-efficacy for a task after watching a model successfully complete the task (Schunk et al.). Verbal persuasion, such as feedback or comments made by the teacher regarding the

student's ability, also can potentially raise self-efficacy (Schunk et al.). Finally, self-efficacy is sensitive to changes in physiological states, such as tiredness, a racing heartbeat, or sweaty palms (Schunk, 2008). All of these influences are thought to affect self-efficacy somewhat indirectly through a filter of an individual student's cognitive appraisal (Schunk). Only some of these influences, though, may be relevant in considering teaching practices that could build self-efficacy for writing.

Branching out slightly from Bandura's original explication of the influences on self-efficacy (1986), Bruning and Horn (2000) have made several suggestions about instructional factors that might raise writing self-efficacy. Their ideas were tested by Hidi, Berndorff, and Ainley (2002), who studied 177 junior high school students while implementing a writing program that used authentic tasks and a warm, supportive emotional environment as suggested by Bruning and Horn. Specifically, the authors used class discussions, lectures, and high-interest exercises in writing and thinking that incorporated topics like controversial issues and fairy tales. Using a questionnaire with items about writing self-efficacy, Hidi and her colleagues found small increases in writing self-efficacy after the eight-week intervention was complete. Though these results are promising in identifying teaching practices that can raise self-efficacy for writing, it is impossible to tell which aspects of the intervention were responsible for the increases. More explicit research is needed to make these determinations.

In addition to the researchers mentioned above, several other authors have suggested that certain teaching practices can influence students' self-efficacy for writing, and I will add to these suggestions. I begin with a teaching practice whose relationship to

self-efficacy *has* been explored, then move on to teaching practices that have been only *theorized by others* to relate to self-efficacy, and end with teaching practices that are newly suggested here as potentially related to self-efficacy. The concept of teaching writing strategies will be considered first.

### **Writing strategies.**

Walker (2003) and Harris, Graham, Mason, and Friedlander (2008) believe that the explicit teaching of writing strategies help students build self-efficacy for writing, and indeed, researchers have found effects of explicit instruction in writing strategies on self-efficacy for writing (Pajares & Valiante, 2006). Such strategies are sets of “operations or actions that [a student] consciously undertakes in order to accomplish a desired goal” (Alexander, Graham, & Harris, 1998) and often are summed up in mnemonic devices, such as “POW: Pick my idea, Organize my notes, Write and say more” (Harris, Graham, Mason, & Friedlander). However, since Pajares & Valiante (2006) only included students with learning disabilities in their study, it is unknown whether strategy instruction in writing raises writing self-efficacy for middle school students in general education. This is a gap to address in the research on developing writing motivation. Strategy instruction in writing has been defined as the teaching of “task-specific strategies for composing” in processes like planning ideas and revising written work (De La Paz, 1999), and in dozens of studies, such writing strategy instruction resulted in improvements in the quality of students’ writing (Graham, Harris, & Troia, 1998). For example, in a meta-analysis examining the effect of writing strategy instruction on the quality and coherence of students’ writing assignments, Swanson and Hoskyn (1998) found a combined effect size



of .68. It should be noted that the teaching of writing strategies is sharply distinguished from the teaching of necessary mechanical knowledge and skills, such as teaching about types of sentences or punctuation (Harris, Graham, Mason, & Friedlander, 2008).

Instruction in writing strategies is different from the general teaching of knowledge and skills for writing in that strategy instruction involves students learning and executing explicit step-by-step methods for accomplishing a writing task (Harris, Graham, Mason, & Friedlander). Given writing strategies' effectiveness in improving the quality of students' writing, thereby creating mastery, it stands to reason that such instruction may relate positively to high self-efficacy for writing.

#### **Goal-setting.**

The following instructional strategies have been authoritatively suggested to have a positive impact on writing self-efficacy, but they await empirical support. First, Schunk (2003) asserted that the setting of specific, proximal, and appropriately difficult goals for writing, combined with receiving feedback on progress made towards those goals, can raise students' self-efficacy.

#### **Self-evaluation.**

Schunk (2003) also proposed that teachers should ask students to regularly evaluate their own progress, given that "positive self-evaluations" can raise self-efficacy.

Walker (2003) has made the same suggestion, pointing out that self-evaluation can be done through the use of checklists of features that a composition can have. For example, many language arts teachers have students keep writing logs or folders and require them to periodically examine changes in the quality of their writing assignments across time.

Students who engage in these types of self-evaluations are likely to recognize improvements in their writing skills, which should improve their self-efficacy for writing.

### **Choice.**

Echoing and building on Schunk (2003), Walker (2003) has surmised it may help develop students' self-efficacy for writing if they are allowed to have choices and control over the content of their learning activities. For instance, some teachers allow students to choose their own audience and topic when they learn to write persuasive letters, rather than assigning generic topics to students. Being able to exert this kind of control over learning activities may help students feel more personally invested in their work, leading to increased effort that improves both skills and self-efficacy. Admittedly, the logical chain is a long one from having choices to growing in self-efficacy; however, there is the possibility that each link in the chain may be strong enough to justify crediting the first (choice) with improvements in the last (self-efficacy.)

### **Progress-based grading.**

Walker (2003) also suggested that writing self-efficacy can be improved if teachers use assessment tools that emphasize learning and progress rather than just grades, such as portfolios and student-led conferences about learning progress. Students who perceive that learning and skill development are more important than just getting A's on assignments may be more focused on becoming better writers than on simply performing for high grades (Schunk, Pintrich, & Meece, 2008), so it is possible that progressed-based grading policies can contribute to students' effort and skill development that fuels self-efficacy for writing.

Given all of the above assertions provided by Schunk (2003) and Walker (2003), it can be hypothesized that there is a measurable relationship between students' self-efficacy for writing and their teachers' patterns of engagement in these classroom teaching practices: requiring students to set goals for their writing skills, requiring students to perform self-evaluations of their work, allowing students to make choices about their writing assignments, and determining grades by focusing on progress rather than overall performance.

### **Independent practice.**

Along with the instructional methods described above that have some support in the literature and have been suggested by others as raising students' self-efficacy for writing, other instructional methods may also do so, but they have not been explored. I offer three of them here, and I suggest that each may raise self-efficacy indirectly by promoting mastery experiences.

First, sociocultural theory suggests that, after no longer depending on supports like teacher guidance, students may work toward mastery through plenty of independent practice on a skill, such as writing (Puntambekar & Hübscher, 2005). Teachers who require plentiful independent practice in writing, then, may be fostering mastery for students, leading to higher self-efficacy in writing. In general, practice in skills has been recognized as an essential component of education in American schools ever since Hunter (1967) promoted “independent practice” as a necessary step in any academic lesson. Such practice has been defined in the literature as tasks that are completed by students without any help or guidance from the teacher (Hunter). For instance, after a

middle school teacher has taught a lesson on business letters, he may ask students to write one on their own for homework; this task would be considered independent practice. It should be noted that independent practice in written compositions is distinct from the concept of rehearsal, a cognitive process of “repeating information to oneself” to keep it in one’s working memory (Schunk, 2008). I aim to discover whether there is a relationship between perceived engagement in independent practice in writing and self-efficacy for it.

### **Tasks of appropriate challenge.**

Second, I suggest that self-efficacy for writing may also result when students work on writing tasks that are appropriately challenging. Sociocultural theory, along with other theories of learning, indicates that working on tasks of suitable challenge—not too difficult and not too easy—can lead to mastery of skills (Schunk, 2008). In fact, the level of difficulty on which a student practices his writing may be essential in developing mastery, since plentiful independent practice alone without regard to challenge has not been shown to lead to mastery (Ericsson, 1993). This notion that assigning appropriately challenging tasks to students can lead to mastery of skills has broad acceptance in educational literature, and its ubiquity can be seen in the following examples: Daloz (1987) stated that challenging tasks lead to successful learning; Jenson (1998) argued that learning takes place when tasks are challenging; Tomlinson and Kalbfleisch (1998) agreed that learning is the result of tasks of “moderate” challenge; and Linnenbrink and Pintrich (2003) added that students master skills when they engage in “tasks slightly beyond their current skill.” Empirical support for this idea appears in studies exploring

Ericsson's well-supported theory that "deliberate practice" can lead to expert performance (Ericsson, Krampe, & Tesch-Romer, 1993). Ericsson and his colleagues define such practice as "specially designed to improve the current level of performance"—in other words, it is practice that is difficult enough for a student to use as a tool for acquiring new skills rather than simply executing skills that are already learned. This kind of challenging practice, by definition, requires both concentration and effort (Ericsson, Krampe, & Tesch-Romer) and is the antithesis of "mindless repetition" of known skills (Ericsson, 2002). For example, if a student is proficient in writing essays that argue a point of view from one perspective, then a task of appropriate challenge would be for this student to write an argument essay that takes two opposing perspectives into consideration. Understandably, no experimental studies seem to support the idea that the practice of assigning appropriately challenging tasks does lead to mastery of skills, since it would be unconscionable to deny this teaching practice to a control group of students. Therefore, I aim to discover this relationship through the current correlational study.

### **Opportunities for re-submission of assignments.**

Third and finally, it stands to reason that if students are encouraged to revise poorly done work, thereby perceiving that their teachers care about mastery of skills more than deadlines, then there is a greater chance for mastery of writing to develop (followed by self-efficacy for it.) The practice of allowing assignment resubmissions does not appear to be well-explored, but some evidence suggests that it may lead to mastery. Posner (2011) found that college students who were allowed to resubmit poorly done

assignments in a statistics course achieved higher scores on a final exam than peers who did not have this opportunity, and in an anecdotal report involving a small class of computer science students, Becker (2006) determined that the opportunity to resubmit assignments resulted in a slight increase in scores on assignments—the class average went from a C to a B. These limited findings are not particularly compelling, since they are outside the domain of middle school language arts; still, it is reasonable to predict that self-efficacy for writing may be promoted through a policy of allowing assignment resubmissions. It should be noted that such a teaching practice is not the same thing as the practice of providing feedback on students' written assignments: allowing resubmissions is a specific classroom requirement or policy that encourages students to try again on writing assignments that did not meet the instructors' expectations (Posner).

### **Mastery experiences.**

In keeping with Bandura's theoretical influences on self-efficacy, some investigators have looked at how mastery experiences might increase writing self-efficacy. These have been operationalized as earning high grades, completing difficult writing tasks, and even learning strategies for writing. Mastery experiences in general have also been conceptualized as having innate talent, receiving awards, and earning high scores on major tests like the SAT (Britner & Pajares, 2006; Lent & Lopez, 1996; Lent, Lopez, & Bieschke, 1991). In a correlational study involving 1,256 students in elementary school through high school, Pajares, Johnson, and Usher (2007) found that mastery experiences, like getting good grades and persevering on a difficult writing task, related to writing self-efficacy by explaining the largest part of its variance. The present

study examines instructional practices, though—so although individual events like persevering on a writing task, earning a high grade in language arts class, or earning a high score on the writing section of the SAT are important types of mastery experiences, they do not enter into the analysis of teaching practices, since they are not directly under the teacher's control.

It is well-established that the mastery experience of earning high grades correlates with self-efficacy for writing (Pajares & Johnson, 1994; Pajares & Valiante, 1999; Schunk & Swartz, 1993; Shell, Colvin, & Bruning, 1995; Shell, Murphy, & Bruning, 1989). But assigning high grades can hardly be considered a teaching practice since so much of the process is beyond a teacher's control. Therefore, mastery experiences do not directly factor into this study; however, I suggest that the teaching practices described above may indirectly promote self-efficacy by helping students achieve mastery. It is also worthwhile to examine the extent to which high grades correlate with these teaching practices.

### **Verbal persuasion.**

Giving feedback on students' writing assignments may be a teaching practice that builds self-efficacy for writing. A few studies have examined the effect of teachers' feedback on the students' self-efficacy for writing. Results were mixed, however. Schunk and Swartz (1993) worked with fourth grade students, finding that self-efficacy for writing improved when progress feedback, a form of verbal persuasion, was given to students. Diujnhouwer, Prins, and Stokking (2010) attempted to improve college students' writing self-efficacy through progress feedback, but these investigators did not

find any significant differences to reveal such a relationship. Pajares, Johnson, and Usher (2007) suggest that teachers should interact with students often by giving personalized feedback on students' writing. Does this practice relate to writing self-efficacy? The current study helps determine whether middle school students' writing self-efficacy relates positively to receiving teachers' feedback.

### **Vicarious experiences and physiological feedback.**

Continuing to the other theoretical influences on self-efficacy, little is known about the effects of modeling (vicarious learning) or physiological feedback on writing self-efficacy. Schunk (2003) has asserted that modeling *should* lead to self-efficacy for writing and indeed that teachers should use modeling extensively in the classroom, and many teachers have promoted this practice based on personal experience and clinical intuition (e.g., Gallagher, 2011) but few studies have been done to confirm this link between modeling and self-efficacy for writing. In one study, modeling did *not* predict students' self-efficacy for writing (Pajares, Johnson, & Usher, 2007). Students indicated their vicarious encounters with writing by reporting, for instance, whether the adults they respect are good at writing. These vicarious experiences related weakly to the measure of writing self-efficacy ( $r=.22$ .) However, vicarious events can be operationalized in different ways, and students' experiences of models of good writing in the classroom may have a different relationship with overall writing self-efficacy than that found by Pajares, Johnson, and Usher.

In sum, aside from giving of high grades, only one specific instructor-controlled practice has clearly been found to link to higher self-efficacy for writing in students:



giving progress feedback (Schunk & Swartz, 1993). This finding occurred in a single study that involved only forty children, and these subjects were in the fourth grade, making it difficult to generalize the study's results to middle school students. Though theoretical suggestions abound for increasing writing self-efficacy, more concrete research is needed to identify the explicit teaching practices that build motivation for writing (Schunk.) Discovering these practices may lead to better, more efficient teaching that motivates middle school students to master writing skills. This study seeks to clarify which precise, observable teaching practices are associated with high self-efficacy for writing in middle school students.

### **Measuring teaching practices**

In order for this study to take place, a new instrument was designed to measure the teaching practices discussed above, since there is a limited history of similar instructional practices being surveyed in the existing literature. This original instrument is called the Language Arts Teaching Practices Questionnaire (LATPQ) and addresses many teaching practices beyond those that have already been measured in the literature.

Similar measurements do exist in the literature, but each is incomplete and therefore unfit for use in the current study. First, Gentry, Maxfield, and Gable (1998) surveyed students' perceived classroom activities, asking them if they can "choose [their] own projects" and if class assignments are "challenging," much like the proposed survey asks students if they "make choices about what [they] want to write" and if they receive "writing tasks that are appropriately challenging." The focus on "projects" and "class assignments," though, makes these items unsuitable for the current research questions.

Next, Kiuahara, Graham, and Hawken (2009) used several similar items to survey teachers about their instructional practices, asking them, for instance, how often they teach “strategies for planning how or what to write.” This survey item is similar in wording to its corresponding item on the LATPQ: “My teacher gives me strategies for writing.” Kiuahara and colleagues’ survey also asked teachers how often they require students to “study and emulate/imitate models of good writing,” a question that resembles the LATPQ’s item that asks students how often their teachers show them good examples of other students’ writing. Kiuahara, Graham, and Hawken’s survey, in addition, asked instructors how often they “provide students verbal praise and positive reinforcement when they write,” much like the LATPQ asks students about how often their teachers praise them when their writing improves. However, because the survey created by Kiuahara, Graham, and Hawken is geared toward teachers, it cannot be used appropriately for surveying students. Finally, Alkharusi (2011) designed a survey that asked high school English students whether they received “continuous feedback from the teacher” about their progress, whether they “are given a chance to correct their mistakes,” and whether the instructor places more importance on grades or learning. Alkarusi’s three survey items, respectively, are similar to the proposed survey items in this study that ask students if their teachers write specific feedback on their assignments, allow assignment resubmissions, and focus assessment on effort and progress, but Alkarusi’s items are too vague to measure the exact teaching practices that this study intends to examine.

To sum this up, several, but not all, concepts on the proposed survey have been measured before in the literature, though none of the extant surveys is exactly appropriate

for the research questions at hand. In general, however, the surveys discussed above set a precedent for the practice of creating original survey items from established definitions and concepts in the literature and using those items to gather information about the instructional practices that teachers use in language arts classrooms. (Kiuahara and colleagues, for instance, explained that they created their own survey items about teaching practices by drawing them from the research on writing interventions.)

Therefore, it seems reasonable to use even the original items on the LATPQ that have not been used in previous surveys, given that they are derived from established, well-defined constructs in the existing literature on writing and motivation. Many researchers have, in fact, used concepts established in the literature to create their own surveys to measure the specific instructional practices of interest (for example: Alkharusi, 2011; Ager, 2011; Brawner, Felder, Allen, & Brent, 2002; Bressler & Bressler, 2007; Choi, 1999; Gentry, Maxfield, & Gable, 1998; Graham, Morphy, Harris, Fink-Chorzempa, Saddler, Moran, & Mason, 2008; Moen, Davies, & Dykstra, 2010).

### **Research questions**

To reiterate, self-efficacy for writing is thought to develop through these three channels: instructional practices that lead to mastery experiences, through which students become skillful and recognize their improvement; vicarious experiences, in which students see others succeed and believe they too can do so; and experiences involving verbal persuasion, which informs students that they can be successful (Bandura, 1997). (Self-efficacy is also thought to develop through physiological feedback, as discussed earlier, but such feedback is not under teachers' control and therefore is not included in

this study.) Teachers in middle school language arts classrooms can use instructional practices that lead students to master skills, see models of success, and be verbally persuaded of their potential for success. So, do middle school students perceive that their teachers engage in the following instructional practices? To what extent do these perceived instructional practices relate to students' writing self-efficacy, and to what extent do they relate to mastery in writing as measured by grades?

1. Does the teacher give instruction in writing strategies? Does such instruction relate to students' writing self-efficacy and/or mastery?
2. Does the teacher have students set challenging goals for improving their writing skills? Does such goal-setting relate to students' writing self-efficacy and/or mastery?
3. Does the teacher have students self-evaluate their writing work? Does this self-evaluation relate to students' writing self-efficacy and/or mastery?
4. Does the teacher allow students to make choices about their writing assignments? Do these choices relate to students' writing self-efficacy and/or mastery?
5. Does the teacher assign grades based on progress in students' writing? Does this grading practice relate to students' writing self-efficacy and/or mastery?
6. Does the teacher require plenty of independent practice in writing? Does this practice relate to students' writing self-efficacy and/or mastery?

7. Does the teacher give writing tasks of appropriate challenge? Do these tasks relate to students' writing self-efficacy and/or mastery?
8. Does the teacher require that poor work be revised? Do these revisions relate to students' writing self-efficacy and/or mastery?
9. Does the teacher offer praise when a student's writing improves? Does this praise relate to students' writing self-efficacy and/or mastery?
10. Does the teacher give positive feedback on students' writing? Does this feedback relate to students' writing self-efficacy and/or mastery?
11. Does the teacher give encouragement for students who are reluctant to write? Does this encouragement relate to students' writing self-efficacy and/or mastery?
12. Does the teacher use himself or herself as a model, showing students how to write by actually doing it? Does this modeling relate to students' writing self-efficacy and/or mastery?
13. Does the teacher use students as models, sharing their work with their peers in order to provide examples of and inspiration for good writing? Does this modeling relate to students' writing self-efficacy and/or mastery?

Taken together, these research questions seek to clarify how well the teaching practices that are theorized to build self-efficacy for writing actually appear to work in the classroom. In other words, what is it that middle school language arts teachers are doing that really does link to students' high self-efficacy for writing?

## **Method**

### **Participants**

109 middle school students (52 boys and 57 girls) in 38 different schools, mostly in the southern United States, in Grades 6 through 8, participated in this study (30 sixth graders, 40 seventh graders, and 39 eighth graders). (Ultimately, multiple regression was used to answer the research questions. Maintaining a statistical power of .8 [Cohen, 1988] while detecting at least an effect size of 0.4, a sample size of 109 is sufficient, according to guidelines set forth by Miles and Shevlin [(2001)].) The students' ages ranged from 11 to 14 ( $M=12.5$ ,  $SD=0.9$ ). The ethnic makeup of the sample, determined from each participant's own description of himself or herself, was 52.3% White ( $n=57$ ), 34.9% Asian ( $n=38$ ), 5.5% African American ( $n=6$ ), 5.5% Hispanic ( $n=6$ ), 0.9% South Asian ( $n=1$ ), and 0.9% biracial (Asian and White,  $n=1$ ).

The socioeconomic status of the students was examined indirectly through the collection of the students' schools' names. Publicly available data online on these schools provided the percentage of students at each school who are eligible for free or reduced lunch. Taking all of this information together for each school represented in the sample of students, the mean percentage of students eligible for free or reduced lunch at the schools which the participants attend is 29 ( $SD=24$ , range: 0-97); the participants, therefore, can reasonably be assumed to represent a variety of socioeconomic levels. (See Tables 1-5 for a summary of these descriptive statistics.)

Table 1

*Participants' Genders*

<i>N</i> (Percentage)	
Male	52 (47.7%)
Female	57 (52.3%)

Table 2

*Participants' Grade Levels*

<i>N</i> (Percentage)	
Sixth	30 (27.5%)
Seventh	40 (36.7%)
Eighth	39 (35.8%)



Table 3

*Participants' Ages*

	<i>N</i> (Percentage)
11 years	13 (11.9%)
12 years	44 (40.4%)
13 years	39 (35.8%)
14 years	13 (11.9%)

Table 4

*Participants' Ethnicities*

	<i>N</i> (Percentage)
White	57 (52.3%)
Asian	38 (34.9%)
African American	6 (5.5%)
Hispanic	6 (5.5%)
South Asian	1 (0.9%)
Biracial (Asian and White)	1 (0.9%)

Table 5

*Indirect Measurement of Participants' Socioeconomic Status*

Percentage of Classmates Eligible for Free or Reduced Lunch	<i>N</i> (Percentage)
0-10%	35 (32.1%)
11-20%	18 (16.5%)
21-30%	5 (4.6%)
31-40%	23 (21.1%)
41-50%	2 (1.8%)
51-60%	15 (13.8%)
61-70%	4 (3.7%)
71-80%	3 (2.8%)
81-90%	2 (1.8%)
91-100%	2 (1.8%)

## **Procedure**

Because this study simply involves the collection of data, it was administered to participants online, thereby avoiding any wasted class time that would have occurred if the study were administered during school hours. Although neither of the survey instruments being used has been previously validated for use online, it can be reasoned that their simplistic instructions and brief content presented no difficulties to online participants. Further, the content of the questionnaires was written in very simple language, and neither questionnaire required participants to perform complex tasks or write sentences—students only had to point, click, and select options from drop-down lists, which they are accustomed to doing online. Middle school students in the U.S. are generally computer literate and Internet-savvy, so I reason that they had no trouble completing the questionnaires on their own. None of the participants quit participating in the study midway through, perhaps because the questionnaires were neither long nor complicated. The smooth administration of the online content was predicted by the findings of Hutchison and Henry (2010), who found that, in a sample of 1,025 students from 12 middle schools populated mainly with at-risk students, students successfully completed Internet questionnaires that were created with an online survey tool. Hutchison and Henry also found that 43% of these largely disadvantaged students used the Internet on a regular basis outside of school, defined as "a few times a week or more." These findings indicate that even at-risk middle school students can be reasonably expected to access and complete online surveys with little trouble. Therefore, there is minimal risk of having biased the sample for this study toward advantaged students by conducting it

online; to confirm that the sample has not been biased in this manner, socioeconomic data gathered in this study indicate that the participants represent a wide variety of socioeconomic standings.

The first round of participants was recruited by word of mouth, after which subsequent participants accumulated in a snowball fashion (Wiersma & Jurs, 2009). Midway through the study, it became apparent that this method of gathering participants was introducing an ethnic bias into the sample, and at that point, a newspaper advertisement was placed to generate a more ethnically diverse sample. In order to induce students to participate in the survey, I offered to place them in a drawing for a \$50 iTunes gift card. This random drawing took place after all the data were collected, and the winner received the gift card by mail.

After providing assent and parental consent, students participated in the study by logging onto a web page hosted by SurveyMonkey, a reliable and professional online survey service. Each participant first entered a unique permission number provided after consent was documented. Participants then entered demographic information and responses to questionnaires on subsequent screens. The final screen prompted participants for their contact information if and only if they wished to enter the drawing for the gift card. This identifying information was kept separate from each participant's responses to the questionnaires to ensure privacy.

## **Measures**

### **Demographic information.**

For the purpose of adequately describing the sample of participants, and in order to describe any variation in self-efficacy across gender and grade level, basic demographic information was collected for each participant. Students indicated their gender, age, grade level, ethnicity, and the name of the school they attend (so that socioeconomic data could be determined indirectly, as described above). Students also self-reported their typical grades in Language Arts class (A's, B's, C's, D's, or F's) so that correlations could be drawn among grades, writing self-efficacy, and perceived instructional practices.

### **Teaching practices questionnaire.**

Each participant filled out the Language Arts Teaching Practices Questionnaire (LATPQ), an original instrument that quantifies the extent to which students perceive that their language arts teachers engage in the teaching practices thought to raise motivation for writing, specifically self-efficacy for writing tasks (see Appendix A). The LATPQ is essentially a list of individual teaching practices that have been theorized to increase students' motivation for writing, as discussed above. Items are grouped into three simple categories aligned with the types of events that influence self-efficacy, as discussed above.

Each item on the questionnaire is a simple description of what a language arts teacher might do for students in a classroom, and items are written from the student's point of view: most items begin with the subject "My teacher...". Students respond to

each item by indicating, on a five-point Likert-type scale, how often their language arts teachers in the current school year engage in those practices. A student chooses from five options: his teacher engages in the particular teaching practice “almost always,” “often,” “sometimes,” “rarely,” or “almost never.”

Before this questionnaire was used for the study, I piloted it by asking eight middle school students, known through personal acquaintances, to complete the instrument and give their feedback on any items that might have been confusing to them. Taking their comments into consideration, I revised the questionnaire to fix minor wording issues, and then asked several more middle school students (again through personal acquaintances) to complete the revised version and offer their feedback. A second revision was then not necessary, as all students in this second round indicated that the questions and directions were clear. This pilot test also provided information on how long it typically takes middle school students to complete the questionnaires, the results of which were communicated to potential participants through the consent forms. According to De Leeuw, Borgers, and Smits (2004), conducting such a pilot test, even though it involves a small number of participants, is essential to developing a clear questionnaire that will be readable and understandable to the intended participants in the study.

#### **Writing self-efficacy assessment.**

Participants also completed the Writing Self-Efficacy Scale (WSES), a short measurement consisting of ten items (see Appendix B). As mentioned earlier, the WSES is a measurement established by Pajares and Valiante (1999). Students are asked to rate

their confidence levels for individual aspects of writing tasks, such as using proper spelling and punctuation, constructing paragraphs, and organizing ideas in writing. Students indicate their confidence for each task on a scale of zero to 100, with zero meaning a complete lack of confidence, and 100 meaning total confidence. The WSES has already been established for use with middle school students, with reliability coefficients consistently in the low .90's (Andrade, Wang, Du, & Akawi, 2009; Pajares, 2007; Pajares, Johnson, & Usher, 2007) and so no changes or validations were necessary for the use of this instrument in this study.

### **Results: Relationships Among Teaching Practices and Self-Efficacy**

This study sought first to determine the extent to which middle school students perceive that their teachers engage in the 13 specified instructional practices. The prevalence of each measured perceived teaching practices was highly variable (see Table 6). For the sake of extracting useful information from these data, I have treated the participants' scores on this Likert-type scale as interval data, with the rationale that the response labels, from "almost never" to "rarely," and from "rarely" to "sometimes," for instance, do imply evenness from one to another. This survey instrument asked participants about each perceived teaching practice three separate times, with different wording each time.



Table 6

*Prevalence of Reported Teaching Practices*

Practice	<i>M (SD)</i>
Tasks of appropriate challenge	3.78 (0.75)
Verbal feedback	3.69 (0.84)
Independent practice*	3.62 (0.78)
Writing strategies*	3.61 (0.70)
Verbal praise	3.61 (0.90)
Self-evaluation*	3.49 (0.80)
Progress-based grading	3.48 (0.85)
Verbal encouragement	3.48 (0.93)
Goal setting*	3.44 (0.81)
Teacher modeling	3.35 (0.93)
Student modeling	3.32 (0.88)
Choice	3.21 (0.88)
Opportunities for resubmissions	3.07 (0.93)
*These perceived teaching practices were dropped from the analysis due to low reliability of their measurement.	

The reliability of items on the survey created (the Language Arts Teaching Practices Questionnaire or LATPQ) was examined. Cronbach's alpha was calculated for each of the 13 scales to report their consistency in measuring the perceived instructional practices through each of those construct's three separate survey items (see Table 9). These values ranged from 0.41 to 0.75 with a mean of 0.62, generally indicating that the items on the LATPQ measured each teaching practice with moderate consistency, though some constructs were much less reliably measured than others. Four teaching practices surveyed had such low reliability values (0.53 or less) that the items were dropped entirely from the analysis: self-evaluation (0.53), goal setting (0.53), writing strategies (0.48), and independent practice (0.41).

Table 9

*Reliability of Items on the LATPQ*

Practice	Cronbach's $\alpha$
Choice	.75
Verbal praise	.75
Student modeling	.71
Teacher modeling	.70
Verbal encouragement	.67
Verbal feedback	.65
Tasks of appropriate challenge	.65
Opportunities for resubmissions	.62
Progress-based grading	.61
Self-evaluation*	.53
Goal setting*	.53
Writing strategies*	.48
Independent practice*	.41

*\*These perceived teaching practices were dropped from the analysis due to low reliability of their measurement.*

To work with the resulting data from the remaining 9 teaching practices, I combined all three responses for each perceived teaching practice into a mean composite response for each participant. Summing up that data, then, it is apparent that the prevalence of the perceived teaching practices is widely varied: all of the mean composite scores for each teaching practice fell slightly above 3.0, or slightly above a response of “sometimes,” with all of the standard deviations for these means fairly close to 1.0. The lowest mean score, 3.07, represented how often the students perceived that their teachers let them redo poorly done writing assignments, and the highest mean score, 3.78, represented how often those students believed that their teachers assigned writing work of appropriate challenge. Nine of the 13 teaching practices generated a complete range of responses from “almost never” to “almost always,” and no teaching practice failed to be reported as taking place “almost always.”

This study also aimed to determine the extent to which these perceived instructional practices relate to students’ writing self-efficacy and to mastery in writing as measured by grades. Before addressing those research questions, though, a brief picture of the patterns of self-efficacy for writing among these participants is needed.

Writing self-efficacy was generally high but quite variable among the participants (see Table 7). The mean level of writing self-efficacy present in the group of participants ( $n=109$ ) was 87.11 ( $SD=12.57$ ). Skewness and kurtosis for these data were both significant ( $p < .05$ ). The negative skew may indicate that the results should be interpreted with caution, since writing self-efficacy is expected to approximate a normal curve (Pajares, 2007), but the sample size (109) is sufficiently large to make the kurtosis

a non-issue (Field, 2009). Internal consistency for the items on the WSES in this study was high ( $\alpha=.897$ ), consistent with expectations from the literature.

Table 7

*Participants' Writing Self-efficacy*

	<i>N</i> (Percentage)
0-20	1 (0.9%)
21-40	1 (0.9%)
41-60	2 (1.8%)
61-80	8 (7.3%)
81-100	97 (89.0%)

Writing self-efficacy across grade level and gender generally paralleled patterns in the established literature. This construct decreased as grade levels increased, with mean writing self-efficacy levels for eighth graders ( $n=39$ ) at 86.29 ( $SD=13.91$ ), seventh graders ( $n=40$ ) at 86.60 ( $SD=12.62$ ), and sixth graders ( $n=30$ ) at 88.85 ( $SD=10.78$ ). The differences among these means were not statistically significant, however:  $F(2, 106) = .40, p = .67$ . Comparing boys ( $n=52$ ) to girls ( $n=57$ ), their respective mean levels of writing self-efficacy, 86.99 ( $SD=10.33$ ) and 87.22 ( $SD=14.40$ ), also did not reach a significant difference:  $t(107) = .092, p = .927$ . These findings are consistent, though, with previous studies that have found similar patterns in writing self-efficacy in gender and grade level: that is, neither gender reports statistically significantly higher self-efficacy

for it, and writing self-efficacy declines as students advance through the middle school grades (Pajares & Valiante, 1999).

Having considered the overall nature of writing self-efficacy present in this study's sample of participants, I move to the results for the main research goals: determining the extent to which the perceived instructional practices relate to students' writing self-efficacy and to mastery in writing as measured by grades. The correlation matrix in Table 10 displays the associations among perceived teaching practices, levels of self-efficacy, and average grades. As expected from the existing literature, students' self-reported grades in their Language Arts classes correlated moderately but significantly with their self-efficacy for writing,  $r=.296, p < .001$ .

Table 10

*Correlations in Perceived Teaching Practices, Writing Self-Efficacy, and Grades*

Measure	1	2	3	4	5	6	7	8	9	10	11
1. Choice	--	.17*	.23**	.29**	.02	.11	.18*	.30**	.14	.11	-.07
2. Progress-based grading	.17*	--	-.00	.36**	.27**	.35**	.31**	.30**	.18*	.04	-.11
3. Tasks of appropriate challenge	.23**	-.00	--	-.01	.14	-.03	.15	.03	.03	.20*	.08
4. Opportunities for resubmissions	.29**	.36**	-.01	--	-.04	.12	.26**	.15	.11	-.04	-.10
5. Verbal praise	.02	.27**	.14	-.04	--	.49**	.42**	.05	.24**	.24*	.08
6. Verbal feedback	.11	.35**	-.03	.12	.49**	--	.39**	.37**	.28**	.20*	-.01
7. Verbal encouragement	.18*	.31**	.15	.26**	.42**	.39**	--	.21*	.27**	.08	.01
8. Teacher modeling	.30**	.30**	.03	.15	.05	.37**	.21**	--	.23**	.10	-.10
9. Student modeling	.14	.18*	.03	.11	.24**	.28**	.27**	.23**	--	.23**	-.01
10. Writing self-efficacy	.11	.04	.20*	-.04	.24*	.20*	.08	.10	.23**	--	.30**
11. Grades	-.07	-.11	.08	-.10	.08	-.01	.01	-.10	-.01	.30**	--

Note. \*  $p < .05$ , \*\*  $p < .01$ .

Four of the 9 perceived teaching practices that remained in the analysis (after some were removed for low reliability of measurement, as discussed above) correlated positively and significantly with self-efficacy for writing: using students' writing as models ( $r=.233, p=.007$ ), giving verbal praise ( $r=.211, p=.014$ ), giving verbal feedback ( $r=.200, p=.019$ ), and assigning tasks of appropriate challenge ( $r=.195, p=.021$ ). All of the remaining teaching practices had positive but nonsignificant correlations to writing self-efficacy, with one exception: the perception of students having opportunities to resubmit their poorly written assignments correlated slightly negatively, but nonsignificantly, with writing self-efficacy ( $r = -0.044, p = 0.326$ ). No correlation between any reliably measured teaching practice and writing self-efficacy was compellingly strong: the strongest of these ( $r = .24, p < 0.05$ ) was for the practice of giving verbal praise, while the weakest ( $r = .04, p > 0.05$ ) was for assigning grades based on progress.

These perceived teaching practices' relationships to students' grades were generally very weak ( $r$  values ranged from  $-0.11$  to  $0.08$ ), with 2 of the practices relating positively to grades and the other 7 relating negatively. None of these correlations was statistically significant.

Five of the reliably measured perceived teaching practices that correlated positively with self-efficacy actually correlated negatively with grades, although these correlations were so weak that these unusual results may well have been due to chance (see Table 10).



Next, multiple regression analysis was performed to estimate the ability of salient teaching practices, taken together, to predict students' self-efficacy for writing. Given the lack of previous studies on most of the teaching practices being studied, I began with a forced-entry method to see how well the 4 perceived practices that correlated significantly with writing self-efficacy functioned as combined predictors (see Table 11):  $R=.343$ ,  $R^2=.117$ ,  $p=.01$ . Following these moderate results, I tried using all 9 predictors, which did not improve predictive power and in fact produced a non-significant model ( $R=.334$ ,  $R^2=.133$ ,  $p=.10$ ). There was no multicollinearity among any of the predictors, so none were excluded from either model. The analysis indicates that the combination of all 4 of the perceived teaching practices surveyed that significantly correlated with writing self-efficacy provides a slightly better power to predict writing self-efficacy than any single practice.

Table 11

*Multiple Regression Results Predicting Writing Self-Efficacy*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Model 1 ( $R=.343$ , $R^2=.117$ , $p=.01$ )			
Tasks of appropriate challenge	3.02	1.57	.18
Student modeling	2.49	1.38	.18
Verbal feedback	1.67	1.61	.11
Verbal praise	1.27	1.50	.09
Model 2 ( $R=.334$ , $R^2=.133$ , $p=.10$ )			
Student modeling	2.67	1.43	.19
Tasks of appropriate challenge	2.91	1.65	.17
Verbal feedback	2.05	1.80	.14
Verbal praise	1.68	1.66	.12
Choice	0.94	1.50	.07
Teacher modeling	0.16	1.49	.01
Opportunities for resubmissions	-0.80	1.46	-.06
Progress-based grading	-0.53	1.64	-.06
Verbal encouragement	-1.22	1.54	-.09

Note. While Model 1 as a whole was statistically significant ( $p=.01$ ), none of the individual components within the model was statistically significant on its own.

## Discussion

### Interpretation of Results

As mentioned above, 109 students representing 38 middle schools reported on how often they perceive that their Language Arts teachers engage in certain teaching practices, with the results highly variable (see Table 6). If the students' reports and the instrument through which these reports were taken are reliable—which I will discuss in a moment—then it would appear that middle school teachers in this sample use all of the 13 teaching practices being examined in this study with moderate consistency.

It is encouraging that the most commonly reported teaching practice is assigning tasks of appropriate challenge ( $M=3.78$ ,  $SD=0.75$ ), since this practice is ubiquitously called for (Daloz, 1987; Jenson, 1998; Linnenbrink & Pintrich, 2003; Tomlinson & Kalbfleisch, 1998) but lacks a strong research base to reveal how consistently it is actually used in classrooms. The current study offers a small contribution to that body of literature, showing that in this sample of students, working on tasks of appropriate challenge appears to be a common classroom requirement. On the other hand, the least commonly reported teaching practice in this study was the opportunity for students to resubmit writing assignments that are poorly done ( $M=3.07$ ,  $SD=0.93$ ), a finding that is somewhat discouraging given the potentially strong but ill-explored benefits of this practice (Becker, 2006; Posner, 2011).

Moving to the reported correlations above between perceived teaching practices and students' self-efficacy for writing, if they are interpreted with caution, they may give language arts instructors an idea of which teaching practices may be worthwhile in the development of their students' confidence in writing skills. Based on the beta weights

provided in the second model of multiple regression (see Table 11), I suggest that these certain practices may help develop writing self-efficacy, since a unit increase in the consistency of the implementation of each of these teaching practices seems to indicate 10% or more of a unit increase in writing self-efficacy: assigning tasks of appropriate challenge ( $\beta=.18$ ), using students' exemplary writing work as models ( $\beta=.18$ ), and offering verbal feedback on students' writing ( $\beta=.11$ ). And, although its beta weight was smaller (.09), I also suggest that offering verbal praise can reasonably be assumed to be associated with higher self-efficacy for writing, based on correlative strength and significance ( $r=.21$ ,  $p=.01$ ). These findings, though very modest, do add to the existing knowledge base about how self-efficacy for writing might be fostered:

First, a teaching practice that was the strongest predictor of writing self-efficacy, using students' excellent written work as models for other students to learn from, fills a gap in the existing literature, which thus far has only surmised that modeling should increase self-efficacy (Schunk, 2003) but until now, it appears that modeling has only been examined in the sense of students seeing competent *adult* writers and that this type of modeling has not predicted writing self-efficacy (Pajares, Johnson, & Usher, 2007). So the finding that seeing competent *peer* models may, in fact, predict self-efficacy for writing does contribute to what is now known about fostering this kind of confidence. This finding may be particularly helpful for middle school language arts teachers because the practice of using students' excellent work as models for the class is a simple, quick habit that requires little preparation time or effort and does not require individualization for certain students or groups of students.

Tying with that teaching practice in predictive power for writing self-efficacy ( $\beta=.18$ ), the perceived practice of assigning students tasks that are appropriately challenging presents a finding that aligns with the well-established idea that practicing any task at a level that is neither too hard nor too easy can lead to skill mastery (Daloiz, 1987; Ericsson, 1993; Jenson, 1998; Linnenbrink & Pintrich, 2003; Schunk, 2008; Tomlinson & Kalbfleish, 1998), and it appears that for the first time in the achievement motivation research, this finding establishes that such practice may have a positive relationship to writing self-efficacy.

Next, the finding that offering verbal feedback on students' work may predict their self-efficacy for writing ( $\beta=.11$ ) expands on the existing knowledge that teachers' feedback does raise self-efficacy for writing in fourth grade students (Schunk & Swartz, 1993); here, some new evidence is presented that the same idea might apply to middle school students even though it may fail to apply to college students (Duijnhouwer, Prins, & Stokking, 2010).

Finally, the correlation established here between students' perception that they earn verbal praise on their writing and self-efficacy for it ( $r=.21, p=.01$ ) offers new evidence where there previously only was a theoretical assertion that such verbal persuasion should raise self-efficacy (Schunk et al., 2008). Further, the correlation found between writing strategy instruction and self-efficacy ( $r=.21, p=.01$ ) may have started to fill the gap in the research where previously it was only known that strategy instruction was effective for the writing self-efficacy of students with learning disabilities (Pajares & Valiante, 2006). Once again, though, this correlation cannot be interpreted meaningfully

given the survey's unreliable measurement of the construct of writing strategy instruction.

Regarding the less strong correlations among perceived teaching practices and writing self-efficacy, the analysis also indicates that some of these practices may be less valuable or simply of indeterminate value for developing student's writing self-efficacy: offering students choices in their writing assignments ( $r=0.11$ ), providing modeling of the writing process by the teacher herself or himself ( $r=0.10$ ), providing verbal encouragement for the writing process ( $r=0.08$ ), grading students on progress and improvement ( $r=0.04$ ), and, lastly, allowing students to redo poor work ( $r=-0.04$ ).

Next, the reported correlations between perceived teaching practices and mastery in writing as indicated by students' grades were generally so weak as to provide very little basis for concluding which practices may be worthwhile in actually raising students' writing competence. The fact that the teaching of writing strategies, had it been measured with better reliability in this study, may have been a statistically significant predictor of writing self-efficacy ( $r=.181, p = 0.03$ ) is expected from the literature since strategy instruction leads to improved quality in writing (Graham, Harris, & Troia, 1998) and since writing competence in turn significantly predicts writing self-efficacy (Pajares, Johnson, & Usher, 2007), but this fact, coupled with the remaining correlations' weaknesses and statistical insignificance, fails to add new information to the literature.

### **Limitations of the Present Study**

Students in the current study ( $n=109$ ) largely reported high grades: 61.5% of the participants reported a grade of A ( $n=67$ ); 26.6% reported a B ( $n=20$ ); 10.1% reported a

C ( $n=11$ ); and only 1.8% reported a D ( $n=2$ ), with no participants reporting a failing grade of F. (See Table 8). This lack of variability in both writing self-efficacy and reported grades may have weakened the resulting correlations to the students' writing self-efficacy, and it may have resulted from the voluntary nature of the study. Such limited variability in the sample of participants is the chief limitation of this study. It may have resulted because students asked to participate were told that the study would be about writing, and they were free to decline to participate; students with low grades on writing assignments and low confidence in their writing skills may well have opted not to be in the study in a disproportionately large number compared to their more able peers.

Table 8

*Participants' Self-Reported Grades in Language Arts Class*

	<i>N</i> (Percentage)
A	67 (61.5%)
B	20 (26.6%)
C	11 (10.1%)
D	2 (1.8%)
F	0 (0.0%)

It should also be noted that self-reported teaching practices from students may not be most reliable indicator of what the teachers actually do in the classroom. Students may fail to pay attention to class activities; they may selectively remember or misremember what their teachers do, and they may be subject to a variety of response biases that cause

them to report false or exaggerated claims about their teachers, both favorably and unfavorably.

Other limitations include a low representation of certain ethnic groups in the sample (see Table 4), an inconsistent measurement of several of the teaching practices, weak correlations, limited generalizability due to the focus only on middle school students, and the correlational nature of the study in general with all its inherent drawbacks.

### **Conclusions and Future Prospects**

Considering future studies that could more fully explore whether the teaching practices at hand relate to writing self-efficacy and mastery, then, the instrument for measuring those practices would need to be improved.

As detailed in Table 9, Cronbach's alpha values for the 13 measured teaching practices ranged from 0.41 to 0.75 with a mean of 0.62, but in order to put more confidence in the meaning of associations between these measured practices and students' self-efficacy for writing, the measurement needs to be stronger, with higher Cronbach's alpha values—at least 0.70—for each of the 9 constructs whose measurement consistency failed to reach that value (see Table 9). In particular, the LATPQ failed to measure reliably the perception that teachers allow their students to redo poorly done assignments and turn them in again for credit ( $\alpha=0.48$ ), a result which may indicate that the construct itself needs to be more carefully communicated to students. (Participants may have misunderstood, for example, whether they were being asked if they had the *option* to resubmit poorly done work or if they actually *did* submit poorly done work only



to be asked to redo it—the latter would be very unlikely for students who report both high grades and high confidence in writing.)

In addition, better measurement of the teaching practices of offering praise and feedback on students' writing would delineate the quality, content, and format of that praise and feedback, not just the consistency with which it is given. These aspects may be important in determining the ultimate effect of such interactions between teachers and students on the latter's writing self-efficacy.

Finally, the LATPQ could be a more refined instrument if its redesign were to take into account the fact that many of the behaviors measured can actually be performed by the student alone, with no interference from the language arts teacher, and may be better conceptualized as student habits rather than teaching practices. "I set reasonable goals for improving my writing," for example, may very well be a student's habit entirely independent of her teacher's instruction. A better version of the instrument measuring teaching practices would eliminate this potential confounding of variables.

One way to accomplish better reliability for items on the LATPQ in general may simply be to include more survey items for each construct, since the small amount of items per construct (3) certainly contributed to low values for Cronbach's alpha. However, if the survey grows in length, it may become burdensome for young participants to fill it out in its entirety; in that case, a research design would be needed that allows for a very large sample size in which each participant only has to complete a certain section of the survey.

In future studies, also, theories might be developed and investigated to follow up on this study's negative relationship found between allowing students to redo poor work and writing self-efficacy—it might be posited that students perceive the teaching practice as irritating or prolonging what is already a difficult process of writing for those students, for instance—but more research would be needed before it can be said with any certainty whether any of the teaching practices that failed to correlate significantly with writing self-efficacy in this study are worth following in the hopes of boosting students' self-efficacy for writing. Additionally, given the weak ability of the LATPQ to have measured some of these teaching practices consistently (see Table 9), all of the relationships found in this study among the perceived practices and students' writing self-efficacy must be interpreted cautiously.

Future studies might also be designed specifically to determine whether any specific teaching practice significantly raises actual writing competence as indicated by course grades, since those relationships that this study explored turned out to be very weak and nonsignificant.

It is important to note that the findings above can only be generalized to students in the sixth, seventh, and eighth grades; future replications of this study would be in order before applying the suggested teaching practices to elementary or high school students with any degree of confidence about their effectiveness in raising those students' self-efficacy for writing. A more effective repetition of this study would also include participants with more variability in their reported levels of writing self-efficacy (which again should approximate a normal curve rather than be negatively skewed, according to

Pajares [2007]), and the sample should include students with more variability in their reported grades for Language Arts classes. A repeated study with a greater, more valuable incentive for participation may help increase the variability in these two key constructs.

Exploratory factor analysis was not conducted in this study for the 13 perceived teaching practices under examination, although it may have been useful to check for any underlying relationships among them, because the sample size of 109 was insufficient to meet the general rule of thumb for conducting factor analysis only with sample sizes of at least 10 to 15 participants per variable (Field, 2009). Future repetitions of the study with larger sample sizes could remedy this omission. Relationships among the teaching practices would be worth exploring because many of them may actually be highly interrelated. For instance, the practice of requiring students to redo and resubmit their poorly written work may actually be better conceptualized as a specific type of teaching practice under the umbrella term of grading for progress rather than absolute work quality. Similarly, using students' exemplary work as models for the entire class may be understood not just as a teaching practice on its own but also as a particular type of offering verbal praise for the student whose work is being held up as a strong example. Factor analysis would determine empirically if these relationships are valid and whether they should influence the way that future studies define and categorize the teaching practices.

In summary, the present study makes a moderate contribution to the existing knowledge base of what middle school teachers might do to increase their students'

confidence in writing skills, and more refined repetitions of this exploration would provide more merit for the recommendations presented here. The remaining unexplained variance in these participants' writing self-efficacy presents calls for future research to clarify other influences.

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APPENDIX A

LANGUAGE ARTS TEACHING PRACTICES QUESTIONNAIRE

## Appendix A: Language Arts Teaching Practices Questionnaire

Items are measured by a 5-point Likert-type scale:  
Almost never, rarely, sometimes, often, almost always.

### General Practices Leading to Self-Efficacy

1. I learn strategies for writing, so that I know exactly what to do when I write.
2. I learn step-by-step strategies for writing well.
3. I learn and practice writing strategies.
4. I set reasonable goals for improving my writing.
5. I set goals for my writing that are not too hard and not too easy.
6. My teacher helps me create reachable goals to make my writing better.
7. I evaluate my own writing to see how well I'm doing.
8. I look at my own writing assignments to think about how I'm improving.
9. My teacher tells me to look back at my past writing work to focus on how I've gotten better.
10. I get to make choices about what I want to write.
11. I get to pick what I want to write about.
12. My teacher has me decide what I want to write.
13. My writing gets graded on effort and progress.
14. I get a good grade if I made improvement in my writing.
15. My teacher grades me on how much better my writing has become.
16. I have lots of chances to practice writing skills on my own.
17. I write a lot by myself.
18. My teacher has me do a lot of writing assignments alone.
19. My teacher gives me writing tasks that are appropriately challenging.
20. When I write, it's not too hard and not too easy.
21. I do writing assignments of medium difficulty.
22. If I do poorly on a writing assignment, I can redo it and turn it in again.
23. I can fix the writing assignments I turned in that were not good.
24. My teacher asks me to re-write an assignment if I got a bad grade on it.

### Verbal Persuasion

25. My teacher praises me when my writing improves.
26. When I do a good job on my writing, my teacher congratulates me.

- 27. When my writing gets better, my teacher gives me praise.
- 28. My teacher gives positive, specific feedback on my writing.
- 29. My teacher gives nice comments on my writing to tell me exactly how I did well.
- 30. My writing assignments have detailed comments on them from my teacher.
- 31. My teacher gives me encouragement when it's time to write.
- 32. When I don't feel like writing, my teacher tells me I can do it.
- 33. My teacher persuades me to try when I don't want to write.

#### Vicarious Experiences

- 34. My teacher shows us how to write by creating new examples on the spot.
- 35. My teacher writes for us to show us how to do it.
- 36. My teacher demonstrates writing for the class by doing it herself/himself.
- 37. In class, I get to see examples of good writing that other students have done.
- 38. I read good examples of other students' writing.
- 39. My teacher gives us examples of great writing that other students did.



## APPENDIX B

### THE WRITING SELF-EFFICACY SCALE

### Appendix B: The Writing Self-Efficacy Scale

The WSES requires that students indicate how certain they are of being able to perform each skill listed below. Students record their responses on a scale of 0 to 100. Zero means “There is no chance that I can perform this skill,” and 100 means “I am completely certain that I can perform this skill” (Pajares & Valiante, 1999).

1. Correctly spell all words in a one-page story or composition
2. Correctly punctuate a one-page story or composition
3. Correctly use all parts of speech in a written composition
4. Write simple sentences with good grammar
5. Correctly use singulars and plurals, verb tenses, prefixes, and suffixes
6. Write a strong paragraph that has a good topic sentence or main idea
7. Structure paragraphs to support ideas in the topic sentences
8. End paragraphs with proper conclusions
9. Write a well-organized and well-sequenced paper that has a good introduction, body, and conclusion
10. Get ideas across in a clear manner by staying focused without getting off topic

