

**THE INFLUENCE OF STUDENTS' PERCEPTIONS OF WRITING  
ON ACADEMIC WRITING PERFORMANCE**

by

Kelsey F. LiPuma

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Department of Language, Learning and Leadership  
State University of New York at Fredonia  
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Department of Language, Learning, and Leadership

CERTIFICATION OF THESIS/PROJECT CAPSTONE WORK

We, the undersigned, certify that this project entitled The Influence of Students' Perceptions of Writing on Academic Writing Performance by Kelsey LiPuma, Candidate for the Degree of Master of Science in Education, Literacy Birth- Grade 12, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.

  
Cindy Bird, PhD.  
Master's Capstone Advisor  
EDU 659 Course Instructor  
Department of Language, Learning, and Leadership

May 16, 2016  
Date

  
Cindy Bird, PhD.  
Department Chair  
Department of Language, Learning, and Leadership

May 19, 2016  
Date

  
Dean Christine Givner, PhD.  
College of Education  
State University of New York at Fredonia

June 15, 2016  
Date

# THE INFLUENCE OF STUDENTS' PERCEPTIONS OF WRITING ON ACADEMIC WRITING PERFORMANCE

## ABSTRACT

Analysis of *The Nation's Report Card* (NAEP, 2011) indicates low performance by adolescent students in the area of academic writing, which in turn suggests that students in the elementary grades are not developing the writing skills that will enable them to write successfully as adolescents. Academic writing involves specific expectations for structure, content, and conventions. While students learn these expectations, students' perceptions of writing may also impact their academic writing performance. Therefore, to address this problem of students' low academic writing performance, an appropriate research question is, what are fourth grade students' perceptions of writing and what is the influence of those perceptions on their academic writing performance? This question of perception and influence is appropriately addressed by conducting an empirical study with fourth grade participants and a mixed methodology to determine specific perceptions and their relationship to writing performance. After measuring academic writing performance and collecting data on perception attitude, self-efficacy, and writing knowledge, analysis has produced three findings. First is that although these participants all had the same teachers and writing instruction throughout their elementary schooling, their perceptions of writing are not consistent with each other but range as do their academic writing performances. Second is that their knowledge of "writing" appears to be primarily focused on an academic concept of writing, and the third finding is that the relationship between perception and performance appears to have a linear correlation, with neutral attitude and neutral self-efficacy producing below average to average writing performance.

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## Chapter 1: Introduction

### Statement of Problem

According to *The Nation's Report Card* (NAEP, 2011), only 27% of students assessed for writing ability in grades 8 and 12 “performed at or above the ‘Proficient’ level” (p. 1). That is, only 27% of students have “clearly demonstrated the ability to accomplish the communicative purpose of their writing” (NAEP, 2011, p. 1). Further, 54% of eighth graders and 52% of twelfth graders performed at the “Basic” level of writing, which indicates “partial mastery” (NAEP, 2011, p. 2) of the knowledge and skills fundamental to proficient writing. This low performance by adolescent students in the area of writing suggests that students are not developing the writing skills in elementary grades that are necessary for students to succeed in school and society. The type of writing necessary for success in school is academic writing, a unique type of writing, which for some students may be an unfamiliar concept. Understanding students’ perceptions, including knowledge of writing, attitude towards writing, and self-efficacy related to writing, would be valuable in determining possible factors involved in academic writing performance and in developing pedagogy to address those factors. An initial way to address this problem of students’ low writing performance in school is to ask the questions, what are fourth grade students’ perceptions of writing and what is the influence of these perceptions on their academic writing? The most appropriate way to address this question of perception and influence is by conducting an empirical research study using appropriate participants and appropriate data collection with a mixed methodology.

### Background

My own experience from working with elementary students has taught me that a student’s perception of writing may influence his or her academic writing. One student with whom I have worked became frustrated when completing writing tasks for English class. Often, his frustration grew into resistance; he would write a few words and then claim he was finished. When asked to respond to word problems using written language in Mathematics, however, the student readily completed similar writing tasks with far more than a few words. Another student valued writing

but only writing nonfiction because she said it was the only “worthy” genre. Another student formatted his writing in lists depending on his analysis of the prompt. These vignettes illustrate how students may respond in a variety of ways to the task of academic writing given their perceptions of writing as a whole or of a particular writing task. Despite these individualized responses, however, I have never seen a teacher administer a writing inventory. Further, in my experience, I have never seen a teacher initiate a personal conversation with a student about the student’s writing, including his or her knowledge, attitudes, and degree of self-efficacy. In writing workshops, teachers often seemed to focus on the content of a student’s writing, rather than on the reasons behind the student’s choices. Although conceptually educators may understand that different students respond differently to writing, I have never met an educator who has sought to understand why or how students respond to writing prompts in the ways they do.

### **Terminology**

For the purpose of this research study, terms “perceptions,” “writing,” and “academic writing” are defined below to provide the reader with a better understanding of the topic. According to Shaver in *Principles of Social Psychology* (1981), perception is “the understanding of the world that you construct from data obtained through your senses” (p. 83). This study examines students’ constructed understanding of writing, including their knowledge about writing, their attitudes towards writing, and their self-efficacy (self-confidence) related to writing. Writing, according to Kucer (2006), “extends and builds on the oral language system” (p. 60) by providing a “form to meet specific situations not well served by spoken language” (p. 60); the permanence of written language allows “communication to occur over space and time with a long-distance audience” (p. 61). Academic writing, as implied by NAEP’s *Writing Framework* (2011), involves responding to “on-demand writing tasks” (p. v). In order to demonstrate proficiency with academic writing on the national writing assessment, students must be “able to persuade, to explain, and to convey real or imagined experience” (NAEP, 2011, p. v). According to the Common Core State Standards, these three types of writing may be referred to as a persuasive argument, informative report, and narrative (NGA Center & CCSSO, 2010). The

types of academic writing being studied in this research include responses to contrived, on-demand writing tasks and a handwritten persuasive argument.

### **Theoretical Stance**

Writing is part of literacy. For this research study, literacy is viewed as under the umbrella theory of psychological processes, and writing is both a cognitive and physical function. According to Kucer (2006), writing is not a “monolithic process” but rather a “transactive and recursive” process in which “various factors” (p. 201) impact its production. Kucer (2006), by citing knowledge and context as two of these factors, implies that writing is a psychological as well as a sociocultural process. This research study is consistent with Kucer’s double theoretical stance towards writing; this study examines students’ perceptions towards writing and students’ psychological response to writing in a situational context. Although perceptions are “formed in a series of cognitive steps” (Johnson, 1987, p. 208), the “situation or environment in which a piece of writing evolves [also] has direct impact on the . . . text that is ultimately written” (Kucer, 2006, p. 204). That is, writing is dependent on both the writers’ cognitive processes and the writers’ situational context (or purposes for writing).

### **Rationale**

This empirical study addresses the problem of students’ low writing performance in school by seeking to determine how fourth grade students perceive writing, and how this perception impacts their academic writing performance in the classroom. Because “writing in the twenty-first century is defined by frequency and efficiency” (NAEP, 2010, p. v), in order to succeed in school and society, students need to write readily and effectively “for several purposes” (NAEP, 2010, p. v) and “to different audiences” (NAEP, 2010, p. v). Unfortunately, 76% of eighth and twelfth grade students are unable to demonstrate this degree of proficient written communication (NAEP, 2010). Students’ low performance in writing suggests that students are not equipped to write academically and, therefore, to meet the expectations set by the U.S. Department of Education. In response, this study examines students’ perceptions in order to determine possible factors involved in academic writing performance. According to Johnson (1987), perceptions

“shape human attitudes and behavior” and “provide the basis for understanding reality” (p. 206). Therefore, the impact of perceptions “is pervasive and unavoidable” (p. 206). Because the influence of perceptions is pervasive, students’ perceptions of writing may be influential on students’ writing performance. The nature of this influence has yet to be determined. Further, constructivist learning theory posits that teachers should begin instruction with what students already know and then build on this knowledge (Brooks & Brooks, 1999). Understanding students’ perceptions, including this schematic knowledge, of writing provides educators with insight into students’ writing performance and into possible means for improving students’ academic writing performance.

## Chapter 2: Literature Review

A search of the research literature using the leading educational databases found nine studies that appear to be pertinent to this research question of what are fourth grade students' perceptions of writing and what is the influence of these perceptions on their academic writing. Each of the nine studies compares writing performance and another construct: either knowledge, attitudes, self-efficacy, discourse knowledge, or topic knowledge. The three main constructs structuring this research study and the review sections below are attitudes, knowledge, self-efficacy. Only one study that examined writing and all three constructs surfaced; it is reviewed first below.

### One Study—Multiple Constructs

Graham, Schwartz, and MacArthur (1993) conducted a study that appears to be the most relevant to this research study because it examined the multiple constructs of students' knowledge, attitude, and self-efficacy in one study as this research study does. Graham, Schwartz, and MacArthur did not, however, measure students' academic writing ability, and therefore the relationship between students' perceptions and academic writing ability has not been addressed by research until now. The researchers interviewed 39 students with learning disabilities (LD) and 29 "normally achieving" (p. 237) students in the fourth, fifth, seventh, and eighth grades. The purpose of the study was to determine if these two groups of students differed in their knowledge of writing, attitudes towards writing, and self-efficacy in relation to writing tasks. In order to determine students' "declarative, procedural, and conditional knowledge" (p. 238) about writing, the researchers conducted interviews, which included eight open-ended questions. The students' answers to the interview questions were then categorized into "idea units" (p. 240) in order to conduct analysis of the data. To determine students' attitudes and self-efficacy regarding writing, the researchers administered two five-point Likert scales with six statements each. A "two-way ANOVA was used to analyze" (p. 242) the collected data, where "group membership and grade were independent variables" (p. 242). The findings suggested that normally achieving students had a "more mature" (p. 248) knowledge base and more "positive" (p. 248) attitudes towards writing than the students with LD; both groups of students were equally positive about their ability to carry out writing tasks.

## Attitude

This section contains reviews of studies that compare writing ability and performance with writing attitude. Graham, Berninger, and Fan (2007) conducted a study in which they aimed to determine the presence of three models of writing among a sample of 128 first grade and 113 third grade students. The first Model of writing held that writing attitude influenced writing achievement; the second Model held that writing performance influenced writing attitude. Model 3 held the view that writing attitude and writing performance were “reciprocal influences” (p. 519), that is, each influenced the other. The researchers administered the Wechsler Individual Achievement Test-2 (WIAT-2) to ensure that students’ “writing skills were within average range” (p. 552). The researchers administered the PAL Compositional Fluency subtest and the WIAT-2 Written Expression subtest to determine students’ writing proficiency. The researchers also asked students to write a composition telling about a recent event at school, which was evaluated using three measures. First, the researchers assessed the “sophistication of the vocabulary” (p. 525) by using procedures similar to the Contextual Vocabulary subtest of the Test of Written Language-2 (TOWL-2). Second, the researchers examined students’ “average length of correct word sequences” (p. 525). Third, the researchers assessed the overall quality of the compositions by using a seven-point “traditional holistic rating scale” (p. 525). To measure students’ attitudes towards writing, students were asked to respond to a seven-question, four-point Likert-type scale in which each of the statements began with “How do you feel” (p. 526). The researchers analyzed the collected data using “covariance matrices and a structural equation modeling approach” (p. 527). The findings suggested that Model 1 “fit the data well” (p. 528) and was “statistically significant” (p. 528). That is, the researchers found that writing attitude influenced writing achievement.

As a follow up to their previous study, Graham, Berninger, and Abbott (2012) re-examined 128 first grade and 113 third grade students’ attitudes to determine if attitude towards writing was a “separable construct” (p. 1) from attitude towards reading. The researchers’ secondary objective was to determine the relationship between attitude and writing performance; their tertiary objective was to determine the relationship between literacy and socioeconomic status and gender. Participants completed a 24-item survey assessing their attitudes towards reading and writing and composed a “personal narrative” (p. 5). The written compositions were

evaluated by measuring the total number of words written, the “longest correct word sequences” (p. 6), and overall quality, which was quantified through a “traditional holistic writing scale” (p. 6). The data were analyzed through exploratory factor analysis. The findings suggested that reading and writing were separable constructs. In addition, the findings suggested that attitude towards writing contributed to students’ writing performance, and that attitude towards writing made a “statistically significant and unique contribution” to third graders’ writing performance. Further, the findings suggested that “there were no statistically significant correlations” (p. 9) between socioeconomic status and literacy attitude, and that “girls had a more positive attitude than boys” (p. 9) towards both reading and writing.

### **Knowledge**

This section contains reviews of studies that compare students’ knowledge of writing, including their topic and discourse knowledge. Olinghouse and Graham (2009) investigated the effect of “discourse knowledge” (p. 37), or “what one knows about how to write” (p. 37), on 32 second and 32 fourth grade students’ writing performance. To assess students’ writing, the researchers administered the TOWL-3, and asked students to plan and write a story about a picture. The story plans were evaluated using a five-point holistic scale. The written compositions were evaluated based on story length, “vocabulary diversity” (p. 42), and overall quality of the writing (determined using “an analytic scoring method” [p. 42]). To assess students’ discourse knowledge, the researchers administered a survey of six open-ended questions. Students’ responses to the survey questions were “divided into idea units” (p. 41). The researchers analyzed the data using “chi-square analyses and analyses of variance” (p. 45). The findings of this empirical study purported that “discourse knowledge about various forms of writing is an important element” (p. 48) in the writing achievement of elementary school mainstream students. Diversity among the students was not a considered variable.

More recently, Olinghouse, Graham, and Gillespie (2014) re-examined discourse knowledge in order to determine if discourse knowledge (“knowledge about how to write” [p. 391]) and topic knowledge (“knowledge about the writing topic” [p. 391]) each “made a statistically significant and unique contribution” to writing performance “across different types of writing” (p. 392), including story, persuasive, and informative writing. Participants were 50

fifth grade students. The researchers asked students to write three compositions, one in each of the three writing genres (story/narrative, persuasive, and informative). These compositions were then scored using “holistic rubrics” (p. 395) to measure the overall quality of the writing and to score “genre-specific elements” (p. 396). The researchers then administered six interview questions to assess students’ discourse knowledge, including knowledge of writing, the writing process, and elements of the three writing genres. The answers to these questions were divided into idea units, “defined as a specific idea in a student’s response” (p. 397). To assess students’ topic knowledge, the researchers administered a “30-item multiple-choice test” (p. 298). The findings revealed that both discourse knowledge and topic knowledge “made a statistically significant contribution to the prediction of the quality of stories, persuasive papers, and informational text” (p. 403) produced by the student writers. These findings supported the researchers’ hypothesis that topic knowledge and discourse knowledge both influence academic writing performance.

### **Self-efficacy**

This section includes reviews of studies that explore students’ degrees of self-efficacy related to writing. Pajares and Valiante (2001) examined the “predictive and meditational role” (p. 355) of self-efficacy, writing apprehension, perceived usefulness of writing, and writing aptitude in the writing performance of 218 fifth grade students. In order to assess writing performance, the researchers asked students to write an essay in response to a prompt. In order to assess self-efficacy, the researchers administered the Writing Skills Self-Efficacy Scale. In order to assess writing apprehension, the researchers adapted and administered the Writing Apprehension Test. In order to assess the perceived usefulness of writing, the researchers administered the Writing Outcome Expectations Scale. Finally, in order to assess writing aptitude, the researchers relied on teacher ratings. All analyses were conducted “on the variance-covariance matrix” (p. 356). The findings suggested that “self-efficacy perceptions predict [students’] writing performance” (p. 357). No other variable appeared to contribute directly to writing performance.

The intention of Piazza and Siebert (2008) was to develop an assessment to determine “the critical affective stances that compose the dispositional side of writing” (p. 277). These stances included “confidence, persistence, and passion” (p. 277). In the creation of their Writing

Disposition Scale (WDS), the researchers used 884 participants in fourth through sixth grade. Through an “exploratory factor analysis” (p. 279) and a “confirmatory factor analysis” (p. 279), the researchers found that the scale was valid and reliable. The researchers concluded by suggesting that they will continue their line of inquiry into the validity and reliability of the WDS and the relationship between writing disposition and achievement.

Researcher Unal (2010) translated Piazza and Siebert’s Writing Disposition Scale (WDS) into Turkish to determine the relationship between writing disposition and gender, grade, and school district among 2,2315 fourth and fifth grade Turkish students. The researcher first used the “Cronbach alfa coefficient” (p. 323) to confirm the scale’s validity. The researcher then used “the KMO tests and Barlett’s test of sphericity” (p. 323) to confirm the scale’s reliability. The researcher found that the translated scale was both valid and reliable. The researcher then administered the WDS to the participants. The collected data were analyzed “according to the independent sample t test and the one way ANOVA” (p. 324). The findings suggested that the writing disposition of fourth and fifth grade students “was positive” (p. 328) and that girls were more “confident, persistent, and passionate” (p. 322) about writing than boys. The findings also showed that the “writing disposition levels of [different] schools” varied (p. 328), and that there was “no meaningful” (p. 326) relationship between grade level and writing disposition.

Shell, Colvin, and Bruning (1995) used a multivariate analysis approach to examine the relationship between self-efficacy, “causal attribution, and outcome expectancy and achievement” (p. 386)—three belief systems that influence students’ reading and writing. Participants were 364 students from fourth, seventh, and tenth grades from an American “midwestern public school system” (p. 388). To measure the students’ three belief systems, the students completed three five-point Likert scale assessments. To measure reading and writing achievement, the researchers referred to the California Achievement Test and had the participants write an essay. The essays were evaluated using a “holistic scoring method” (p. 389). The researchers conducted “multivariate analyses of variance analyses and canonical correlation analyses” (p. 389) to analyze the data. The results indicated students’ beliefs and achievement “in the domains of reading and writing have a generalized reciprocal relation to each other” (p. 396), meaning that students’ beliefs influence their reading and writing achievement, and the students’ reading and writing achievement influences the students’ beliefs.

Further, students' beliefs appear to "exert potentially important motivational influences" (p. 395) on students' reading and writing.

### **Summary**

The studies reviewed above are relevant to this research study. They provide a framework and "location" for this research. The study by Graham, Schwartz, and MacArthur (1993) most closely aligns with this study because these researchers examine students' knowledge, attitudes, and self-efficacy in relation to writing, which mirrors the intent and partial design of this study. Graham, Schwartz, and MacArthur (1993) do not, however, explore students' writing achievement or performance, something this study does. Graham, Berninger, and Fan (2007) examine students' writing attitude in relation to students' writing achievement, but do not examine students' knowledge or self-efficacy. Olinghouse and Graham (2009) and Olinghouse, Graham, and Gillespie (2014) provide a methodology for measuring students' knowledge about writing. Shell, Colvin, and Bruning (1995), as well as Pajares and Valiante (2001), measure students' self-efficacy; their study provides a model this study's measure of self-efficacy. Pajares and Valiante (2001) use a Writing Skills Self-Efficacy Scale, which is unique to their study. Piazza and Siebert (2008) and Unal (2010) both determine the reliability and validity of the Writing Disposition Scale, which, in essence, assesses students' self-efficacy and attitudes towards writing. Combining the methodology, methods, and design from these studies creates the methodology and methods for this study.

In addition, the participants in most of the above studies are students in the same grade range as for this research study: fourth or fifth grade. Further, most of the researchers choose to use a Likert scale to collect data regarding students' self-efficacy and attitudes. Most of the researchers also choose to conduct interviews consisting of, usually, less than ten open-ended questions to assess students' knowledge about writing — "discourse knowledge" (Olinghouse et al., 2014). The interview data for Olinghouse and Graham (2009), Graham, Schwartz, and MacArthur (1993), as well as Olinghouse, Graham, and Gillespie (2014) are qualitatively analyzed into "idea units," "defined as each specific, unique idea in a student's response" (Olinghouse & Graham, 2009, p. 41). Each Graham study also uses the same seven "idea unit" categories or qualitative codes: "environmental structuring, production procedures, substantive

processes, seeking assistance, motivation, ability, and irrelevant” (Olinghouse & Graham, 2009, p. 41). This data collection and data analysis method framework provides a model for this research study.

## **Chapter 3: Methodology**

### **Design of Study**

The overall goal of this study is to understand fourth grade students' perceptions of writing, including knowledge of writing, attitude towards writing, and self-efficacy related to writing. The second goal is to determine a relationship between those students' perceptions of writing and the quality of their actual academic writing. To that, this study compares these students' perceptions with their overall academic writing ability. The research questions guiding this study are, what are fourth grade students' perceptions of writing and what is the influence of those perceptions on their academic writing? To answer these questions, this empirical research study uses a mixed methodology of both quantitative and qualitative data and analysis, a similar combination of methods to those used in the related and previously published research studies identified in Chapter 2. The design is to obtain academic writing samples from participants in fourth grade, then conduct interviews and administer surveys to those participants. Data were collected on students' knowledge, attitudes, and self-efficacy through interviews and Likert-type measures, and on writing quality by using norm- and criterion-referenced writing assessments. Data were then analyzed using comparative analysis.

### **Participants.**

The pool of participants for this study consisted of fourth grade students enrolled in a general education class at a small rural elementary school in western New York State. Fourth grade was chosen because of its pivotal nature; it is the hinge between elementary and middle school, and the school year in which students learn to compose different types (genres) of writing. In New York State, the Common Core State Standards (NGA Center & CCSSO, 2010) set the benchmark that fourth grade students are to be writing for various purposes and audiences as well effectively and frequently. Five students were selected for this study. These five students, between nine and ten years old, were not receiving any form of special education or formal support services at the time of this study. All five students were in the same grade four classroom, taught by the same set of teachers, and received the same fourth grade curriculum. As

part of their writing curriculum, all students in that grade four class were required to keep a classroom journal in which they would write narratives every Monday morning about their weekends. Further, the students' teachers aimed to align their instruction with the Common Core State Standards.

### **Procedures.**

This research began when the researcher collected the participants' writing samples (a one paragraph response to a prompt) both before and after teaching a lesson on topic sentences to the participants' entire grade 4 class. In the next phase of the research, the researcher met with the five participants as a group to administer the assessments for self-efficacy and attitude measures and the TOWL-4 subtests. These meetings required three sessions of 30 minutes each to complete the measures. The researcher then met with each of the participants separately for two sessions of 30 minutes each to conduct and record oral interviews.

### **Data Collection.**

Data regarding students' academic writing performance and ability were collected using an expository writing sample, and norm-referenced subtests from the TOWL-4. The first set of data collected was the persuasive argument response to the prompt, "Spring is a terrible season because of the rain and the mud. Do you agree or disagree with this statement? Explain why and be sure to use at least one topic sentence." Because of the time and location of this study, all students had experienced at least two weeks of spring, which provided students with sufficient topic knowledge to respond effectively to the prompt. Topic knowledge was therefore eliminated as a factor involved in the quality of the students' writing. Students were given five minutes to plan their writing and 20 minutes to write their compositions. After 15 minutes of writing, students were informed that they had five minutes remaining to finish their compositions. Specific subtests of the TOWL-4, a norm-referenced assessment, were then used to collect data regarding students' writing ability to respond to contrived, on-demand writing tasks, a central component of academic writing as it is defined by the U.S. Department of Education (NAEP, 2011). The spelling/punctuation and logical sentences subtests of TOWL-4 were administered to

assess students' spelling, punctuation, and ability to compose logical sentences. For the spelling and punctuation subtest, participants wrote dictated sentences. For the logical sentences subtest, participants were given a worksheet of sentences and asked to "eliminate the illogical element" (Hammill & Larsen, 2009) in each sentence so that the new sentence made sense, was grammatically correct, and was not awkward.

The second set of data was the results of the assessments for the self-efficacy, attitude, and knowledge measures administered to the five participants as a group. Data regarding students' perceptions of writing, the self-efficacy and attitude components, were collected on Likert scales marked in response to pre-set questions. These questions were asked to the participants during group sessions. For the self-efficacy measure, all five participants as a group were orally read 11 statements and asked to record their responses a five-point Likert scale (see Appendix A). Most of the statements used the stem "It is easy for me to," while three statements used the reversed stem "It is hard for me to," in order to promote accurate and reliable responses. For the attitude measure, all five participants as a group were orally read 17 statements and asked to record their responses on a five-point Likert scale (see Appendix B). All of the statements used the stem "How would you feel."

Data regarding students' perceptions of writing, the knowledge component, were collected through individual interviews with 15 open-ended questions (see Appendix C). The fourth set of data was these audio-recorded interviews. These questions were designed by the researcher to measure students' declarative, procedural, and conditional knowledge about writing generally, about academic writing, and about the writing process. All questions were designed to assess students' discourse knowledge about writing. The first three open-ended interview questions encouraged students to articulate what they know about writing generally, including how they define writing and how they define "good" and "bad" writers. The next three questions were designed to measure students' procedural knowledge about the three types of academic writing and each followed the structure, "What kind of advice would you give someone who had to write a persuasive/informative/narrative composition for class?" The next nine questions were designed to measure the students' conditional knowledge relative to the three types of writing and the writing process. That is, the questions aimed to assess the students' ability to apply the writing process to the three types of academic writing. Each question asked, "If you were asked to write a persuasive/informative/narrative composition for class or homework, how would you

organize/plan/edit your paper?” Overall, the open-ended interview questions about knowledge intended to reveal students’ discourse knowledge about writing, academic writing, and the writing process.

### Data Analysis

Data analysis began by working with the data on writing performance. Scoring of the persuasive expository writing samples was done using an adaptation of the New York State Grade 4-5 Expository Writing Evaluation Rubric (NYSED, 2012) (see Appendix D). This rubric evaluates four components of writing: Content and Analysis; Command of Evidence; Coherence, Organization, and Style; and Control of Conventions. The New York State rubric was adapted for this research study in a few minor ways. For example, because the participants were not asked to respond to a text but to a sentence, all mention of a “text” was removed from the rubric. Considering the criteria of the rubric analytically, the writing samples were then given a 0 to 4 score based on each criterion. The four scores, corresponding with the four criteria, were totaled so that one numerical value denoted each student’s performance on the spontaneous writing task.

Figure 1. Students’ Scores Indicating Performance on Persuasive Writing Sample

<b>Criteria (on a scale of 1-4 for each)</b>	<b>Evan</b>	<b>Troy</b>	<b>Rachel</b>	<b>Heather</b>	<b>Charlotte</b>
<b>Content and Analysis:</b> the extent to which the essay conveys ideas and information clearly and accurately in order to support analysis of a topic	2	3	4	3	4
<b>Command of Evidence:</b> the extent to which the essay presents evidence to support analysis and reflection	3	3	3	4	4
<b>Coherence and Organization:</b> the extent to which the essay logically organizes complex ideas, concepts, and information using formal style and precise language	2	2	3	3	4
<b>Control of Conventions:</b> the extent to which the essay demonstrates command of conventions of standard English grammar, usage, and capitalization, punctuation, and spelling	2	3	2	3	4
<b>Total out of 16</b>	<b>9</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>16</b>

The second piece of analysis of writing performance data was working with the quantitative data from scoring the spelling/punctuation and logical sentences subtests of TOWL-4. Raw scores were calculated based on the scoring procedures outlined in the *TOWL-4 Examiner's Manual* (Hammill & Larsen, 2009). Correct responses were marked as one point while incorrect responses were marked as zero points. The total correct responses for each of the students' subtests were summed and denoted as raw scores. These raw scores were then converted into standard scores, "called scaled scores, which have a mean of ten and standard deviation of three" (p. 48) and range from one to 20 points. These subtest scaled scores were then converted to descriptive terms, which ranged from very poor (1-3 scaled score) to very superior (17-20 scaled score). The students' total scaled scores were then calculated. This final calculation served to allocate one numerical value to each student's performance on the TOWL-4 contrived writing tasks.

Figure 2. Scores and Descriptive Terms Indicating Performance on TOWL-4 Subtests

Student	Spelling			Punctuation			Logical Sentences			Total
	Raw score	Scaled score	Term	Raw score	Scaled score	Term	Raw score	Scaled score	Term	
Evan	16	12	Average	0	4	Poor	10	10	Average	<b>26</b>
Troy	18	13	Above Average	12	11	Average	7	7	Below Average	<b>31</b>
Rachel	20	15	Superior	9	9	Average	9	9	Average	<b>33</b>
Heather	15	12	Average	16	13	Above Average	11	11	Average	<b>36</b>
Charlotte	23	16	Superior	21	16	Superior	16	16	Superior	<b>48</b>

The numerical values for each student's performance on the contrived (TOWL-4) and spontaneous (writing sample/rubric) writing tasks were then totaled to numerically denote each student's academic writing performance. Based on these numbers, students were placed on a continuum from lowest score to highest score in regard to academic writing performance.

Figure 3. Continuum Indicating Students’ Academic Writing Performance Scores

<b>Low</b>		<b>Average</b>		<b>High</b>
<b>50% = 38/76</b>		<b>75% = 57/76</b>		<b>90% = 69/76</b>
Evan (35)	Troy (42)	Rachel (45)	Heather (49)	Charlotte (64)

The students’ academic writing performance is illustrated on a continuum from low to high because most students performed in the “average” range on most of the TOWL-4 subtests and on most of the evaluation rubric criterion. This suggests that all students are performing at or above grade level when tasked with academic writing.

Moving to students’ perceptions and specifically students’ attitudes, Figure 4 presents each student’s rating of writing components on a like/dislike scale with 5 being strongly like.

Figure 4. Students’ Self-Perceived Attitude Scores

<b>Writing Component</b>	<b>Evan</b>	<b>Troy</b>	<b>Rachel</b>	<b>Heather</b>	<b>Charlotte</b>
Persuasive	3	4	5	4	4
Informative	2	3	5	5	5
Narrative	5	5	4	5	5
Organizing	5	3	4	3	3
Planning	4	4	5	5	5
Revise/edit	3	3	3	4	5
Punctuation	5	3	4	3	4
Capitalization	5	3	4	4	4
Spelling	5	3	5	5	5
Sense	3	3	5	3	4
Grammar	3	5	5	5	4
Home writing	5	5	4	5	5
Journal	5	5	5	5	5
Poetry	1	3	5	5	4
Writing not HW	5	5	5	5	5
Writing not TV	1	3	3	5	4
Writing about life	5	5	5	4	5

Analysis of the attitude responses indicates that Evan appears to like narrative writing, organizing, planning, using conventions (spelling and capitalization), and personal writing, but appears to dislike informative writing, poetry writing, and writing instead of watching TV. Evan appears to be neutral about persuasive writing, revising and editing, and using grammar. Troy on

the other hand appears to like persuasive and narrative writing, planning, using grammar, and personal writing, but is neutral about informative writing, organizing, revising, planning, using conventions, poetry writing, and writing instead of TV. Rachel likes all three types of academic writing, as well as planning, organizing, using conventions and grammar, and personal writing, but appears to be neutral about revising and editing her writing and writing instead of watching TV. Heather also likes all three types of writing as well as planning and revising her writing, using conventions, and personal writing. Heather appears to be neutral about writing instead of watching TV, making sense in her writing, organizing, and using conventions (punctuation and spelling). Charlotte likes every aspect of writing except organizing her writing.

Moving to self-efficacy, Figure 5 presents each student's rating on an agree/disagree scale with 5 being strongly agree that the student can accomplish a specific writing task.

Figure 5. Students' Perceived Self-Efficacy Scores

<b>Writing Task</b>	<b>Evan</b>	<b>Troy</b>	<b>Rachel</b>	<b>Heather</b>	<b>Charlotte</b>
Persuasive	3	3	5	4	4
Informative	5	3	5	5	5
Narrative	4	5	4	5	5
Organizing	3	3	5	3	4
Planning	5	3	5	5	5
Revise/edit	3	4	5	3	4
Punctuation	3	3	5	5	5
Capitalization	3	3	4	5	5
Spelling	2	4	5	4	4
Sense	5	3	5	5	5
Grammar	5	4	5	3	4

Analysis of the self-efficacy responses indicates that Evan agrees he is able to plan his writing and able to write narratively, informatively, logically, and grammatically. Evan appears to disagree that he is able to write with correct spelling, and appears to be neutral about his ability to revise and edit, write persuasively, organize, and use correct conventions. Troy agrees that he is able to write narratively, revise and edit, spell correctly, and use grammar appropriately, but he is neutral about his ability to write persuasively, write informatively, organize, plan, spell, punctuate, and make sense. Heather agrees that she is able to write persuasively, narratively, and informatively, plan, use conventions (punctuation, capitalization, spelling), and make sense, but

she is neutral about her ability to organize, revise and edit, and use grammar appropriately. Both Rachel and Charlotte agree that they are able to accomplish a specific writing task successfully.

Analysis of the qualitative data from the open-ended interview questions began with transcription of the audio-recorded responses to the questions about writing knowledge. First cycle coding methods included in vivo and descriptive coding (Saldana, 2012) which produced between 24 and 44 unrepeated codes for each student. Second cycle coding included pattern coding, which produced 20 distinct codes across all students. Figure 8 presents a compilation of those codes with salient examples of each code to illustrate its meaning. All salient examples were quoted directly from the students' oral interview responses.

Figure 8. Pattern Codes with Salient Examples

<b>Pattern Codes</b>	<b>Salient Example From Student Responses</b>
Teacher directions	They focus on their writing and they don't . . . try not to get distracted.
Conventions	You could tell them how to do some capitalization, punctuation, spelling.
Connection to self	It's when you write about stuff that you think is cool.
Prescribed structure	They make sure they have a topic that will have a lot of details.
Limited knowledge	Wait you mean like, organize your work like organize your paper and pencil?
Developed knowledge	[For writing a persuasive essay] Well you can make people think the same way you think.
Quality in quantity	I would . . . add stuff.
Writing strategy	Well like, do a graphic organizer.
Make sense	And . . . try to make it make sense.
Reluctance	If I <i>had</i> to do that. If I don't I just go right into writing the story and just start doing it.
Superficial changes (i.e. neatness) as a secondary concern	Well you could write it out first and it really wouldn't matter if you had spelling or anything wrong.
Superficial changes (i.e. neatness) as a primary concern	I would write in cursive.
Implicit cognition (the inability to discuss aspects of the writing process explicitly)	Just try to think, think, think. That's it.
Awareness of audience	I would put some voice and feeling into it and kind of make it funny because people like to ready funny things.
Connection to reading	And—well, people write books and stories. And there's like fiction and nonfiction writing.
Concern for grade	If you get a good grade good for you and if you don't bad for you.
Help-seeking	If I couldn't think of anything I'd just ask my parents if I'm doing it for homework or in class I'd just ask the teacher.

Figure 9 presents a compilation of these codes, as present in each student's open-interview responses.

Figure 9. Pattern Codes Present in Students' Responses

<b>Pattern Codes</b>	<b>Evan</b>	<b>Troy</b>	<b>Rachel</b>	<b>Heather</b>	<b>Charlotte</b>
Teacher directions	X	X	X	X	X
Conventions	X	X	X	X	X
Connection to self	X	X	X	X	X
Prescribed structure		X	X	X	X
Limited knowledge	X	X	X	X	
Developed knowledge			X	X	X
Quality in quantity		X	X	X	
Writing strategy				X	X
Make sense		X			X
Reluctance	X		X		
Superficial changes as secondary concern	X		X		
Implicit cognition	X	X			
Awareness of audience					X
Connection to reading					X
Superficial changes as primary concern					X
Concern for grade	X				
Help-seeking	X				

The data show that all students hold similar core knowledge about writing. That is, all five students responded to questions about writing in terms that show their knowledge of writing to include teacher directions, conventions, and a connection to self. The teacher-directed pattern code encompasses descriptive and in vivo codes that relate to teacher directions: "put your name on the top," writing as a timed activity, "make sure it's appropriate for school," "colorful adjectives," "start from the top," etc. Many of these descriptive and in vivo codes involve the creation of "planning pages" for writing.

Figure 10. Students' Mention of Planning Pages

<b>Student</b>	<b>Salient Example</b>
Evan	I'd plan out my paper by first doing that first sheet of paper
Troy	You would plan your details
Rachel	I would jot down some details—some quick details that I could put in
Heather	Okay so I would put my planning page down and copy it
Charlotte	On your planning page you don't have to have it be in order

The prevalence of teacher directions in students' responses about writing suggests that teacher directions are central to students' discourse knowledge about writing. Within this teacher-directed understanding of writing, students have learned that writing (especially school writing) begins with a planning page.

Another pattern code identified in all students' interview responses was writing conventions, which encompass descriptive and in vivo codes related to spelling, punctuation, capitalization, and grammar. Due to the prevalence of references to conventions in all students' interview responses, the results suggest that conventions are central to all students' understanding of writing. All students independently mentioned using "correct" conventions when discussing what good writers do.

Figure 11. Students' Mention of Conventions

<b>Student</b>	<b>Salient Example</b>
Evan	Make capitalization and punctuation
Troy	You know like capitalize right and you have to spell things right
Rachel	They make sure to have good punctuation
Heather	Not to have two ands in a sentence, go back for capitalization
Charlotte	Spelling, grammar, punctuation you could change to make it better

Because all students discussed conventions, the results suggest that spelling, punctuation, capitalization, and grammar are central to students' discourse knowledge about writing.

Still another pattern code identified in all students' interview responses was connection to self, which is comprised of descriptive and in vivo codes mentioning writing at home, writing about life events, writing narratives, writing "about stuff that you think is cool," writing "to put

down your feelings,” etc. When asked to define “writing,” all students responded with an answer that suggested all writing involved some connection to their personal lives or thoughts.

Figure 12. Students’ Mention of Connection to Self

<b>Student</b>	<b>Salient Example</b>
Evan	It’s like when you make stories of things and you use it for your journal”
Troy	Like writing something from your memory
Rachel	Stuff that’s gone on in your life that you think is really nice to write about
Heather	You could basically write anything you really want
Charlotte	Writing is like, putting down your feelings basically and like, you can just write whatever you want usually

These responses suggest that students’ knowledge (and concept) of writing involves a strong personal element, whether past memories or current feelings.

While all students’ knowledge of writing incorporated teacher directions, conventions, and connection to self, other codes are identified in the interview responses of three or four students. Specifically, four of the five students discussed writing in terms of a prescribed structure and with limited knowledge; three of the five students described writing in terms of quality in quantity and with developed knowledge. The pattern code “limited knowledge” of writing is assigned to student responses that suggested the student was unable to answer the question asked. For example, when Evan was asked to provide advice for a student writing a persuasive paper, his response included, “You just say . . . really I don’t know.” When responding to the same question, Troy responded with, “It’s like their opinion? Well, they can write about . . . This is hard.” Both of these responses suggest that the students had difficulty answering the question, thus indicating limited knowledge of persuasive writing. The pattern code “developed knowledge” is assigned to student responses that revealed a depth of knowledge about the particular concept in question. Although “developed” and “limited” knowledge of writing appear to be oppositional, they are not mutually exclusive. That is, both Rachel and Heather’s interview responses show degrees of both developed and limited understandings of writing. The code “quality in quantity” appears in the response of three of the five students, and means that students understand quantity of writing to be an indicator of the quality of a piece of writing. Troy, Rachel, and Heather’s responses imply that number, or the quantity of “more,” contributes to the quality of one’s writing. For example, when asked to provide advice to a

student writing an informative paper, Troy suggested writing “more stuff,” Rachel suggested writing “a bunch of paragraphs,” and Heather suggested giving the student an easy topic so “they could write a longer paragraph than they normally do.” In addition, students mentioned using “longer sentences,” “bigger words,” and “adding a lot.” These responses suggest that quantity and length are significant to these students’ perceptions of academic writing.

While all student responses share common codes, indicating that all students share a common knowledge, Charlotte’s interview responses contain three codes unique to her and Evan has two codes unique to his responses. Charlotte explicitly addressed awareness of her audience, the connection between reading and writing, and superficial changes (e.g. neatness) as a secondary concern. Charlotte described how she differentiated her writing when planning, organizing, revising/editing, and writing persuasive, informative, and narrative compositions. That is, she was able to respond to different writing tasks with different writing strategies. Evan on the other hand is the only student to discuss writing in terms of grades and seeking help.

The final stage of data analysis is to compare the students’ perceptions (attitude, self-efficacy, knowledge) of writing with their actual performance on academic writing tasks. Starting with Evan, analysis shows a young fourth grade white male whose perception of writing includes a liking for writing narratively, organizing, planning, using conventions, and writing in a way that connects to himself, but a dislike of writing informatively, writing poetry, and writing instead of watching TV. His attitude is neutral about writing persuasively, revising and editing, using grammar, and making sense. Regarding his writing self-efficacy, Evan believes he is able to write informatively, write narratively, plan, make sense, and use proper grammar well, finds spelling difficult, but is neutral about his abilities for writing persuasively, organizing, revising and editing, using conventions (punctuation and capitalization). Regarding his knowledge perceptions of writing, Evan appears to have limited knowledge of writing that is based on teacher directions, use of conventions, reluctance, artificial changes, and implicit cognition (the inability to discuss writing processes explicitly). For his actual academic writing performance, Evan scored a 9/16 total on his actual piece of persuasive argument writing evaluated for the four criteria of Content and Analysis; Command of Evidence; Coherence and Organization, and Control of Conventions. His TOWL-4 subtest scores show him as “average” in spelling and logical sentences, and “poor” in punctuation. These scores place Evan at the low end on the continuum for academic writing performance. Comparing these perceptions with performance

finds that this student with perceptions of neutrality to persuasive writing and revising in both attitude and self-efficacy, and with a limited knowledge of writing appears to produce an academic writing performance that is average to low.

Troy, the other young male participant, has attitudes and self-efficacy similar to Evan. In his self-efficacy, Troy is neutral about his ability to use conventions and produce persuasive writing, and in his attitude, he is neutral to revision and editing. However, unlike Evan, Troy likes persuasive writing but is neutral in his attitude towards writing conventions. Troy's knowledge of writing appears to cluster around the core shared knowledge of teacher-directed and conventions and quality in quantity. For his actual academic writing performance, Troy scored an 11/16 total on the four criteria rubric for his actual piece of persuasive argument writing. His TOWL subtest scores show him as "above average" in spelling, "average" in punctuation, and "below average" in logical sentences. These scores place Troy just slightly below average on the continuum for academic writing performance. Comparing these perceptions with performance finds that this student with perceptions of neutrality to revising and using conventions in his attitude but positive self-efficacy for his ability to write persuasively and use conventions, and with a knowledge of writing as teacher directed and with conventions appears to produce an academic writing performance that is average to low.

Of all participants, Charlotte scored the highest academic writing performance, both on the rubric and the continuum. Her attitude towards writing indicates she likes all things about writing except for organizing, towards which she is neutral. In her self-efficacy, she is confident in her ability to perform all writing tasks, and has knowledge of audience and the connection between writing and reading that the other participants do not have. Comparing these perceptions with performance finds that this student with perceptions of a very positive attitude towards writing, high self-efficacy, and detailed knowledge of writing appears to produce an academic writing performance that is above average.

The other two participants Rachel and Heather, both young females, appear to be quite similar in all aspects of this research. Both rank about "average" on the academic writing performance continuum and have rubric scores of 12 and 13 respectively. Both students like most aspects of writing, although Heather feels neutral about organizing, making sense, and spelling. In their self-efficacy, both students are confident in their ability to perform most writing tasks, although Heather is neutral about her ability to organize, revise and edit, and use proper

grammar. Like Evan and Troy, the students' knowledge of writing appears to cluster around the core shared knowledge; however, these students demonstrate limited and developed knowledge of writing based on a prescribed structure and quality in quantity. Comparing these perceptions with performance finds that both these similar students with perceptions of a positive attitude towards writing, high self efficacy, and both developed and limited knowledge of writing appear to produce an academic writing performance that is average.

Overall, three findings emerge from this research study. One is that although these participants are all from the same class and school, and have had the same teachers and writing instruction throughout their elementary schooling, their perceptions of writing are not consistent with each other but range over a wide scale as do their academic writing performances. Another finding is that their knowledge of "writing" appears to be primarily focused on an academic concept of writing: teacher-directed, pre-planned, and convention-based. The third finding is that the relationship between perception and performance appears to have a linear correlation, with neutral attitude and self-efficacy producing below average to average performance, and positive attitude and self-efficacy producing average to above average performance.

## Chapter 4: Results

### Results

After completing a mixed methodology empirical study with five participants in grade four to determine how their perceptions of writing impact their academic writing, this researcher has determined three key findings from this research study. First is that although the participants all have the same class, school, teachers, and writing instruction, their perceptions of writing and academic writing performances range over a wide scale. The second finding is that their knowledge of “writing” appears to be primarily focused on an academic concept of writing: teacher-directed, pre-planned, and convention-based. The third finding is that the relationship between perception and performance appears to have linear correlation; students with neutral attitudes and self-efficacy produce below average to average writing performance and students with positive attitudes and self-efficacy produce average to above average writing performance.

### Reliability of Data

This researcher worked diligently to ensure the reliability of this study and the data. Reliability began with purposeful selection of participants; the five students were those who had received the same writing instruction from the same teachers and were not receiving any form of special education or formal support services at the time of this study. In regard to the writing ability measures, this researcher followed the prescribed administration and scoring procedures detailed Hammill and Larsen (2009) throughout the *TOWL-4 Examiner's Manual*. The students had similar topic knowledge about Spring, which enabled them to answer the writing prompt similarly. The writing samples were evaluated using New York State's Expository Writing Rubric in order to ensure objective grading throughout the scoring process. In regard to the perception measures, although this researcher used the same location, duration, script, and surveys when interviewing all five students, the data relied on oral responses from students who may or may not be familiar or experienced with accurately and clearly articulating their thoughts and thinking process.

### **Interpretation of Findings**

Results of the data analysis indicate three findings emerging from this empirical study. The first finding is that although these participants are all from the same class and school, and have had the same teachers and writing instruction throughout their elementary schooling, their perceptions of writing are not consistent with each other but range over a wide scale as do their academic writing performances. Students' attitudes and self-efficacy ranged from strongly negative to strongly positive as students' knowledge ranged from limited to developed. In spite of the researcher's efforts to control variables such as school writing knowledge received and school writing experience, a range of knowledge appears to exist among the participants. This range suggests that there are other factors and variables at play in writing performance than just being taught to write. Although attitude and self-efficacy can be influenced to a degree by teachers and school writing experiences, results suggest they may play a larger role in academic writing performance than instruction alone. That thought can be interpreted in two ways: that students' perceptions of writing are influenced by factors unrelated to writing instruction in school and over which teachers likely have no control, and that teachers wanting to improve students' school writing performance might consider increasing their efforts to impact student writing attitude and self efficacy not just writing knowledge.

The second finding is that the students' knowledge of "writing" appears to be primarily focused on an academic concept of writing: teacher-directed, pre-planned, and convention-based. Most participants discussed writing in terms of teacher directions, prescribed structure, and quality in quantity. This knowledge perception of writing suggests that participants hold an understanding of "writing" as another school-based subject. Although all participants did speak of writing in terms of connection to self, that connection appears to relate more to the content of the writing and a desire (or perhaps a teacher requirement) to make the writing relevant to self than to the nature of writing itself. Therefore the participants' knowledge of writing generally and of good writing specifically appear to be a reflection of the style of writing they learned in school. A broad interpretation of that finding suggests that the writing students do outside of school (such as blogging or texting) may not be considered "writing" by the participants. If so, teachers may be able to influence academic writing performance (especially the elements of structure and conventions) by approaching writing instruction through a socio-cultural lens,

which views writing as culturally and discourse based: meaning that the writing conventions for the discourse of “texting” are not appropriate for the discourse of school writing.

The third finding is that the relationship between perception and performance appears to have a linear correlation. That is, the participants with more negative attitudes, lower degrees of self-efficacy, and limited knowledge of writing generally scored lower on the academic writing ability measure. On the other end of the continuum, participants with positive attitudes, higher degrees of self-efficacy, and developed knowledge of writing generally scored higher on the academic writing ability measure. While this finding of a linear correlation is not really “new” (the more a student knows, the better a student writes), this finding does add the factors of attitude and self-efficacy as part of that correlation. As with the second finding that suggests teachers may be able to influence academic writing performance by incorporating writing instruction that also addresses attitude and self-efficacy, this finding suggests that doing so may have a direct impact on student academic writing performance.

## Chapter 5: Discussion and Conclusion

### Overview of Study and Findings

Analysis of *The Nation's Report Card* (NAEP, 2011) indicates low performance by adolescent students in the area of academic writing, which in turn suggests that students are not developing the writing skills in the elementary grades that will enable them to write successfully as adolescents. Academic writing involves specific expectations for structure, content, and conventions. While students learn these expectations in school, students' perceptions of writing may also impact their academic writing performance. Therefore, to address this problem of students' low writing performance in school, an appropriate research question is, what are fourth grade students' perceptions of writing and what is the influence of those perceptions on their academic writing performance. The most appropriate way to address this question of perception and influence is by conducting an empirical research study using fourth grade participants and a mixed methodology to determine what those perceptions are and how they relate to writing performance. After measuring academic writing performance and collecting data on perception attitude, self-efficacy, and writing knowledge, analysis has produced three findings. First is that although these participants are all from the same class and school, and have had the same teachers and writing instruction throughout their elementary schooling, their perceptions of writing are not consistent with each other but range over a wide scale as do their academic writing performances. Second is that their knowledge of "writing" appears to be primarily focused on an academic concept of writing: teacher-directed, pre-planned, and convention-based. The third finding is that the relationship between perception and performance appears to have a linear correlation, with neutral attitude and self-efficacy producing below average to average performance, and positive attitude and self-efficacy producing average to above average performance.

### Significance of the Findings

These findings are significant to classroom teachers, literacy specialists, researchers, and to the field of literacy as a whole. The findings are significant to these professionals because they

illustrate student's perceptions of writing within the era of Common Core. Although researchers (Graham, Schwartz, & MacArthur, 1993; Graham, Berninger, & Fan, 2007; Pajares & Valiante, 2001; Olinghouse & Graham, 2009) have examined students' knowledge, attitude, and self-efficacy regarding writing, most of their studies were conducted before the advent of Common Core. Therefore the data collected in those studies does not reflect the new ways in which Common Core has affected teaching and learning. Students' perceptions, which this study has found to be based on teacher directions, conventions, pre-planning, and quantity, may be a reflection of the scripted, prescribed curricula aligned to Common Core Standards. In this light, Common Core has not only changed teachers' instruction, but also students' perceptions of writing, and, possibly, reading.

### **Limitations of the Findings**

These findings are limited by the measurements used to assess students' perceptions. The perception measures were adapted from measures used in previous studies (Graham, Schwartz, & MacArthur, 1993; Olinghouse & Graham, 2009), but the reliability and validity of these measures have never been confirmed. Furthermore, there are no current, valid, and reliable measures of attitude, self-efficacy, and knowledge, as each of these constructs rely on the participants' ability to describe, explain, and articulate. In addition, the number and type of participants is a limitation of the findings; five non-diverse students all from one rural school limits the generalizability of the results.

### **Conclusion (The Answer to the Research Question)**

The overall goal of this study was to understand fourth grade students' perceptions of writing, including knowledge of writing, attitude towards writing, and self-efficacy related to writing. The second goal was to determine a relationship between those students' perceptions of writing and the quality of their actual academic writing. To that end, this study compared these students' perceptions with their overall academic writing ability. The research questions guiding this study were, what are fourth grade students' perceptions of writing and what is the influence of these perceptions on their academic writing? To answer these questions, this empirical research study

uses a mixed methodology of both quantitative and qualitative data and analysis. Data analysis reveals three findings. The first finding is that that fourth grade students' perceptions and academic writing performance range widely despite similar educational experiences. The second finding is that students' knowledge of writing is largely academic-based, focused on teacher directions, pre-planning, and conventions. The third finding is that the relationship between perception and performance appears to have linear correlation, with neutral attitude and self-efficacy producing below average to average performance, and positive attitude and self-efficacy producing average to above average performance. Thus to the question of what are students' perceptions, the summative answer is that their attitudes and self-efficacy are individualized and therefore appear to be influenced by factors outside of classroom writing instruction, while their writing knowledge appears to be a direct result of classroom writing instruction. To the question of the influence of those perceptions on academic writing, the answer is that the influence appears to be linear.

### **Recommendations for Future Research**

Recommendations for future research include developing a universally applicable scale for measuring students' perceptions. This scale should be both reliable and valid in order to provide its user with an accurate depiction of students' perceptions about writing. Additionally, future research could compare students' perceptions of writing with their out-of-school writing practices in order to determine the influences of home discourses on academic discourses within the context of writing.

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**Appendix A: Perceptions of Writing: Measure of Self-efficacy\***

\*adapted from Graham, Schwartz, and MacArthur, 1993

STATEMENTS

1. It is easy for me to write a persuasive argument on a topic.
2. It is easy for me to write an informational report about a topic.
3. It is easy for me to write a story.
4. It is easy for me to organize my writing.
5. It is hard for me to plan my writing.
6. It is easy for me to revise and edit my writing.
7. It is easy for me to use correct punctuation in my writing.
8. It is hard for me to use correct capitalization in my writing.
9. It is easy for me to use correct spelling in my writing.
10. It is hard for me to write sentences that make sense.
11. It is easy for me to use correct grammar.

RESPONSE SCALE

1- strongly disagree    2- disagree    3- neutral    4- agree    5- strongly agree

**Appendix B: Perceptions of Writing: Measure of Attitude\***

\*adapted from Graham, Schwartz, and MacArthur, 1993

**STATEMENTS**

1. How would you feel about writing a persuasive argument on a topic?
2. How would you feel about writing an informational report about a topic?
3. How would you feel about writing a story?
4. How would you feel organizing your writing?
5. How would you feel planning your writing at school?
6. How would you feel revising and editing your writing at school?
7. How would you feel if you had to correct your punctuation?
8. How would you feel if you had to correct your capitalization?
9. How would you feel if you had to correct your spelling?
10. How would you feel if you had to correct your sentences because they didn't make sense?
11. How would you feel if you had to correct your grammar?
12. How would you feel writing about something you have heard or seen at home?
13. How would you feel keeping a journal?
14. How would you feel writing poetry for fun?
15. How would you feel writing a story instead of doing homework?
16. How would you feel about writing instead of watching TV?
17. How would you feel writing about things that have happened in your life?

**RESPONSE SCALE**

1- strongly dislike    2- dislike    3- neutral    4- like    5- strongly like

**Appendix C: Perceptions of Writing: Measure of Knowledge\***

\*adapted from Graham, Schwartz, and MacArthur, 1993, Olinghouse and Graham, 2009

**QUESTIONS**

1. What is writing?
2. What do good writers do when they write?
3. Why do you think some kids have trouble writing?
4. What kind of advice would you give someone who had to write a persuasive argument for class?
5. What kind of advice would you give someone who had to write an informational report for class?
6. What kind of advice would you give someone who had to write a story for class?
7. If you were asked to write an informational report for class or homework, how would you organize your writing?
8. If you were asked to write an informational report for class or homework, what kinds of things would you do to plan your paper?
9. If you were asked to write an informational report for class or homework, how do you change the paper to make it better?
10. If you were asked to write a persuasive argument for class or homework, how would you organize your writing?
11. If you were asked to write an persuasive argument for class or homework, what kinds of things would you do to plan your paper?
12. If you were asked to write an persuasive for class or homework, how do you change the paper to make it better?
13. If you were asked to write a story for class or homework, how would you organize your writing?
14. If you were asked to write a story for class or homework, what kinds of things would you do to plan your paper?
15. If you were asked to write a story for class or homework, how do you change the paper to make it better?

**Appendix D: Academic Writing Ability: Rubric\***

\*NYSED, 2012

New York State Grade 4-5 Expository Writing Evaluation Rubric

CRITERIA	CCLS	SCORE				
		4 Essays at this level:	3 Essays at this level:	2 Essays at this level:	1 Essays at this level:	0 Essays at this level:
<b>CONTENT AND ANALYSIS:</b> the extent to which the essay conveys ideas and information clearly and accurately in order to support an analysis of topics or texts	W.2 R.1-9	—clearly introduce a topic in a manner that follows logically from the task and purpose —demonstrate insightful comprehension and analysis of the text(s)	—clearly introduce a topic in a manner that follows from the task and purpose —demonstrate grade-appropriate comprehension and analysis of the text(s)	—introduce a topic in a manner that follows generally from the task and purpose —demonstrate a literal comprehension of the text(s)	—introduce a topic in a manner that does not logically follow from the task and purpose —demonstrate little understanding of the text(s)	—demonstrate a lack of comprehension of the text(s) or task
<b>COMMAND OF EVIDENCE:</b> the extent to which the essay presents evidence from the provided texts to support analysis and reflection	W.2 W.9 R.1-9	—develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples from the text(s) —sustain the use of varied, relevant evidence	—develop the topic with relevant facts, definitions, details, quotations, or other information and examples from the text(s) —sustain the use of relevant evidence, with some lack of variety	—partially develop the topic of the essay with the use of some textual evidence, some of which may be irrelevant —use relevant evidence inconsistently	—demonstrate an attempt to use evidence, but only develop ideas with minimal, occasional evidence which is generally invalid or irrelevant	—provide no evidence or provide evidence that is completely irrelevant
<b>COHERENCE, ORGANIZATION, AND STYLE:</b> the extent to which the essay logically organizes complex ideas, concepts, and information using formal style and precise language	W.2 L.3 L.6	—exhibit clear, purposeful organization —skillfully link ideas using grade-appropriate words and phrases —use grade-appropriate, stylistically sophisticated language and domain-specific vocabulary —provide a concluding statement that follows clearly from the topic and information presented	—exhibit clear organization —link ideas using grade-appropriate words and phrases —use grade-appropriate precise language and domain-specific vocabulary —provide a concluding statement that follows from the topic and information presented	—exhibit some attempt at organization —inconsistently link ideas using words and phrases —inconsistently use appropriate language and domain-specific vocabulary —provide a concluding statement that follows generally from the topic and information presented	—exhibit little attempt at organization, or attempts to organize are irrelevant to the task —lack the use of linking words and phrases —use language that is imprecise or inappropriate for the text(s) and task —provide a concluding statement that is illogical or unrelated to the topic and information presented	—exhibit no evidence of organization —exhibit no use of linking words and phrases —use language that is predominantly incoherent or copied directly from the text(s) —do not provide a concluding statement
<b>CONTROL OF CONVENTIONS:</b> the extent to which the essay demonstrates command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling	W.2 L.1 L.2	—demonstrate grade-appropriate command of conventions, with few errors	—demonstrate grade-appropriate command of conventions, with occasional errors that do not hinder comprehension	—demonstrate emerging command of conventions, with some errors that may hinder comprehension	—demonstrate a lack of command of conventions, with frequent errors that hinder comprehension	—are minimal, making assessment of conventions unreliable

- If the prompt requires two texts and the student only references one text, the response can be scored no higher than a 2.
- If the student writes only a personal response and makes no reference to the text(s), the response can be scored no higher than a 1.
- Responses totally unrelated to the topic, illegible, incoherent, or blank should be given a 0.
- A response totally copied from the text(s) with no original student writing should be scored a 0.