A STUDY OF THE DIFFERENCES BETWEEN THE EXPRESSIVE WRITING APPROACH AND A WRITER'S WORKSHOP APPROACH FOR WRITING INSTRUCTION FOR SECONDARY SCHOOL STUDENTS WITH DISABILITIES

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Alexandra Elizabeth-Acosta Conniff, daughter of Yamandu Pereyra Acosta and Sylvia Ruth (Viroga Larrosa) Acosta, was born June 2, 1970, in Eufaula, Alabama. She attended elementary schools in Barbour County and graduated with honors from Eufaula High School in 1988. In August 1988, she entered Huntingdon College in Montgomery, Alabama to study Chemistry. In June 1990, she transferred to Auburn University and earned a Bachelor of Science (Chemistry) in August 1993. She entered Auburn University in January, 1996 and received a Masters of Education degree (Learning Disabilities) in August, 1997. She received a Masters of Education degree (Educational Administration) in August, 2007. Starting in August, 1997, she taught students with disabilities in the Jefferson County Schools in Birmingham, Alabama until she returned to Auburn University in June, 2003 to complete her doctorate degree. In conjunction with her doctoral studies, she taught secondary students with disabilities in Eufaula City Schools and served as a graduate assistant in the Department of Rehabilitation and Special Education. She has two sons, Robert Nicholas-Acosta Conniff and Stephen Daniel-Acosta Conniff.

DISSERTATION ABSTRACT

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A comprehensive review of research of instructional approaches investigated descriptive and intervention writing studies, both short-term and longitudinal, that has been conducted to examine the writing skills of students with and without disabilities. Various instructional studies investigated the effectiveness of instruction on the writing skills of students with disabilities and their peers. The prior knowledge the writers brought to the writing task and the students' metacognitive ability were factors involved in writing. Presented were the textual factors of the writer's knowledge of both general and specific writing structures that affect the writing process. The impact of instructional procedures is

examined. Methodological issues in writing research with secondary school students with learning and behavioral problems were analyzed.

This study compared two highly dissimilar approaches of teaching writing: Writer's Workshop, a writing process approach, versus Expressive Writing, a rule-based strategy approach. Expressive Writing (Engleman & Silbert, 1985), the rule-based strategy approach is based on the Direct Instruction Model developed by Siegfried Englemann and his colleagues. This writing instructional method focuses on teaching specific rules and strategies to students so that each student can apply the strategies to his or her writing. Writer's Workshop (Calkins, 1986, 1981; Graves, 1983), the writing process approach including rehearsal, drafting, revising, and editing phases, is based on is based on a social contextualist perspective. The cognitive process of the writer was the emphasis of the process approach to writing. In this study 21 secondary students with mild mental retardation, specific learning disabilities and other health impairments in a rural high school (13 males, 8 females, 16 African Americans and 5 Caucasians, ranging in age from 14.6 to 18.6 years) were randomly assigned to treatment groups: Expressive Writing or Writer's Workshop instruction. Two weeks of 45-minute daily instructional sessions were implemented. The two groups were compared on two essays, two curriculum-based measures and a maintenance essay. To determine whether students demonstrated a preference for either instructional method, an attitude/satisfaction scale was administered. Results of this study suggest that students with mild mental retardation, specific learning disabilities or other health impairments can benefit from small group writing instruction. Students did not show a preference for either instructional method.

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Style manual or journal used: Publication Manual of the American Psychological Association, Fifth Edition (2001)

Computer software used: Microsoft Word 2003; Scientific Package for the Social Services (SPSS), Version 13.0

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I. INTRODUCTION

While writing poses significant challenges for many students with disabilities, good teaching can help them overcome these barriers (Gersten & Baker, 2001).

Overview

The identification of the most effective methods to teach expressive writing to secondary school students with learning and behaviour problems continues to be an area of research. Baker, Gersten and Graham (2003) state that teaching writing to students with learning disabilities (LD) and behavior problems is one of the most difficult and challenging forms of teaching.

Even though writing is an essential communication skill in our society, many American students across the nation are still significantly poor readers and writers (Gersten, 1998; National Center for Educational Statistics [NCES], 2002). Students need to be able to inform, persuade, and tell a story to express themselves (Page, 2003) because writing is a key skill for communication. According to Secretary Page in his 2003 statement, a national level writing deficiency has focused all interested parties' awareness for the need of effective writing instruction. Students need to write for academic and professional success. In order to measure success over time, writing assessments are

needed. Even though students are improving according to the 2002 National Center for Educational Statistics (NCES) writing report, more than two-thirds of the nation's students still perform below the basic grade level of proficiency. For example, according to McGraw-Hill SRA (2003) in 1995 in the Chicago Public School District, only 21.6% of Grade 3 students in 592 elementary schools were reading on grade or above grade level.

II. REVIEW OF LITERATURE

The Current Status of Writing

Writing is the most complex and difficult challenge facing students in schools (Hillocks, 1984; Stein & Dixon, 1994). The inherent writing difficulties are even more challenging for those with learning disabilities of those in the lower performing student population (Isaacson, 1991; Stein & Dixon, 1994). Students who do not read on grade level also have difficulty writing. According to the 2002 National Standard of Education Statistics (NCES) in Writing Nations' report card, 85% of eighth graders performed at or above *Basic* in 2002. Eighth-graders who are at or above *Proficient* increased a significant difference in 2002 to 31%. Major findings of writing achievement level for grades 4, 8 and 12 in 2002 included the percentages of fourth-graders at or above *Basic* increasing from 84% to 86%. The twelfth-graders performed significantly different in 2002 with a decrease from the 1998 78% at or above *Basic* to 74%. Although only 2% of the students at each grade level performed at the *Advanced* level in 2002, this is an increase from the 1% in 1998.

Relatively little time is allotted to the cognitively complex writing task. Many of the difficulties experienced by students when writing are due to the inopportune combination of a difficult content to be learned with very little time allocated to learning it

(Stein & Dixon, 1994). Isaacson (1991) identified common characteristics of students with learning problems along with implications for effective writing instruction.

Table 1

Characteristics of Students with Learning Problems and Implications for Instruction

Common Characteristics of Students with Learning Problems	Implications for Effective Writing Instruction
Memory Problems	New Information should be organized meaningfully. Opportunities to apply new knowledge should be adequate.
Poor Selective Attention	Instruction should be explicit. Sometimes skills should be temporarily removed from the context.
Lack of Proficiency	Students should receive mechanical skills guidance or scaffolding on mechanical skills as they write. Skills should be taught directly.
Insufficient Procedural Strategies	Procedural Strategies should be explicit. Strategies should be scaffolded.
Poor Metacognitive Skills	Instruction should be explicit. Strategies should lead to self-regulation.
Poor Perspective-Taking	Students should interact with one another collaboratively.

Note. From Stein, M., & Dixon, R. C. (1994). Effective Writing Instruction for Diverse Learners. *School Psychology Review, 23*, 403. Copyright 1994 by National Association of School Psychologist. Adapted with permission.

The scientific knowledge base on teaching fundamentals is more advanced than teaching the knowledge base on teaching specific content (Baker, Gersten, & Scanlon, 2002) to students with disabilities. And more is known about teaching fundamentals and content at the primary than at the secondary level (Gersten, 1998).

Students' Writing Skills

Utilizing the National Assessment of Education Program Data (2002) an examination of the educational significance of the current writing problems demonstrates a difference between general education and special education students' writing achievement. Even though, writing is an essential component of academic success, students with disabilities have difficulty learning how to write. Students with disabilities are not being tested as much as their regular achieving peers are. About four percent of identified students with disabilities were excluded from the grades 4, 8 and 12 assessments according to the United States Department of Education, Institute of Education Science, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

There are also regional differences in scores. When you compare Alabama's writing score on the Nation's Report Card NAEP data, Alabama students in grades four, eight and 12 were performing below the national average score. The grade four students' national average scale score of 140 is lower than the national public score of 153. When you compare Alabama's writing score on the Nation's Report Card NAEP data, the grade

eight students' national average scale score of 142 is lower than the national public score of 152.

In order to measure their academic performance, Alabama students in grades three through eight are given the Stanford Achievement Test 9th Edition 2002. The national average is 50. Sub tests include reading and language. Alabama students in both grade four and eight are above the national average (Percentile for 4th grade Reading = 55 and 8th grade reading = 51) Alabama students are also above the national average in language with grade (Percentile for 4th grade Language = 59 and 8th grade Language = 56.) A significant difference in achievement exists not only between regular and special education students, but also between races. Even though percentile scores for all students tested in grades three through eight is 55, special education students are performing at the 17th percentile. General education students are performing at 61 percentile with African Americans and Caucasians at the 39th and 65th percentiles.

Writing in the Elementary and Middle School

The Alabama Direct Assessment of Writing is administered each year in order to measure the writing skills of Alabama students in grades five, seven and ten. A significant difference exists between general vs. special education students and between African American and Caucasian students. In the fifth grade, all students meeting or exceeding standard is 30.9% (general education is 34.1%, special education 25.9%, African-Americans 19.6 %, and Caucasians 38 %). In the seventh grade, all students meeting or exceeding standard is 38.3% (general education students score at 42.3%, special

education 32.3%, African American is 24.5% and Caucasian score 46.7 %). Yes, improvement in achievement for students exists, but students with disabilities are not progressing as well as their peers. Students with disabilities are performing significantly below the same age peers in writing skills including writing complete sentences and paragraphs that are logically and grammatically correct. Some researchers suggest causes of difficulties in written expression could be linked to poor, ineffective writing instruction. A major questions facing researchers is how do teachers instruct these struggling students in order to diminish the differences between these students and their peers and attain minimum standards in fundamental concepts of writing?

According to the Commission on Composition, National Council of Teachers of English (NCTE) position statement on teaching composition, the means of writing instruction should be done through writing. The central means of writing instruction should be guidance in the writing process and discuss of the student's own work. Students with disabilities need explicit writing instruction with frequent checks for understanding. One answer is the carefully sequenced instruction that teaches prerequisite or component skills to mastery using a logical example sequence and providing opportunities for guided practice and cumulative review (McGraw-Hill, 2003; NCTE, 2003)

As there is a controversy in reading instruction between explicit instruction vs. whole language instruction, there is also a debate in writing instruction. Explicit instruction focuses on rule-based strategy skill instruction leading up to a written product while whole language focuses on incidental learning through immersion in literature and writing activities. This debate is ongoing, and may never be resolved.

Recent Developments

While the writing instruction debate continues, the number of schools graduating functionally illiterate students is continuing to increase. In the 1983 *A Nation at Risk* report, there were 23 million American adults functionally illiterate by the simplest tests of everyday reading, writing and comprehension such as writing a grocery list, reading a menu or following multi-step directions on a product package. According to the 2003 U.S. Department of Education, 47 million American adults are functionally illiterate today, and each week, another 44,000 people are added to the U.S. adult illiterate population (Education World, 2003). Results from the 2000 Education Trust report, *Youth at the Crossroads: Facing High School and Beyond,* an international comparison of twelfth graders leaves American students above only Cyprus and South Africa. According to the *1999 Trends in Academic Progress: Three Decades of Student Performance*, average achievement of high school students on standardized tests is now lower than when *Sputnik I* was launched 48 years ago.

Students' inability to write is a problem that continues to weaken our nation's well being on a social and economic level. In recent years, a surge of research reports alert professionals, parents and researchers to the growing problem of illiteracy. The U. S. Department of Education says the 13% of 17-year-olds in the United States of America are functionally illiterate. This means that they have difficulty with daily living skills that require reading or writing such as reading a sign or writing a grocery list. Among minority youth, 44% of 17-year-olds are functionally illiterate.

In the 1983 *A Nation at Risk*, many 17-year-olds did not posses the "higher order" intellectual skills needed. Nearly 40% could not draw inferences from written material; only 1/5 could write a persuasive essay; and only 1/3 could solve a multi-step math problem. Not all reports have bad news. In the National Education Association 2003 Report the number of Advanced Placement exams administered has increased 356% in 16 years (1984-2000) from 50 per 1000 students to 178 per 1000 students.

Assessments of students in schools yield information that can be utilized to change how students are instructed and how students are assessed. Approximately 280,000 students were assessed for writing in 2002. Fifty percent were fourth graders, forty-three percent were eighth graders and seven percent were twelfth graders. Students were asked to write for three purposes: narrative, informative, and persuasive. Students were asked to write for many different audiences and in a variety of forms from a variety of stimulus materials including poems, letters, photographs and cartoons. Students were asked to generate, draft, revise and edit ideas and forms of expression in their writing.

When data are disaggregated by gender, average scores showed increase at both grades four and eight for both sexes. Female students outscored the male students across all three grade levels. In the twelfth grade, the boys' scores declined and the girls' scores showed no change. The gender gap increased in twelfth grade because the females scored 25 points above males and the male scores declined.

Looking at the scale scores by race and ethnicity, Caucasian, African American and Hispanic students improved their scores in 2002 from 1998 scores in fourth and eighth grade. But there was no statistical difference for twelfth graders across the races. When

Caucasian and African American students are compared using average scale scores, performance gaps are large between the races. For fourth graders, the size of the gap narrowed because African American fourth graders' scores increased twice as much as Caucasian's scores. At the eighth and twelfth grades the gaps did not show a significant change. When comparing Caucasian and Hispanic students, large performance gaps are also evident and no statistical differences occurred in the size of the gaps. Disaggregated data of students who qualify for free/reduced-price lunch and students who do not qualify for free/reduced-price lunch shows a substantial gap between eligible and not-eligible students. Substantial achievement gaps exist across races and socioeconomic status.

As a student progresses from elementary school to high school, the reading requirements, which demand increasing mastery of higher level reading skills, will be utilized in their writing activities. Secondary students gain information from a plethora of sources**.** Middle school and secondary teachers assume students have mastered necessary skills in order for them to be effective content area learners and rely on textbooks that are not on the readability level of the students. According to Baker, Gersten, and Scanlon (2002), a gap of skills exists between secondary students with learning disabilities and the secondary curriculum. But, the 2003 Education Report shows that an alarming percentage of America's 17-year-olds are foundationally illiterate. Those students who do read cannot comprehend what they have read. According to Carnine (1990), the teachers' ability to meet instructional objectives is greatly diminished by the demands of these low-performing students. Research and learning strategies have evolved in recognition of the instructional

aspects involved in helping non-strategic learners perform in ways that are more like their strategic peers (Baker, Gersten, & Scanlon, 2002).

In 1985, Gickling and Thompson coined the term curriculum casualties (Simmons & Kameenui, 1996). Curriculum casualties refer to the interaction of curricula that move too fast in relation to learners' existing skills. The cumulative effect of poorly designed curricula and instruction for learners results in a cycle of failure where the learners with disabilities continually and increasingly diverge from their peers. Two decades of research on secondary special education teaching have developed models that address both how students engage in secondary content learning and how teachers present and coordinate the learning process (Baker, Gersten, Scanlon, 2002; Gersten, 1998). Dixon and Carnine (1993) affirmed curriculum effects proposing that students can learn misconceptions from poorly designed instruction that can be barriers to remediation efforts in the future (Simmons & Kameenui, 1996). Two roles, author and secretary, are essential in production of clear written communication with each requiring knowledge and skills unique to that role. Reluctant writers in the author's role seem to struggle with generating and organizing ideas into a particular framework or structure (Baker, Gersten, Scanlon, 2002; Englert & Raphael, 1988; Englert, Raphael, Fear, & Anderson, 1989; Stein, Dixon, & Barnard, 2001). What corrective procedures have been enacted to remediate students for becoming successful writers?

Background of the Problem

The National Commission on Writing in America's Schools and Colleges' (2003) report, "The Neglected 'R'", supports the need for a writing revolution. American society

needs to understand the educational value of writing. Writing is not simply a way for students to demonstrate what they know, but it is a way to understand what they know. Therefore, writing is learning and discovery. Through writing, students can be equipped to observe, make judgments and think about the many complex issues that face students. Challenges in society and the classroom that Americans face include the following: support for teaching and other classroom issues, allotting time for writing, integrating technology into the teaching of and learning of writing, and assessments.

Contributors of Traditional Instruction that Fail to Influence Students Writing Ability

In order to be effective teachers of writing, one must understand the nature of writing. Writing is essentially the process of thinking and recording on paper thoughts and ideas. Writing is foremost a cognitive process. The means of revealing one's thoughts to others across time and space is done utilizing pen or computer keyboard.

Although writing is based on spoken language, it really is not. Writing is more accurately described as structured, disciplined thinking on paper. Even though speech contains meaningless utterances, sentence fragments and unnecessary repetition, writing does not (Hicks, 1993).

National Council of Teachers of English (NCTE)

The Writing Study Group of the NCTE Executive committee believes that writing is a complex activity. The NCTE offers principles that should lead to valuable teaching practices. Everyone has the capacity to write, writing can be taught, and teachers can help students become better writers. Writers can get better. Teachers do make a difference in how much students are capable of achieving as writers. Support for developing writers is

provided through carefully designed writing instruction. People learn to write by writing. The more people write, the easier it gets and the more a writer is motivated to do write. Writing is a process of not only knowledge of what writing is, but also what actions writers engage in as they produce texts.

Writing is a tool for thinking and generating ideas. Writing is a tool for thinking including solving problems, identifying issues, constructing questions, reconsidering what someone else has figured out, and trying out half-baked ideas. Writing grows out of many different purposes: the thinking, the procedures, and the physical format in writing all different when the writer's purposes vary according to purpose and audience. Conventions of finished and edited texts are important to readers and therefore to writers.

Writing should be grammatically correct and in Standard English. Reading and writing skills are closely related, and research has found that increased reading experiences also enhance writing skill development (Cotton, 1987). People who read well have a much easier time of learning to write well. Effective writers are familiar with what pervious writers have said. Reading creates a sense of audience and expectations on a topic. Speech and writing have a complex intertwined relationship. Maintaining audience and purpose in our writing allows for the writer's effective "voice" to be heard. Literate practices are embedded in complicated social relationships. The writer's frame of reference should include access to a wide, diverse set of experience and means of communication in order to create predispositions and skill for composing for any audience.

Since composing occurs in different modalities and technologies, writers need to be able determine the appropriate medium needed for a particular message, purpose and

audience. As society has moved from stick writing on mud balls all the way to computers, the basic tools for communicating has expanded to include modes beyond print alone. Assessment of writing involves complex informed human judgment. Writing is assessed for different purposes, but professionals who are informed about writing, development and the field of literacy education should assess writing.

Writing in the Middle School and High School

Assessment in writing in Alabama occurs at the 5th, 7th and 10th grade. Students have 60 minutes to read and respond to the Alabama Direct Assessment of Writing's prompt. There were four modes of written communication: descriptive, narrative, expository and persuasive. The scores are reported along a continuum from not rated to level IV. To receive a not rated score, the papers may be blank, off topic or off mode, insufficient, illegible, in a foreign language, copied verbatim from the prompt or refusal to write. Level 1 proficiency shows little understanding of the writing task. Level II proficiency reflects some understanding of the writing task, but more author involvement than author control. Level III scores indicate a good understanding of the writing task and are sufficiently developed with a sense of audience, purpose and author control. Level IV responses demonstrate writing that is thorough with a strong sense of purpose an audience and is precise, consistent and elaborated with details that are clear and coherent. The product should have necessary characteristics to ensure it meets standards. A focused holistic rubric for level one through level four is used to assess students' responses characterized by the following: purpose, content, audience and organization/clarity. The

following table delineates the criteria each level of measurement for these four areas of purpose, content, audience and organization/clarity (see Table 2).

Table 2

Holistic Rubric for Alabama Direct Assessment of Writing (ADAW)

	Level I Did not meet standard	Level II Partially meets standard	Level III Meets standard	Level IV Exceeds standard
Purpose	Indicated little understanding of writing task	Indicated some understanding of the writing task.	Indicated a good understanding of the writing task.	Indicates a thorough under-standing of the writing task.
Content Descriptive	Attempts to describe someone or something. Presents limited information/details in vague, general terms.	Described someone or something. Presents general information/ details.	Described someone or something. Presents specific information/details. Included other relevant details.	Described clearly someone or something. Uses precise, vivid sensory details. Includes other relevant details.
Narrative	Presents an unclear sequence of events that tells what happened in a poorly organized manner. May present a vaguely defined time frame.	Presents a sequence of events that tells what happened in a poorly organized manner. Presents a vaguely defined time frame.	Presents clearly a sequence of events, telling what happened. Establishes a time frame.	Presents clearly a sequence of events, telling explicitly what happened. Provides a definite time frame.

Table 2 (continued)

	Level I Did not meet standard	Level II Partially meets standard	Level III Meets standard	Level IV Exceeds standard
Audience	Displayed little or no sense of audience and purpose in word choice tone and language.	Displayed some sense of audience and purpose in word choice (tone and language)	Displayed a sense of audience and purpose in word choice (tone and language).	Displayed a strong sense of audience and purpose in word choice (tone and language).
Expository	Attempts to present reasons, explanations, or steps in a process. Displayed little or o attention to appropriate sequencing of steps or ideas. Presents few details and a vague main idea.	Presents reason, explanations, or steps in a process. Displayed some attention to appropriate sequencing of steps or ideas. Presents incomplete development, with limited details. May include a statement or implied main idea.	Presents reasons, explanations, or steps in a process. Displayed logical order: appropriate sequencing of steps or ideas. Contains a main idea and supporting details and may provide a conclusion.	Presents reason, explanations, or steps in a process. Uses logical order and the appropriate sequencing of steps or ideas. Contains a main idea, support details and a conclusion.

(table continues)

Table 2 (continued)

	Level I Did not meet standard	Level II Partially meets standard	Level III Meets standard	Level IV Exceeds standard
Persuasive	Contains an opinion and presents limited persuasive details, reasons, and/or examples supporting the position.	Contains an opinion and presents some persuasive details, reason, and/or examples supporting the position.	Contains a clearly state opinion and presents sufficiently persuasive details, reason, and/or examples supporting the position.	Contains a clearly state opinion and presents persuasive details, reasons, and/or examples that thoroughly support the position.
Organization/ clarity	Displayed little or no evidence or organization plan or strategy.	Displayed some evidence of an organizational plan or strategy, although ideas were loosely organized.	Displayed an organizational plan or strategy. Displayed a sense of author control.	Displays a strong organizational plan or strategy with overall completeness.

(table continues)

Table 2 (continued)

	Level I Did not meet standard	Level II Partially meets standard	Level III Meets standard	Level IV Exceeds standard
Organization/ clarity (cont'd)	Displayed little or no sense of author involvement. Presents one or more weak, unclear controlling ideas. Gave little or not attention to topic development. May present irrelevant ideas.	Displayed some sense of author involvement but weak author control. Uses a controlling idea but may wander from it or uses several controlling ideas. Introduces the topic and develops it minimally. Presents ideas with minimal attention to their flow. Uses basic-functional vocabulary.	Uses one controlling idea with only minimal wandering from it. Introduces the topic and develops it sufficiently. Presents ideas so that they flow smoothly from one to the next with clarity. May provide a conclusion. Makes occasional errors in grammar, usage, and mechanics that did not interrupt the flow of communication.	Displays a strong sense of author control. Uses one clear controlling idea and did not wander from it. Introduces the topic and develops it thoroughly. Presents clear ideas so that they flow smoothly from one to the next with clarity and coherence, using appropriate transitions. May provide a conclusion. Displayed limited minor errors in grammar, usage

			Uses a variety of sentence structures.	and mechanics.

Table 2 (continued)

	Level I Did not meet standard	Level II Partially meets standard	Level III Meets standard	Level IV Exceeds standard
Organization/ clarity (cont'd)	May commit many obvious errors in sentence formation, grammar, usage, and mechanics that interrupt the flow of communication.	May commit errors in sentence formation, grammar, usage, and or mechanics that interrupt the flow of communication.	Uses meaningful, precise vocabulary. May display creativity in presenting information.	Uses a variety of sentence structures appropriately. Uses vivid and precise vocabulary. May display creativity in presenting information

Types of Writing

Descriptive is the most basic mode. A written description consists of statement about the attributes of the item being described. Some commonly included items included in the description include references to appearance (size, shape and color), taste, smell sound and how something feels. There is no reference to time or sequence, but only impressions of that being described. References to relative location, as appropriate, of parts are included. In elementary schools, describing activities are rather common such as sentence expansion exercises and picture or object descriptions.

The narrative mode adds elements of time and sequence to the descriptive mode. Process and directions are described in order in which they should be carried out, and events are usually described in chronological order. Examples of narrative writing in the elementary schools are the personal experience story, the original story, and directions telling how to do something or make something.

The expository writing attempts to explain relationships. How and why questions are the focus of attention. It not only includes descriptions and sequencing of events, but also provides explanations about cause-and-effect relationships between events, or the significance of parts of each other. Explanations about the effects of brushing your teeth regularly or why it sleets rather than hails are examples of expository writing.

Persuasive writing adds the elements of judgment and advice or recommendation. It explains the goodness or worth of an idea, action, or thinking, and it attempts to influence the reader's attitudes or actions by providing supportive explanations. Typically, the argument includes a position statement with reasons that support a position, whether

for or against something. Quotes from respected individuals, facts, and analogies to strengthen the argument may be included. A description of something or summary or past events also may be included. A letter to the editor or an editorial in the school paper about the dress code might be appropriate for upper grade children.

Traditional Writing Programs

Review of Literature on Traditional Programs

The National Council of Teachers of English (NCTE) a professional association of educators of English studies, literacy and language arts is dedicated to improving the teaching and learning of English and language arts at all levels of education. NCTE aims for excellence in writing achievement—for all students. Based on 2002 NAEP writing results were encouraging, but not everyone shows improvement. Roughly 80 percent of students who took the 2002 NAEP writing test performed at or above the "Basic" level. Success in modern society demands that students write at or above the "Proficient" level, not at a "Basic" level. NAEP defines "Proficient" writing comprised of an effective response that is clear and enhances the central idea. Nationally, only 28 percent of fourth-grade, 31 percent of eighth-grade, and 24 percent of twelfth-grade writers scored at or above the "Proficient" level. Racial, family income and school location criteria were contributors to significant gaps in achievement.

Writing is the key to learning and to documenting what one has learned across all subjects. Effective teachers guide student as they learn to analyze, organize and synthesize information. NCTE launched The National Writing Initiative Campaign in order to help

every student become a competent writing and thinker. The National Writing Initiative Campaign was designed to help teachers in every discipline learn to use writing as a tool for student learning and thinking; to encourage the involvement of community members and parents in students' literacy and writing education; to help educators make instructional decisions based on careful assessment of student writers; and to build successful school-wide, system-wide and campus-wide writing programs.

The NCTE Commission on Composition states essential principles in the teaching of writing to guide teachers, parents, and administrators in understanding the power or writing and in effective teaching of writing. Writing is a way for a writer to learn about his world and communicate his insights to others and there by grow personally and affect change in the world. Writing is a process of planning, writing, revising and editing. Educators should focus on the writing process versus the writing product and its strengths and weaknesses (Baker, Gersten, & Scanlon, 2002). A range of purposes exists for writers to present their understanding of the world. Writing classrooms should consist of less than 20 students because effective teaching of writing includes frequent writing assignments and frequent individual attention from the teacher and peers. Teachers should provide guidance and support to writers throughout the writing process. They should be knowledgeable about the relationship between reading and writing.

Writing as a Process

Writing is a critical element of school curriculum and an important part of past school. Effective school research has been conducted to determine factors that distinguish schools and classrooms over the past twenty years. In the area of writing, a gulf lies

between research and practice (Cotton, 1987). The Northwest Regional Educational Laboratory in 1984 published a synthesis on research on effect school practices entitled, the Goal Based Education Program.

From the research on teaching writing comes the major general finding that improvements in student achievement are demonstrated when writing is not a product, but rather a process (Cotton, 1987; Gersten & Baker, 2001; Hillocks, 1984, 1986). In a product-oriented approach the major concerns are form and correctness with sole audience being the teacher. Success is measured for students demonstrating conforming to formulae, following rules, and demonstrating technical mastery of formal modes and conventions. Many major writing decisions are made by the teacher, so writing ownership lies more with the teacher than the student.

Constructivism is a philosophy about learning and teaching rather than a specific teaching method or approach. Constructivists view children as innately active, self-regulating learners who construction knowledge and learning within a social, developmentally appropriate context (Harris, Graham & Mason, 2003). A deeper, richer understanding of knowledge by the learner is attained through active participation in the learning and is manifested through application of knowledge by the students. Constructivists rebuff teaching discrete skills in a linear sequence and also the belief that mastery of prerequisite basics skills is necessary for higher order thinking skills (Harris & Pressley, 1991; Pressley & Harris, 1998). Harris, Graham and Mason (2003) argue that Constructivism, with its emphasis on authentic and meaningful learning environments versus skill attainment of strategies and knowledge through explicit instruction is

incapable of providing the level of instruction necessary for students with disabilities to attain mastery.

Whole language is the most widely known application of Constructivism. Constructivists reject explicit instruction. Through immersion in authentic, rich learning environments, students will learn developmentally appropriately all they need to know and develop all the skills and abilities they need. Learning to write occurs naturally within this environment. Although skills are taught in a teachable moment, little or no explicit instruction of basic skills is addressed.

Failures of various subparts of the traditional approach lead to the production of struggling writers. Reasons for failures of the traditional approach include first, focusing on form and mechanics and sacrificing meaning and ideas. Secondly, product is the focus vs. process being the focus. Thirdly, early writing process stages are neglected. Next, no artificial contexts for writing are offered. Next mechanical skills are isolated from writing context. Finally, the traditional approach is based on outmoded theoretical assumptions versus research and experimentation (Cotton, 1987).

Essential Ingredients: Recipes for Teaching Writing

Sandra Worsham, a secondary classroom teacher of 30 years, presents workshops to writing teachers across the country. She is member of the National Teachers Hall of Fame, a 1992 Milken National Educator, and a 1982 Teacher of the Year for Georgia. In her book, *Essential Ingredients,* Worsham describes understanding the way we learn to write. Writers are reluctant to write. A continuum of writing ability is found in a classroom. The best way to learn to write is to write about yourself. Creating an inviting

atmosphere in the classroom is a part of behavior management. Writers need a space where they feel safe, respects and appreciated. Involving parents in the classroom is proactive. Prewriting initializes ideas so that these ideas will motivate, lead, excite and inspire writers. Drafting of ideas leads to sharing of ideas with peers. Structured sharing of drafts and suggestions from group members leads to revisions. Publishing works increases the pride of authors. When teaching students about experimentation with words and ideas, teachers need to be creative and allow choice. However, students with disabilities have difficulty manipulating and perceiving the relationship among ideas, monitoring their texts, and using writing strategies to produce coherent texts (Englert, 1992; Englert, Raphael, Anderson, Gregg, & Anthony, 1989; Wong, Wong, & Blenkinsopp, 1989). Writing across the curriculum helps students succeed in school. Writing should be interesting, come from our own locale and appeal to the senses. Teachers must be reflective in their practice of writing instruction and learn from their students. Worsham students should not be constrained by rules, but rather have a free flow of ideas in their writing.

Alabama Reading First Initiative: Literacy for All

The twenty-first century work force requires that students need to be reading at the "above average" range to meet the higher demands of the work force. Test scores show that reading is a weakness in Alabama. Over 90,000 children in Alabama in grade three to eleven score on the lowest levels on the Stanford Achievement Test and are on "alert" status. One of the first three states, Alabama, received approval of its Reading Proposal for increasing achievement of students. In 1998, the $15+ million dollar grant was funded for six years to assist in raising the number of students who are reading on

grade level. The goal of the Alabama Reading First Initiative is improving reading for students to 100% literacy so that the students can compete with anyone and be contributing members in the twenty-first century society.

The approach will target three areas of reading for students: beginning reading instruction; expanding reading power; and intensive, effective interventions for struggling readers. The research base for the Alabama Reading Initiative is establishing a balance between best practices of whole language and phonics. It combines the explicit teaching of skills needed to decode words with language-rich, literature-rich instruction. Students with disabilities benefit from the structured, teacher-directed rule-based strategy instruction of Alabama Reading Initiative. The strategy is first modeled; then the students are guided through examples and then students apply strategy in another example then a novel example. Immersion in the language-rich, literature-rich regular education curriculum exposes students with disabilities to the program of study to which they will be compared to and compete with their peers in the classroom and on norm referenced tests.

Elements of Alabama Reading Initiative (ARI) for Effective Reading Instruction

Early reading stage. At the beginning reading stage in order develop oral language proficiency, effective reading instruction should include language-rich activities including an immersion in a print-rich environment. Phonemic awareness should be developed through play with sounds of the language in a linguistically rich environment. Interactive strategies, as well as systematic, explicit phonics instruction, should teach names and shapes of letters and engage students in building and decoding words. Daily practice with a variety of early reading material as well as daily opportunities to write should be

integrated in all content areas. Teacher-directed comprehension strategies, that increase the student's ability to gain meaning and to reflect with and around print, should be integrated into instruction. Assessment and evaluation of student progress should be on going and daily. Assessment of instruction should guide instruction.

Expanding reading power. When providing instruction in grades two through 12, teachers must instruct explicitly so that students can read frequently, strategically, broadly and thoughtfully. The reading program should be connected to the writing program. The program should provide comprehension strategy with teacher-directed, integrated instruction so that students improve their ability to gain understanding and engage in reflection with varied, abundant and authentic printed materials. Vocabulary should be expanded utilizing daily discussions that students are required to defend their understanding of printed material utilizing literal, interpretive and evaluative responses.

Reading recovery. Reading Recovery is a one-on-one tutoring for low-achieving first graders where students receive a half-hour lesson each school day for 12 to 20 weeks with a specially trained Reading Recovery teacher. When students are achieving in the average range of their class and demonstrate they can continue to achieve, they graduate out of the program. Dr. Marie M. Clay, a New Zealand educator and researcher, developed Reading Recovery. In the mid-1960s, Dr. Clay conducted observational research that enabled her to design ways to detect children's early reading difficulties. She developed Reading Recovery procedures with teachers and tested the program in New Zealand in the mid-1970s. Reading Recovery has spread from New Zealand to Australia, the United States, Canada and Great Britain. Since Reading Recovery was introduced in

the United States in 1984, more than one million first graders have been served. The Reading Recovery Council of North America, a network of educators that monitors program integrity, provides professional development, coordinates the collection of research, evaluates data, and disseminates information, supports this program.

Linking Reading and Written Language

Hedrick and Cunningham (1995) conducted a study to look at the relationship between reading and listening comprehension of written language. Two questions were asked about this relationship. First, higher levels of wide reading were associated with stronger listening comprehension ability. Second, there was evidence, indirectly, to suggest that wide readers might be increasing their listening comprehension ability. One hundred and twenty fourth graders (54 boys and 66 girls) in a small southeastern town in the United States were measured on reading-related language ability, estimated amount of wide reading and general language ability. These students came from middle and working class families. Twenty-six and eight-tenths of the children were on free or reduced lunches. No children with disabilities or children with English as a second language were included because this study's focus was on modal or normal relationships between reading and language. The students were 2.5% Hispanic, 25% African American, and 72.5% Caucasian, which reflects the approximate racial mix of the city school system.

Hierarchical regression logic was used to isolate the relationship between wide reading and reading-related language development. Three variables (Title Recognition Test, Formal Listening Inventory and Sentence Combing) were analyzed. All three variables correlated with each other at the .01 levels. The hierarchical multiple regression

analysis indicated that although general language development accounted for a moderate amount of the dependable variance in listening-comprehension-of-written-text ability (18.7%), performance on the wide reading measure explained significant additional variance (14.7% unique variance to Title Recognition Test). The major finding of the study was that exposure to written language is implicated in the development of reading-related language ability.

According to the NCTE Writing Initiative, over the last 30 years' research on literacy learning during secondary grades has revealed a great deal of how middle school students learn to write well. Much of the research is based on direct observation of students writing and reading. The research has also highlighted the pivotal supportive role that educators play in the development of these language processes. Key concepts of the research include writers in the middle grades have accumulated knowledge that is essential for writing. Quality instruction builds upon students' existing abilities, skills and life experiences. Communication skills improve when students are asked to write frequently for meaningful purposes. The development of student writing is best achieved through substantial time devoted to writing, focused instruction that builds upon the writings, and multiple opportunities to write across the curriculum. Grammar, punctuation, and spelling are most successfully learned with a combination of carefully targeted lessons applied within the context of meaningful writing.

Writing development is inextricably tied to reading development. Writers improve their ability to craft a particular genre by being provided ample opportunities to read, write, and observe peers' production of that particular genre. *Writing to Think* is an

important role of writing. Writers form ideas, understand experiences and present understanding by the act of writing. Student achievement across the curriculum can be improved by teaching writing as a tool for exploration and understanding.

Implications for teachers include imbedding writing skills and conventions within the context of meaningful writing. Middle school students with learning and behavior problems improve in their writing when they are challenged to use writing for meaningful purposes. Assessment of writing is embedded within the curriculum and is represented by a collection of key pieces created over time. This assessment benefits individual writers and guides instructional planning for teachers.

The ERIC Clearinghouse on Reading, English and Communication Digest #157 (2000) advocates vocabulary's influence on successful writing. An extensive research base exists indicating that a rich vocabulary is a critical element of reading ability. Reading and writing are so closely aligned that some researchers advocate teaching reading and writing simultaneously rather than as two separate subjects. Both reading and writing involve generating ideas, organizing ides, drafting ideas and revising ideas. If the writing process is linked to the reading process and the reading process is dependent on vocabulary, then the writing process is also dependent. Teachers can use vocabulary to improve writing skills.

Writing is dependent on recalling words to describe an event. The extensiveness and profundity of a student's vocabulary will have a direct influence upon the descriptiveness, accuracy, and quality of his writing. Brynildssen (2000) presents six principals of vocabulary development. Direct instruction of techniques or procedures for developing a broad, varied vocabulary is the first principle. Second, new vocabulary

introduced is connected to student's prior knowledge and experiences. Third, students should be encouraged to utilize new vocabulary in many contexts. Fourth, frequent exposure, practice and testing will improve acquisition of meaning and correct usage of new vocabulary. Next, teachers should model use of vocabulary through frequent use in the daily classroom. Finally, vocabulary teaching must be an interdisciplinary project, integrated into the curriculum at every level.

Teachers improved vocabulary by creating classrooms that take writing seriously in a writing-centered classroom. Some techniques that can used to create these writing-centered classrooms include sharing vocabulary-rich literature, helping students become aware of and look for interesting words, offer a variety of writing opportunities, provide ample time for the entire writing process, and allow conferencing with teachers and peers.

Strategic Writing Instruction

Effective Intervention

A well-trained specialist should provide struggling readers with and without learning and behavior problems in grades two through twelve intensive, effective instruction as early as possible in order to significantly accelerate learning. Phonemic awareness and phonics, which enables students to understand the connection between speech and print, should be done with explicit instruction. Monitoring of student progress should be ongoing and should guide subsequent instruction. Comprehension strategies that increase the student's ability to gain meaning and to reflect about appropriate printed material should be teacher-directed integrated instruction. Extensive, accelerated practice

in reading and write should be utilized daily to ensure accuracy and fluency and to increase comprehension.

For more than twenty years, an abundance of research on strategy instruction has been conducted (Graham & Harris, 1989, Baker, Gersten, & Scanlon, 2002). Originally, most of this research focused on the effects of strategy instruction on students with disabilities, but now researchers are looking at how strategy instruction affects all learners. Many students' ability to learn has been improved through the deliberate teaching of cognitive and metacognitive strategies. Cognitive strategies are a strategy or group of strategies or procedures that the learner uses to perform academic tasks or to improve social skills. Meta cognition is the understanding a person has about how he learns including the strategies use to accomplish tasks, and the process by which the learner oversees and monitors his use of strategies (Baker, Gersten & Scanlon, 2002; Gersten, 1998).

Why is it important to teach students to be strategic? The Individuals with Disabilities Education Act (IDEA) of 2004 and the No Child Left Behind Act (NCLB) of 2001 focus on all students improving academically. All students should have access and progress in the general education curriculum according to the IDEA 2004. NCLB has established goals of performance that guide efforts of public schools, especially in establishing proficiency in reading/language arts, mathematics and science by all students by the year 2013–2014. In order to produce literate and productive lifelong learners, students need to become strategic, independent learners.

Essential strategies to teach that lead to improved student performance include computation and problem solving; memory; productivity; reading accuracy and fluency; reading comprehension and writing. Writing instruction utilizing the transactional strategies instruction (TSI) model should include the phases of planning, revising, questioning, uses of cues, verbalization, visualization, checking and monitoring. When teaching, strategy use, one should follow five steps: first, describe the strategy; second, model its use; third, provide ample assisted practice time; fourth, promote student self-monitoring and evaluation of personal strategy use; and finally, encourage continued use and generalization of the strategy.

Students with disabilities in inclusive classrooms respond differently to the curriculum. Depending on the disability, whether physical, emotional or cognitive in nature, students may need modifications in order to access the general education curriculum. Students may need advance and graphic organizers, instructional scaffolding, additional practice and time to complete assignments and large-print materials, audiotapes or electronic materials. Without specific modifications the standard curricular materials are inadequate and these students find themselves blocked from access to essential aspects of the curriculum. In order to break down these barriers and to assist these students' learning, teachers must adjust the material or their presentation. Teachers must be prepared to provide useful alternatives in terms of both curricular materials and instructional delivery in order to provide equal access to the curriculum. With appropriate tools and instructional methods, an effective teacher can encourage each student to participate directly in their learning experience. Writing is effectively used when it is

embedded throughout the school day across the curriculum. Implications for families and community members include engaging in literary and literacy activities there by bridging the gap between school and home and increasing the amount of participation of families and community members in school.

A common principle of instructional design is the power of the negative example (Engelmann & Carnine, 1982; Simmons & Kameenui, 1996). Dixon and Carnine (1993) addressed the question, "What would be the negative features of a curriculum for students with diverse learning needs?" Even though their analysis focused on mathematics, the principles can be generalized to other content areas. A curriculum designed intentionally to be difficult for students with diverse learning needs would: teach very little thoroughly; teach a topic or content and drop it, fail to give students the opportunity to apply content realistically; avoid opportunities to work on the critical features where many students predictably fail; avoid linking symbolic representations with concrete manipulations; encourage children to infer strategies; and focus on rote acquisition (Simmons & Kameenui, 1996). Simmons and Kameenui (1996) would add to Carnine and Dixon's list of poorly designed curricula criteria the following: provide few explicit examples of how to perform a task; assume that learners have adequate background information and know when and how to use it; leave it entirely up the learner to make the connections between information; allocate equal amount of time to all instructional objectives and assume that instructional time is unlimited.

Practitioners, administrators, education researchers, publishers, developers and personnel who prepare general and special educators must optimize academic learning for

the increasingly large number of students who fail to benefit adequately from current educational practices and tools (Simmons & Kameenui, 1996). Research on curriculum design, students, who fail to respond to traditional instruction, may require intensity and a variety of instruction different from past and present practices and education tools. Students are not going to progress if practitioners only add an instructional veneer to existing educational tools and practices.

Direct Instruction

Several levels of the term direct instruction exist. The most basic difference between indirect instruction and direct instruction is implying versus telling. When direct instruction has lower case "d" and "i", direct instruction refers to an instructional method based on homogeneous grouping of students, choral response, signals and other research based instructional techniques. Douglas Carnine and Siegfried Engelmann articulated a Direct Instruction theory in the book, *Theory of Direct Instruction.* Direct Instruction with capital letters refers to specific programs designed by Siegfried Engelmann and his co-workers that use direct instruction techniques along with scripted lessons, carefully designed sequences and answers for anticipated student questions.

Creating Direct Instruction programs is very deliberate. First, the national and state curricula being used are analyzed. Program developers will create a draft that will show any weaknesses. If the program contains too much practice and repetition in the beginning, then it will be difficult to determine how much practice and repetition was necessary to increase the opportunity of student success. It's much easier to build up practice and repetition rather than to analyze the program. A small group of 12 to 30

students is used to evaluate the rough draft. The authors continually modify the track to change areas for weaknesses as the student progress through the lessons. When the authors complete a program, it is tested with more students in different settings. Based on student errors, the authors make revisions. Most programs have a minimum of four revisions before publication.

Direct Instruction programs have notable external elements, which include scripts. The scripts contain what the teacher says and correction procedures for student incorrect responses based on anticipated student answers. The true power of a Direct Instruction program is it detailed analysis of each taught skill. The skill is broken down into its component parts. Each component part is taught to mastery and then the skills are combined where different skills are used across setting, which culminates with greater generalized fluency.

Critics of direct instruction suggest this technique as being a "cookie cutter" approach to instruction. This technique is not a "one size fit all" mentality. Individual needs are assessed routinely and carefully so that each student is placed according to his or her individual skill level. Lessons are fast paced so those students attain the highest response race in the shortest amount of time. The pacing of the lesson increases the possibility that students are remaining on task; focused on skills taught and are also actively engaged in learning. Increased retention of material is facilitated because there is a short time between students learning information and students applying that knowledge.

Success in Direct Instruction programs comes from not only fast pacing, but also scripted lessons. The scripts are essential for student success because the dialog is

designed for consistency across lessons and ensure that the students understand information presented. Teachers are no more inhibited by scripts than actors in a movie or docking protocol for a ship captain. In order to diminish opportunities for confusion, the scripts are specifically phrased and skillfully planned. The script guides the lesson and aids the teacher in answering many of the student questions by providing anticipated student responses.

Direct Instruction research has been conducted and demonstrates success for students of all ages and all levels of academic success. At-risk students, students with disabilities, general education and talented and gifted students continue to find success utilizing Direct Instruction programs. Teacher perceptions of students as not ready to learn can be eliminated by using Direct Instruction programs because program placements are homogeneous based on skill level. In order to catch up low-performing students to their peers, these low achievers require specialized instruction in order to accelerate their learning and success.

Success in learning comes through practice. Direct Instruction molds students to create competent, successful students. Confidence is constructed by carefully planning programs so those students are successful in each small lesson. This confidence in the learning tasks gives the child the opportunity to believe that he is capable of succeeding and therefore will succeed at larger, more complex ideas and issues. Every independent task required of student has been previously taught in a scaffolded teaching approach, so that the child will have all the necessary pre-requisite skills to be successful.

In order to maximize the opportunity for assessment, signaling is utilized. A student response is initiated by a visual or audible cue. Signals are utilized to ensure that students' answer at the same time the teacher is able to conduct assessments multiple times in a minute on the entire group. The teacher provides enough "think time" for each student to process the question and generate a response before providing the signal. Students' benefit by giving all children the opportunity to respond and not allowing other vocal, aggressive students dominate the class. Feedback and corrections are essential features of direct instruction lesson. Corrective feedback gives students the opportunity to not only practice, but to practice a correct response. Immediate corrections ensure that students don't learn misrule or incorrect skills.

Student motivation is also critical for success. Many students with disabilities and low performers have encountered failure. The best way to motivate low achievers is to emphasize their success frequently. The program is cumulative and builds on previously taught material. Teachers highlight student success by emphasizing that mastered material that w as once hard is now easy because it has been mastered.

Skills are cumulative. Traditional teaching techniques utilize a linear approach to teaching. Skills are taught in independent units, followed by the next independent unit. The Direct Instruction Program design teaches prerequisite skills and then utilizes these skills to teach the current lesson. Students are accountable for all content learned from the beginning of the program. Activities embedded in each thread change from lesson to lesson in order to increase application generalization skills of concepts and operations across a variety of settings. Tracks are a series of tasks needed to learn a given skill. A

typical Direct Instruction program track will be spread out over 20-80 lessons. While this skill is being taught, additional skills are being taught. Eventually the tracks will merge.

Cognitive Strategy Instruction in Writing (CSIW)

Cogitative strategy instruction integrates both behavioral and cognitive approaches. The behavioral perspective emphasizes direct instruction for its effectiveness in organizing, delivering and evaluating instruction for students with LD in teaching expository writing (Hallenback, 2002), but supplements direct instruction with instruction for generalization and processing. According to Hallenback (2002), writing should be taught as a process consisting of steps in which support, reinforcement and corrective feedback are provided. According to cognitive theorists, internalization of thought processes of effective writers should be incorporated into instructional methodology. Social Constructivism is based on the notion that people through social interactions come to know and understand the world. Cognitive Strategy Instruction in writing combines elements of direct instruction with cognitive strategy instruction with a core emphasis on collaborative teacher-student and student-student dialogue. This approach emphasizes exposing inept writers to the thought processes utilized by effective writers; thus enabling these struggling writers to apply these processes to their own writing. This approach emphasizes students with LD taking ownership of their own writing. Teachers provided scaffolding during the writing process and provided to the students cognitive tools necessary to move beyond the *learned helplessness* (Hallenback, 2002) characteristic of students with LD.

The study results first suggest implications for teachers of writing which include that, teachers need to teach thought process and skills through a scaffolded approach. Second, the purpose of writing instruction is to develop effective, independent writers. Third, the writing process builds upon itself. Finally, collaborative writing with peers can be generalized to other situations (taking notes, writing letters, writing emails); not just creating expository text that provides information to a reader in an interesting and informative way. During student collaborations, teachers should be willing to relinquish some control over the instructional environment. Rubrics should be developed to facilitate systematic assessment of writing instruction's critical stages.

The study with a single teacher and four students with LD suggest implications for the other students also. Students should be provided with assessment data at pre and post stages so those students can see a correlation between effort to improve writing and progress. Students need to make a commitment to becoming independent writers by utilizing teacher instruction and scaffolding. Students also need to practice utilizing knowledge in developing another's perspective so that this information guides in author tone and voice. A variety of opportunities need to be provided so that generalization of skills can be applied. The teacher is a key in fostering meaningful collaboration between peers in creating expository text.

Self-Regulated Strategy Development (SRSD)

Graham and Harris (2003) argue to integrate SRSD with other instructional approaches so that focused explicit instruction or isolated instruction can be integrated into the larger literacy context to the extent needed by individual students. Critical to the

success of this integration are teachers' intentions as well as students' perceptions of what and why they are doing something. Writing requires broad self-regulation and attention control (Graham & Harris, 1994, 1996, 2003; Harris, Graham & Mason, 2003). Writers need to effectively communicate to the reader by multi-tasking attention to audience needs and perspectives, purposes and goals, form and features and organization while coping with the mechanics and rules of writing. According to Harris, Graham and Mason (2003), students struggle in five areas of writing skill which include (a) effective use of mechanics of writing, (b) revision of text and goals, (c) creating goals and structure, (d) content generation, and (e) creating the outline for a writing product.

Students with LD have an even greater difficulty with writing than their peers (Harris & Graham, 1989, 2003). Students with LD are less skilled with the writing process, but overestimate their writing abilities. They lack skills and strategies for planning, producing, organizing and revising text. Students with LD struggle in selecting topics and generating ideas and may become hindered by the mechanics of writing.

The Self-Regulated Strategy Development (SRSD) was developed by Graham, Harris and their colleagues over 20 years ago to evaluate and guide writing instruction for students with severe deficits in expressive writing. According to Harris, Graham and Mason (2003), an integrated instructional approach to writing is needed to address the strengths and weaknesses as well as the cognitive, affective and behavioral characteristics of students with LD. Three goals that SRSD addresses for writing include (a) instilling positive attitudes towards writing, (b) improving independent revising and monitoring skills of writing, and (c) providing strategies encompassing the writing process, planning,

writing, revising and editing to students with severe writing difficulties. In order to develop skills, understanding and academic, social and self-regulation strategies, students with disabilities often require more extensive, structured, and explicit instruction than their peers do.

Research on Effective Teaching of Composition

The SRSD writing instruction model has been used in more than 30 studies since 1985. These studies have involved elementary through high school students with instruction being provided by regular and special education teachers. Instruction has often a part of Writer's Workshop (Danoff, Harris, & Graham, 1993; De La Paz, 1999; De La Paz & Graham, 2002; MacArthur & Graham, 1993; Sexton, Harris, Graham & Mason, 2003). By utilizing SRSD, improvements in students' planning (brainstorming, self-monitoring, organizing, webbing and advanced planning) and revising (with peers for both substance and mechanics) strategies have been noted. Improvements have been found for students with LD, as well as their peers (Danoff, Harris & Graham, 1993; De La Paz, 1999), with the students with disabilities performing similarly to their normally achieving peers (Danoff, Harris & Graham, 1993; De La Paz, 1999).

The SRSD has six stages that are as follows: (a) activate and develop background knowledge, (b) discuss it, (c) model it, (d) memorize it, (e) support it, and (f) independent performance. The six characteristics of SRSD instruction are as follows: (a) collaborative learning emphasized, (b) individualization of instruction, (c) criterion based instruction, (d)

proactive planning for writing difficulties or problems, and (e) developmental enhancement (Harris, Graham, & Mason, 2003).

Process-oriented approach to teaching writing has emerged in the past 20 years of research. Writing is a complex, reflective nonlinear process. The process has several distinct stages (Cotton, 1987; Gersten & Baker, 2001; Hillocks, 1984, 1986). The process includes prewriting, drafting, revising, editing and publication. During the prewriting stages, the writer gathers information. Prewriting activities may include, but not be limited to reading, talking, thinking, drawing, and problem solving and conducting library research. In the drafting stage in a process-oriented approach, is not focusing on mechanics, but rather content. Beginning the writing process can be painful and frustrating as ideas are put on the computer screen (or on paper). Revising involves making any changes deemed necessary including addition and deletions; reorganization and rewriting. Including peer reviews during revising leads to a superior final product (Cotton, 1987). At the editing stage is when the writer gives attention to mechanics such as syntax, spelling, punctuation, and grammar. Potential audiences for students' published written work could be classmates, teachers, and community members.

Instructional Practices

Not only has the process approach to writing been investigated, but also component parts of the traditional product-oriented approach have been investigated. One area is grammar instruction. The ineffectiveness of teaching grammar in isolation from student's actual writing efforts has little or no effect on the writing ability of students (Cotton, 1987; Hillocks, 1984, 1986). Cotton (1987) has shown grammar instruction that

relates directly to students' writing can improve writing achievement. Sentence combining instruction is one of the teacher techniques to improve writing skills that have a strong research base. Sentence combining, using students' own writing as the material with which to practice developing skills, is a good example of teaching the principles of grammar in a meaningful way. Sentence combining is an instruction technique to get writers to change syntactic patterns by embedding ideas into another sentence. Fluent writers use longer, more complex sentences than less fluent writers do. In experimental studies (Graham, MacArthur, & Schwartz, 1995), sentence-combining practice is better than grammar instruction for elementary and secondary students.

Writing achievement can be improved by providing a language-rich environment. Journal writing free writing and stream of consciousness writing can improve writing motivation and skill. Establishing written communication between student and teacher as well as writing poetry, compiling lists and free writing association. Reading and writing are closely related, and researchers have found that writing skill development is enhanced by increased reading experiences (Cotton, 1987).

Teacher and peer evaluations (Gersten & Baker, 2001), which repeatedly provide students with feedback and correctives on their work early and throughout the learning process, lead to high quality final products. In the traditional approach of product oriented writing, the teacher only write commentary on the final product, which is an ineffective way to produce writing skills gain. Research supports students preparing more than one draft of a paper. Today with use of word processors to produce all kinds of written communication, questions arise about the use of word processing programs.

Word processing programs are highly compatible with the process approach to writing. Cotton (1987) found that the use of computers was effective when utilized with good teaching techniques, which includes conferences and continuous evaluations and utilized holistically for revising such as cutting and pasting and rewriting.

Instructional Modes

George Hillocks, Jr. (1984) of the University of Chicago published a meta-analysis of 500 written composition experimental studies from 1963-1982. Hillocks not only cited discrete instructional practices and their relative effect sizes, but also included "instructional modes" and the effect sizes of their use on writing. He identifies three major classroom instructional modes that are the environmental, natural process and presentational modes.

The presentational mode is the most widespread approach of writing instruction by teachers and the least effective of the three Hillocks identified and studied (Cotton, 1987). The mode of writing instruction is characterized by first relatively specific and clear objectives. Secondly, discussions dealing with concepts to be learned and applied were lecture and teacher-led. Next; illustration of concepts and explanations were accomplished through the study of models and other materials. Next, specific assignments or exercises generally involve initiating a pattern or following rules that have been discussed previously (Cotton, 1987). Finally, teachers primarily provided feedback to students on their writing.

Hillocks' meta-analysis found that the natural process mode is 50 percent more effective than the presentational mode. The natural process mode is characterized by (a) general objectives to increase fluency and skill in writing; (b) free writing based on student

interest; (c) peers are the audience for writing; (d) peers provide positive feedback, generally; (e) revision of writing opportunities; and (f) high levels of interaction between students.

The environmental mode of instruction is distinguished by (a) clear and specific objectives, (b) careful selection of materials and problems to engage students with each other in specific processes important to some particular aspect of writing, and (c) small-group activities including problem-centered discussions that were task specific with high levels of student interaction. Through structured tasks, objectives are made clear for students by engaging them in concrete tasks.

When comparing the environmental, presentational and natural process modes, the environmental mode was found to be four times more effective and the traditional presentational mode and three times more effective than the natural process mode. Both effective school research and the environmental mode emphasize the importance of clearly delineated objectives. Both call for guided and independent practice with new concepts and skills. Both emphasize carefully selected practice items that match and illustrate the lesson taught. Finally, both stress the importance of utilizing small group structures for specific activities. Research findings, (Cotton, 1987) which are most relevant to composition instruction, are first those that stress the importance of clarity of objectives. Secondly, stress continuity and sequencing of instruction. Next, provide opportunities for guided and independent practice. Next, align of practice activities with concepts studied. Next, stress frequent monitoring of student learning and provide feedback and correctives while student work is in progress. Next utilize small group learning for some classroom

activities. Finally, stress strong instructional leadership, and staff development focusing on skill building and key instructional issues.

Expressive Writing

Skilled writers devote a good deal of time to planning, revising, monitoring, evaluating, and managing the writing process (Graham & Harris, 2002). In teaching writing to students with LD, research efforts have shifted to identifying methods for developing these writing strategies and processes (Baker, Gersten, & Graham, 2003). Students with LD frequently have specific deficits in written expression (Zipprich, 1995). Common writing deficits include ability to conform to a topic (Graham & Harris, 1989); inability to produce a cohesive story (Barenbaum, Newcomer, & Nodine, 1987; Wong, Butler, Ficzere, & Kuperis, 1996); low productivity (Barenbaum, Newcomer, & Nodine, 1987); inability to use organizing strategies; and mechanical errors (Zipprich, 1995). In addition to experiencing these problems, students with LD scored significantly lower than normally achieving students on a variety of written language measures (Zipprich, 1995). Barenbaum et al. (1987) found that students (8 to 14 years old) with learning disabilities wrote fewer stories than their normally achieving peers and their production did not increase significantly with maturation. MacArthur and Graham (1993) found that students with LD averaged less than one minute of planning before writing.

Researchers believe that student writing will not improve until teacher instruction improves; therefore more research is needed to find the best teaching practices (Zipprich, 1995). Writing more will not in itself improve the quality of students' writing. Zipprich (1995) refers to a paradigm shift in writing instruction from a product approach to a

process approach in which purposes of writing and problem solving are emphasized. Harris, Graham and Mason (2003), authorities in composition have identified the stages of writing process as follows: prewriting, drafting, revising, editing and publishing. Experienced authors find that their written products improve as they practice the stages of the writing process recursively. The prewriting phase of the writing process appears to be the most important element (Zipprich, 1995). For most writers, the process of composing begins with a planning stage that is used to generate ideas and goals. However, MacArthur and Graham (1993) found that many students with LD have few strategies for setting goals and thinking of content. Other researchers have advised that students would be taught how to approach writing through guidance, practice, and development of relevant skills and strategies (Graham & Harris, 2003; Graham, Harris, Fink-Chorzempa, & MacArthur, 2003; Graham, Harris, & Larsen, 2001).

Some researchers suggest that students who are asked to write stories should be given instruction in narrative structure as part of their writing instruction (Barenbaum et al., 1987; Graham, Harris, & Larsen, 2001). The students must be taught the components of a story in order for students to know what elements to include in a story. The most common elements of a story include setting, problem, goal, action, and outcome (Zipprich, 1995). In recent studies students with LD improved in reading and/or writing skills following instruction in narrative structure (Graham, Harris, & Larsen, 2001; Zipprich, 1995).

A prewriting technique, a web, can be developed to organize ideas before writing (Darch & Eaves, 1986; Zipprich, 1995). The web is a nonlinear form of outline, and the

author can record information on the web as it occurs. One makes a web by starting with a main idea in the center of a piece of paper, then branching off from the main idea into categories of information.

Gersten and Baker (2001) present a synthesis to summarize research conducted on interventions in expressive writing for students with LD. Thirteen studies designed to teach students with LD to write better were studied. Expressive writing was defined as writing in order to display knowledge or to support self-expression (Graham & Harris, 1989). In the studies analyzed, students were asked to describe, inform, and convince in narrative or expository form using writing.

Overall, the multiple-baseline studies suggest that writing interventions for students with LD are feasible and effective (Danoff, Harris & Graham, 1993; Gersten & Baker, 2001; Wallace & Bott, 1989). Virtually all of the interventions were composed of several components: the writing process, awareness of text structure and feedback.

Explicit teaching of the critical steps in the writing process teaches students to develop and organize what they want to say and guide them in producing a written product. Well-developed plans for writing result in better first drafts (Gersten & Baker, 2001). Editing and revising skills are essential to the writing process. These skills are difficult for students with LD, but a few researchers are developing specific strategies (Harris, Graham & Mason, 2003; Wong, Butler, Ficzere, & Kuperis, 1996). Peer editing was a recurrent strategy in the research of Harris and Wong.

Explicit teaching of the conventions of writing genre text structures provides a useful prompt card for undertaking the writing task, no matter the genre: persuasive,

narrative or comparison. Peers or teachers provide guided feedback to students about quality, strengths and missing elements (Gersten & Baker, 2001). Written products improved when feedback was combined with instruction on the writing process or text structure with a uniform vocabulary. Wong (1996) found that teacher feedback and peer feedback yield equal results. Feedback is the most important component of explicit systems (Gersten & Baker, 2001; Wong et al, 1996).

Research in Specific Areas of Writing

Writing Research

The hallmark of research in education is a single, well-designed study, which can provide useful and pertinent evidence for educators to utilize in their decision-making. Over the last decades, the number of studies of writing instruction has increased, but leaves educators and scholars struggling to understand conclusions from conflicting findings. Educators have come a long way since the 1980s in learning how to teach students with LD (Gersten & Vaughn, 2001). Innovative approaches to teaching both core academic skills and complex content to students with LD have come from advances a wide array of traditions: cognitive research, behavioral research, direct instruction and socially mediated instruction. Bernice Wong has been a leading researcher in the area of expressive writing research and Russell Gersten and Scott Baker have synthesized the research on effective expressive writing research.

Students with language learning problems have some general characteristics (SNOW, 2005). A student with language problems may have receptive and expressive

problems in either the spoken or written language forms. A student may have difficulty with processing and understanding linguistic information including word meaning and the ability to give a word attributes such as comparison, size and color. A student may have difficulty with syntax including sequencing words, sentence structure; understanding cause and effect relationships; and conversations clarity in explaining ideas. Expressive language difficulties in production include the following such as word retrieval; correct grammar; and maintaining a clear, coherent, logical and relative conversation. Classroom strategies that can be used in structured and unstructured settings include modeling correct language. Another is expanding on the student's utterances by adding content and attributes. Next, discuss word association categories such as similarities and differences, synonyms and antonyms. Next discuss abstract vocabulary. When giving instructions, focus on listening skills and add visual clues to verbal directions. On written directions, highlight key words or phrases in instructions. Keep language familiar and predictable. Give directions in the right sequence.

Descriptive Studies of Writing Experience

Short-Term Studies

H. Lee Swanson, Maureen Hoskyn and Carole Lee's (1999) *Interventions for Students with LD: A Meta-Analysis of Treatment Outcomes,* consists of 272 studies on students with LD. It is a comprehensive meta-analytic study of over 30 years of intervention research (Gredler, 2004). Educators and researchers do not have a "clear understanding of the intervention approaches that work with a particular type of children

with LD as a consequence of gender, age, intelligence, and/or level of achievement" (Swanson, 1999).

In 1997, Forness, Kavale, Blum and Lloyd wrote a *Mega-Analysis of Meta-Analyses: What Works in Special Education and Related Services.* Swanson et al. (1999) is much more comprehensive. Readability of the text to interpret these findings to teachers and parents who work directly with students with LD improves the likelihood of translating research into practice. The meta-analysis does have its shortcomings by only being as good as the original study. The authors addressed this issue by insuring that the included studies focused on subjects with average intelligence that were exposed to an intervention on at least three sessions, employed appropriate methodologies, and finally that the outcomes were quantitatively measured (Gredler, 2004).

The text's six chapters included a justification for the analysis and general research questions, methodology, group- and single-subject design outcomes, and a discussion of findings and implications. A description in a comprehensive list of each study included sample size, selection criteria, treatment, measures, target domains (e.g., math, reading, and writing), results, and effect sizes is provided in Appendix A. Also listed in the Appendix is a list of the studies that did not meet the selection criteria for the analysis (see Appendix B).

According to Gredler (2004), the implications derived from this meta-analytical study are discussed in detail in regard to formulating school policies. Specific questions are posed and addressed on the basis of the study's results. For example, is there merit in pullout programs, or is full-inclusion superior? According to the results, pullout programs

are superior. Is whole language or phonics superior in the remediation of reading problems? Results support both as producing positive outcomes. The authors also present specific evidenced-based instructional strategies that result in positive outcomes. General principles, in addition, are presented which are based upon existing research, but may warrant further study. For example, do interventions for students with LD also benefit students without LD? This text is a valuable tool for sifting through what is available and what works.

Darch (1989) presented an overview of an alternative instructional approach designed to help high school students with LD from low-income rural areas better comprehend material in content areas. The instructional approach combined advanced organizers with Direct Instruction. Following a review of research in the these areas, a discussion of two published studies support combining Direct Instruction with advanced organizers as a method to improve the comprehension skills of high school students with LD. The paper concludes by identifying and discussing general methods educators can successfully use to teach students with LD placed in regular education.

In each study, procedures from traditional basal programs were contrasted with a combination of direct instruction teaching procedures and advanced organizers. In order to develop instructional techniques to help high school students with LD, one must look at reasons why traditional forms of instruction often fail to help students with LD comprehend from lecture and texts. Obstacles that educators in low-income rural schools often face include vast geographical distances, inadequate services, and inappropriately designed programs (Darch, 1989). Typically, students in isolated rural regions come from

homes where parents have very little formal education. Students in low-income rural schools may have inadequate learning stimulation in the formative years and enter school without having mastered of the prerequisite skills needed for success in the classroom.

In the first study, Darch and Gersten (1986) utilized two direction-setting activities constructed to improve the high school student's with LD ability to comprehend content area concepts presented. The subjects were 24 African American, low-income students with LD formally placed in a LD program and they were divided into two groups. Instruction for both groups consisted of nine 50-mintue lessons of the same information, but varied due to method of instruction. A unit probe test was administered every three days followed by a posttest covering all content taught. Students with LD who were taught with the combined method of direct instruction and advanced organizers out performed students taught with the basal approach. They also scored at least 80% mastery on posttest. Structured directional setting activities may form a network of important associations to help students from meaning from written test (Darch, 1989).

The second study (Darch & Eaves, 1986) examined the relative effectiveness of visual spatial displays in improving the comprehension of critical concepts during content area instruction of students with LD. Instruction in the content area only varied in the method of instruction. Students were taught key instructional science concepts for twelve 55-minute instructional sessions. On both the unit tests and posttest administered, students instructed with the visual spatial display advanced organizer scored much higher on recall measures. Students with LD were able to retain important concepts despite their learning problems when they were instructed utilizing both the direct instruction and visual spatial

display advanced organizer. They were better prepared to understand and recall key concepts of the content material versus those students with LD instructed with the less structured alternative approach. Elements of effective instructional approaches should first, include intensive comprehension instruction. Second, prepare students to organize key concepts through pre reading activities. Third, students should be actively involved in comprehension instruction. Fourth, one should systematically correct student errors in comprehension. Finally, classroom management is critically important during comprehension instruction.

Berninger, Abbott, Thomson and Raskind (2001) conducted a study on 102 children in grades 1 to 6 with documented reading problems, writing problems or both as well as both biological parents. The child had to have a verbal IQ (VIQ) of 90 or higher to be included and had to be underachieving in a component reading or writing skill at least 1 *SD*. Children with psychiatric or neurological disorders were excluded. Participation included completing three to four hours of test battery and giving a blood sample.

The parents and affected children were compared on the structural relationships between related language processes (Verbal IQ, orthographic, phonological and rapid naming skills), component reading (accuracy, rate, comprehension) and writing (handwriting, spelling and composition) skills. In both children and parents, the orthographic factor had significant paths to all reading and writing skills, except reading comprehension. The phonological factor had significant paths to all reading and writing skills except reading rate and handwriting in the children, but in affected adults only if VIQ was removed. Rapid naming had only significant paths to reading rate in children and

adults. VIQ had significant paths to reading comprehension in children and adults. In adults, VIQ had significant paths to reading accuracy, reading rate, spelling and composition, but not children. For children, the number of language deficits based on discrepancy from VIQ predicted uniquely severity of writing and reading problems. For adults, the number of language deficits based on discrepancy from VIQ predicted spelling problems.

Dixon, Carnine and Kameenui (1993) presented scaffolding (an instructional aid or procedural facilitator) as a tool for teaching diverse learners. A single subject design was utilized. The subject was a male student with a disability mainstreamed into a 5th grade classroom. An instructional aid of procedural facilitator (*Plan Think Sheet*) could help the child organize an array of ideas for some specific rhetorical purpose. The teacher modeled the use of the scaffold and offered feedback as to its use. Peers could demonstrate its use also. Other types of Think Sheets could help the child further organize is ideas for his writing purpose such as organizational, explanation, compare and contrast or story text structures. In order to reduce the cognitive load inherent in moving from random ideas to a purposeful and effectively structured draft, Think Sheets and cooperative-learning groups can be used.

Scaffolding, Think Sheets, nor cooperative groups alone could produce the kind of impressive results Raphael and Englert (1990) achieved in the Cognitive Strategy Instruction in Writing Program. The researchers used in addition to scaffolding, Think Sheets and cooperative groups, positive and negative examples of good writing, teacher modeling of writing process, frequent writing opportunities, and substantial guidance from

teachers. Even though the role of the writing teacher is critical, instructional tools can be enormously powerful in teaching struggling students.

When teaching struggling secondary students science content knowledge, what is the interaction of reading skills and the science content? Carnine and Carnine (2004) addressed increasing science knowledge and reading skills for middle school students whose reading skills were below grade level. For reading instruction, vocabulary is carefully selected, instruction in word reading, oral and silent reading with reading fluency practice as needed and explicit instruction on retelling, concept mapping and summarization—comprehension strategies. Incorporation of instructional design principals that have been documented to improve comprehension of higher order thinking, process skills and science content include six aspects. First, identification and teaching of the big idea, the systematic instruction of vocabulary, a review and integration of core concepts, visual displays of how core concepts are integrated mnemonics for core concepts, and structured hands-on activities. In order for middle school students and teachers to be successful in secondary science, well-designed instructional materials need to come together with other factors. These other factors include professional development on pedagogy for science instruction, sufficient instructional time, progress monitoring, classroom and school wide discipline programs, and administrative leadership to facilitate the selection and use of appropriate instructional materials and professional development.

Long-Term Studies

A multiple-baseline ABA design across three groups, 13 intermediate-level elementary students with LD and poor writing ability were taught during a four-month

study how to use a pre-structured story web as a technique to improve their narrative story writing ability. Performance was measured by 12 target behaviors. Students showed improvement in the two primary target behaviors of planning time and holistic (quality) score following instruction in the web technique, but showed inconsistent results for the other target behavior of number of words, thought-units, density factor, sentence types and mechanics. Analysis of data included both visual-graphic and mean-to-mean comparisons across phases and individuals. The problem of poor instruction as a contributor to poor writing skills can be addressed by continuing research efforts regarding best practices in the delivery of writing instruction (Zipprich, 1995). Because of the lack of research related to the use of the story web technique in providing instruction to students with LD, this study addressed this question.

The thirteen students ranged in age from nine to twelve years with a mean full-scale IQ of 107, with scores ranging from 89 to 109 on the Wechsler Intelligence Scale for Children-Revised (Wechsler, 1974). All students had been identified by the school district as having a primary disability of learning disabilities. Three of the 13 students had a secondary disability of behavior disorder and one of the 13 had a communication disorder as a secondary disability. All of the students were receiving instruction in the resource room. All the students selected demonstrated significant writing deficits as measured by the Test of Written Language (TOWL; Hammill & Larsen, 1983).

The group data was comprised of the individual daily data with the means calculated for each phase of each behavior. Comparison across the three groups for each phase showed that for most target behavior changes appeared to be irregular or

insignificant. Significant changes were found for the two behaviors of planning time and holistic score. Between baseline and intervention all three groups experienced an increase in planning time. This was expected because instruction in the web technique specifically provided for planning time. Planning time for all three groups dropped from intervention to maintenance. The mean holistic score increased from baseline to intervention for all three groups. Holistic score for all three groups continued to increase or remained the same from intervention to maintenance.

Results of the study show that instruction in the prewriting technique called the web accounted for consistent gains in planning time and holistic score across individuals instructed in three groups. Inconsistent gains across individuals were made for the number of words and number of thought units produced. No pattern of gains emerged for the density factor, the types of sentences produced, and mechanics of writing (Zipprich, 1995). These behaviors are not directly taught during the study, which indicates that students with LD require instruction in sentence structure and mechanics of writing in order to improve these behaviors. Although after the web technique instruction, students improved in including components of a good story, the writing was still of poor quality. Information presented in the story was sparse, and typically consisted of one long paragraph. Mechanical errors and simple sentence structure were characteristic of the stories.

Crawford and Carnine (2001) conducted a study to compare the effects of a conceptually organized history textbook, *Understanding US History* (Carnine, Crawford, Harnuss & Hollenbeck, 1994) and a traditional, topically organized textbook, *American*

History (Garraty, 1982). The study included 81 eighth grade students in four intact U. S. history classes at one northwestern middle school. The study was conducted over one year with a pretest/posttest control group design. The instructional material was the treatment variable. Each teacher taught one class using the pilot conceptually organized history textbook and the other used the traditional, topically organized textbook. Both a choice test and an essay test measured students' achievement. Even though test questions were drawn from the traditional topically organized textbook, students who used the conceptually organized textbook out performed the other group. On the posttest essays, no significant difference between treatment conditions was found. Crawford and Carnine (2001) hypothesized that the overall poor performance on the essay exam was due to lack of instruction in expository writing skills. Student interviews yielded favorable opinions of the conceptually organized textbook because textbook was easier to comprehend.

Stevens and Slavin (1995) conducted a two-year study to determine the long-term effects of a comprehensive cooperative learning approach for elementary reading and language arts instruction for students with and without disabilities in grades two to six. They examined instruction's impact on students' achievement, attitudes and metacognitive awareness. The Cooperative Integrated Reading and Composition (CIRC) program was utilize to group students into heterogeneous learning teams for reading and language arts activities. In the study 635 students at three elementary schools that used the CIRC program were compared to 664 students at 4 schools that used traditional instruction. Teachers provided students with direct instruction on comprehension strategies and used a writing process approach to teaching writing and language arts. Seventy-two students

with disabilities were included and fully participated in cooperative learning team activities at the CIRC schools. The sixty-five students with disabilities at the control schools participated in pullout programs. The results for the first year indicate that the CIRC students out performed the control group in reading vocabulary and reading comprehension. The second-year results showed that CIRC students outperformed the control group in vocabulary, comprehension and language expression. Even though no significant effects on student's attitudes towards reading or writing were seen, the CIRC students demonstrated higher metacognitive awareness than did their peers. Students with disabilities in the traditional schools performed worse than the students with disabilities at the CIRC school. The CIRC students with disabilities outperformed their peers on reading vocabulary, reading comprehension and language expression.

Attitude of Students with Learning and Behavioral Problems About Writing

Social skills and self-perceptions of social ability interact when self-monitoring and self-appraisal are associated with an individual's social behavior (Nowicki, 2003). A general term that refers to a variety of learning difficulties in listening, reasoning, mathematics, speaking, reading or writing is "learning disabilities". A learning disability is a disorder in one or more basic psychological processes (visual, auditory, motor or language processing). As long as a disabling condition cannot be attributed to another disability or social/cultural difference, a pattern of atypical learning can be named a learning disability. Although social competence problems often co-exist with learning disabilities, they are not considered a distinct category of learning disability (Wong, 1996).

Since the No Child Left Behind Act (2001) mandated that all students with disabilities be in the regular education setting with age-appropriate students to the greatest extent possible, an important factor for success includes the social competence of children with learning disabilities. Nearly 30 years has passed since inclusive education became a reality in school districts. Effective inclusion program evaluation and assessment of students' progress should consist of more than ensuring the academic needs are met, but also social competence and self-concept.

Nowicki conducted a meta-analysis of synthesized research from 1990 to 2003 addressing the social competence of students with LD in the inclusive classroom. Dependent measures such as teachers' perceptions of social competence peer preference ratings, positive peer nominations, global self-worth, and self-perceptions of scholastic performance when compared to average-to-above average classmates resulted in medium to large effect sizes. Another set of comparisons for low-achieving students resulted in moderate effect size for teachers' perceptions of social competence and for peer social preference rating. Based on the 32 studies, students with LD and at-risk student are at a greater risk for social difficulties than an average- to high-achieving student. Students with LD and their low-achieving classmates do not appear to have accurate self-perceptions of social acceptance. The small mean effect size for self-reported social acceptance indicates that an appreciable proportion of students with LD were unaware of their poor social acceptance by their peers.

The studies that were selected included empirical comparisons of students with and without disabilities in an inclusive, regular, integrated or mainstreamed setting rather than

a segregated setting. Two groups were established: average- to above-average achieving classmates and low-achieving classmates. Each study's operational definition for learning disabilities and comparison groups are presented in table form. According to Nowicki (2003), researchers' finding explanations of poor social skills have focused on methodological concern learned helplessness and social proximity effects. An insight into contributing factors of poor self-perception of social competence included neurological difference, deficits in cognitive processing and a lack of meta cognitive skills.

Heward (2003) proposes ten faulty notions about teaching and learning that hinder the effectiveness of special education. Each notion is described and then briefly described why or how it hinders effective instruction and the adoption of research-based teaching practices. Four assumptions that the perspective is based upon include the following: first, students with disabilities have the right to an effective education. Secondly, special education instruction should be intensive, goal-directed and individualized. Thirdly, research has produced a useful and reliable knowledge base for special education. Finally, research-based instructional tools are under-used in special education.

Some students with disabilities today benefit from a special education program that is specialized, intensive, individualized, precise, goal-directed, and continually monitored for procedural fidelity and outcomes (Heward, 2003). These fortunate students participate in special education that includes strategies and tactics that initiate significant progress. An objective comparison between what researchers have discovered about effective instruction and the school day experienced by children with disabilities reveals a large difference between what is known and what is practiced. A significant discrepancy exists.

Special educators need not lose their way in this postmodern deconstructivism era. Special educators need not be blinded by the promise of fads and miracle cures, but rather depends on the trustworthy, but slow-moving and cautious guides of empiricism, parsimony, philosophic doubt, and scientific manipulation (Heward, 2003). Empiricism is defined as objective observation and measurement of behavior change in place of speculation, opinion and common sense. Parsimony is trying simpler, logical explanation for phenomena before considering more complex or abstract explanations. Philosophic doubt entails continually questioning the truthfulness of what is regarded as fact. Scientific manipulation includes conducting experiments to control for confounding variables and to isolate functional variables.

Science helped teachers discover effective teaching practices and science will help teachers learn how to improve the application of these practices in the schools. Science cannot determine outcomes or goals, but it can help teachers get to where they want to go. Researched aimed at bridging the gap between current knowledge and classroom practice—research that is more responsive to the needs of practitioners and the students and families they serve and that has increased trustworthiness, usability, and accessibility (Carnine, 1997; Gersten, 2001).

Descriptive Studies in Basal Writing

Review of Literature on Traditional Program

Stein and Dixon (1994) discuss current practices embodied in basal texts. The variety of approaches to writing instruction in current use is probably limitless, but variety

does not ensure effectiveness. Many commercial materials display varying degrees of weakness that might impact a student's writing ability: a) design, b) content, c) allocation of time, and d) accommodations for diversity. Jitendra and Kameenui (1988) conducted a design-of-instruction analysis of concept teaching in five basal language programs and determined violations from the bottom up. In the study they evaluated the extent to which five major language arts basal presented concepts in accordance with 11 research-based principals of concept instruction (Stein & Dixon, 1994). Results of the study determined that although basal language programs clearly specified the lesson objectives designed to teach basic concepts, they failed to adhere to an essential set of principle for designing effective teaching sequences to meet those objectives (Jitendra & Kameenui, 1988). For example, the researchers found that the basal did not teach key concepts explicitly and did not use adequate examples both in initial instruction or review.

Table 3

Summary of Critical Dimensions of Curriculum Design Principles

Principle	Criteria/Features
Big Idea: Concepts, principles or heuristics that facilitate the most efficient and broad acquisition of knowledge	Focus on essential learning outcomes Capture rich relationship Enable learners to apply what they learned in varied situations. Involve ideas, concepts, principles, and rules fundamental to higher-order learning Form the basis for generalization and expansion
Conspicuous Strategies: Useful steps	Planned Purposeful

for accomplishing a goal or task	Explicit Of medium-level application Most important in initial teaching

(table continues)

Table 3 (continued)

Principle	Criteria/Features
Mediated Scaffolding: Instructional guidance provided by teachers, peers, materials or tasks	Varied according to learner need and experiences Based on task (not more than learner needs) Provided in the form of tasks, content, and materials Weaned or removed according to learner proficiency
Strategic Integration: Integrating knowledge as a means of promoting higher-level cognition	Combines cognitive components Resulted in a new and more complex knowledge structure Aligns naturally with information (i.e. not "forced") Involved meaningful relationships Links Essential big ideas across lessons within a curriculum
Primed Background Knowledge: Preexisting information that affects new learning	Aligns with learner knowledge and expertise Considers strategic and proximal pre-skills

Note. From Simmons, D. C., & Kameenui, E. J. (1996). A Focus on Curriculum Design: When Children Fail. *Focus on Exceptional Children, 28*, 1-17. Copyright 1996 by Love Publishing Company. Reprinted with permission.

Isaacson (1991) illustrated how the tasks in basal material content appear to have little relationship to the objectives that are supposed to address. The task discrimination between exclamatory and declarative sentences did not require student to understand the difference between a declarative and exclamatory sentence because the publisher had already determined the type of sentence with the punctuation. In comparison, an example of a task that would discriminate for the targeted objective would be: "Write two short paragraphs. In the first paragraph write the sentence 'Look at that' as a declarative sentence. In the second paragraph, write the sentence 'Look at that' as an exclamatory sentence (Stein & Dixon, 1994). If such discrimination is the objective targeted, then the tasks should align with the objective.

All topics within the general structure have equal-sized parcels of lessons, chapters and units with specific time allotments to topics predetermined. The topics were stretched or squeezed to fit prearranged time slots. Whether learning mechanics or composition, some topics may merit weeks of thorough instruction while other topics may merit a brief exposure only. Low performing students cannot afford to spend time learning marginal content (Stein & Dixon, 1994). Tasks in some basal program are roughly structured in order of difficulty. For example, on a 13–application item, 1–9 are for low performers; 5–13 are for the high performers; and 3–10 are for average performers. This approach denies low performers full participation in the curriculum. A more equitable approach would

adjust instruction, not content, for low performers. Instruction should make strategies more explicit or increase scaffolding and review (Simmons & Kameenui, 1996; Stein & Dixon, 1994). In summary, basal program may not accommodate the needs of low performing students by not providing explicit strategies, scaffolding and providing adequate opportunities for application. The solution of providing easy or trivial tasks for low performers denies low performers the opportunity of full participation in the curriculum.

Descriptive Studies

Ellen McIntyre (1995) conducted a study to investigate the writing skills of students in a low-SES urban primary classroom in relation to whole language instruction. Skills measured in this study included: fluency, sense of audience and purpose, organization, and use of mechanics of writing. Of the 42 children in grades 1-3 ranging in age from six to nine, 11 *conventional writers* were selected. Ninety-eight percent of the 42 children qualify as low-SES, 55 percent Caucasian and 45 percent African American. Fifteen students had a learning disability. Of the 11 that participated in the study, six were boys (two African American, four Caucasian) and five were girls (three Caucasian and two African American). Three were receiving instruction for reading and writing disabilities (two Caucasian girls and one African American boy). The children ranged in age from seven to nine and were in the second and third grades.

Holistic and specific aspects of the student text was examined was scored by four raters. All 11 children improved in their writing skills following one year of instruction. According to McIntyre, whole language teaching has promise. Most of the skills measured

in the study were implicitly taught in the classroom. Some of the mechanics instruction was incidental learning, but other students require more one-on-one instruction to improve.

Nippold, Ward-Lonergan, and Fanning (2005) designed a study to obtain information that could used to inform persuasive writing collaborative instruction between classroom teachers and speech language pathologist on the topics of pragmatics, semantics and syntax. One hundred eighty participants included 60 children, 60 adolescents and 60 adults. The mean age of the children, adolescent and adults were 11, 17 and 24 respectively. None of the participants had a disability. Two thirds of each age group lived in western Oregon and one third lived in northern California. Ninety-five percent were Caucasian and 5 percent were Hispanic, Asian or African American and all were native English speakers. Each participant wrote an essay that was examined in detail. Results indicate that between childhood and adulthood, performance improved. Clinical implications for speech language pathologist and classroom teachers include focusing in on key aspects of later language development in areas of pragmatics, syntax and semantics.

Research Support for Explicit Strategy Programs

Descriptive Studies

Saddler and Graham (2005) conducted a study to understand the effects of peer-assisted sentence-combing instruction on the writing performance of more and less skilled writers. They examined the effectiveness of intervention for improving sentence

construction, a basic foundational writing skill. Fourth graders in the Washington, DC, metropolitan area were administered the Sentence Combining Subtest from the Test of Written Langue-3 (TOWL-3; Hammill & Larsen, 1996) which assesses a student's ability to integrate the meaning of several short sentences that address related topics into a single grammatically correct sentence. This screening identified the skilled and less skilled writers. Forty-four students ranging in age from 9 to 11 were randomly assigned to treatment conditions, sentence combining or grammar instruction with an equal number of skilled and less skilled writers at each site. Pairs consisted of a skilled and unskilled writer. Each student pair received 30 lessons, three times a week for ten weeks for 25 minutes per session. Six college students majoring in education delivered instruction to students in the two treatment conditions. Each instructor taught and equal number of pairs in both treatment conditions to control for possible instructor effects. Implementation for both treatment conditions was taught to the instructors until implementation was error free.

The study's results show that the peer-assisted approach to sentence-combining instruction for fourth graders had a positive impact on the sentence-combining skills of skilled and less skilled writers. The writing performance of students receiving sentence-combining instruction outperformed the students receiving grammar instruction. These findings replicate and extend previous research by demonstrating that the treatment of peer-assisted sentence combination can improve the sentence-construction skills of skilled and less skilled writers. When students revise their writing, sentence-combining instruction can promote young writers to use this skill.

Vaughn, Gersten and Chard (2000) summarize the critical findings of recent research syntheses examining the research on higher-order processing and problem-solving, reading comprehension, written expression, and grouping practices associated with improved outcomes in reading for students with LD. Common principles of instruction are identified and summarized with research-based examples of best practice. Considerable progress in designing, implementing, and evaluating effective interventions for students with LD has been the hallmark of the last two decades in special education (Gersten, 1998). Although these approaches are sometimes grounded in descriptive research, researchers document actual performance deficits in significant academic domains such as expressive writing. Over the past twenty years, instructional approaches have evolved models of teaching and learning based on cognitive psychology (Vaughn et al., 2000).

Swanson, Hoskyn and Lee's (1999) meta-analysis identified three factors associated with high effects—regardless of the model of instruction used or the content of instruction. These instructional components appear to be: control of task difficulty (i.e., sequencing examples and problems to maintain high levels of student success); teaching students with LD in small interactive groups having six or fewer students and direct response questioning. Swanson, Hoskyn and Lee (1999) label as directed response questioning includes all teaching procedures that promote "thinking aloud" about the text being read (Vaughn, Gersten & Chard, 2000), about mathematical problems to be solved (Vaughn, Gersten & Chard, 2000), or about the process of composing a written essay or story (Graham & Harris, 2003; Vaughn, Gersten & Chard, 2000). According to Vaughn et

al. (2000), these three instructional components—control of task difficult, small group instruction, and directed response questioning—have the potential to influence student learning and students' independent functioning, regardless of instructional domain.

Higher-order processing skills are necessary for students with LD to be successful in school and work settings. Even though students with LD struggle with these skills, these higher-level skills can be taught (Vaughn, Gersten, & Chard, 2000). Swanson, Hoskyn and Lee (1999) examined 58 intervention studies that used higher order processing for middle and high school students and calculated effect sizes for these cases. The instructional models represented in the 58 higher-order processing studies were place into four categories: (a) strategy instruction only, (b) direct instruction only, (c) a combined model of strategy and direct instruction; and (d) non-strategy/non-direct instruction model. Even though strategy instruction only, direct instruction only or a combination of both did not differ from each other in effect size, their effect sizes were greater than the traditional approaches.

Swanson, Hoskyn and Lee (1999) found similar findings in a broader meta-analysis on instructional model. When teaching complex material and skills to adolescents with LD, the only component that contributed independently to the variance of the effect size was extended practice and feedback (Vaughn, Gersten, & Chard, 2000). The results of Swanson, Hoskyn and Lee's (1999) meta-analysis suggest that in order to minimize the difficulties with complex cognitive activities experienced by students with LD, adequate practice must be provided. The adequate practice should be conducted in a small, interactive group, carefully directed questioning and prudently controlled tasks.

Vallecorsa and deBettencourt (1997) investigated the effectiveness of direct instruction of a text structure procedure in written expression and reading by students with LD. This study investigated a procedure for teaching elements of the story form. Three 13-year-old seventh grade boys participated in the study. Each student met the criteria used in North Carolina for diagnosing learning disabilities and demonstrated significant deficiencies in reading comprehension and written expression. Each student was performing more than two years below current grade level placement. The boys' reading comprehension scores from the Woodcock-Johnson Psycho-Educational Battery (Woodcock & Johnson, 1977) ranged from 2.9 to 3.6 and the boys' written language scores ranged from 2.7 to 4.9. The experimental design was an ABC design with multiple baselines across reading and writing behaviors. Baseline data was collected to document student performance on their ability to comprehend and produce written stories. The first intervention was reading intervention and the last phase was writing intervention.

The boys' knowledge of the story form in reading and writing was measured using a rating scale developed by MacArthur and Graham (1986) for use with adolescents. The Story from Rating Scale, the dependent variable, identified eight important story elements with which this age group should be familiar: main characters, locale, characters' reaction, starter event, time, goals, actions, and ending. The boys attended a private after school remedial center for students with LD and were instructed twice a week for 60-minute sessions. Students' responses were given to blind raters who had been trained to use the story form rating scale weekly. A reliability check of the raters' performance was conducted three times within each phase using randomly selected story retellings and

compositions obtained from the students. Comparisons between raters and the standard resulted in agreement scores for the sample composition from 89% to 93% and sample retellings from 91% to 94%. Rater comparisons resulted in agreement scores for retelling from 88% to 93% and compositions from 86% to 92%.

Three teachers from the center were trained to use the story-map, which included the discussion of the role of text structure knowledge in reading comprehension and defining each element included in the story map. Several practice tasks were completed as a group and as individuals. The two raters were trained using the story form rating scale. Eight sessions included defining and discussing each element of the story map using examples. At the end of the practice sessions, inter-rater reliability ranged from 90% to 93% across all comparisons.

In this study one question examined the extent to which direct reading instruction influenced the comprehension skills of students with LD. Once introduced to the story-map, all three students improved their retelling of short stories to included relevant information. Story maps provide a concrete model to follow that helps students with LD offset any conceptual, memory and retrieval difficulties. Another question examined was the question of whether story from instruction in one literacy area has a transfer effect on another, and what happens when direct transfer instruction is provided. Writing gains were only seen after direct instruction is use of the story-map as a writing aid was provided. Outcomes demonstrated that once a student is instructed in the elements of story form, the students' story comprehension and production skills were enhanced. To be most effective, three conditions must be present: instruction must be explicitly provided in each literacy

area, instruction must be used together with concrete models which are visual, and clarify how ideas relate to other ideas and how text is organized. A limitation of this study was no probes were administered to assess the treatment over time effects. It would have been useful to examine what happens when all intervention is withdrawn. No attempt was made for generalization to content areas. It would also be useful to study the subject of transfer training after explicit instruction has been in each literacy area to determine if a reciprocal effect occurs.

Troia and Graham (2003) examined the effectiveness of highly explicit, teacher-directed instructional routine to teach three planning strategies for writing for fourth and fifth graders with learning disabilities. Troia and Graham extended on previous research on students with LD over the last ten years by addressing three specific issues. One issue addressed was the generalization of strategies for students with LD may be impaired if they are not encouraged to think for themselves about issues of the strategies, including the rationale, worth, impact, or applicability. The second aspect in which this study extends prior research is teaching planning strategies of students with LD by comparing the effects of explicit instruction to process approach to writing instruction. The third extension of prior research is the study of the effectiveness of brainstorming when it is not specifically tied to the structural features of the genre under consideration and if it is more open-ended.

Twenty students with LD from two mid-Atlantic suburban elementary schools were selected to participate in the study. Thirteen were fourth graders and seven were fifth graders. Sixteen were boys and four were girls. There were 13 European American, five

African American, one Hispanic and one Asian American. Six had free/reduced lunch. Three had an additional disability of ADHD and four had language impairments. The total sample had a mean average of 2.20 years in special education. Mean sample Verbal scale IQ was 108.57 with *SD* 14.84 and a mean sample Performance scale IQ of 102.87 with *SD* 16.44. Mean of Reading composite score for sample was 87.60 with *SD* 14.16 and a mean writing composite score of 87.05 with *SD* was 13.28. Seven were in a self-contained classroom. Students were randomly assigned to either an experimental treatment group or a comparative treatment group.

The experimental group received advance planning strategy instruction. Three teacher-directed procedures were utilized including instructor modeling how to use goal setting, brainstorming, and organizing to perform task, explain how the strategies were adapted for each particular task and how performance was affected. Instructors identified multiple situations and tasks which the students could use the strategies. The comparative treatment group received a modified version of process writing instruction which included: a) a predictable routine for frequent writing opportunities, b) critical writing skills and strategies instruction in mini-lessons when need was evident, c) a community of writers writing for authentic purposes and audiences, d) students received individualized feedback about the substance and form of their writings through teacher and peer conferencing activities, and e) regular occasions for sharing and publishing written work (Calkins, 1981, 1986; Graves, 1983).

Students who were taught using goal setting, brainstorming and organizing, three planning strategies, spent more time planning stories in advance of writing and produced

stories that were qualitatively better than those students who had process writing instruction. After one month following instruction, students who had been taught the strategies maintained superior story quality and produced longer stories than those that had been taught process writing. The teacher-directed highly explicit strategy instruction did not transfer to persuasive essay writing, an uninstructed genre.

Stein and Dixon (1994) suggested that many writing disabilities may be a result of too little time allocated for writing instruction or from inadequately designed writing instruction that does not address the learning needs of many students. Stein and Dixon (1994) identified characteristics of students with LD and made recommendations for teaching writing effectively. In the few successful, well-designed, and implemented studies of writing instruction for diverse learners (Graham & Harris, 1989; Stein & Dixon, 1994) the instruction shares some broad characteristics that support well the apparent needs of diverse learners. Some of these characteristics of big idea, explicit strategies, scaffolding and review benefit normally achieving students as well. Low performing students would have access to the curriculum without it being a "dumbed down" writing curriculum so that they can compose longer compositions or more mature composition, as well as transfer their knowledge more readily than other students while still engaging in the same fundamental processes of writing and following the same fundamental text structures as other learners.

A major writing disability might be a lack of solid opportunities to learn to write well. By encouraging teachers to increase the amount of time for writing instruction based

on empirically based methodology, we can reduce the number of students being referred for special education services due to writing difficulties.

Stein, Dixon and Barnard (2001) reviewed the research on effective writing instruction. The three purposes of the paper include reviewing what research tells us about the needs of struggling writers, to highlight findings from writing research for teachers, and to illustrate a model of collaboration between researchers and curriculum developers. *Postcards* is a model writing program developed by the National Center to Improve the Tools for Educators (NCITE) and Curriculum Associates.

No matter the reason for failure, all students can benefit from well-implemented, well-designed writing instruction (Simmons & Kameenui, 1996; Stein, Dixon & Barnard, 2001). Struggling writing may have difficulty with memory problems; poor selective attention; lack of mechanical skills; insufficient procedural strategies and poor metacognitive skills, as well as the inability to assume another's perspective (Isaacson, 1991). Two roles, author and secretary, are essential in production of clear written communication with each requiring knowledge and skills unique to that role. Reluctant writers in the author's role seem to struggle with generating and organizing ideas into a particular framework or structure (Englert & Raphael, 1988; Englert, Raphael, Fear, & Anderson, 1989; Stein, Dixon, & Barnard, 2001). The author's role requires use of metacognitive skills including the ability to select appropriate strategies, and when and why to use these strategies. Poor writers also do not demonstrate less success in synthesizing material for writing a report.

Raphael and Englert (1990) summarized the difficulties experienced by poor writers. The problems include students' a) inability to sustain their thinking about topics, b) poor organizational skills, c) insensitivity to audience needs, d) failure to provide a purpose, e) inability to perceive themselves as informants with information to share, and f) poor use of conventions of print (p. 389). In order to improve writing instruction in the middle grades and provide writers with instruction along the continuum should include a) emphasizing the big ideas, b) teach explicit strategies, c) scaffold instruction, and d) provide sufficient review (Simmons & Kameenui, 1996).

Postcards (1996) is an instructional program on CD-ROM for teaching writing that incorporates critical features such as text structure, the writing process, collaboration (big ideas); explicit instruction on strategies of intermediate generality; gradually diminishing scaffolding to support students as they are learning; and review that is adequate, distributed, cumulative and varied. *Postcards (1986)* teaches students in grades 5-8 planning and drafting for writing. The National Center to Improve the Tools of Education (NCITE) advised on how current empirical research could be incorporated into the development of the program. The NCITE advised on how to best derive the greatest potential from computer-based instruction in order to accommodate a wide range of student achievement levels within one classroom (Simmons & Kameenui, 1996; Stein, Dixon & Barnard, 2001).

Intervention Studies in Writing

Techniques

For the last 15 years, innovate research in special education has developed methods of providing access to the general education curriculum for students with learning and behavioral problems. Educators view instruction in written expression as a way to stretch the nature of teaching to include activities that intrinsically motivating and cognitively demanding. Progress has occurred in the area of instruction for students with disabilities in writing essays (Vaughn, Gersten, & Chard, 2000). Research has demystified ways to teach students with disabilities to analyze material learned in the classroom and to write both personal narratives and persuasive essays. Expressive writing research first demonstrated the phenomena of students with LD demonstrating conceptual performance that far exceeded predictions based on performance of basic mechanics of writing.

Isaacson (1994) addressed the emerging trend for expressive writing to tackle the organizational and mechanical aspects of writing, but also the social and creative aspects. In Gersten and Baker's (2001) meta-analysis, five criteria for study inclusion included: first, interventions should have emphasized tasks associated with the writing process (e.g., composing, editing, and revising). Second, at least 66% of the sample included students with LD. Third, 45-minutes of intervention implemented across at least 3 days of instruction. Fourth, at least one measure of writing performance used. Finally, the study included a comparison group of students with LD (Vaughn, Gersten, & Chard, 2000).

Four hundred thirty-six children in grades 3 to 9 in thirteen group studies met the criteria for inclusion in the meta-analysis. Two types of dependent measures for writing instruction were analyzed: first, actual measures of student writing and secondly measures that examined student's understanding of the process of writing text. The second type of

measures addresses metacognitive issues by including views of themselves as writers. All 13 studies had a strong mean effect size of 0.81. Effect sizes were consistently large across measures of writing genres, procedures used to assess quality and students' sense of being able to write. Effect sizes were consistent across the studies (Vaughn, Gersten, & Chard, 2000). Even though the number of cases was small, there is enough evidence to allow for inferences to be made for the improvement of classroom best practices. Best practices in expressive writing instruction included: explicit teaching of the critical steps in the writing process, explicit teaching of the conventions of a writing genre and guided feedback.

Generalizing from research synthesis principals of instruction for students with LD has had a significant influence on both general and special education. In all cases where interventions demonstrated significant positive effects for students with LD, they resulted in at least as high or higher effect sizes for all other students in the class (Vaughn, Gersten, & Chard, 2000). As more students with LD are instructed in the general education setting, implementation of research-based interventions will improve the educational benefits for all learners. An essential feature of effective interventions for students with disabilities is making instruction visible and explicit (Gersten & Baker, 2001; Swanson, 1999). Two benefits of this type of instruction are first, providing a model for thinking about a learning situation that they would not have discovered by themselves. Second, by providing overt instruction, formative feedback can be given to students with LD by teachers and peers to guide and correct the application of their learning.

Another component of effective interventions in reading and writing is interactive dialogue between teacher and student and between students. The quality of feedback and verbal interaction between teacher and student is associated with improved outcomes in writing (Vaughn, Gersten & Chard, 2000). Effective intervention approaches in reading and writing include both systematic skill building and development of strategies that build skills and knowledge broadly (Gersten & Baker, 2001; Gersten, Woodward, & Darch, 1986; Vaughn, Gersten, & Chard, 2000). According to Gersten and Baker (2001), improved outcomes in reading and writing are associated with small interactive groups and pairs; and interactive dialogue between teacher and student (Vaughn, Gersten, & Chard, 2000).

Hooper and Montgomery (1993) reported on the prevalence of writing problems in middle school students. The sample was taken from three middle schools across the nation to include 1274 students ranging in age from 10 to 16. The sample consisted of 967 Caucasians and 301 minorities. There were 624 males and 650 females. About 25.9% received a free or reduced lunch. None of the 69% of the students receiving special education services were labeled mentally retarded or serviced in a self-contained classroom. Results from the Spontaneous Writing Quotient of the Test of Written Language-2 (TOWL-2) varied in the percentage of students failing less than 1 standard deviation from the mean and reflected significant gender differences across all three sites with females exhibiting much less difficulties than the males. In the southeastern and western samples, the Caucasians outperformed the minorities. In general when using the spontaneous writing samples in diverse samples of middle school students, the data

suggest a high prevalence of writing problems in these middle school populations when compared to normal curve expectations. Few studies directly characterize the epidemiology of written language expression. The ability of students to communicate their knowledge, beliefs and ideas meaningfully via their production of written text appears to be problematic. Middle schools were selected because it represents a time when students are asked to demonstrate their knowledge and creativity via written production and have been exposed to some kind of instruction devoted to writing. Middle school is a time period in which students without severe handicaps possess nearly all of the neurodevelopmental abilities necessary to perform the writing process.

Although teachers and students find argumentative writing very challenging, teaching and learning it are feasible and attainable (Gleason, 1999). Persuasive or argumentative writing is worth including in the curriculum of reasoning skills that can be generalized to working situations and daily living. Students with LD lack the prerequisite skills for locating, organizing and developing evidence, which exhibits itself in weak persuasive writing. Students with LD lack background knowledge required for reasoning. When given factual information, students with LD lack the skills to know how to use this information in the planning and drafting stages of writing. Students who are weak in this area need to be provided explicit instruction about the role of evidence and how to use this factual information to develop a line of reasoning that supports a conclusion. Students also need to be taught how to find information that will assist them in developing their evidence. Providing feedback to students using criteria based on an established model of

argumentation and emphasizing coherence of argument are essential parts of effective instruction.

Instructional techniques that have been utilized to teach other modes of writing are not sufficient meet the complexity of this mode. These instructional techniques include providing model essays, providing think sheets, teaching text structure, and providing self-regulatory checklists. Students with LD progress in their written argumentation skills by using additional techniques that include thick-aloud demonstrations, oral brainstorming and debating, focusing on audience and purpose, considering opposing perspective, and accessing factual information from other sources.

James, Abbott and Greenwood (2001) conducted research on writing instruction. Twenty students were divided into low and high-ability groups using the Individual Reading Inventory (Aoki et al., 1997). Nine weeks of 30- minute instruction was provided to the 13 in the high ability group followed by nine weeks of instruction for the seven in the low ability group. Five students in the low ability group were identified with a learning disability. The model utilized included a process-writing model, graphic organizers and the six-trait assessment model for diagnostic and progress monitoring purposes. Spandel's (1996) six-trait model of skilled writers includes: ideas and content; organization; voice; word choice; sentence fluency; and conventions. In Writer's Workshop, the student's responsibility includes prewriting, drafting, editing, peer conferencing, revision, and publishing. The teacher facilitated and monitored classroom activities and held individual conferences to provide suggestions for revisions in both content and form prior to

publishing. In order to provide explicit instruction on writing concepts, graphic organizers were used.

Overall, pre and posttest scores improved all students after the nine-week intervention. The low performing group made the greatest improvement. For both groups, five of the six writing traits improved by at least one point. By the end of the intervention both groups' scores were similar even after beginning with the low group significantly behind the high group. The students' improvements were the result of the integration of the six-trait writing assessment and writer's workshop models in combination with the use of graphic organizers.

Program Components

Page-Voth and Graham (1999) investigated the effects of goal setting and strategy use on the writing performance and self-efficacy of students with writing and learning problems. Thirty-seventh seventh and eighth grade students (18 African American, 10 Caucasian, and 2 Hispanic) with writing and learning difficulties participated in the study. Eighteen were in the seventh grade and 12 were in the 8th grade. In the mid-Atlantic state school, 42 percent of the participants qualified for free or reduced lunch. Mean IQ score for group was 95 and the mean average age was 12 years and 6 months. Students wrote three essays with different goals. Half of the students used a strategy to facilitate goal attainment. Students' goals were designed to increase either the number of pros, cons or both of an argument. Students' who wrote in response to goals tended to have longer essays that contained more supporting ideas and holistically better than those written by

the control group. Neither strategy use nor goal setting influenced the students' writing self-efficacy.

Graham and Harris (2005) wrote a book to help students with LD write better. Skilled writing is strategic. Strategies for writing include planning, monitoring, evaluating, and revising text (Graham & Harris, 1989). A variety of research-based, scientifically validated, writing strategies are appropriate for all students but validated using students with LD. In Table 4, these strategies are summarized including strategies for regulating the writing process and strategies for planning a revising text.

Table 4

Research Based Writing Strategies

Strategy	Description	Genre	It helped the writer
Self-monitor and record writing output	Count and graph the number of words written in each paper	All Genres	Generate content Sustain attention
PLEASE	Plan and write a paragraph containing a topic sentence, supporting details, and a concluding statement	All Genres	Generate content Organize content Evaluate content Write a paragraph
PLANS	Plan and write a paper by determining what it would include once it is completed	All Genres	Plan in advance Set writing goals Generate content Write a complete paper

(table continues)

Table 4 (continued)

Strategy	Description	Genre	It helped the writer
STOP and LIST	Plan and write a paper by setting goals, brainstorming, and sequencing ideas	All Genres	Plan in Advance Set writing goals Generate Content Evaluate content Write a complete paper
Summary Writing	Summarize reading material in writing by identifying main idea and important details	All Genres	Identify important information Plan in advance Organize Content Evaluate content Write a complete summary
Set a goal for revising	Revise a paper by setting a goal to add three or more ideas to it	All Genres	Generate content Revise by adding text
Peer Revising	Revise and edit a paper after receiving feedback from a peer on its substance and form	All Genres	Revise for clarity Revise by adding text Edit for spelling, punctuation, and sentence errors
CDO	Revise a paper by using specific criteria to evaluate and modify each sentence	All Genres	Revise sentences for clarity, intention, interest, and believability

(table continues)

Table 4 (continued)

Strategy	Description	Genre	It helped the writer
Self-monitor and record story parts	Count and graph the number of basic story parts included in each story	Story	Generate content Write a complete story
Vocabulary	Plan and write a story by brainstorming action and describing words to use in it	Story	Plan in advance Generate Content
Story Grammar	Plan and write a story by Brainstorming ideas for each part of the story before writing it	Story	Plan in advance Generate content Organize content Write a complete story.
Set general and elaborated goals	Plan and write a Persuasive paper by setting a general goal to persuade the reader that your position is correct; set elaborated goals to included a clear premise, give reasons and examples to support your premise, and refute reasons for the other side of the argument.	Persuasion	Generate content Write a complete essay

(table continues)

Table 4 (continued)

Strategy	Description	Genre	It helped the writer
Three-step strategy with TREE	Plan and write a Persuasive paper by brainstorming ideas for each part of the essay before writing it	Persuasion	Plan in advance Set writing goals Generate content Organize content Evaluate content Write a complete essay.
STOP and DARE	Plan and write a Persuasive paper by brainstorming ideas for each part of the essay before writing it; evaluate if each part of the paper is included	Persuasion	Plan in advance Set writing goals Generate content Organize content Evaluate content
SCAN	Revise a persuasive paper by strengthening support for the premise, adding needed information, checking each sentence for clarity and cohesiveness, and correcting spelling and other errors.	Persuasion	Revise for clarity Revise for coherence Revise by adding text Evaluate content Correct spelling and other errors Write a complete essay

(table continues)

Table 4 (continued)

Strategy	Description	Genre	It helped the writer
POWER strategy: Explanations	Plan, write and revise an Informative paper by brainstorming and organizing possible ideas before writing it; revise the paper with the help of a peer to ensure that it is clear, interesting and complete	Explanation	Plan in advance Set writing goal Generate content Organize content Revise for clarity, interest and completeness
POWER strategy: Comparison/Contrast	Plan, write and revise a comparison/ contrast paper by brainstorming and organizing possible ideas before writing it; revise the paper with the help of a peer to ensure that it is clear, interesting and complete.	Comparison/ contrast	Plan in advance Set writing goal Generate content Organize content Revise for clarity, interest, and completeness
Report Writing	Plan and write a report by brain-storming and gathering additional information from other sources, organizing the collected informa-tion on a web, deciding what information to use and the order of presentation, and checking to be sure the report is complete.	Report	Plan in advance Generate content Gather content Organize content Evaluate content Write a complete report

Note. From Graham, S., & Harris, K. R. (2005). *Writing Better: Effective Strategies for Teaching Students with Learning Disabilities.* Baltimore: Paul H. Brookes Publishing Co. Copyright 2005 Paul H. Brookes Publishing Co. Reprinted with permission.

The book is divided into six sections. The first section is the power of writing. The second is strategies for teaching planning, writing and revising. Section three describes writing strategies that can be applied broadly. Section four consists of writing strategies that are genre specific. Section five is strategies for self-regulating and the writing process and concludes with making it work.

Program Implementation Studies

Cotton (1987) stated the according to the ERIC Clearinghouse on Reading and Communication Skills reported three years earlier was that most authorities of writing agree that students learn to write by writing, extended periods of writing are not used during the classroom time. In this time of high stakes testing, writing gets pushed aside in order to increase time for reading and math instruction. More students are using the Internet to communicate with friends. Technology in the daily lives of students has increased the amount of daily writing, but the kind of writing that students are using is less than stellar. Some educators, according to Silverman (2004), fear that these instant messaging and text messages — short, quick messages dashed off in cyber space — may not be helping student's writing skills. (For example: lol for "laugh out loud"; nmjc for "nothing much just chillin".) According to National Assessment of Educational 2003

progress report, one third of all the nation's fourth, eighth and twelfth graders are not able to compose organized, coherent prose using correct grammar and spelling utilizing clear language. Former 2000 National Teacher of the Year, Marilyn Whirry, thinks that using short sentences to convey messages via the internet may be hindering students' ability to be coherent and organized writers in the school.

Each year the National Writing Project trains 100,000 teachers at 185 universities but this only reaches a small percentage of all the teachers in the classrooms. The teachers face many barriers; one course is not enough training for the teachers. Some universities do not even require a writing course to earn a teaching certificate. Another barrier is the overwhelming demands of overcrowded classrooms and large number loads. According Maryann Smith, director of governmental relations and public affairs for the National Writing Project, Reading and Arithmetic are supported by the important third R, Writing. Educators must make the commitment to incorporate writing standards across the curriculum. Educators must attend seminars and training sessions and require different types of writing besides prompts used for standardized testing.

The inclusion of general and special education students in Grades 5 and 8 in large-scales assessments of writing has prompted numerous questions about defining good writing and how to collect valid samples of writing ability (Crawford, Helwig, & Tindal, 2004). In response to the need for more empirical research for the performance of students with LD in assessing their written expression, Crawford, Helwig and Tindal (2004) conducted research to investigate the effectiveness of extended time on large-scale

writing tests on the writing performance of general and special education students in grades five and eight.

The demographics of the participating students in the Pacific Northwest included in grade 8, 72 boys and 68 girls; 6 of the students were receiving special education services for learning disabilities and none were receiving services for mild mental retardation; 123 students are European American; 17 were minorities. In the fifth grade sample, 116 were boys and 97 were girls. Of the 169, 44 were serviced for special education services 42 were students with LD, and 2 were mentally retarded; 180 were European American and 33 were minorities. The socioeconomic status of the groups ranged from moderately low to moderate.

Students in both grades completed a writing performance assessment and 30-minute writing performance assessments completed over three days. Four traits, ideas, organization, conventions, and sentence fluency, were evaluated for the assessments. Between lengths of time allotted for the assessment and student's educational classification had a significant interaction at grade five. These grade five students performed significantly better on the three-day writing assessment. The students with disabilities benefited the most. At grade eight, no difference was found between scores on the 30-mintue and the 3-day assignment. Even though no significant difference were found in students' writing performance across airy types of writing such as narrative, imaginative, persuasive and expositor, but significant differences were report across certain writing traits.

Longitudinal Studies

Becker (2001) discusses the University of Oregon's Direct Instruction Model as effective model for disadvantaged youth in the first three grades. In 1964, the War on Poverty began. At the center of the educational phase of this social-action program was the teaching of reading and language competencies. Project Follow Through was restructured in 1967 to select, test, and evaluate promising educational programs for underprivileged youth in the first three grades. The University of Oregon Direct Instruction Model has produced gains that are significant in the measures of positive affect, basic skills, and conceptual reasoning. Title I funding had succeeded in equalizing educational opportunity by improving financial and education resources (Becker, 2001). With the success of Siegfried Engelmann's learning theory and experience in highly engineered materials and teacher behavior, educators and researchers can make precise inferences about the critical features of effective programs.

This model has four assumptions. First, all children can be taught, regardless of their developmental readiness or environment. Teaching failure is not excused. Second, any compensatory education program should include logical procedures. Third, underprivileged youth are behind their peers in skills needed to be successful in school. Fourth, in order for the underprivileged youth to be successful, they must be taught more in the time available than their peers. Even though these underprivileged students are not successful in the middle class school structure, these students have a multitude of functional skills that are adaptive for their environment. These are very teachable students (Becker, 2001).

Some distinctive features of this model include scripted presentation of lessons, small-group instruction; signals, reinforcement, training and supervision, and biweekly reports. In order to teach efficiently and effectively the competencies of reading and language, teachers must be thoroughly acquainted with and skilled in several areas of reading and language instruction. According to Carnine et al. (2004), teachers must be knowledgeable about the essential skills or objectives that make up the reading process and the procedures for teaching those skills. Teachers must be knowledgeable about the procedures for evaluating, selecting and modifying reading programs to meet the needs of all students in their classrooms. The techniques for effectively presenting lessons, including techniques for pacing task, motivating students and diagnosing and correcting errors. Teachers must know how to utilize assessments to properly place students in a program and monitor their performance throughout the school year. Teachers must know how to inform instruction through assessments to. How to organize classrooms to maximize the amount of time a student spends engaged in reading and language instruction.

The research base for direct instruction is dependable. Not only does the research support the method as a whole unit, but also supports the component parts of the method. Extensive studies have investigated the characteristics of effective teachers, which are associated with student success. Research has been conducted on students with a disability and students in regular education. Studies have been conducted involving a wide variety of SES, ability levels and all grade levels. Our goal as teachers is for all students to be successful in the classroom. With effective instruction all students can learn in a positive

learning environment where there are fewer behavior problems and more active participation in the classroom.

Becker and Gersten (2001) studied the effects of the Direct Instruction Model for students in grades 5 and 6 who'd had three years of direct instruction in grades 1-3. The results specified consistently strong, significant effects on the Metropolitan Achievement Test and the Wide Range Achievement Test (WRAT). Consistent effects were found on WRAT reading decoding skills. Consistent effects in spelling and math problem solving were found and moderate effects in most other academic areas such as math concepts, science, math computation and word knowledge. Students retained knowledge and problem-solving skills mastered in the primary grades (Becker & Gersten, 2001). Students who had not had a continuing program in the intermediate grades showed losses when compared to the standardized national norm sample.

Methodological Issues

In the 28 studies discussed in the intervention section of this paper, there were several problems and limitations of these studies including the poor description of treatment, fidelity of treatment, sample characteristics, and intervention length. Students with disabilities were included in 17/28 of the studies. These studies, ranging from 1986 to 2005, consisted of students with and without disabilities across many SES and many United States geographical regions. Races included in the intervention section included Caucasians, African Americans, Hispanics and Asians. Four thousand two hundred one students in grades 2 to 10 were included in this review. Limitations of these studies will be discussed.

Poor Description of Treatment

When a researcher describes in detail how the study was conducted, it permits the reader to replicate the study as well as evaluated the appropriateness of methods utilized and the validity and reliability of the results. An inadequate detail creates more questions for the readers and more than adequate detail weighs down the reader with irrelevant information. The method section should provide sufficient detail that a reader knows what the researcher did and how the researcher conducted the research. Most of the studies reviewed stated that material was being used such as a probe, pretest/post-test, 50-minute lesson, 30-minute lesson, but few provided examples of any material. Teacher wording during lesson or test administration was omitted. Replications to obtain the same results would be extremely difficult because inadequate descriptions of materials utilized in the previous study would be difficult to duplicate.

Fidelity of Treatment

Several questions arise about the quality of the content of these published studies. How did they know what was material presented as it was intended? How were issues of program implementation addressed? In the Saddler and Graham's (2005) article, six college students were trained until there were zero errors in presentation over three days before implementing the study with the subjects. Was percentage interrater reliability given? Only one study stated inter rater reliability, which was the 1997 Vallecorsa and deBettencourt study. Not only were inter rater reliabilities 91 to 94 percent, but three inter rater reliability checks were conducted across the study.

Sample Characteristics

Studies examined in this paper focused on subjects with average intelligence that were exposed to an intervention on at least three sessions some students had disabilities and some did not. Of the 4201 students in grades 2 to 10, 1630 were students with disabilities. Students with disabilities comprised 39% of the sampled students. The 1619 students did not have co-morbidity with another disorder. Three had a secondary disability of Attention Deficient Hyperactive Disorder, five had a Speech Language Impairment and three had a behavioral disorder.

When defining LD, most used the IDEA definition of LD as it is implemented by the school districts where the studies were being conducted. Most of the studies did not include students who did not have an average IQ nor had psychological disorders. The 2571 students did not have disabilities. A difficulty in finding suitable subjects for research is a limitation. Not only is it difficult to find students with learning disabilities but specifically students with writing disabilities with average IQs.

Groups of students were either comprised of regular education/special education or some combination of students. Crawford, Helwig, and Tindal (2004) only had 50 students with disabilities out of 353 students. Crawford and Carnine (2001) worked with 81 eighth grade students. Darch and Gersten (1986) worked with 24 students with disabilities. Nippold, Ward-Lonergan and Fanning (2005) worked with 180 children, adolescents and adults without disabilities. Studies were conducted over many geographical regions of the United States and across many social economic standards. Berninger, Abbott, Thomason, and Raskind (2001) studied 102 subjects who had a

reading problem, a writing problem or both in the grades first through sixth. The study consisted of three to four hour test battery and a blood sample.

Intervention Length

Interventions varied in length with shortest being 3 sessions (Crawford, Helwig, & Tindal, 2004) to the longest being three years long (Becker & Gersten, 2001) the next longest was two years (Stevens & Slavin, 1995). Crawford and Carnine (2001) conducted research on 81 eighth graders over a one-year period using a pre and post tests measurements. McIntyre (1995) conducted research on 11 elementary students for one year. He utilized four raters to assess the writing skills of these students. Crawford, Helwig, and Tindal (2004) conducted research on 140 eighth graders and 213 fifth graders for 30 minutes a day over a 3-day assignment.

The length of the lesson also varied. Saddler and Graham (2005) worked with 44 students for 30 lessons. Lessons were 25-minute lessons three times a week for 10 weeks. Crawford, Helwig, and Tindal (2004) had three 30-minute lessons. Darch and Eaves (1985) conducted research for 55 minutes over 12 lessons with a pre and posttest. James, Abbott and Greenwood (2001) conducted research for 9 weeks for 30-minute lessons. As the publication criteria for publication submissions have improved over the last twenty years, so have the descriptions of studies. The more recent the study descriptions of intervention length and type of intervention are better.

Research Methodology and Design

Ellen McIntyre (1995) conducted a study to investigate the writing skills of students in a low-SES urban primary classroom in relation to whole language instruction.

McIntyre described the sample used in the study. The investigator did not describe how she selected students to be in the experimental or control group. The investigator described that holistic and specific aspects of the student text was examined was scored by four raters. The investigator does not describe rater training, rater reliability or rater reliability. Nor, does the investigator state if checklists were used during implementation of programs. Even though all 11 children improved in their writing skills following one year of instruction and according to McIntyre, whole language teaching has promise; replication of the study is difficult because lessons were not described in detail. Fidelity of treatment was not addressed.

Saddler and Graham (2005) conducted a study to understand the effects of peer-assisted sentence-combing instruction on the writing performance of more and less skilled writers. They examined the effectiveness of intervention for improving sentence construction, a basic foundational writing skill. The researchers described the assessments utilized to screen participants and what the purposes of the screenings were. The investigators described that students were randomly assigned to treatment conditions and described grouping of skilled and unskilled writers. Pairs consisted of a skilled and unskilled writer. The investigators described how often lessons were conducted and duration of the lessons. They also described how the six instructors were trained. They controlled for possible instructor effects by having each instructor teach an equal number of pairs in both treatment conditions. Implementation issues were addressed by checking for fidelity of treatment by instructors. Sample lessons were presented so that this study could be replicated.

When examining writing research, a reader must take into consideration the limitations of previous studies in order to build upon what has been attempted in the past. When replicating a study, the researcher must describe the treatment succinctly but accurately. Once your treatment has been identified, then fidelity of treatment must be taken into consideration. The researcher must control to the greatest extent possible that the treatment is being implemented as it was written. When implementing in the intervention, the researcher must take into consideration length of the intervention. The length must be long enough to suggest a trend that the intervention is the cause of a change in behavior and not some other uncontrolled cause. Subject selection is a critical feature of the research. Generalization to the general population is greater when the sample is random. The limitations that exist in the studies discussed from 1986-2005 discussed guide the researcher into improving previous research.

Summary and Conclusions

A comprehensive review of research on teaching writing to middle school students with learning and behavior problems was presented. The statement of the problem was followed by the presentation of the relevance of the problem. Descriptive and intervention studies examined the writing experience of students with LD were discussed. Both short-term and longitudinal writing studies had been conducted that examined the writing skills of students with and without disabilities. Following the literature review of traditional programs, a literature review of explicit, strategy instruction programs investigated effectiveness of the current methods of composition instruction.

Various instructional approaches for teaching writing to middle school students have been investigating the effectiveness of instruction on the writing skills of students with disabilities and their peers. Writing studies are organized according to factors involved in instruction, the writing process, and the writing product. The prior knowledge the writer brings to the writing task and the students' metacognitive ability are factors involved in the writing. Textual factors, which affect the writing process, included the writer's knowledge of both general writing structure and specific writing structure. The impact of instructional procedures employed by teachers to teach writing will also be examined.

From a review of the literature, a need for more research with low-performing middle school and high students is needed. Instructional strategies conducted on less skilled students can be generalized as instructional strategies for general education students. Few studies have addressed the place issues of instruction in rural areas. Low social economic status appears to affect the attainment of basic language skills by these identified students. The process approach to writing has a great deal of support as well as the strategy instruction approach. Research has been conducted on general education students and students with a disability. More research needs to be conducted for middle school and high school students in rural areas.

III. METHOD

The effects of two different approaches to improve the written expression of ninth-, tenth-, eleventh- and twelfth-graders with specific learning disabilities, mild mental retardation and other health impairments in a low-income rural school were examined in this study. The two approaches were Expressive Writing, a program utilizing strategy instruction based on the Direct Instruction Model developed by Siegfried Engelmann and his colleagues (Englemann & Silbert, 2005), and Writer's Workshop, a program emphasizing the traditional/social contextual perspective of Calkins (1986) and Graves (1983). This chapter provided an outline and discussion of the research methodology used in this study. Included are the procedures for the sample selection and procedures for data collection was discussed. A list of null hypotheses and discussion of the methods of analysis conclude this chapter.

Research Methodology and Design

This study was considered an experimental investigation because of the experimental manipulation of the independent variable and random assignment of subjects to the experimental condition (Glass & Stanley, 1970). According to Stanley and Campbell (1963), experimental design is the strongest design with respect to internal validity and is effective in minimizing threats to external validity. According to Johnson

and Christensen (2000) experimental studies call for the researcher, while making observations under controlled conditions, to identify causal relationships by showing the effects of systematic changes in one or more variables in the experimental study. The two teaching methods were randomly assigned to the groups.

Sample Selection

A rural public high school in Southeast Alabama was chosen for the study because the majority of the students were from low average to low in academic achievement and the majority of students were from families of low average to low socioeconomic status. Many of the students in this school were judged to be at-risk for referral to the special education program as defined by the Individuals with Disabilities Education Act (IDEA) (2004). The population from which subjects for this study were drawn were ninth-, tenth-, eleventh- and twelfth-grade students attending this school.

The community had a population of approximately 14,000 according to the 2000 census with approximately 838 students in grades 9, 10, 11 and 12 attending the school. Of these students 60 percent were African American, 39 percent Caucasian and less than one percent "other", which is indicative of the demographics of the city school district. The 67 percent of the student body that receive free lunches and breakfasts were also indicative of the socioeconomic status of the families from which the students came. The sampling pool was composed of ninth-, tenth-, eleventh- and twelfth-grade students with specific learning disabilities, other health impairments and mild mental retardation in two study skills resource rooms. The students with specific learning disabilities, mild mental retardation and other health impairments were pursuing either a regular diploma or an

occupational diploma and received special education instruction 6 to 21 hours per week outside the general education classroom for one and one-half hours a day in the study skills class.

The school district superintendent was contacted to determine initial approval of the study. Once approved, the researcher contacted the principal and special education resource classroom teachers to provide them with information about the study. The sample was composed of 40 ninth-, tenth-, eleventh- and twelfth-grade students with specific learning disabilities, mild mental retardation and other health impairments as determined by each student's Multidisciplinary Eligibility Team in accordance with Alabama Administrative Code 290-080-090.

In addition to these school district personnel, the researcher met students' general education teacher(s) and/or parent(s) upon request. A letter of consent was distributed to all students identified as possible participants in this study. The researcher contacted each parent by phone to answer questions about the study. A copy of the letter and consent form sent to parents appears in Appendix A. The thirty-nine parents contacted gave permission on the phone for their child to participate in the study. Only one parent did not give consent.

Determining Group Equivalency

All 39 students who returned parent permission forms were administered two pretests prior to the implementation of the study. The pretests were used for two purposes. One purpose was to determine if the students' present level of performance was below average for their grade level. The second purpose was to provide possible

covariates for the data analysis. To ascertain present level of performance, each student was first administered the Kaufman Test of Educational Achievement II (KTEA-II) (2004). The KTEA-II is an appropriate standardized test for use with individuals from ages 4.5 to 25 years. This instrument has been used to directly and indirectly measure writing in studies. The KTEA-II has two subtests that indirectly measure expressive writing, including Written Expression and Spelling. Indirect procedures call for students to punctuate dictated material, to spell, to correct another writer's errors, or to make judgments about correctness of manufactured items. Examinees do not write original text, but rather reword a sentence or paragraph. Most of the tasks include a multiple-choice format, a cloze procedure, or sentence-combining activities. The purpose of this type of measurement is to ascertain the writer's knowledge about writing convention rather than application of those principles to real or simulated writing purposes. The test culminates with a single narrative direct product in order to provide an estimate of the student's functional writing ability. The narrative is scored analytically for vocabulary, thematic maturity, and handwriting. The handwriting subtest was not used as part of this study.

The KTEA-II provides standard scores and percentile ranks. The test has been normed and possesses adequate reliability across age and grade levels. The reliability for the total test scores is 0.89 for ages 4.5 to 25 years with subtest reliability coefficients ranging from 0.79 to 0.88. Reported reliability coefficients of Written Expressions three subtests of style, word usage and spelling have at least 0.81 magnitudes. The authors provided the inter-scorer reliabilities for the vocabulary, handwriting and thematic maturity subtests. The publishers reported internal consistency: split-half reliability

coefficients for subtests and composites by age. For 15–25 year olds, Written Language ranged from 0.93 to 0.94 with mean of 0.94, Written Expression ranged from 0.81–0.87 with a mean of 0.84, spelling ranged from 0.91–0.93 with a mean of 0.92 (Kaufman, 2004).

The purpose of the KTEA-II pretest in the current study was to identify students experiencing problems with written expression. Students who are mentally retarded following the extended standards for significant cognitive impairment and pursing a certificate of attendance were excluded. These students performing in the lower extreme of SS < 43 were excluded because results would be positively skewed because 18 out of 39 subjects of the sample scored SS < 43. Raw score gains made by these students would be personally significant, but would still fall in the lower extreme on the normal bell curve when compared to the normally achieving peers. Eighteen students from the original 39 were excluded from the study because of their score on the pretest and their severe cognitive impairment. Twenty-one students were selected for the study. Again, the students were in the ninth, tenth, eleventh and twelfth grade and had specific learning disabilities, mild mental retardation and other health impairments. The eighteen students who were excluded from the study were in the 3rd block class while the 21 other students were in the two 4th block resource classes.

The second pretest measure was an essay to ascertain the writer's application of writing convention for a specific writing purpose. Each student was given a stimulus picture for a pretest essay and was asked to write a story about it. The drawing was black and white depicting Jerry lying on the ground in a corral with a saddled wild horse

jumping the fence while Sam sat on the fence. Standardized procedures were used to elicit the students' essay. Appendix B includes the picture and the administration procedures for the pretest essay. Two raters scored the essays using the Alabama Holistic Analytic Rubric. An independent-samples *t* test was used to determine if significant differences between group scores on either measure (KTEA-II or pretest essay) existed. The mean standard score on the achievement measure, KTEA-II, determined the subjects' achievement level. The group means obtained on the Alabama Holistic Rubric represented scores reflecting a proficiency of Level 1, Level 2, Level 3 or Level 4.

The pretest essay had a range of possible scores from 12 to 48. For the 21 subjects, only one student scored a 36 out of 48, one student scored 33 out of 48, 19 students scored below 33 with five of those students scoring the lowest possible score of 12 out of 48 (see Table 5). The Writer's Workshop group scored higher than the Expressive Writing group on the Pretest Essay, but this difference was not statistically significant with an independent-samples *t* test of 1.28 and $p = .22$.

Table 5

Pretest Essay Score Distribution (Range of possible scores 12-48), Mean and Standard Deviation

Scores	*N*
12	5
13	3
15	1
17	4
19	1
20	1
21	3
23	1
33	1
36	1
Total	21
Pretest Essay Mean	17.90
S.D.	6.61

The study skills class is a 1.5-hour block class where students are administered tests from general education class, re-taught general education material, provided note

taking instruction, and opportunities for studying for examinations, and assisted in research and organization of long-term projects. This class is only available to students with disabilities as determined by eligibility criteria established by the Alabama Administrative Code. One study skills class had ten students and the other study skills class had 11 students.

The students with disabilities in each class were randomly assigned to one of the two treatment groups. Random assignment was used to control for effects of history, maturation, testing, and instrumentation (Stanley & Campbell, 1963). The random assignment was accomplished by drawing names from shuffled stacks representing the classes and placing them alternatively into two groups. This resulted in a total of 21 students for this study, 11 in one treatment group and ten in the other. Treatment groups were small groups of 11 or less members per group. There were two treatment groups for each experimental intervention. No students were excluded in the final sample because no students exceeded the absenteeism criteria of three or more absences. To control for potential school effects, both treatments were taught at the same school. Students in the study were instructed in their study skills class, but also participated and continued to receive small group instruction for writing. Conducting the experiment during the normal academic classes allowed each student to have full access to his or her academic instruction. At the conclusion of the study, each participant and his or her parent(s) were given a report of individual performance on measures from the pretests to the maintenance test.

The researcher worked with the two special education teachers of the study skills class to develop a schedule of instruction. The one and half-hour block was divided into two 45-minute sessions. The researcher provided instruction to the Writer's Workshop group for 45-minutes daily, relieving the special education teacher of her duties. During this time, the second special education teacher taught the other group her normal academic class. After 45-minutes of instruction, the first special education teacher arrived to teach her normal academic classes and the researcher went to the second special education teacher, relieved her of her duties, and provided 45-minutes of instruction to the Expressive Writing Group (See Table 6). Thus, students in both experimental groups received an identical amount of writing instruction from the same instructor.

Table 6

Instructional Time for Students with Disabilities

1 ½ hour Block Study Skills Class	1st 45-minutes	2nd 45-minutes
Class I	Writer's Workshop Group	Normal Academic Study Skills Class
Instruction provided by	Researcher	Special Education Teacher
Class II	Normal Academic Study Skills Class	Expressive Writing Group
Instruction provided by	Special Education Teacher	Researcher

A description of the sample including number of students, sex, race and age range is presented in Table 7. Twenty-one students ranging in age from 14.6 years to 18.6 years (175-223 months) participated in the study with 13 males and eight females, 16 African Americans and five Caucasians. Eleven students were in the Writer's Workshop group ranging in age from 14.6 years to 18.6 years (175 to 223 months) with seven males and four females, eight African Americans, and three Caucasians. The Expressive Writing group had 10 students ranging in age from 14.9 years to 17.1 years (179 to 205 months) with six males and four females, eight African Americans and two Caucasians. The mean and standard deviation of the Expressive Writing group was M = 16.5 years (198.35 months) SD = 1.1 years (13.50 months). The mean and standard deviation of the Writer's Workshop group was M = 17.1 years (205.05 months) and SD = 1.6 years (18.97months).

Table 7

Description of the Research Sample Including Number, Sex, Race and Age Range

Group	N	Male	Female	African American	Caucasian	Age Range in years and months
Writer's Workshop	11	7	4	8	3	14.6 -18.6 yrs. (175–223 mo.)
Expressive Writing	10	6	4	8	2	14.9 – 17.1 yrs. (179–205 mo.)
Total	21	13	8	16	5	14.6 – 18.6 yrs. (175–223 mo.)

Table 8

Mean and Standard Deviation of Expressive Writing and Writer's Workshop Group Members

Criteria	Expressive Writing		Writer's Workshop		
	M	*SD*	*M*	*SD*	Difference
Age in years (months)	16.5 years (198.35 mo.)	1.1 years (13.504 mo.)	17.1 years (205.05 mo.)	1.6 years (18.97 mo.)	F (1) = 1.63 $p > .05$

Procedures

The author served as the experimental teacher. The researcher taught both the Writer's Workshop (process) and the Expressive Writing (strategy) groups. She held a bachelor in Chemistry, and a Masters of Education in Specific Learning Disabilities, a Masters in Educational Administration and has 12 years of classroom teaching experience. To control for possible teacher bias, the experimental teacher taught both groups, one group from each treatment type (e. g., Expressive Writing, a strategy approach, and Writer's Workshop, a traditional/social contextualist approach).

A description of the achievement levels of the students was determined by administering a Kaufman Test of Educational Achievement II (2004). Specific information regarding the students' written expression abilities was recorded from the student's KTEA-II scores. The means and standard deviations for the two groups' Written Expression scores can be found in Table 9. A *t* test was calculated on the Expressive Writing Composite Score of the Expressive Writing and Spelling subtest scores to determine if there were any significant differences in written expression between the two groups. Results from the *t* tests revealed no significant differences on any of the written expression scores between the two groups. In addition, the researcher administered a pretest essay to determine which students had difficulty with written expression. This pretest served as a screening device by eliminating from the study those students who were not experiencing any problems with written expression.

Table 9

Onset of Study Independent-samples t test for KTEA-II Expressive Writing Composite Score

	Mean	SD	*t*	*p*
KTEA-II			.53	.60
Writer's Workshop	70.64	10.62		
Expressive Writing	67.70	14.68		

The intervention phase of this study took place for 2 consecutive weeks, Monday through Friday, a total of 10 school days. Daily instruction for each treatment group occurred for approximately 45-minutes. During each lesson the researcher followed the scripted format designed for the Expressive Writing, a strategy approach, and the semi-scripted format designed for Writer's Workshop, a traditional/social contextualist approach. Both groups were taught the same material. Instruction for the first week included identifying subjects, correcting run-on sentences, pronoun-antecedent agreement, using quotations, rearranging so that sentences begin with a dependent clause, and writing a paragraph. Instruction for the second week included identifying predicates, supplying pronoun-antecedents, and punctuating quotations correctly, rearranging so that the sentence begins with a dependent clause and paragraph writing.

For each treatment group following the lesson, students were asked to write a paragraph based on a referent, a picture that a teacher can refer to in order to assist the student in making clarifications about his or her writing. On the fifth and tenth days of intervention, the students completed a curriculum-based assessment based on material taught that week and wrote an essay. For example, after the first week of intervention the first assessment addressed the issues of identifying subjects, correcting run-ons sentences, pronoun-antecedent agreement, using quotations, rearranging so that sentences begin with a dependent clause, and writing a paragraph. The students were asked to write an essay based on a given topic. Students were asked to think before writing and were given a list of ideas to consider. The students were asked to write for at least 20 minutes. The students were asked not to worry about spelling but to focus on the topic. The students

were reminded to make their papers interesting. They were also reminded to use the skills learned in writing classes about what to do when you are getting ready to write, when you are writing and when you are checking over your paper. The generalization of skills is an important issue for developing instructional programs for students with learning disabilities, mild mental retardation and other health impairments, and one that was addressed in the present study.

A satisfaction scale was used to measure students' attitudes towards the Expressive Writing, strategy approach, and Writer's Workshop, a social contextualist approach, at the end of the intervention. Finally a maintenance test was administered 2-weeks after the last day of intervention to determine if students retained any gains over time.

Control for Extraneous Variables

Even though the treatment consisted of two dissimilar instructional approaches, several important variables were similar and were held constant throughout all treatment groups. The following factors of instructional time, instruction format, amount of writing practice, behavior management and observation were equated for both groups so that potentially intervening variables could be controlled:

1. *Instructional Time*. Both groups were taught 5 days a week for approximately 45-minutes per day for 2-weeks. Instruction in all groups took place at a time convenient with the normal academic special education schedule. All groups were taught during the afternoon hours.

2. *Format of Instruction*. Lessons for each group were outlined and semi-scripted so that the teacher can accurately implement each instructional program. Appendix C illustrates the organization of selected lessons.

3. *Amount of Practice Writing*. Both groups were provided with approximately 20 to 30 minutes equal writing practice time.

4. *Behavior Management*. Behavior management for both groups was similar. The teacher used positive verbal reinforcement as the primary management tool. Verbal reprimands were used for mildly disruptive behavior. Daily group errors were kept for each group and displayed on the wall. A daily goal of three errors per group was established.

5. *Teacher Training*. The experimental teacher had been trained to implement the instructional technique for the group to which she was assigned. Prior to the implementation of the study the experimenter reviewed lesson implementation to perfect presentation skills.

6. *Observation*. A trained observer visited the classes at various times to observe the implementation of the teaching model and to ensure fidelity of implementation. The teacher was visited at least once per week for each group. The observer noted the length of time spent on the lesson, the implementation of the format, the time that the students spent practicing writing and methods of behavior management. A form for recording the observation was provided. A copy of the form is in Appendix D. Using

standardized observation forms for each instructional method suggested that each instructional method was appropriately implemented.

Materials

For Writer's Workshop, each student was provided with different kinds of media to write on (Phoenix, 2002). For quick scribbling of first draft, old, previously used copier paper encouraged students to focus on content not neatness. Good-quality, final-draft papers for an audience required lined and unlined paper. Each student was provided a writing folder divided into sections. Each section was labeled. For example, a student might have the sections Work In Progress, Finished Writing or Tomorrow File. Also included in the folder were writing implements, forms for listing topics for future writing, high-frequency words, templates and helpful hints for editing. The atmosphere during the writing class was relaxed and informal. Students were allowed to move about the room in order to conference with each other and to use materials at various places in the room. For Expressive Writing, each student was provided with a workbook from the publisher and a composition notebook for written assignments. The organization of the classroom and presentation of the lessons were highly structured.

Independent Variable

The independent variable for this study was the method of expressive writing instruction for 45-minutes daily. There were two levels of the independent variable: Expressive Writing, a strategy approach, and Writer's Workshop, a traditional/social contextualist approach. A thorough description of each method is provided in the following section.

Conceptual Base for the Strategy Approach

An explicit strategy approach was one of the instructional methods employed in this study. This approach is based on the Direct Instruction model and was developed by Siegfried Engelmann and his colleagues at the University of Oregon (Englemann, Becker, Carnine & Gersten, 1988). The direct instruction model was chosen for this study because this model has been proved to be effective with students mildly disabled in short-term and long-term studies (Baker, Gersten & Graham, 2003; Baker, Gersten & Scanlon, 2002) as wells as other studies that also documented the effects of direct instruction programs on high school performance (Carnine & Carnine, 2004; Darch, 1989, Darch & Eaves, 1986).

Several levels of the term direct instruction exist. The most basic difference between indirect instruction and direct instruction is implying versus telling. When direct instruction has lower case "d" and "i", direct instruction refers to an instructional method based on homogeneous grouping of students; choral response, signals and other research based instructional techniques. Douglas Carnine and Siegfried Engelmann (1982) articulated a Direct Instruction theory in the book, *Theory of Direct Instruction.* Direct Instruction with capital letters refers to specific programs designed by Siegfried

Engelmann and his co-workers that use direct instruction techniques along with scripted lessons, carefully designed sequences and answers for anticipated student questions.

Creating Direct Instruction programs is very deliberate. First, the national and state curricula being used are analyzed. Program developers will create a draft that will show any weaknesses. If the program contains too much practice and repetition in the beginning, then it will be difficult to determine how much practice and repetition was necessary to increase the opportunity of student success. It is much easier to build up practice and repetition rather than to analyze the program. A small group of 12 to 30 students is used to evaluate the rough draft. The authors continually modify the track to change areas for weaknesses as the student progress through the lessons. When the authors complete a program, it is tested with more students in different settings. Based on student errors, the authors make revisions. Most programs have a minimum of four revisions before publication.

Direct Instruction programs have notable external elements, which include scripts. The scripts contain what the teacher says and correction procedures for student incorrect responses based on anticipated student answers. The true power of a Direct Instruction program is its detailed analysis of each taught skill. The skill is broken down into its component parts. Each component part is taught to mastery and then the skills are combined where different skills are used across setting, which culminates with greater generalized fluency.

Critics of direct instruction suggest this technique is a “cookie cutter” approach to instruction. This technique is not a “one size fit all” mentality. Individual needs are

assessed routinely and carefully so that each student is placed according to his or her individual skill level. Lessons are fast paced so those students attain the highest response race in the shortest amount of time. The pacing of the lesson increases the possibility that students are remaining on task; focused on skills taught and are also actively engaged in learning. Increased retention of material is facilitated because there is a short time between students learning information and students applying their knowledge.

Success in Direct Instruction programs comes from not only fast pacing, but also scripted lessons. The scripts are essential for student success because the dialog is designed for consistency across lessons and ensures that the students understand information presented. In order to diminish opportunities for confusion, the scripts are specifically phrased and skillfully planned. The script guides the lesson and aids the teacher in answering many of the student questions by providing anticipated student responses.

Direct Instruction research has been conducted and demonstrates success for students of all ages and all levels of academic success. At-risk students, students with disabilities, general education and talented and gifted students continue to find success utilizing Direct Instruction programs. Teacher perceptions of students as not ready to learn can be eliminated by using Direct Instruction programs because program placements are homogeneous based on skill level. In order to catch-up low-performing students to their peers, these low achievers require specialized instruction in order to accelerate their learning and success.

Success in learning comes through practice. Direct Instruction molds students to create competent, successful students. Confidence is constructed by carefully planning

programs so those students are successful in each small lesson. This confidence in the learning tasks gives the child the opportunity to believe that he is capable of succeeding and therefore will succeed at larger, more complex ideas and issues. Every independent task required of students has been previously taught in a scaffolded teaching approach, so that the child will have all the necessary pre-requisite skills to be successful.

In order to maximize the opportunity for assessment, signaling is utilized. A student response is initiated by a visual or audible cue. Signals are used to ensure that students' answer at the same time so the teacher is able to conduct assessments multiple times in a minute on the entire group. The teacher provides enough "think time" for each student to process the question and generate a response before providing the signal. Students' benefit by giving all children the opportunity to respond and not allowing other vocal, aggressive students dominate the class. Feedback and corrections are essential features of Direct Instruction lesson. Corrective feedback gives students the opportunity to not only practice, but to practice a correct response. Immediate corrections ensure that students do not learn misrule or incorrect skills.

Student motivation is also critical for success. Many students with disabilities and low performers have encountered failure. The best way to motivate low achievers is to emphasize their success, frequently. The program is cumulative and builds on previously taught material. Teachers highlight student success by emphasizing that mastered material that was once hard is now easy because it has been mastered.

Skills are cumulative. Traditional teaching techniques utilize a linear approach to teaching. Skills are taught in independent units, followed by the next independent unit. The

Direct Instruction Program design teaches prerequisite skills and then utilizes these skills to teach the current lesson. Students are accountable for all content learned from the beginning of the program. Activities embedded in each thread change from lesson-to-lesson in order to increase application generalization skills of concepts and operations across a variety of settings. Tracks are a series of tasks needed to learn a given skill. A typical Direct Instruction program track will be spread out over 20-80 lessons. While this skill is being taught, additional skills are being taught. Eventually, the tracks will merge.

Expressive Writing Strategy Approach

The Expressive Writing (strategy) model of teaching writing was one of the instructional methods used. Learning was facilitated through the implementation of techniques, rules or principles of writing. Metacognition, the self-regulation of knowledge or an awareness of one's own knowledge, was a primary aspect of strategy use. The lessons for this instructional implementation were taken from Expressive Writing II (Englemann & Silbert, 2005), a published program. The authors provided scripted lessons for the teacher in Expressive Writing II. The following major skills were taught as a part of the strategy based program: pronoun clarity and including details that were necessary for clarity; writing with a variety of sentences (e.g. sentences that begin with a dependent clause, sentences that contain a series of items in a list and compound sentences); writing conversations with quotes correctly; and editing for clarity, punctuation, paragraphs and sentence forms. Each lesson included rules and strategy instruction for certain skills. Strategies were presented using direct instruction techniques. An excerpt from Lesson 9 is

used as an example. In this teaching example, the students were presented with rules for using pronoun clarity.

Task 2. Pronoun Clarity

1. Find Part B.
2. You learned that you have to be very careful when you use the words *he* or *she*. You also have to be very careful when you use the word *it*. Listen to these sentences: Bill put cheese on the bread. It is green. We don't know if the word *it* refers to the cheese or the bread.
3. Here is the rule for using the word *it*. If there are two objects in a sentence, you can't use *it* in the next sentence. Listen again. If there are two objects in a sentence, you can't use *it* in the next sentence.
4. I'll read the first sentence in item 1: Jane put a book on the magazine. There are two objects in the sentence, the book and the magazine. So, the next sentence can't begin with *it*. Cross out *it* at the beginning of the second sentence.
5. (*Call on a student.*) Read both sentences in item 1 (*Signal*) "Jane put a book on the magazine. The book has a red cover."
6. I'll read the first sentence in item 2: Tom got a new coat. How many objects in the first sentence? (*Signal.*) "One." Can the next sentence begin with the word *it*? (*Signal.*) "Yes." Cross out *the coat*.
7. (*Call on a student.*) Read both sentences in item 2. (*Signal*.) "Tom got a new coat. It has a fur collar."

8. Do the rest of the items in Part B. Remember, if there are two objects in the first sentence, you can't use the word *it* in the next sentence. (Observe students and give feedback.) (Engelmann & Silbert, 2005)

The lesson continued with students completing the assignment independently and then checking their work. After the teacher taught the skills, the students practiced each new skill before additional skills were taught. When the students made an error, the teacher used a specific correction procedure to correct the error. The students were taught to edit their own work by first editing the work of others. The initial format for writing stories was reporting on pictures, followed by making inferences from pictures, and then by writing from imagination. The written product was the major emphasis of this application of strategies. Sample lessons appear in Appendix C.

Rabren (1994) discussed the major differenced between a structured approach and an unstructured approach of teaching to compare the treatment groups in her study. These major differences can also be applied in this study to compare the Expressive Writing approach and the Writer's Workshop approach. Major differences in the two approaches to writing included unstructured (Writer's Workshop) versus structured (Expressive Writing) classroom organization. The teacher's role in the Writer's Workshop was as a facilitator and in the Expressive Writing, a director. In the Expressive Writing, strategy approach, the program prescribed the curriculum focus and in the Writer's Workshop approach, the curriculum focus was adaptive to student needs. In the Writing Workshop approach the writing topics were student selected versus prescribed by the program in the Expressive Writing. Error corrections in the Expressive Writing strategy

approach were teacher-directed and rule based; in the Writer's Workshop approach the error correction was student-directed. The emphasis of the Writer's Workshop approach was the writing process. The emphasis of the Expressive Writing strategy approach was strategies and rules. The traditional/social contextualist approach is very different from the strategy approach in several key areas. The curriculum focus of the strategy approach is on instructional components that effectively teach writing. In the traditional/social contextualist approach, the curriculum is student-oriented. Instructional components of the strategy approach are well defined and structured, while in the traditional approach instructional components are loosely defined.

Despite the differences between the two approaches, these methods do have similar components. For example, both methods are designed to teach writing. Both methods provide students with an opportunity to practice skills independently. Students are asked to write in both methods. Considering the difference and similarities between the two methods, the dominant distinguishing difference between the two methods is not what is taught but how it is taught.

Conceptual Base for the Traditional/Social Contextualist Approach

The other treatment condition in this study was a traditional/social contextualist approach. In this approach, instructional methods typically found in popular basal writing programs currently found in many schools were utilized. The process approach to writing emphasizes the cognitive process in which the writer engages during writing. Writing is a complex task; teachers are encouraged to assist students in the many thinking, selecting,

and organizing tasks required. The process approach to teaching writing is based on an interactive model (teacher-student, student-student, and student-teacher). While writing is in progress, the emphasis is placed on the teacher-student interactions. Written products are used as drafts. Teacher feedback on drafts yields the final product. Conferencing activities, prompting and models were teacher behaviors encouraged to reduce the fear or anxiety students often associate with writing, thus creating a writing environment designed to encourage the creative process (Calkins, 1981; Calkins, 1986; Englert, 1992;Hicks, 1993). According to Graves (1983), techniques associated with the writing process are student selection of topics, daily writing, conferencing with peers, and publication when the writer decides the piece is ready.

The lesson plans for the implementation of the writing process instruction was based on Writer's Workshop (Calkins, 1986). The writing instruction in this language program is based on Graves (1983) writing process approach. Materials were added to meet the objectives of the instructional implementation included frequently misspelled words (Spelling Demons), proofreading checklists, writing log forms, conferencing forms, writing implements, different types of paper, and checklist for each step of the writing process.

Typically a lesson in the process group would begin with a 10-minute mini-lesson (Calkins, 1986) from teacher-generated material based on the students' needs and weaknesses demonstrated in the student writing. Examples of lessons were: choosing topics, revising, editing, and using story grammar (Appendix C). The students had 25 minutes of writing time. During the writing time, three types of conferences were held as

follows: informal teacher-student conferences, formal teacher-student conferences, and peer conferences. During the informal conferences, the teacher circulated around the room asking students how they were doing, encouraging them, and offering open-ended suggestions. Informal conferences were short; the purpose of the meeting was to help the student move on quickly. Some sample questions include the following: How can I help you? Tell me what your piece is about. How is the writing coming along? During the writing time, the teacher conducted formal conferences, which focused more on specifics such as meaning and editing. Before the formal conference, the teacher would have read the draft and planned for the conference. Peer conferences took place at any time that student wanted feedback and help from classmates. Prior to the peer meetings, the teacher first demonstrated how a peer conference should proceed then role-played with the entire class. During these peer conferences students received encouragement and ideas from each other. The final 10-minutes of the writing period were spent with the students sharing their compositions with the group. Following the group share, the teacher published the compositions in a booklet for all the students.

This approach does not use signals for group responses for assessment; rather each student is assessed individually based on his or her writing. Feedback is an essential component of this highly unstructured type of writing instruction, but it is not immediate to the student's writing. Error corrections are not immediate and not mandated until the final draft. This approach is a linear approach to teaching. Skills are taught in independent units followed by the next independent unit. Focus is on the creative process versus the mechanics of writing.

Writer's Workshop Approach

The cognitive process of the writer for writing was the emphasis of Writer's Workshop. The teacher facilitated the required organization, selection and thinking tasks for the students. The Writer's Workshop approach is based upon a cooperative learning model. The teacher/student relationship was emphasized. The teacher fostered the creative process through interactions with each student and his or her writings. The teacher had conferences, prompted, and modeled as the teacher had a conference with students about the students' written products. Elements of the Writer's Workshop approach included student directed selection of topics, daily writing, and conferencing with peers and student directed publication.

The Writer's Workshop plans for lessons for the implementation were based on the social contextualist perspective of Calkins (1986) and Graves (1983) in which the writing process included rehearsal, drafting, revising, and editing phases. Additional material was added including rubrics, checklists and a writing log.

Routines of Writer's Workshop lesson included one to two minutes of Status of Class report, five to 10-minutes of skills mini-lesson, 20-30 minutes of actual writing time and 10-minutes of group share. The semi-scripted mini-lesson (Calkins, 1986) developed by the researcher or the text based on the needs of the students. Based on the students' writing weaknesses, the teacher chose appropriate topics for mini-lessons. Twenty to 30 minutes of writing time followed the mini-lessons.

During the writing time three types of conferencing were available. They were informal teacher-student conferences, formal teacher-student conferences and peer conferences. A schedule was established for formal teacher-student conferences and peer conferences. Each student signed up for a conference, conducted a five-minute conference and then returned to his or her seat. The schedule diminished off task behaviors at the conference tables.

The writing process, which led to the written product, was the major focus of this highly unstructured instructional method, Writer's Workshop. Mechanics including sentence structure, punctuation and capitalization were secondary to the writing process. Students were encouraged to write their papers until they were pleased, but students were not expected to produce a finished product during each class period. In this teaching example lesson plan, the students are presented with evaluation.

Objectives:

To help students become accurate writers

To distinguish between correct/incorrect ways for revising

Preparation:

Explain to students that in order to evaluate a composition, it will be necessary to devise a checklist for judging work

Skill to be taught:

Evaluation

Procedures:

- Orally discuss what constitutes good writing

- Students silently read a good piece of literature, as defined by state curriculum guides
- Students read a passage from a paper orally and students then offer suggestions about what will be considered good
- Students silently read a composition that will be considered poor but without error.
- Have a student read that work orally.
- Have students discuss the difference in the good literature and not good literature.
- Give the students a composition that needs correcting and have them read it.
- While student read silently, teacher writes on the board.
- The whole class looks for mistakes on the composition and corrects them as the mistakes are being pointed out. Have a student identify and write types of errors on the board.
- Identified errors are used as guidelines for formulating a checklist for a student evaluation.

Timeline

The timeline of the intervention study is discussed below. The pretest measures of KTEA-II and pretest essay were administered to the students. The students were then randomly assigned to each treatment group. Four days of 45-minute instruction were provided to each experimental group. On the fifth day of instruction a curriculum-based measure and an essay were administered. Following four more days of instruction a

second curriculum-based assessment and a second essay were administered. The following Monday, a Student Attitude/Satisfaction Scale was administered. Two weeks following the intervention a maintenance essay was administered. Table 10 provides a detail listing of the timeline for intervention for both experimental groups.

Table 10

Timeline of Intervention, Assessments and Maintenance Essay

Week One	Thursday	Assessment Administration of Pretest Kaufman Test of Educational Achievement II Expressive Writing Subtest
	Friday	Administration of Pretest Essay
Week Two	Monday	45-minutes of Daily Writing Instruction
	Tuesday	45-minutes of Daily Writing Instruction
	Wednesday	45-minutes of Daily Writing Instruction
	Thursday	45-minutes of Daily Writing Instruction
	Friday	
	Weekly Assessment	Curriculum-Based Assessment I & Essay I
Week Three	Monday	45-minutes of Daily Writing Instruction
	Tuesday	45-minutes of Daily Writing Instruction
	Wednesday	45-minutes of Daily Writing Instruction
	Thursday	45-minutes of Daily Writing Instruction
	Friday	
	Weekly Assessment	Curriculum-Based Assessment II & Essay II
Week Four	Monday	Student Attitude/Satisfaction Scale
Week Five	Friday	Maintenance Essay

Dependent Variables

This study compared the means on eight dependent measures: (a) essay 1—total score, (b) essay 2–total scores, (c) total words written on essay 1, (d) total words written on essay 2, (e) curriculum-based assessment 1-total score, (f) curriculum-based assessment 2-total score, (g) 10 statements on the attitude/satisfaction scales, and (h) maintenance essay. The dependent variables measured in this study included the students' performance on two curriculum-based assessments and two essays. Students' ability to generalize their expressive writing strategies to unfamiliar material and their ability to maintain their skills over time were also measured. Finally, the students' overall satisfaction with their instruction was assessed at the conclusion of the study.

For both the practitioner and the researcher, assessment of written expression has presented a challenge. The difficulties associated with measuring expressive writing have also led to important findings and suggestions for improving writing in this area. The researcher examined the weaknesses found in previous expressive writing research and will describe efforts to be taken to avoid the same problems in the present study. Writing achievement was assessed with several measures because of writing's complexity and inherent difficulty in its evaluation and measurement. Each measure in this study will be described and an explanation given for why it was chosen, when it was used, and how it was scored. Descriptions of each of the dependent measures will be presented subsequently.

Essay 1 and 2

For the first essay students were asked to write about what a firefighter does. The students were asked to think about the topic before writing and were given a list of ideas to consider. The students were asked to write for at least 20 minutes. The students were asked not to worry about spelling but to focus on the topic. The students were reminded to make their papers interesting. They were also reminded to use the skills learned in writing classes about what to do when you are getting ready to write, when you are writing and when you are checking over your paper.

For the second essay, the students were asked to write for at least 20 minutes on the topic of "If I were the mayor of this town…" giving their ideas and opinions while using their imagination. Suggestions about what to think about on this topic were given. The students were asked not to worry about spelling but to focus on the topic. The students were reminded to make their papers interesting. They were also reminded to use the skills learned in writing classes about what to do when you are getting ready to write, when you are writing and when you are checking over your paper. See Appendix B for essay topics with instructions for pre-essay, essay 1 and essay 2.

The Alabama Direct Assessment of Writing Holistic Rubric

This complex informed human judgment was used to assess the writing progress of students with and without disabilities in Alabama at the fifth, seventh and tenth grades. There are four modes of written communication: descriptive, narrative, expository and persuasive. The scores are reported along a continuum from not rated to level IV. To receive a not rated score, the papers may be blank, off topic or off mode, insufficient,

illegible, in a foreign language, copied verbatim from the prompt or refuse to write. Level 1 proficiency shows little understanding of the writing task. Level II proficiency reflects some understanding of the writing task, but more author involvement than author control. Level III scores indicate a good understanding of the writing task and responses are sufficiently developed with a sense of audience, purpose and author control. Level IV responses demonstrate writing that is thorough with a strong sense of purpose and audience and is precise, consistent and elaborated with details that are clear and coherent. The product has necessary characteristics to ensure it meets standards. For the tenth grade direct assessment of writing holistic rubric for level one through level four, responses were characterized by the following: purpose, content, audience, organization and clarity.

The following procedure was used in this study to establish reliability between raters of student essays. The most direct means of rank-ordering students for writing ability was a holistic evaluation of their writing. Teacher training for scoring essays was conducted until interrater reliability was established of .90. An analytic scale guided raters choosing the better of each student's pre and post-essays on the same topic as a means for program evaluation or for research on methods of teaching writing. Two teachers were identified as scorers for the student essays. Both teachers held a Master's degree in special education and had worked with students in rural schools. The researcher acquired non-participating students' essays in the tenth grade to be used for training. The two scorers practiced the scoring procedure with the training papers until an acceptable level of reliability was reached. A reliability coefficient of .80 was considered high enough for

program evaluation, but to determine individual growth for teaching or research, a reliability coefficient of .90 was satisfactory.

Twenty-five percent of the essays from the experimental sample were chosen for the reliability sample. These papers were scored by both raters and were used to determine inter-rater reliability. The researcher scored the remaining 75% of the essays. The inter-rater reliability between the two raters was determined using Pearson correlation coefficients to be .90.

Total Word Count

Total Word Count was also used to compare the writing performance of the groups (Deno, 1982; Gansle, Noell, VanDerHeyden, Noaquin, & Slider, 2002; Tsang, 1996). In the present study, each student wrote two essays and a maintenance essay. The total words written on each essay including words that were spelled incorrectly were counted. Numbers that were not spelled out were not counted as words. Titles and rewritten story starters were counted as words written (Gansle, et. al., 2002; Shin, 1989;Tsang, 1996). Espin, Scierka and Skare (1999) found that when the number of words written correctly increased other writing skills also improved including grammar and punctuation. Independent-samples *t* tests were used to determine if there were significant differences in the two treatment groups on the number of words written.

Curriculum-Based Assessments

During each 45-minute lesson, the experimental teacher presented a writing lesson following a semi-scripted lesson designed for the Expressive Writing, explicit strategy group, or Writer's Workshop, the traditional writing group. After the teacher taught her

writing lesson, students were individually asked to write a paragraph based on a referent. The teacher used a picture referent to narrow the topic of essay in order to focus on mechanics of basic writing and to allow for questioning of vague statements in the essay paragraphs. On the 5th and 10th days of the intervention, the students completed a researcher-made curriculum-based assessment from the days and previous four days of lessons.

At the end of each week of intervention a curriculum-based assessment covering previously taught skills was administered. Direct assessments of writing using curriculum-based measurements are thought to have stronger content validity (Gansle, et. al., 2002) than published tests that use more indirect methods of assessment such as objective multiple-choice questions, cloze procedures or sentence combing test formats (Tindal & Parker, 1989). Curriculum-based assessment is a systemic procedure for monitoring the students' progress in an academic area and making instructional decisions (Deno, 1985; Espin, Scierka, & Skare, 1999; Fewster & Macmillan, 2002; Tsang, 1996). Deno and Mirkin's (Deno, 1985) curriculum-based measure research in the early 1970s provided special education teachers with an efficient, accurate way of assessing the effects of instruction. According to Fewster and Macmillan (2002), Deno and Mirkin produced a standardized model that focused on frequent administration of short-duration basic skills probes taken directly from the students' own curriculum. Assessment methods used to make decisions about instruction must be capable of detecting small performance changes (Fewster & Macmillan, 2002) and must be amendable to frequent administration. The first assessment consisted of eighteen questions worth 45-points on skills assessments and one

essay worth 55 points. Skills assessed included identifying subjects, correcting run-on sentences, pronoun-antecedent agreement, using quotations, rearranging so that sentences begin with a dependent clause, and writing a paragraph. Three questions, worth three points, assessed underlining the subject of a sentence. Five questions, worth 14 points, assessed correcting run-ons. Four sentences, worth four points, assessed pronoun antecedent agreement. Three questions, worth nine points, assessed using quotations. Three sentences, worth 15 points, assessed rearranging so that sentences began with dependent clause. The 55 points on the essay were divided up as follows: (a) eleven points addressed run-on sentences in the essay, (b) eleven points addressed correct capitalization, end punctuation, and staying on topic, (c) eleven points addressed key points necessary to address the topic, (d) eleven points addressed the conclusion of essay and (e) eleven points addressed spelling and punctuation errors.

The second researcher-made curriculum-based assessment was composed of 16 questions of skills assessment worth 45-points and one essay worth 55 points. Skills assessed included identifying predicates, supplying pronoun antecedents, punctuating quotations correctly, rearranging so that the sentence begins with a dependent clause and writing an essay. Four questions, worth 4 points, assessed identifying predicates. Five sentences, worth five points, assessed the skill of supplying pronoun antecedents. Four questions, worth 21 points, assessed punctuating quotations correctly. Three sentences, worth 15 points, assessed rearranging so that the sentence began with a dependent clause. The 55 points on the second essay were the same as the description for essay 1.

On the last day of the 2-week instruction period, the teacher administered a second essay and the second curriculum-based measure. The following Monday, students also completed an attitude/satisfaction scale to determine if the students had a preference for either type of instruction. Two weeks after the last day of instruction, a maintenance essay was administered to each student participating in the study in order to determine if treatment effects were maintained over time.

Maintenance Essay

For the *maintenance essay*, the students were asked to write for at least 20 minutes on the topic of a referent of a boy playing Frisbee with his dog in the woods while using their imagination. Instructional procedures were the same as the instructions for essay 1 and essay 2 (see Appendix B). Suggestions about what to think about on this topic were given. The students were asked not to worry about spelling but to focus on the topic. The students were reminded to make their papers interesting. They were also reminded to use the skills learned in writing classes about what to do when you are getting ready to write, when you are writing and when you are checking over your paper.

Attitude/Satisfaction Measure

An *attitude/satisfaction scale* was constructed by the researcher and used to determine if there were differences between the groups and their feelings about the received instruction. A five-point Likert scale had students choosing agree (5), somewhat agree (4), undecided (3), somewhat disagree (2) or disagree (1) about their reaction to the instruction and its value for future writing assignments. A copy of the instrument appears in Appendix F.

Analysis of Data

This section contains the data analysis and the presentation of results. First the research questions will be restated in the null form and then the statistical analysis procedures will be described.

Null Hypothesis

The 18 null hypotheses dealt with two levels of one independent variable and eight dependent variables. The two levels of the independent variable were the two methods of teaching writing: Expressive Writing and Writer's Workshop. The dependent variables were (a) essay 1—total score, (b) essay 2–total scores, (c) total words written on essay 1, (d) total words written on essay 2, (e) curriculum-based assessment 1, (f) curriculum-based assessment 2, (g) 10 statements on the attitude/satisfaction scales, and (h) maintenance essay. The null hypothesis will be presented in six groups that will correspond to the groups in which data will be analyzed.

Essay 1

1. There will be no significant difference between the treatment groups when compared on the purpose subscores of the holistic/analytic score of essay 1.

2. There will be no significant difference between the treatment groups when compared on the content subscores of the holistic/analytic score of essay 1.

3. There will be no significant difference between the treatment groups when compared on the audience subscores of holistic/analytic scores of essay 1.

4. There will be no significant difference between the treatment groups when compared on the organization subscores of holistic/analytic scores of essay 1.

5. There will be no significant difference between the treatment groups when compared on the clarity subscores of holistic/analytic scores of essay 1.

Essay 2

1. There will be no significant difference between the treatment groups when compared on the purpose subscores of the holistic/analytic score of essay 2.

2. There will be no significant difference between the treatment groups when compared on the content subscores of the holistic/analytic score of essay 2.

3. There will be no significant difference between the treatment groups when compared the audience subscores of holistic/analytic scores of essay 2.

4. There will be no significant difference between the treatment groups when compared on the organization subscores of holistic/analytic scores of essay 2.

5. There will be no significant difference between the treatment groups when compared on the clarity subscores of holistic/analytic scores of essay 2.

Total Scores of Essay 1 and Essay 2

1. There will be no significant difference between the treatment groups when compared the total holistic/analytic score of essay 1.

2. There will be no significant difference between the treatment groups when compared the total holistic/analytic score of essay 2.

Words Written

1. There will be no significant difference between the treatment groups when compared on the total words written on essay 1.

2. There will be no significant difference between the treatment groups when compared on the total words written on essay 2.

Curriculum-based Assessment

1. There will be no significant difference between the treatment groups when compared on the total score of the curriculum-based assessment one.

2. There will be no significant difference between the treatment groups when compared on the total score of the curriculum-based assessment two.

Attitude/Satisfaction Scale

1. There will be no significant difference between the treatment groups when compared on the attitude/satisfaction scale.

Maintenance Essay

1. There will be no significant difference between the treatment groups when compared on maintenance essay scores.

Statistical Analysis

The following data were analyzed in this study: total holistic/analytical scores and sub scores for two essays (essay 1 and essay 2), total words written on two essays, total scores on two curriculum-based assessments, total and sub scores on an attitude/satisfaction scale, and holistic/analytical scores and sub scores on a maintenance

essay. All data were analyzed using the Statistical Package for the Social Sciences (SPSS, 2003).

Independent-samples *t* test was used to test the null hypotheses that relate to the essay 1 and essay 2. Expected variability of the students' writing was not found; 11 out of 21 of the students obtained standard scores that indicated performance three standard deviations below the mean on a normal bell curve.

After the administration of the experimental treatments two important adjustments were needed: to adjust treatment effects for any differences between the treatment groups that existed prior to the experiment and to filter estimates of experimental error. One would expect to find relatively small differences between the treatments on the covariate and considerably larger differences among the subjects with the different treatment conditions when one assumes that the subjects were randomly assigned to the treatment conditions.

In order to analyze the 10 statements on the attitude/satisfaction scale, independent-samples *t*-tests were used. In order to compare the groups on total words written on the two essays, independent samples *t*-tests were used.

Summary

This chapter provided a discussion of the research methodology utilized in this study. It included a description of the measures and procedures for the sample selections and data collection. The chapter closed with the null hypotheses and methods of analysis.

IV. RESULTS

Overview

Twenty-one students with specific learning disabilities, mild mental retardation or other health impairments were randomly assigned to one of the two treatment groups. Twenty-one students completed the study, with ten students in one group and 11 in the other group. Students in both groups received writing instruction.

The first week of instruction consisted of identifying subjects, correcting run-on sentences, pronoun-antecedent agreement, using quotations, rearranging so that sentences begin with a dependent clause, and paragraph writing. The second week of instruction consisted of identifying predicates, supplying pronoun-antecedents, punctuating quotations correctly, rearranging so that the sentence begins with a dependent clause and paragraph writing.

Determining Group Equivalency

A description of the achievement levels of the students based on total test scores on the Kaufman Test of Educational Achievement-II (KTEA-II) (2004) indicated that the students had significant difficulties with writing. For the 21 participants, the mean standard score was 69.24 with a *SD* 12.48 and a range of standard scores from 43 to 87. An independent-samples *t* test compared the Writer's Workshop mean total score of the KTEA-II ($M = 70.64$, $SD = 10.62$) with those of the Expressive Writing ($M = 67.70$, *SD*

= 14.68). The comparison was found not to be statistically significant, t (19) = .53, p = .60. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the mean total score of the KTEA-II. Simply, both groups of students were struggling with writing prior to the intervention.

The Writer's Workshop group Pretest Essay mean (19.64) was higher than the Expressive Writing Group mean (16.00), but this difference was also not statistically significant using an independent-samples t test (t = 1.28 and p = .22).

Table 11

Means and Standard Deviations t-value and p on Pretest Measures of KTEA-II Writing Composite Score

Test	*Mean*	*SD*	*t*-value	*p*
KTEA-II Expressive Writing Composite			.53	.60
Writer's Workshop	70.64	10.62		
Expressive Writing	67.70	14.68		

Table 12

Pretest Essay Mean, Standard Deviation, t-value and p

Test	*Mean*	*SD*	*t*-value	*p*
Pretest Essay			1.28	.22
(Range of possible scores: 12 -48)				
Writer's Workshop	19.64	8.23		
Expressive Writing	16.00	3.77		

Expressive writing involves several interactive processes. Therefore, writing in this study were assessed using (a) two curriculum-based assessments, (b) two essays and (c) a maintenance essay. Two curriculum-based assessments determined the subjects' knowledge of the essential conventions of writing covering the material that was taught each week. For example the first curriculum-based assessment was designed to address concepts addressed in the first week of instruction (e.g., identifying subjects, correcting run-ons sentences, and pronoun-antecedent agreement) using 18 questions and one essay.

Two weeks after the end of the intervention, the subjects' ability to maintain their skills over time was measured using a maintenance test. Finally, a researcher-designed attitude/satisfaction scale was used to determine student satisfaction with the type of instruction received.

This chapter presents the results of the data analysis for this study.

The purpose of this study was to examine the efficacy of two highly dissimilar types of writing instruction for students with learning disabilities, mild mental retardation or other health impairment. These two types of instruction were (a) Expressive Writing, a rule-based strategy and (b) Writer's Workshop, a traditional method. To ensure fidelity of treatment of both groups, the teacher was trained using the interventional material, the teacher used semi-scripted lesson plans during the intervention, and observations by a trained observer were conducted at least twice a week for each intervention. Separate independent-samples *t* tests were conducted for the subjects' performance on: (a) essay 1—total score, (b) essay 2—total score, (c) total words written on essay 1, (d) total words written on essay 2, (e) curriculum-based assessment 1, (f) curriculum-based assessment 2, and (g) maintenance essay. The 10 statements on the attitude/satisfaction scales were analyzed one at a time using univariate analysis of variance (ANOVA) procedures. Differences between the two groups on each of the ten items on the attitude/satisfaction

scale were also analyzed using multivariate procedures. The Wilks' lambda test of significance of $p < .05$ level was used for the analysis. The null hypotheses will be presented in seven groups that will correspond to the groups on which data were analyzed. All the data were analyzed using SPSS for Windows (13.0), a computerized statistical package. Table 14 presents the means and standard deviations for students in the two treatment groups on the holistic/analytic scores of Essay 1. The means, standard deviations of each of the eight dependent measures, and *F* values of the analysis of

variance for the attitude/satisfaction scale are presented in Tables 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 in the text.

Essay 1

Essay 1 was scored using the Alabama Holistic Analytic Scale (See Appendix E). The essays were scored on the topics including Purpose, Content, Audience, Organization, Clarity, Punctuation, Spelling, Handwriting, and total score and number of words written. The Punctuation, Spelling and Handwriting subtests were not analyzed in this study. The null hypotheses that corresponded with each of these measures and the results independent-samples *t* test are presented in Table 15. The null hypotheses for total score and number of words written are discussed subsequently and results of independent-samples *t* test are presented in Table 18 and Table 19 respectively.

Table 13 presents the results of the score distribution for Essay 1 (Range of possible scores 12–48), Mean and Standard Deviation for both groups. Table 14 presents the Means and Standard Deviations for Students in the Two Treatment Groups Holistic/Analytic Scores of Essay 1. Table 15 presents the results of the independent samples-*t* test of significance on Holistic/Analytical Scores of Essay 1.

Null Hypotheses 1(Essay 1): There will be no significant difference between the treatment groups when compared on the purpose subscores of the holistic/analytic score on essay 1. An independent-samples *t* test compared the Writer's Workshop mean purpose subscores of the holistic/analytic score on essay 1 ($M = 4.00$, $SD = 1.79$) with those of the Expressive Writing ($M = 5.20$, $SD = 1.40$). The comparison was found to not be statistically significant, $t\ (19) = -1.70$, $p = .11$. This result indicates that the Writer's

Workshop group and the Expressive Writing group did not differ on the mean purpose subscores of the holistic/analytic score on essay 1. Therefore, the null hypothesis was retained.

Null Hypotheses 2 (Essay 1): There will be no significant difference between the treatment groups when compared on the content subscores of the holistic/analytic score of essay 1. An independent-samples *t* test compared the Writer's Workshop mean content subscores of the holistic/analytic score on essay 1 ($M = 3.82$, $SD = 1.89$) with those of the Expressive Writing ($M = 4.40$, $SD = 1.84$). The comparison was found to not be statistically significant, $t\ (19) = -.71$, $p = .48$. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the content subscores of the holistic/analytic score on essay 1. Therefore, the null hypothesis was retained.

Null Hypothesis 3 (Essay 1): There will be no significant difference between the treatment groups when compared on the audience subscores of holistic/analytic scores of essay 1. An independent-samples *t* test compared the Writer's Workshop mean audience subscores of the holistic/analytic score on essay 1 ($M = 3.27$, $SD = 1.62$) with those of the Expressive Writing ($M = 3.90$, $SD = 1.53$). The comparison was found to not be statistically significant, $t\ (19) = -.91$, $p = .37$. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the audience subscores of the holistic/analytic score on essay 1. Therefore, the null hypothesis was retained.

Null Hypothesis 4 (Essay 1): There will be no significant difference between the treatment groups when compared on the organization sub scores of holistic/analytic scores

of essay 1. An independent-samples *t* test compared the Writer's Workshop mean organization subscores of the holistic/analytic score on essay 1 (M = 2.91, SD = 1.38) with those of the Expressive Writing (M = 4.60, SD = 1.90). The comparison was found to be statistically significant, t (19) = -2.56, p = .03. This result indicates that the Writer's Workshop group and the Expressive Writing group did differ on the organization subscores of the holistic/analytic score on essay 1. Therefore, the null hypothesis was rejected.

Null Hypothesis 5 (Essay 1): There will be no significant difference between the treatment groups when compared on the clarity subscore of holistic/analytic scores of essay 1. An independent-samples *t* test compared the Writer's Workshop mean clarity subscore of the holistic/analytic score on essay 1 (M = 2.18, SD = .75) with those of the Expressive Writing (M = 2.70, SD = .70). The comparison was not found to be statistically significant, t (19) = -.69, p = .50. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the clarity subscore of the holistic/analytic score on essay 1. Therefore, the null hypothesis was retained.

Table 13

Essay 1 Score Distribution (Range of possible scores 12–48), *Mean and Standard Deviation for Both Groups*

Score	Number of Students
12	5
13	1
15	1
18	1
20	1
22	1
24	1
25	1
26	1
27	2
28	1
31	1
32	2
36	2
Total	21

Essay 1 Mean		Essay 1 SD	
Writer's Workshop	19.55	Writer's Workshop	7.93
Expressive Writing II	24.70	Expressive Writing II	9.25

Table 14

Means and Standard Deviations for Students in the Two Treatment Groups

Holistic/Analytic Scores of Essay 1

	Instructional Method [a]	Mean	SD
Total Essay Score [b]	Writer's Workshop	19.55	7.93
	Expressive Writing II	24.70	9.25
Purpose (2-8)[c]	Writer's Workshop	4.00	1.79
	Expressive Writing II	5.20	1.40
Content (2-8)	Writer's Workshop	3.82	1.89
	Expressive Writing II	4.40	1.84
Audience (2-8)	Writer's Workshop	3.27	1.62
	Expressive Writing II	3.90	1.53
Organization (2-8)	Writer's Workshop	2.91	1.38
	Expressive Writing II	4.60	1.90
Clarity (1-4)	Writer's Workshop	2.18	.75
	Expressive Writing II	2.70	.70
Number of Words	Writer's Workshop	81.64	55.20
	Expressive Writing II	150.30	113.93

[a] Writer's Workshop had 11 subjects and Expressive Writing II had 10 subjects

[b] Range of possible points was 12-48

[c] Range of possible points on each subtest

Table 15

Independent Samples-t Test of Significance on Holistic/Analytical Scores of Essay 1

	df	*t*	*p*
Total Essay Score	19	-1.38	.19
Purpose	19	-1.70	.11
Content	19	-.71	.48
Audience	19	-.91	.37
Organization	19	-2.56	.03*
Clarity	19	-.69	.50
Number of Words	19	-1.78	.09

*Significant at the .05 level

Essay 2

There were five null hypotheses for Essay 2. Essay 2 was scored using the Alabama Holistic Analytic Scale (See Appendix E). The essays were scored on the topics including Purpose, Content, Audience, Organization, Clarity, Punctuation, Spelling, and Handwriting. Punctuation, Spelling and Handwriting scores were not analyzed. Table 16 presents the Means and Standard Deviations for Students in the Two Treatment Groups Holistic/Analytic Scores of Essay 2. The null hypotheses that correspond with each of these measures and the results independent-samples *t* test are presented in Table 17. The null hypotheses for total score and number of words written are discussed subsequently

and results of independent-samples *t* test are presented in Table 18 and Table 19 respectively.

Null hypothesis 1(Essay 2). There will be no significant difference between the treatment groups when compared on the purpose subscores of the holistic/analytic score of essay 2. An independent-samples *t* test compared the Writer's Workshop mean purpose subscores of the holistic/analytic score on essay 2 (M = 3.64, SD = 1.75) with those of the Expressive Writing (M = 3.80, SD = 1.47). The comparison was found not to be statistically significant, t (19) = - .23, p = .82. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the purpose subscores of the holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Null hypothesis 2 (Essay 2). There will be no significant difference between the treatment groups when compared on the content subscores of the holistic/analytic score of essay 2. An independent-samples *t* test compared the Writer's Workshop mean content subscores of the holistic/analytic score on essay 2 (M = 3.64, SD = 1.75) with those of the Expressive Writing (M = 4.20, SD = 1.75). The comparison was found not to be statistically significant, t (19) = - .74, p = .47. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the content subscores of the holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Null hypothesis 3. There will be no significant difference between the treatment groups when compared on the audience subscores of holistic/analytic scores of essay 2. An independent-samples *t* test compared the Writer's Workshop mean audience subscores

of the holistic/analytic score on essay 2 (M = 3.45, SD = 1.81) with those of the Expressive Writing (M = 3.80, SD = 1.48). The comparison was found not to be statistically significant, t (19) = - .48, p = .64. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the audience subscores of the holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Null hypothesis 4(Essay 2). There will be no significant difference between the treatment groups when compared on the organization subscores of holistic/analytic scores of essay 2. An independent-samples t test compared the Writer's Workshop mean organization subscores of the holistic/analytic score on essay 2 (M = 2.91, SD = 1.04) with those of the Expressive Writing (M = 3.80, SD = 1.75). The comparison was found not to be statistically significant, t (19) = - 1.43, p = .17. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the organization subscores of the holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Null Hypothesis 5(Essay 2): There will be no significant difference between the treatment groups when compared on the clarity subscore of holistic/analytic scores of essay 2. An independent-samples t test compared the Writer's Workshop mean clarity subscore of the holistic/analytic score on essay 2 (M = 1.73, SD = .91) with those of the Expressive Writing (M = 1.80, SD = .63). The comparison was not found to be statistically significant, t (19) = -2.11, p = .84. This result indicates that the Writer's

Workshop group and the Expressive Writing group did not differ on the clarity subscore of the holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Table 16

Means and Standard Deviations for Students in the Two Treatment Groups Holistic/Analytic Scores of Essay 2

	Instructional Method [a]	Mean	SD
Total Essay Score [b]	Writer's Workshop	20.18	8.46
	Expressive Writing II	23.50	8.80
Purpose	Writer's Workshop	3.64	1.75
(2-8)[c]	Expressive Writing II	3.80	1.47
Content	Writer's Workshop	3.64	1.75
(2-8)	Expressive Writing II	4.20	1.75
Audience	Writer's Workshop	3.45	1.81
(2-8)	Expressive Writing II	3.80	1.48
Organization	Writer's Workshop	2.91	1.04
(2-8)	Expressive Writing II	3.80	1.75
Clarity	Writer's Workshop	1.73	.91
(1-4)	Expressive Writing II	1.80	.63
Number of Words	Writer's Workshop	83.36	62.63
	Expressive Writing II	76.00	85.90

[a] Writer's Workshop had 11 subjects and Expressive Writing II had 10 subjects

[b] Range of possible points was 12-48 [c] Range of Possible points

Table 17

Independent Samples-t test on Holistic/Analytical Scores of Essay 2

	df	*t*	*p*
Total Essay Score	19	- .88	.39
Purpose	19	- .23	.82
Content	19	- .74	.47
Audience	19	- .48	.64
Organization	19	- 1.43	.17
Clarity	19	- 2.11	.84
Number of Words	19	.23	.82

Total Scores of Essay 1 and Essay 2

Two hypotheses addressed the total scores of Essay 1 and Essay 2. Both Essay 1 and Essay 2 were scored using the Alabama Holistic Analytic Scale (see Appendix E). The total sum score was comprised of the eight topics of purpose, content, audience, organization, clarity, punctuation, spelling and handwriting. Table 18 presents the Means, Standard Deviations, Independent Samples *t*-test and Significance for Students in the Two Groups on the Total Scores of Essay 1 and Essay 2.

Null hypothesis 1. There will be no significant difference between the treatment groups when compared on the total holistic/analytic score of essay 1. An independent-samples *t* test compared the Writer's Workshop mean total holistic/analytic score on essay

1 (M = 19.55, SD = 7.93) with those of the Expressive Writing (M = 24.70, SD = 9.25). The comparison was found not to be statistically significant, t (19) = - 1.38, p = .19. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the mean total holistic/analytic score on essay 1. Therefore, the null hypothesis was retained.

Null hypothesis 2. There will be no significant difference between the treatment groups when compared on the total holistic/analytic score of essay 2. An independent-samples t test compared the Writer's Workshop mean total on the holistic/analytic score on essay 2 (M = 20.18, SD = 8.46) with those of the Expressive Writing (M = 23.50, SD = 8.80). The comparison was found not to be statistically significant, t (19) = - .88, p = .39. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the total holistic/analytic score on essay 2. Therefore, the null hypothesis was retained.

Table 18

Means, Standard Deviations, Independent Samples t-Test and Significance for Students in the Two Groups on the Total Scores of Essay 1 and Essay 2

	M	*SD*	*t*	*p*
Essay 1			- 1.38	.19
Writer's Workshop	19.55	7.93		
Expressive Writing	24.70	9.25		
Essay 2			-.88	.39
Writer's Workshop	20.18	8.46		
Expressive Writing	23.50	8.80		

Number of Words Written

Two hypotheses addressed the number of words written on Essay 1 and Essay 2. Following is a statement of the hypotheses and the results of the independent-samples *t* test that compared the means of each group. Table 19 presents the means, standard deviations, independent-samples t test, and significance for words written on Essay 1 and Essay 2.

Null hypothesis 1. There will be no significant difference between the treatment groups when compared on total words written on essay 1. An independent-samples *t* test compared the Writer's Workshop mean words written on essay 1 (*M* = 70.27, *SD* =

43.82) with those of the Expressive Writing (M = 51.50, SD = 26.70). The comparison was found not to be statistically significant, t (19) = 1.17, p = 0.26. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the total words written on essay 1. Therefore, the null hypothesis was retained.

Null hypothesis 2. There will be no significant difference between the treatment groups when compared on the total words written on essay 2. An independent-samples t test compared the Writer's Workshop mean total words written on essay 2 (M = 83.26, SD = 62.63) with those of the Expressive Writing (M = 76.00, SD = 85.90). The comparison was found not to be statistically significant, t (19) = .23, p = .82. This result indicates that the Writer's Workshop group and the Expressive Writing group did not differ on the total words written on essay 2. Therefore, the null hypothesis was retained.

Table 19

Means, Standard Deviations, Independent-samples t test, and Significance for Words Written on Essay 1 and Essay 2

	Mean	*SD*	*t*	*p*
Essay 1			1.17	.26
Writer's Workshop	70.27	43.82		
Expressive Writing II	51.50	26.70		
Essay 2			.23	.82
Writer's Workshop	83.26	62.63		
Expressive Writing II	76.00	85.90		

Curriculum-based Assessment

Two hypotheses addressed the total score on curriculum-based assessments one and two. A statement of the hypothesis and results are reported in Table 20.

Null hypothesis 1. There will be no significant difference between the treatment groups when compared on the total score on curriculum-based assessment one. An independent-samples *t* test compared the Writer's Workshop mean total score on curriculum-based assessment one ($M = 50.91$, $SD = 30.07$) with those of the Expressive Writing II ($M = 42.10$, $SD = 20.55$). The comparison was found not to be statistically significant, $t\ (19) = .78$, $p = .45$. This result indicates that the Writer's Workshop group and the Expressive Writing II group did not differ on the total score on curriculum-based assessment one. Therefore, the null hypothesis was retained.

Null hypothesis 2. There will be no significant difference between the treatment groups when compared on the total score on curriculum-based assessment two. An independent-samples *t* test compared the Writer's Workshop mean total score on curriculum-based assessment two ($M = 44.00$ $SD = 31.65$) with those of the Expressive Writing II ($M = 63.40$, $SD = 31.59$). The comparison was found not to be statistically significant, $t\ (19) = -1.40$, $p = .18$. This result indicates that the Writer's Workshop group and the Expressive Writing II group did not differ on the total score on curriculum-based assessment two. Therefore, the null hypothesis was retained.

Table 20

Means and Standard Deviation for Curriculum-based Assessments 1 and 2

	Writer's Workshop	Expressive Writing II	*t*	*p*
CBA 1[a]			*t* (19) = .78	*p = .45*
Mean	50.91	42.10		
SD	30.07	20.55		
CBA 2			*t* (19) = -1.40	*p = .18*
Mean	44.00	63.40		
SD	31.65	31.59		

[a] Total possible score 100.

Attitude/Satisfaction Scale

One null hypothesis related to the 10 statements on a student attitude/satisfaction scale. Differences between the two groups on each of the ten items on the attitude/satisfaction scale were analyzed using multiple univariate procedures. The results of the analyses were reported in Table 21. General Linear Model procedures were used to determine if there are differences between the groups on the 10 statements. A statement of the hypothesis and Table 21 in which the results are reported follows. Table 22 presents the summary of means and standard deviations for the Student Attitude/Satisfaction Scale.

Null hypothesis 1. There will be no significant difference when comparing the attitude/satisfaction scale between the treatment groups. Differences between the two groups on each of the ten items on the attitude/satisfaction scale were analyzed using

multivariate procedures. The results are reported in Table 21. The multivariate Wilks' lambda test for the attitude/satisfaction scale was not significant (F (9) = 1.10, p = .44). Therefore, the null hypothesis was retained.

Table 21

General Linear Model for the Student Attitude/Satisfaction Scale

Test	Df	Value	F	*p*
Wilks'	9	0.45	1.10	.44

Table 22

Summary of Means and Standard Deviations for Student Attitude/Satisfaction Scale

	Mean	SD
Question 1: I like to write.	3.05	1.76
Writer's Workshop	2.42	1.62
Expressive Writing II	3.80	1.69
Question 2: I learned a lot from this unit.	4.14	1.49
Writer's Workshop	3.83	1.59
Expressive Writing II	4.56	1.33
Question 3: I feel that It is important to learn how to write.	3.86	1.70
Writer's Workshop	3.42	1.88
Expressive Writing II	4.40	1.35

(table continues)

Table 22 (continued)

	Mean	SD
Question 4: I liked the way this unit was taught.	3.77	1.51
Writer's Workshop	4.17	1.03
Expressive Writing II	3.30	1.89
Question 5: I wished that more writing units were taught this way.	3.32	1.81
Writer's Workshop	2.67	1.72
Expressive Writing II	4.10	1.66
Question 6: I will use what I've learned in other classes.	3.55	1.63
Writer's Workshop	3.83	1.53
Expressive Writing II	3.20	1.75
Question 7: I hate writing.	2.77	1.60
Writer's Workshop	3.00	1.41
Expressive Writing II	2.50	1.84
Question 8: I would like to write better.	3.81	1.60
Writer's Workshop	4.00	1.35
Expressive Writing II	3.56	1.94
Question 9: I like choosing my own topics when I write.	4.59	1.00
Writer's Workshop	4.58	1.17
Expressive Writing II	4.60	0.84
Question 10: I like to be assigned topics or be given a story starter.	3.50	1.77
Writer's Workshop	3.25	1.82
Expressive Writing II	3.80	1.75

[a] 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

Maintenance Essay

One null hypothesis addressed the total score on a maintenance essay between the treatment groups. Table 23 presents the means, standard deviations, *p* value of the independent-samples *t* test analysis on the maintenance essay.

Null hypothesis 1. There will be no significant difference when comparing the total score on a maintenance essay between the treatment groups. An independent-samples *t* test compared the Writer's Workshop mean total score on the maintenance essay (M = 25.09, SD = 7.11) with those of the Expressive Writing II (M = 29.20, SD = 6.49). The comparison was found not to be statistically significant, t (19) = -1.38, p = .18. This result indicates that the Writer's Workshop group and the Expressive Writing II group did not differ on the total score on curriculum-based assessment two. Therefore, the null hypothesis was retained.

Table 23

Means, SD, Independent-Samples t-test and p Value of Maintenance Essay

	Writer's Workshop	Expressive Writing II	*t*	*p*
Maintenance Essay			*t (19) = -1.38*	.18
Mean	25.09	29.20		
SD	7.11	6.49		

Summary of Results

The results of the independent-samples *t* test along with means and standard deviations of the dependent variables were presented in this chapter. The 18 null hypotheses were discussed in eight categories: (a) essay 1—total score, (b) essay 2—total score, (c) total words written on essay 1, (d) total words written on essay 2, (e) curriculum-based assessment 1, (f) curriculum-based assessment 2, (g) attitude/satisfaction scale and (h) maintenance essay. The only significance found was on organization subscores of holistic/analytic scores of essay 1. None of the other independent-samples *t* tests were found to be statistically significant. Only one of the 18 null hypotheses was rejected addressing the difference between treatment groups on the organization subscore of Essay 1.

Results from the independent-samples *t* test separate one-way analysis of variance indicated that the Expressive Writing II group did not have significantly different scores from the Writer's Workshop group on Essay 1 total score or on the purpose, content, audience or clarity subscores. Results from the independent-samples *t* test indicated that the Expressive Writing II group did not have significantly different scores from the Writer's Workshop group on Essay 2 total score on the purpose, content, audience, organization or clarity subscores.

Results from the independent-samples *t* test indicated that the Expressive Writing II group did not have significantly different scores from the Writer's Workshop group on number of words written on Essay 1 and Essay 2. Results from the independent-samples *t* test indicated that the Expressive Writing II group did not have significantly different

scores from the Writer's Workshop group on Curriculum-Based Assessment 1 and Curriculum-Based Assessment 2.

Results from the one-way analysis of variance indicated that the Expressive Writing II group did not have significantly different scores from the Writer's Workshop group on Attitude/Satisfaction Scale. Results from the independent-samples *t* test indicated that the Expressive Writing II group did not significantly differ in scores from the Writer's Workshop group on the Maintenance Essay. A discussion of these results is presented in Chapter V.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the present study, including its purpose and procedures. Results of the study are discussed as they relate to the expressive writing needs of students with specific learning disabilities, mild mental retardation and other health impairments. The latter part of the chapter will be devoted to a discussion of the limitations of the study and their effect on the internal and external validity of the results. Finally, the chapter concludes with recommendations for future research.

Purpose and Procedure

The purpose of this study was to examine the relative effects of two instructional approaches for teaching writing to secondary students with specific learning disabilities, mild mental retardation, and other health impairments. A review of literature in the area of written expression revealed the presence of a deficiency in writing ability in the general population of students. Also revealed was the absence of research relating to the development of writing ability in students with skill deficits. Although findings from students with average ability and those with learning disabilities might apply to rural students with skill deficiencies, a need appears for studies to be done with this specific population.

The purpose of the present study was to compare the effects of two different methods of teaching written expression to secondary students in the ninth-, tenth- and twelfth-grade with specific learning disabilities, mild mental retardation and other health impairments attending a rural school in Southeast Alabama. Specifically, there were seven research questions under investigation in this study:

1. Are there specific writing instructional methods that are more successful in improving overall writing scores of students with specific learning disabilities, mild mental retardation and other health impairments?

2. Are there specific writing instructional methods that are more successful in generalizing to the writing task for students with specific learning disabilities, other health impairments and mild mental retardation?

3. Do students with specific learning disabilities, mild mental retardation and other health impairments have more positive attitudes towards certain types of writing instruction?

From these three general research questions additional specific research questions were developed. These specific research questions were:

1. Is there a significant difference between the treatment groups when compared on scores on short-term curriculum-based assessments?

2. Is there a significant difference between the treatment groups when compared on scores of the Maintenance Essay?

3. Is there a significant difference between the treatment groups when compared on scores of the Essay 1 and Essay 2?

4. Is there a significant difference between the treatment groups when compared on a student-attitude/satisfaction scale?

Design of the Study

In order to investigate these questions, 21 ninth-, tenth-, and twelfth-grade students with specific learning disabilities, mild mental retardation and other health impairments were randomly assigned to two treatment groups. Students with specific learning disabilities, mild mental retardation and other health impairments often experience difficulty with one or more factors associated with the writing process (Baker, Gersten & Graham, 2003; Gersten & Baker, 2001; National Standard of Education Statistics, 2002). Investigated in the present study was the effect of two different types of writing instruction on the performance of students with specific learning disabilities, mild mental retardation and other health impairments. Daily instructional sessions for both groups lasted approximately 45-minutes for 2-weeks. A certified secondary teacher served as both the experimental teacher and the researcher for both groups. The two instructional methods under investigation in the present study were Expressive Writing, a strategy instruction approach, and Writer's Workshop, a traditional writing instruction approach. One group was taught using the structured published program, Expressive Writing II (Engelmann & Silbert, 2005) based on the Direct Instruction Model (Engleman, Becker, Carnine & Gersten, 1988). The program emphasized the teaching of explicit strategies for writing. The rule-based approach included a review of relevant previous learning or prerequisites for the lesson. Then students were presented with a rule-statement to assist

students in written expression, followed by a multi-step procedure to demonstrate the strategies followed by practice. The other group used a less structured writing social-contextualist approach that was based on Calkins' (1981, 1986) and Graves' (1983) model. In addition, the teacher was periodically observed by one observer during the intervention phase of this study to ensure that proper instructional techniques were being utilized.

Instructional objectives of each lesson were the same as the Expressive Writing group, but in Writer's Workshop, mini-lessons were the avenue for instruction. Application of basic grammar rules and style were emphasized in the final draft phase of writing. In order to meet the instructional objectives, the researcher added material including rubrics, checklists and writing logs. The student's responsibility includes prewriting, drafting, editing, peer conferencing, revision, and publishing. The teacher facilitated and monitored classroom activities and held individual conferences to provide suggestions for revisions in both content and form prior to publishing.

Because of the complexity of the writing process, researchers have encountered many difficulties in assessing writing. The two groups in the present study were compared using independent-samples *t* test for each of the eight dependent measures related to writing: (a) essay 1—total score, (b) essay 2—total scores, (c) total words written on essay 1, (d) total words written on essay 2, (e) curriculum-based assessment 1, (f) curriculum-based assessment 2, (g) 10 statements on the attitude/satisfaction scales, and (h) maintenance essay. Results of this study indicated that there were no significant

differences between the two treatment groups when compared on the dependent measures except the Essay 1 organization subscore.

Results

Eighteen null hypotheses relating to the dependent variables were tested using independent-samples *t* tests and ANOVAs for the attitude/satisfaction scale. The only significant difference between the groups found was on Essay 1 on the organization subscore. None of the other independent-samples *t* tests yielded a significant difference between groups. There were no differences in the two groups on the total holistic score or the subscore of the two essays except for the organization score on Essay 1. Independent-samples *t* tests showed there was no significant difference between the groups on total words written on the essays. With univariate analysis of variance, no differences were found in the attitude or satisfaction of the students in the two groups. Overall, the findings did not support the general hypothesis that one method of writing instruction would promote higher writing scores or more positive attitudes than the other method of instruction.

Discussion of Findings

Several possible reasons or combination of reasons exist for why the results of the present study did not support a difference in two methods of teaching writing. Writing is the most complex and difficult challenge facing students in schools (Hillocks, 1984; Stein

& Dixon, 1994). The inherent writing difficulties of balancing all the skills necessary for effective writing are even more challenging for those with learning disabilities and those in the lower performing student population (Isaacson, 1991; Stein & Dixon, 1994). As previous research has indicated, problems associated with writing are intensified as a student progresses from elementary school to high school. The reading requirements, which demand increasing mastery of higher level reading skills, have to be utilized in students writing activities. Middle school and secondary teachers, who rely on textbooks that are not on the readability level of the students, assume students have mastered the necessary skills in order for them to be effective content area learners. According to Baker, Gersten, and Scanlon (2002), a gap of skills exists between secondary students with learning disabilities and the secondary curriculum. Writers must manage several tasks when writing: first, the writer must retrieve knowledge of the topic, next, use the linguistic conventions unique to text and also take into consideration the audience while at the same time managing the motor skills required to get the ideas on the paper. The fact that writing is such a complex task is one possible explanation for the lack of significant results in the present study.

Because writing is a complex skill, perhaps the final results were affected by the small sample size and the short duration of the study. The present study was implemented over five weeks with 2-weeks of intervention. According to Umbach (1990), (in Burton, 1973) improvement in general aspects of writing ability is a slow, gradual process; therefore, experimental treatments over a period of only a few weeks or months are predestined to conclusions of no significant differences. Hillock (1984) with his meta-

analysis of 500 published writing studies, questioned the reasoning that the main reason for non-significant differences between groups is that experimental treatments are of very short duration. Hillocks (1984) findings suggest no relationship between the duration of treatment and change in the quality of writing. The results of the study did not support the contention that duration was an important factor in the manifestation of significant or no significant differences between groups; instead, Hillock (1984) suggested that the difference among treatments might be due to other variables. Even though differing opinions exist, perhaps the 5-week length of intervention in the present study was not sufficient to realize differences with the particular population involved.

In the present study, lack of reading proficiency is presented as a possible explanation for lack of differences in the groups. Examining the test scores of the subjects in the present study offers some understanding into the lack of significant differences between groups. A strong relationship exists between reading and written language. Others have documented the relationship between reading and writing (Brynildssen, 2000; Carnine & Carnine, 2004; ERIC, 2000; Hedrick & Cunningham, 1995; Umbach, 1990). Lack of proficiency in reading is especially problematic for a writer who will be required to read well in order to revise and edit work.

In the present study, the researcher noted that editing was problematic for the students. Great difficulty was experienced by the students in detecting personal errors as wells as those errors of their peers during the 45-minutes of daily writing instruction time. This observation is consistent with the findings of Brynildssen (2000) when she studied basic writers and with the findings of De La Paz and Graham (2002) who described the

difficulties that students with skills deficient experienced when editing their own work as well as the work of others.

The work of Becker (2001) also offers insight and a possible explanation for performance of the students in the present study. In his studies, Becker (2001) found writing difficulties among speakers of nonstandard dialects. Confusion for students usually arose from discrepancies in uses and conventions between non-standard spoken dialects and standard written English. In the present study, 16 out of 21 subjects, more than 76 percent of the participants, were minority students who spoke non-standard English.

Becker also stated that many poor writers had not been provided background experiences that are essential for acquired linguistic forms and conventions. At the school 67 % of the students received free lunches, a fact that established the socioeconomic level of the students, and supports the argument that the students might have environmental and cultural deprivation. A possibility exists that the students in the rural school setting who participated in the study had not been provided with chances for meaningful writing experiences.

The researcher observed and documented through discussion with teachers, that the students in the school where the study was implemented had not typically had consistent, structured instruction since the 7th grade. The high school was on block schedule with English only offered either fall or spring semester, but not both semesters for all grades. Due to this lack of instruction, the 9th, 10th and 12th grade students with specific learning disabilities, mild mental retardation and other health impairments

demonstrated writing skills deficiencies. This lack of practice with written expression could have been a factor in the group comparison results.

Another factor for the no significant differences existing between the groups may possibly be the measures used to assess writing. Assessment of writing is difficult. In this study, writing was measured indirectly with a standardized pretest measure and directly with two student essays and analytically with word counts; maybe the measures were not sensitive to detect the differences between these particular groups of subjects.

If difference in writing achievement in the groups had been found, the researcher expected the highest scoring group would show more positive attitudes toward their instruction. Since, no differences in writing achievement were found, attitude differences were not found. The fact that both groups held positive feelings toward the instruction was probably due to the fact of small group instruction with 11 or less students with ample opportunities for teacher-student, student-student and student-teacher interactions and opportunities for writing success.

Limitations

There are limitations that mitigate generalizations that may be made from the results of this study. The first limitation deals with the participants. The 21 students were in the 9^{th} –12^{th} grade at rural high school and enrolled in a program for students with specific learning disabilities, mild mental retardation or other health impairments. Although the majority of the participants were low socioeconomic status, the classes represented a mix in terms of socioeconomic status, race, gender, ability and achievement, generalization

of results to different populations in different settings may be problematic. A second limitation is the possibility of bias because the researcher was also the experimental teacher. A third limitation is the short length of the intervention of only eight days of instruction with a curriculum-based measure and an essay at the end of each week. A fourth limitation is the large number of students of with mild mental retardation included in the study. Students with mild mental retardation performed in the lower extreme on norm-referenced tests. Even though the raw scores improved, the standard scores were still in the lower extreme. A fifth limitation was the small sample. Small sample reduces the possibility of obtaining a statistically significant difference. The intervention consisted of eight days of 45-minute instructional time. Instructional time was limitation. The low scores on both of the curriculum-based assessments may be the result of limited instructional time. Replications of this study in the future should allow for a longer intervention time consisting of 45-minute classes over more than two weeks. Another limitation was having only one observer observing each class twice a week. Having another observer to conduct an interrater reliability might have affected the implementation of the instructional methods.

Recommendations

When conducting research in rural areas establishing trust with stakeholders is the key to success. Having the superintendent's support diminished any anxiety of school administrators that may have arisen. Both programs used in the study are used in the school system, so the classroom teacher was aware and knowledgeable of both

instructional methods. When communicating with parents of students with disabilities use language that the parents feel comfortable with. Refrain from using technical jargon, but rather layman's terms. Contact with 40 parents was made verbally either by phone or at a meeting before the letters of consent were sent home. This personal contact with parents was advantageous because parents' questions were answered so that each parent had an understanding of the purpose of the research. Verbal consent was given on the phone and then the parents returned the letters to the researcher. Only one parent refused to give consent to the treatment.

Another recommendation would be that more research be conducted with secondary students with specific learning disabilities, mild mental retardation and other health impairments in rural areas; and specifically in the area of writing because few writing studies have been conducted in rural areas for students with specific learning disabilities, mild mental retardation and other health impairments.

The results of this study were limited to students with mild mental retardation, specific learning disabilities and other health impairments in grades 9^{th} – 12^{th} ranging in age from 14 to 18. This study should be conducted with nondisabled students to determine if similar results would be obtained with regular education students.

The sample size of this study (n = 21) limits the generalizability of the results. It is recommended that researchers use larger samples when designing studies that evaluate the effectiveness of approaches to writing instruction. Future studies should be in inclusive settings with general education and special education classrooms versus a resource room model. Because of the instructional mandates of No Child Left Behind of students with

disabilities being taught by a highly qualified teacher, students with intellectual quotients of 55 or higher follow the state curriculum and are instructed in the regular classroom. A highly qualified teacher in a self-contained classroom teaches students with severe cognitive disabilities who are pursuing the alternative standards.

Over the last 30 years' research on literacy learning during secondary grades has revealed a great deal of how secondary students learn to write well. Much of the research is based on direct observation of students writing. The research has also highlighted the pivotal supportive role that educators play in the development of these language processes. Quality instruction builds upon students' existing abilities, skills and life experiences. Communication skills improve when students are asked to write frequently for meaningful purposes. The development of student writing is best achieved through substantial time devoted to writing, focused instruction that builds upon the writings, and multiple opportunities to write across the curriculum. Grammar, punctuation, and spelling are most successfully learned with a combination of carefully targeted lessons applied within the context of meaningful writing.

Future writing research for students with disabilities should focus on instructions that not only devote substantial time to writing, but also focuses on instruction that scaffolds writing instruction for success. Students with disabilities benefit from small group instruction in writing. In order for students with mild mental retardation and learning disabilities to compete with their peers in writing, they will needed intensive writing instruction by a highly skilled teacher.

REFERENCES

Alabama State Department of Education. (2003). Alabama direct assessment of writing: Grade seven. Spring, 1-13.

Aoki, E., Arnold, V., Flood, J., Hoffman, J., Lapp, D., Martinez, M., Palincsar, A., Priestley, M., Smith, C., Teale, W., Tinajero, J., Webb, A., & Wood, K. (1997). *Spotlight on literacy: Individual reading inventory.* New York: Macmillan/McGraw-Hill.

Baker, S., Gersten, R., & Graham, S. (2003). Teaching expressive writing to students with LD: Research-based applications and examples. *Journal of Learning Disabilities, 36*(2), 109–123.

Baker, S., Gersten, R., & Scanlon, D. (2002). Procedural facilitators and cognitive strategies: Tools for unraveling the mysteries of comprehension and the writing process, and for providing meaningful access to the general curriculum. *Learning Disabilities Research and Practice, 17*(1), 65–77.

Barenbaum, E. M., Newcomer, P.L., & Nodine, B. F. (1987). Children's ability to write stories as a function of variation in task, age, and developmental level. *Learning Disabilities Quarterly, 10,* 175–188.

Becker, W. (2001). Teaching reading and language to the disadvantaged—What we have learned from research. *Journal of Direct Instruction, Winter*, 31–52.

Becker, W., & Gersten, R. (2001). Follow-up of follow through: The later effects of the direct instruction model on children in fifth and sixth grades. *Journal of Direct Instruction, Winter*, 57–71.

Berninger, V. W., Abbott, R. D., Thomson J. B., & Raskind, W. (2001). Language phenotype for reading and writing disability: A family approach. *Scientific Studies of Reading, 5*(1), 59–106.

Brooke, R. E. (2003). *Rural voices: Place-conscious education and the teaching of writing*. New York: Teachers College Press.

Brynildssen, S. (2000). Vocabulary's influence on successful writing. *ERIC Digest, EDO-CS-00-08 December 2000.* Retrieved June 6, 2004 from http://www.indiana.edu/~reading/ieo/digests/d157.html

Calkins, L. (1981). Case study of a nine-year-old writing. In D. Graves (Ed.), *A case study observing the development of primary children's composing, spelling and motor behavior during the writing process* (pp. 239–262). Durham, NH: University of New Hampshire.

Calkins, L. (1986). *The art of teaching writing*. Portsmouth, NH: Heinemann.

Carnine, D. (1997). Bridging the research to practice gap. *Exceptional Children, 63*, 513–521.

Carnine, L. & Carnine, D. (2004). The interaction of reading skills and science content knowledge when teaching struggling secondary students. *Reading & Writing Quarterly, 20,* 203–218.

Carnine, D., & Englemann, S. (1982). *Theory of Instruction: Principles and Applications.* New York, NY: Irvington Publishers.

Cotton, K. (1987). Teaching composition: Research on effective practices. School Improvement Series, Regional Education Laboratory. Retrieved June 11, 2005 from http://www.nwrel.org/scpd/sirs/2/topsyn2.html

Crawford, D. B., & Carnine, D. (2001). Comparing the effects of textbooks in eighth-grade U. S. history: Does conceptual organization help? *Education and Treatment of Children, 23*(4), 387–422.

Crawford, L., Helwig, R., & Tindal, G. (2004). Writing performance assessments: How important is extended time? *Journal of Learning Disabilities, 37*(2), 132–142.

Danoff, B., Harris, K., & Graham, S. (1993). Incorporating strategy instruction within the writing process in the regular classroom: Effects on the writing of students with and without learning disabilities. *Journal of Reading Behavior, 25*(3), 295–322.

Darch, C. (1989). Comprehension instruction for high school learning disabled students. *Research in Rural Education, 5*(3), 43–49.

Darch, C., & Eaves, R. C. (1986). Visual displays to increase comprehension of high school learning disabled students. *The Journal of Special Education, 20,* 309–318.

Darch, C., & Gersten, R. (1986). Direction setting activities in reading comprehension: A comparison of two approaches. *Learning Disabilities Quarterly, 9,* 235–243.

De La Paz, S. (1999). Teaching writing strategies and self-regulation procedures to middle school students with LD. *Focus on Exceptional Children, 31*(5), 1–17.

De La Paz, S., & Graham, S. (2002). Explicitly teaching strategies, skills and knowledge: Writing instruction in middle school classrooms. *Journal of Educational Psychology, 94*(4), 687–698.

Dixon, B., & Carnine, D. (1993). The hazard of poorly designed instructional tools. *Learning Disabilities Forum, 18*(3), 18–22.

Dixon, R. C., Carnine, D., & Kameenui, E. (1993). Using scaffolding to teach writing. *Educational Leadership, 51*(3), 100–101.

Englemann, S., Becker, W., Carnine, W., & Gersten, R. (1988). The direct instruction follow through model: Designs and outcomes. *Education and Treatment of Children, 11*, 303-317.

Engelmann, S., & Carnine, D. W. (1982). *Theory of instruction: Principles and applications.* New York: Irvington.

Engelmann, S., & Silbert, J. (2005). Expressive Writing II. Chicago, Henley-on Thames, Sydney, Toronto: SRA Macmillan/McGraw-Hill.

Englert, C. S. (1992). Writing instruction from a sociocultural perspective: The holistic, dialogic, and social enterprise of writing. *Journal of Learning Disabilities, 25*(3), 153–172.

Englert, C. S., & Raphael, T. E. (1988). Constructing well-formed prose: Process, structure, and metacognitive knowledge. *Exceptional Children, 54*(6), 513–520.

Englert, C. S., Raphael, T. E., Anderson, L. M., Gregg, S. L., & Anthony, H. M. (1989). Exposition: Reading, writing and the metacognitive knowledge of learning disabled students. *Learning Disabilities Research, 5*(1), 5–24.

Espin, C., Scierka, B., & Skare, S. (1999). Criterion-related validity of curriculum-based measures in writing for secondary school students. *Reading & Writing Quarterly, 14,* 5-27.

Fewster, S. & Macmillan, P. (2002). School-based evidence for the validity for curriculum-based measurement of reading and writing. *Remedial & Special Education 23*(3), 149-157.

Forness, S. R., Kavala, K. A., Blums, I. M., & Lloyd, J. W. (1997). Mega-analysis of meta-analyses: What works in special education and related services. *Teaching Exceptional Children, 29,* 4–9.

Gansle, K., Noell, G., VanDerHeyden, A., Noquin, G., & Slider, N. (2002). Moving beyond total words written: The reliability, criterion validity, and time cost of alternate measures for curriculum-based measurements in writing. *School of Psychology Review, 31*(4), 477-497.

Gersten, R. (2001). Sorting out the roles of research in the improvement of practice. *Learning Disabilities Research & Practice, 16,* 45–50.

Gersten, R. (1998). Recent advances in instructional research for students with LD: An overview. *Learning Disabilities Research and Practice, 13,* 162–170.

Gersten, R., & Baker, S. (2001). Teaching expressive writing to students with LD: A meta-analysis. *The Elementary School Journal, 101*(3)*,* 250–272.

Gersten, R., & Vaughn, S. (2001). Meta-analysis in learning disabilities: Introduction to the special issue. *The Elementary School Journal, 101*(3)*,* 247–249.

Gersten, R., Woodward, J., & Darch, C. (1986). Direct instruction: A research-based approach to curriculum design and teaching. *Exceptional Children, 53,* 17–31.

Glass, G. V., & Stanley, J. C. (1970). *Statistical methods in education and psychology.* Englewood Cliffs, NJ: Prentice-Hall.

Gleason, M. M. (1999). The role of evidence in argumentative writing. *Reading & Writing Quarterly, 14,* 81–106.

Graham, S., & Harris, K. R. (2005). *Writing better: Effective strategies for teaching students with LD.* Baltimore, MD: Paul H. Brookes Publishing Co.

Graham, S. & Harris, K. R. (2003). Students with LD and the process of writing: A meta-analysis of SRDS studies. *Handbook of Learning Disabilities, xvii,* 323–344.

Graham, S., & Harris, K. R. (1989). Component analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology, 81*(3), 353–361.

Graham, S., Harris, K. R., Fink-Chorzempa, B., & MacArthur, C. (2003). Primary grade teachers' instructional adaptations for struggling writers: A national survey. *Journal of Educational Psychology, 95*(2), 279–292.

Graham, S. Harris, K. R. & Larsen, L. (2001). Prevention and intervention of writing difficulties for students with LD. *Learning Disabilities Research & Practice, 16*(2), 74–84.

Graham, S., MacArthur, C., & Schwartz, S. (1995). Effects of goal setting and procedural facilitation on the revising behavior and writing performance of students with

writing and learning problems. *Journal of Educational Psychology, 87*(2), 230–240.

Graves, D. H. (1983). *Writing: Teachers and children at work*. Exeter, NH: Heinemann.

Gredler, G. R. (2004). Book reviews. *Psychology in the Schools, 41*(2), 273–278.

Hallenbeck, M. (2002). Taking charge: Adolescents with learning disabilities assume responsibility for their own writing. *Learning Disability Quarterly, 25,* 227–246.

Hammill, D., & Larson, S. (1983). *Test of written language*. Austin, TX: PRO-ED.

Harris, K. R., Graham, S., & Mason, L. H. (2003). Self-regulated strategy development in the classroom: Part of a balanced approach to writing instruction for students with disabilities. *Focus on Exceptional Children, 35*(7), 1–16.

Harris, K. R., & Pressley, M. (1991). The nature of cognitive strategy instruction: Interactive strategy construction. *Exceptional Children, 57*, 392–405.

Harris, P. (2003). Why is writing so important? Retrieved May 25, 2005 from http://www.ncte.org/about/press/rel/107867.html

Hedrick, W. B., & Cunningham, J. W. (1995). The relationship between wide reading and listening comprehension of written language. *Journal of Reading Behavior, 27*(3), 425–438.

Heward, W. L. (2003). Ten faulty notions about teaching and learning that hinder the effectiveness of special education. *Journal of Special Education, 36*(4), 186–205.

Hicks, J. R. (1993). *Let's get serious about teaching children to write.* Lantham, MD: University Press of America, Inc.

Hillocks, G., Jr. (1984). What works in teaching compositions: A meta-analysis of experimental treatment studies. *American Journal of Education, 93*, 133–170.

Hooper, S. R., & Montgomery, J. W. (1993). Prevalence of writing problems across three middle school samples. *School of Psychology Review, 22*(2), 610–623.

Isaacson, S. (1991). Written expression and the challenges for students with learning problems. *Exceptionality Education Canada, 1*(3), 45–57.

Isaacson, S. L. (1994). Integrating process, product, and purpose: The role of instruction. *Reading & Writing Quarterly, 10,* 39–62.

James, L. A., Abbot, M., & Greenwood, C. R. (2001). How Adam became a writer winning writing strategies for low-achieving students. *TEACHING Exceptional Children, 33*(3), 30–37.

Jennings, W. (2005). [Review of Rural voices: Place-conscious education and the teaching of writing]. *Journal of Research in Rural Education, 20(2).* Retrieved June, 2005 from http://www.umain.edu/jrre/20-2.pdf

Jitendra, A. K., & Kameenui, E. J. (1988). A design-of-instruction analysis of concept teaching in five basal language programs: Violations form the bottom up. *The Journal of Special Education, 22*(2), 199–219.

MacArthur, C., & Graham, S. (1993). Integrating strategy instruction and word processing into a process approach to writing instruction. *School Psychology Review, 22*(4), 671–682.

McGraw Hill, SRA. (2003). Low-performing school achieves exemplary growth level. *SRA Direct Instruction,* Retrieved February 22, 2004 from http://www.sraonline.com/index.php/home/curriculumsolutions/di/research.jhtml

McIntyre, E. (1995). Teaching and learning writing skills in a low-SES, urban primary classroom. *Journal of Reading Behavior, 27*(2), 213–242.

National Commission on Writing. (2003). The neglected "R" the need for a writing revolution. *College Entrance Exam Board*. April, 1–42.

Nippold, M. A., Ward-Lonergan, J. M., & Fanning, J. L. (2005). Persuasive writing in children, adolescents, and adults: A study of syntactic, semantic and pragmatic development. *Language, Speech, and Hearing Services in Schools, 36,* 125–138.

Nowicki, E. A. (2003). A meta-analysis of the social competence of children with learning disabilities compared to classmates of low and average to high achievement. *Learning Disability Quarterly, 26,* 171–187.

Page-Voth, V., & Graham, S. (1999). Effects of goal setting and strategy use on the writing performance and self-efficacy of students with writing and learning problems. *Journal of Educational Psychology, 91*(2), 230–240.

Postcards [Computer software]. (1996). North Billerica, MA: Curriculum Associates.

Pressley, M., & Harris, K. R. (1998). Constructivism and instruction. *Issues in Education: Contributions from Educational Psychology, 3*(2), 245–255.

Rabren, K. (1994). Differential effects of two systematic reading comprehension approaches with students with learning disabilities. Thesis (Ph.D.), Auburn University.

Raphael, T. E., & Englert, C. C. (1990). Writing and reading: Partners in constructing meaning. *The Reading Teacher, 46*(6), 388–400.

Saddler, B., & Graham, S. (2005). The effects of peer-assisted sentence-combining instruction on the writing performance of more and less skilled young writers. *Journal of Educational Psychology, 97*(1), 43–54.

Shin, M. R. (1989). *Curriculum-based measurement: Assessing special children*. New York: Guilford.

Silverman, F. (2004). Kids r writing 4 fun, but not well. Retrieved June, 2005 from www.DistrictAdministration.com

Simmons, D. C., & Kameenui, E. J. (1996). A focus on curriculum design: When children fail. *Focus on Exceptional Children, 28*(7), 1–17.

Spandel, V. (1996). *Seeing with new eyes: A guidebook on teaching and assessing beginning writers.* Portland, OR: Northwest regional Educational Laboratory.

Stanley, J. & Campbell, D. (1963). *Experimental and quasi-experimental designs for research.* Houghton Mifflin: USA.

Stein, M., & Dixon, R. (1994). Effective writing instruction for diverse learners. *School Psychology Review, 23*(3), 392–406.

Stein, M., Dixon, R., & Barnard, S. (2001). What research tells us about writing instruction for students in the middle grades. *Journal of Direct Instruction, 1*(2) 107–116.

Stevens, R., & Slavin, R. (1995). Effects of cooperative learning approach in reading and writing on academically handicapped and nonhandicapped students. *The Elementary School Journal, 95*(3), 241–262.

Swanson, H. L., Hoskyn, M., & Lee, C. (1999). *Interventions for students with LD: A meta-analysis of treatment outcomes.* New York/London: Guilford Press.

Tindal, G. & Parker, R. (1989). Assessment of written expression for students in compensatory and special education programs. *Journal of Special Education, 23, 169-183.*

Tsang, W-K. (1996). Comparing the effects of Reading and Writing on writing performance. *Applied Linguistics, 17*(2), 210-233.

Troia, G. A., & Graham, S. (2003). Effective writing instruction across the grades: What every educational consultant should know. *Journal of Education and Psychological Consultation, 141*(1), 75–89.

Umbach, B. (1990). Comparison of two methods of teaching written language to low-performing fourth graders in two rural schools. Thesis (Ph.D.), Auburn University.

Vallecorsa, A., & deBettencourt, L. (1997). Using a mapping procedure to teach reading and writing skills to middle grade students with LD. *Education & Treatment of Children, 20*(2), 173–189.

Vaughn, S., Gersten, R., & Chard, D. J. (2000). The underlying message in LD intervention research: Findings from research synthesis. *Exceptional Children, 67(*1), 99–114.

Wallace, G. W., & Bott, D. A. (1989). Statement-pie: A strategy to improve the paragraph writing skills of adolescents with learning disabilities. *Journal of Learning Disabilities, 22*(9), 541–553.

Wechsler, D. (1974). *Wechsler intelligence scale for children-revised.* San Antonio, TX: Psychological Corp.

Wong, Y. L., Butler, D. L., Ficzere, S. A., & Kuperis, S. (1996). Teaching low achievers and students with LD to plan, write, and revise opinion essays. *Journal of Learning Disabilities, 29*(2), 197–212.

Wong, Y. L., Wong, R., & Blenkinsop, J. (1989). Cognitive and metacognitive aspects of learning disabled adolescents' composing problems. *Learning Disabilities Quarterly, 12,* 300–322.

Worsham, S. (2001). *Essential ingredients recipes for teaching writing.* Alexandria, VA: Association for Supervision and Curriculum Development.

Zipprich, M. A. (1995). Teaching web making as a guided planning tool to improve student narrative writing. *Remedial & Special Education, 16*(1), 3–17.

APPENDICES

APPENDIX A

SAMPLE OF CONSENT LETTER USED TO REQUEST PARTICIPATION IN THE STUDY

Informed Consent

For a Research Study Entitled "A Study for the Differences Between Direct Instruction Writing Approach and a Social Contextualist Writing Approach to Teaching Low-Performing Secondary Students."

You are invited to have your child participate in a study on writing instruction. This study is being conducted by Alexandra Acosta Conniff, a doctoral student at Auburn University under the supervision of Dr. C. Darch, in the department of Rehabilitation and Special Education at Auburn University. The purpose of this study is to determine which of the two writing methods will be more effective in improving the writing performance of students with learning and behavior problems in ninth to twelfth grade students. Your child has been selected as a possible participant because he/she qualifies under the Individuals with Disabilities Act (IDEA) (2004) as having a disability.

If you decide to participate, instruction should last 45 minutes a day for at least five days a week with his/her peers. The instruction will last two weeks. Your child will be assigned to one of two groups and will receive a researched based method of writing instruction. Since writing instruction is part of everyday classroom instruction, your child's normal writing instruction is not being withheld, nor will his/her daily routine be disrupted. As the end of the study, your child will be given an individualized report that provides his/her individual group and whole group writing achievement. This is a research project not a treatment for your child's condition. If you decide to not let your child participate, they will continue to receive their normal, everyday, writing instruction.

Any information obtained in connection with this study and that can be identified to your child, will remain confidential and will be disclosed only with your permission. If you give permission by signing this document, the information collected will be disclosed in the form of a completed research study. Information collected throughout the study may also be published in a professional journal or presented at conferences. If so, none of your child's identifiable information will be included. Data will be kept in locked cabinet within my locked office. All identifying data (or codes) will be destroyed.

You may withdraw your child from participation at any time, and you may withdraw any data that has been collected about your child. Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Rehabilitation and Special Education, Eufaula City Schools, or teachers. If you have any questions, please contact me, Alexandra Acosta Conniff or Dr. Craig Darch at (334) 844-5943. We will be happy to answer your questions. You will be provided a copy of this form to keep. If you have read and have decided to let your child participate, please review this information with your child.

For more information regarding your rights as a research participate you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Participant's Signature Date	Print Name
Child's Name Date	

Pg 1 of 1

APPENDIX B

ESSAY TOPICS WITH INSTRUCTIONS FOR PRE-ESSAY, ESSAY 1 AND ESSAY 2

Instruction for administering the Pretest Essay

Today I want you to write a story about the picture that I have given you. Open your Blue Testing Booklet to the first blank page. Before you begin writing your story, take time to think about and plan your story. Think about what might have happened before the picture, what is happening now, and what might happen in the future. Take your time and do your very best. This should take you about 30 minutes, but you many have more time if you need it. If you don't know how to spell a word, just do the best you can with the word. You may begin.

& RANCH
The wild horse
Sam
Jerry

Instruction for administering Essay 1

Today I want you to write about what a firefighter does. Think about the topic before you begin to write. Here are some ideas you might want to consider:

How does a person get to be a firefighter?

What jobs does a firefighter do?

Is being a firefighter hard work?

What is hard about the job?

What are some good and bad things about being a firefighter?

Would you like to be a firefighter?

This essay should take you at least 20 minutes to complete. I would like for you to use all of the time and write as much as you can. If you need more time, you can have it. If you are not sure how to spell a word, do the best that you can. Try to make your paper interesting. Remember to use the skills that you have learned during your writing classes, when you are getting ready to write, when you are writing and when you are checking over your paper.

Instruction for administering Essay 2

Today I want you to write about a topic on which you will give some of your ideas and opinions. You can use your imagination. The topic is:

If I were the mayor of this town...

Think about the topic before you begin to write. Think about what you like or dislike about your town. What would you change and what would you leave the same. Try to write as much as you can and make it as interesting as you can. If you are not sure how to spell a work, spell it the best way that you can. It should take you at least 20 minutes to do this. I want you to use at least that amount of time but if you need more, you can have it. Try to make your paper interesting. Remember to use the skills that you have learned during your writing classes, when you are getting ready to write, when you are writing and when you are checking over your paper.

APPENDIX C

LESSON PLANS AND SAMPLE LESSONS FOR PROCESS INSTRUCTION AND STRATEGY INSTRUCTION

Writing Process Workshop

Basic Lesson Plan

Mini-lesson — 10-15 minutes

Lesson topics will not be predetermined. Topics will be dependent on the developing needs of the group. Possible lesson topics may include: physical organization of the paper, story grammar, punctuation, editing, revising, grammar, sentence construction, choosing topics.

Writing time — 20-25 minutes

Students will focus on writing on chosen topics during this semi-structured time. Among the students topics and level of work will vary. Not only will students be writing, but may also conference with the teacher or with a peer. Students may also be brainstorming for new topics, rewriting a draft, proofreading, or illustrating a written product.

Sharing time — 5-10 minutes

Students will share his/her work with other students or with the class.

Lesson Plan Revising

Objectives:

To develop the ability for attractive, clear, and readable composition organization.

To scan for composition errors

To develop an understanding of clear, meaningful writing

Skills to be taught:

Scanning

To become aware of complete sentences

To become aware of paragraph clarity

To become aware of paragraph unity

Materials needed:

Overhead projector

Compositions that need revising

Evaluation sheet

Editing marks

Preparations:

Revising is about the work that goes into saying what you want to say in the best possible way (Painter, 2006). This is the most crucial stage in the writing process. The following are invitation revision strategy that can and should be repeated.

Invitations to writing

- Reread just the beginning of your draft. Cover the first sentence or two. Does your piece sound better if it would start two or three sentences into the paragraph?

- Demonstrate with a sample from a draft
- Cross-out portion
- Read it first in its entirety then reread it beginning after the cross out
- Have students read the rough draft orally
- Have the students check for specific errors in specific are one at a time for sentence clarity, spelling, mechanics and organization.

Lesson Plan – Evaluation

Objectives:

To help students become accurate writers

To distinguish between correct/incorrect ways for revising

Preparation:

Explain to students that in order to evaluate a composition, it will be necessary to devise a checklist for judging work

Skill to be taught:

Evaluation

Procedures:

- Orally discuss what constitutes good writing
- Students silently read a good piece of literature
- Students read a passage from a paper orally and students then offer suggestions about what will be considered good
- Students silently read a composition that will be considered poor but without error.
- Have a student read that work orally.
- Have students discuss the difference in the good literature and not good literature.
- Give the students a composition that needs correcting and have them read it.
- While student read silently, teacher writes on the board.

- The whole class looks for mistakes on the composition and corrects them as the mistakes are being pointed out. Have a student identify and write types of errors on the board.
- Identified errors are used as guidelines for formulating a checklist for a student evaluation.

Check 3 says: Did you start your paragraph with the right sentence? Make sure you started your paragraph with the sentence in the box.
Check 4 says: Did you end your paragraph by telling what the last picture shows?
Read your paragraph for checks 3 and 4. When it meets those checks, put checks in boxes 3 and 4. *(Observe.)*

Lesson 7

Task 1. Editing Run-Ons

1. Open your workbook to page 51. Find part A.
2. I'll read the instructions: Fix up the run-on sentences in this passage.
3. You have to be very careful when you read this passage. Some sentences name a person and tell two things the person did. These sentences are not run-ons. Some sentences name a person more than once. These are run-ons.
4. Read the passage to yourself. Raise your hand when you find a sentence that has the word *and*, but is not a run-on.
   (Call on a student.)
   (Signal.) **"She took the flowers home and put them in a vase by the window. The flowers got bigger and bigger."**
5. Read the passage. Fix up the run-ons. Be careful. Remember, some sentences with *and* are not run-ons.
   (Observe students and give feedback.)
6. Check your work.
   A girl picked flowers by the side of the road period. Cross out *and*. Capital *S* She pulled up many different kinds of pretty flowers. She took the flowers home and put them in a vase by the window. The sun came through the window every morning. The girl took good care of the flowers period. Cross out *and*. Capital *S* She made sure they had enough water. The flowers got bigger and bigger. Capital *E* Everybody enjoyed looking at the beautiful flowers.

Task 2. Pronoun Clarity

1. Find part B in your workbook.
2. The writer of this passage forgot to introduce some people and things. The sentences with problems are underlined. For each underlined sentence, find the word that is not clear. Look at the picture and find out the name of the person or thing. Cross out the unclear word and write the correct word.
   (Observe students and give feedback.)
3. Fix up the rest of the underlined sentences.
4. Check your work.
   And stood in back of the cage. She held a big steak in her hands. The lion walked into the cage. It had its eyes on the steak. Jerry closed the cage door as the lion walked into the cage.

Task 3. Missing Sentences

1. Take out a sheet of lined paper. Write your name and today's date. *(Observe.)*
2. Write *part C* on your paper.
   Write number 1. Skip a line and write number 2.
3. Find part C in your workbook.
4. Here are two paragraphs that tell about the pictures. There are numbers in the paragraphs. Those numbers mark the places where important sentences are missing.
5. Touch number 1 in the passage.
   (Observe.)
   The space shows where a missing sentence goes.
6. I'll read the first part of the story. If, read past number 1.
   Alice took a walk while James and Betty watched the rodeo. Alice pretended that she was a cowgirl. She rode her toy horse into the rodeo ring. Missing sentence. James screamed.
7. The paragraph doesn't tell why James screamed.
   If we look at the picture, we can figure out what must have happened. Make up a sentence or two that tells what happened to make James scream.
   (Call on two students. Praise sentences

that express the idea: A bull ran toward Alice.)

8. Here's the paragraph with a good sentence in the blank:
   Alice took a walk while James and Betty watched the rodeo. Alice pretended that she was a cowgirl. She rode her toy horse into the rodeo ring. A big bull ran toward Alice. James screamed.

9. Touch number 2 in the passage. I'll read past number 2. You figure out the missing sentence:
   James and Betty knew they had to act quickly. They climbed over the fence and ran into the rodeo ring. James picked up Alice and handed her to a woman in the stands. Missing sentence. The bull ran toward Betty.

10. The paragraph doesn't tell why the bull ran toward Betty. If we look at the second picture, we can figure out what Betty must have done to make the bull run toward her. Make up a sentence or two that tells what Betty did.
    (Call on two students. Praise sentences that express the idea: Betty took off her coat and waved it at the bull.)

11. Here's the paragraph with a good sentence in the blank:
    James and Betty knew they had to act quickly. They climbed over the fence and ran into the rodeo ring. James picked up Alice and handed her to a woman in the stands. Betty took off her coat and waved it at the bull. The bull ran toward Betty.

12. On your paper, write the missing sentences for the passage. Write missing sentence 1 and missing sentence 2. Check your sentences by reading the passage and seeing if your sentences explain why. You have three minutes.

13. *(After three minutes, call on several students to read the passage with their missing sentences.)*

TO CORRECT:
(For sentences that change the following sentences or that repeat part of the following sentences, say:) You can only add the missing sentences. You can't change any sentences that are already written.

Task 4. Quotations

1. Write *part D* on your paper. Number your paper from one through three.
2. Find part D in your workbook.
3. I'll read the instructions: Write complete sentences that tell what the people said.
4. Write the sentences. Be sure to put quote marks around the words the people said.
   (Observe students and give feedback.)
5. Check your work.
   Sentence 1: Capital *J* James said comma quote marks capital *D* Did you see my new coat question mark quote marks.
   Sentence 2: Capital *A* Ann said comma quote marks capital *I* I found your book on the floor period quote marks.
   Sentence 3: Capital *B* Bill said comma quote marks capital *I* Is the dog in the house question mark quote marks.

Task 5. Writing a Paragraph

1. Skip a line and write *part E* on your paper.
2. Find part E in your workbook.
3. You're going to write a paragraph about these two pictures.
4. The sentence above the pictures is the sentence the paragraph starts with. I'll read the sentence: Sally fixed the fence while Jim took the children for a ride in the wagon.
5. Look at the first picture and tell some things that must have happened. Tell what the car did. Tell why Jim fell out of the wagon.
   (Call on several students. Praise sentences such as: The wagon went by a car. The car backfired. The noise

scared the horse. The horse jumped up and began to gallop. Jim fell out of the wagon.)

6. Now tell some things that must have happened between the first and the second pictures. Tell about what Sally did.
   (Call on several students. Praise sentences such as: Sally jumped on her horse. She chased the wagon. Her horse caught up to the wagon.)
7. Remember, the last picture shows how the paragraph ends. The last thing that happened was Sally stopped the wagon by pulling the reins.
8. Touch the words in the vocabulary box as I read them: hacktired, fell, galloped, reins, pulled, jumped, horse, caught, grabbed, scared.
   Remember, spell those words correctly if you use them in your paragraph.
9. I'll read the checks:

Check 1: Is each sentence punctuated correctly?
That means: Does each sentence begin with a capital and end with a period?

Check 2: Did you tell all the important things that must have happened?
The bonus check for today is check 2. You can earn five bonus points for that check.

Check 3: Did you start your paragraph with the right sentence?

Check 4: Did you end your paragraph by telling what the last picture shows?
When you write your paragraph, make sure it meets all these checks. If it meets all these checks, you'll get 20 points.

10. Write your paragraph.
    (Observe students and give feedback.)
11. *(After 10 minutes, say:)* If you're still writing, finish your paragraph. I'm going to call on students who have finished. Those who have finished, listen carefully to the person reading and see if the paragraph meets all the checks.
12. *(Call on three or four students to read their paragraphs. After a good sentence, praise the student who is reading.)*

FOR PARAGRAPHS WITH PROBLEMS:

1. For paragraphs that met at least one check, say to the class: Who can tell me something good about that paragraph?
   Call on a student. Praise responses that refer to one or more of the checks.
2. If the paragraph has a problem, say: The paragraph has a problem with check_____. I'll read the part with the problem. If you can tell me about the problem, you earn two bonus points.
   Read the part with the problem to the group. Then call on a student. The first student to answer correctly earns two bonus points.
3. If nobody identifies the problem, call attention to the problem and tell how the paragraph could be fixed.

13. *(Repeat step 12 with at least three more students.)*
14. Make four check boxes under your paragraph.
15. Check 1 says: Is each sentence punctuated correctly?
    Read your paragraph. Fix up any run-ons. Make sure each sentence begins with a capital and ends with a period. When the paragraph is fixed up, put a check in box 1.
    (Observe students and give feedback.)
16. Check 2 says: Did you tell all the important things that must have happened?
    Read your paragraph. If you left out an important sentence, write that sentence and make an arrow to show where it should go. Cross out any sentence that is not based on the pictures. When the paragraph is fixed up, put a check in box 2.
    Check 2 is the bonus check today, so be extra careful.
    (Observe students and give feedback.)
17. Now you're going to check your paragraph for checks 3 and 4.

Check 3 says: Did you start your paragraph with the right sentence? Make sure you started your paragraph with the sentence in the box.
Check 4 says: Did you end your paragraph by telling what the last picture shows?
Read your paragraph for checks 3 and 4. When it meets those checks, put checks in boxes 3 and 4.
(Observe students and give feedback.)

Lesson 8

Task 1. Editing

1. Open your workbook to page 54. Find part A.
2. I'll read the instructions: Fix up the passage so that each sentence is punctuated correctly.
3. You have to be very careful when you read this passage. Some sentences name a person and tell two things the person did. These sentences are not run-ons. Some sentences name a person more than once. These are run-ons.
4. Read the passage to yourself. Raise your hand when you find a sentence that has the word *and*, but is not a run-on.
(Call on students.)
(Signal.) **"She got on her bike and rode over to where the noise had come from. Nancy got off her bike and walked toward the spacecraft."**
5. Read the passage. Fix up the run-ons. Be careful. Remember, some sentences with *and* are not run-ons. Make sure each sentence begins with a capital and ends with a period. *(Observe.)*
6. Check your work.
Nancy heard a loud noise period. Capital *S* She got on her bike and rode over to where the noise had come from period. Capital *S* She saw a spacecraft parked in front of a tree. Nancy got off her bike and walked toward the spacecraft. The spacecraft door opened period. Nancy walked into the empty spacecraft. She saw thousands of lights and buttons period. Cross out *and*. Nancy was very excited period. Capital *S* She pushed a big red button period. Capital *T* The engines roared as the spacecraft lifted off the ground. Nancy looked out the window as the spacecraft flew around the earth period. Cross out *and*. Capital *N* Nobody believed Nancy when she told them about her trip to the spaceship.

Task 2. Pronoun Clarity

1. Find part B.
2. The paragraph reports on the picture, but the part of each sentence that names something is blank. You have to write in the right words.
3. Remember, you can't use *he, she or it* the first time a person or thing is introduced. After the person or thing is introduced, you can use *he, she or it*.
4. Look at the picture. Here's the first sentence: Blank talked on the phone as she stirred cake mix in the bowl.
We're introducing somebody for the first time. What words go in the blank?
(Signal.) **"Mrs. Lee."**
Write *Mrs. Lee* in the blank. *(Observe.)*
5. Next sentence: Blank looked at a book on the table.
What word goes in the blank?
(Signal.) **"She."**

TO CORRECT:
We've introduced Mrs. Lee in the last sentence so we can use the word *she*.

Write *she*. *(Observe.)*

6. Next sentence: Blank sat on the rug.
Are we introducing somebody new?
(Signal.) **"Yes."**
Yes, we are. So what word goes in the blank?
(Signal.) **"Joe."**
Write *Joe*. *(Observe.)*
7. Next sentence: Blank held a rattle in one hand and pulled the dog's tail with his other hand.
What word goes in the blank?

(Signal.) "**He.**"
Write *he*. Joe was already introduced in the last sentence, so we can use the word *he*.

8. Fill in the rest of the words on your own. Remember. If you introduce somebody or something for the first time, use the name. If somebody or something was introduced in the last sentence, use *he, she* or *it*.

9. I'll read the sentences. Check your work.
   Mrs. Lee talked on the phone as she stirred cake mix in the bowl. She looked at a book on the table. Joe sat on the rug. He held a rattle in one hand and pulled the dog's tail with his other hand. The cat reached toward the bird cage. It stood on the windowsill and held onto the curtain with a paw.

Task 3. Missing Sentences

1. Take out a sheet of lined paper. Write your name and today's date. *(Observe.)*
2. Write *part C* on your paper. Write number *1*. Skip a line and write number *2*.
3. Find part C in your workbook.
4. Here are two paragraphs that tell about the pictures. There are numbers in the paragraphs. These numbers mark the places where important sentences are missing.
5. Touch number 1 in the passage. *(Observe.)*
   The space shows where missing sentences go.
6. I'll read the first part of the story. I'll read past number 1: A truck was carrying two lions to the zoo. The truck driver saw a huge hole in the street. Missing sentence. A cage fell off the truck.
7. The paragraph doesn't tell why the cage fell off the truck. If we look at the picture, we can figure out what must have happened. Make up a sentence or two that tells what happened to make the cage fall off the truck.
   (Call on two students. Praise sentences that express the idea: The truck driver tried to steer around the hole. The truck crashed into a pole.)
8. Here's the paragraph with good sentences in the blank:
   A truck was carrying two lions to the zoo. The truck driver saw a huge hole in the street. The truck driver tried to steer around the hole. The truck crashed into a pole. A cage fell off the truck. The cage door swung open. A lion walked out of the cage and chased a lady.
9. Touch number 2 in the passage. I'll read past number 2. You figure out the missing sentence: Tom and Betty ran from the meat market. Betty carried the bag with the meat in it. Missing sentence. The lion walked into the cage.
10. The paragraph doesn't tell why the lion walked into the cage. If we look at the second picture, we can figure out what must have happened.
    Make up a sentence or two that tells what Betty did to make the lion walk into the cage.
    (Call on two students. Praise sentences that express the idea: Betty held the meat near the back of the cage.)
11. Here's the paragraph with a good sentence in the blank:
    Tom and Betty ran from the meat market. Betty carried the bag with meat in it. She took the meat out of the bag and ran to the back of the cage. The lion walked into the cage. Tom closed the cage door.
12. On your paper, write the missing sentences for the passage. Write missing sentence 1 and missing sentence 2. Check your sentences by reading the passage and seeing if your sentences explain why. You have three minutes.
13. *(After three minutes, call on several students to read the passage with their missing sentences.)*

TO CORRECT:
(For sentences that change the following sentences or that repeat part of the following sentences, say:)
You can only add the missing sentences. You can't change any sentences that are already written.

Task 4. Writing Sentences That Begin by Telling When

1. Write *part D* on your paper. Number your paper from one through three.
2. Find part D in your workbook.
3. Each sentence ends by telling when. We're going to move the part that tells when to the beginning of each sentence.
4. Sentence 1: The children went to sleep when their mom got home.
   Say the sentence so it begins with the part that tells when.
   (Signal.) **"When their mom got home, the children went to sleep."**
5. Sentence 2: Sally cleaned the house while the baby took a nap.
   Say the sentence so it begins with the part that tells when.
   (Signal.) **"While the baby took a nap, Sally cleaned the house."**
6. Sentence 3: He brushed his teeth before he went to sleep.
   Say the sentence so it begins with the part that tells when.
   (Signal.) **"Before he went to sleep, he brushed his teeth."**
7. Write each sentence so it begins with the part that tells when. Remember, put a comma after the part that tells when.
   (Observe students and give feedback.)
8. Check your work.
   Sentence 1: Capital W When their mom got home comma the children went to sleep period.
   The t in *the* should be a small *t*.
   Sentence 2: Capital-W While the baby took a nap comma Sally cleaned the house period.
   Sentence 3: Capital B Before he went to sleep comma he brushed his teeth period.

Task 5. Writing a Paragraph

1. Skip a line and write *part E* on your paper.
2. Find part E in your workbook.
3. You're going to write a paragraph about these two pictures.
4. The sentence above the pictures is the sentence the paragraph starts with. I'll read the sentence: Tom took his dog for a walk while his big sister fixed the car.
5. Look at the first picture and tell some things that must have happened. Tell about the hole in the bridge. Tell what the dog must have done.
   (Call on several students. Praise sentences such as: The dog fell through a hole in a bridge. The dog landed in the water. The dog climbed onto a rock.)
6. Now tell some things that must have happened between the first and the second pictures. Tell about the things Tom's sister did after the dog fell into the water.
   (Call on several students. Praise sentences such as: His sister took a rope out of the trunk of the car. She tied the rope onto the bridge. She climbed down the rope and rescued the dog.)
7. Remember, the last picture shows how the paragraph ends. The last thing that happened was his sister climbed up the rope with the dog.
8. Touch the words in the vocabulary box as I read them: bridge, water, river, rapids, climbed, tied, pole, heard, crawled, rescued.
   Remember, spell those words correctly if you use them in your paragraph.
9. I'll read the checks:

Check 1: Is each sentence punctuated correctly?
That means: Does each sentence begin with a capital and end with a period?

Check 2: Did you tell all the important things that must have happened?
The bonus check for today is check 2. You can earn five bonus points for that check.

Check 3: Did you start your paragraph with the right sentence?

Check 4: Did you end your paragraph by telling what the last picture shows?
When you write your paragraph, make sure it meets all these checks. If it meets all these checks, you'll get 20 points.

10. Write your paragraph.
    (Observe students and give feedback.)
11. *(After 10 minutes, say:)* If you're still

APPENDIX D

SAMPLE OF TEACHER OBSERVATION FORM

Observation Form Writing Strategy Instruction

Teacher _____

Observer _____

Date and time _____

	Comments	Yes	No
1. The class began on time.			
2. Materials were organized.			
3. Students appeared to be attending to the lesson.			
4. The teacher followed the script from the presentation guide.			
5. The teacher modeled procedures.			
6. Students were giving opportunities to practice skills.			
7. Students wrote individually.			
8. Student work is checked promptly and feedback is given.			
9. Students were taught to edit written products.			
The teacher used positive reinforcement during her interactions with the students.			

Observation Form
Writing Process Workshop

Teacher _____

Observer _____

Date and time _____

	Yes	No
1. The class began on time.	____	____
2. Materials were organized.	____	____
3. Students appeared to be attending to the teacher. ____		____
4. The teacher presented a mini lesson related to writing.	____	____
Subject of the lesson _____		
Amount of time spent _____		
5. The students spend time writing in his/her writing folders on individually chosen topics.	____	____
6. The teacher spent time conferencing with individual students about his/her writing.	____	____
7. Students spent time conferencing with peers about his/her writing.	____	____

8. Students were involved with:
   Proofreading _____
   Rewriting _____
   Choosing topics _____
   Illustrating _____

9. Students shared writing:
   With the teacher _____
   With peers _____
   With the entire class _____

10. The teacher used positive reinforcement during her interactions with the students. ____ ____

Observation Form

Writing Process Workshop

Teacher _____Observer _____

Date and time _____

	Comments	Yes	No
1. The class began on time.			
2. Materials were organized.			
3. Students appeared to be attending to the teacher.			
4. The teacher presented a mini lesson related to writing. Subject of the lesson _____ Amount of time spent _____			
5. The students spend time writing in his/her writing folders on individually chosen topics.			
6. The teacher spent time conferencing with individual students about his/her writing.			
7. Students spent time conferencing with peers about his/her writing.			
8. Students were involved with: Proofreading _____ Rewriting _____ Choosing topics _____ Illustrating _____			

9. Students shared writing: With the teacher _____ With peers _____ With the entire class _____			
10. The teacher used positive reinforcement during her interactions with the students.			

APPENDIX E

SCORING CRITERIA FOR WRITING SAMPLES

Alabama Holistic Analytic Scale

Topic	Level 1 Does not meet standard	Level 2 Partially meets standard	Level 3 Meets Standard	Level 4 Exceeds standard	Total
Purpose	2	4	6	8	
Content	2	4	6	8	
Audience	2	4	6	8	
Organization	2	4	6	8	
Clarity	1	2	3	4	
Punctuation	1	2	3	4	
Spelling	1	2	3	4	
Handwriting	1	2	3	4	
				SUM	

Scoring Guide

Holistic Rubric for Alabama Direct Assessment of Writing (ADAW)

	Level I Does not meet standard	Level II Partially meets standard
Purpose	Indicates little understanding of writing task	Indicates some understanding of the writing task.
Content: Descriptive	Attempts to describe someone or something. Presents limited information/details in vague, general terms.	Describes someone or something. Presents general information/details.
Narrative	Presents an unclear sequence of events that tells what happened in a poorly organized manner. May present a vaguely defined time frame.	Presents a sequence of events that tells what happened in a poorly organized manner. Presents a vaguely defined time frame.
Expository	Attempts to present reasons, explanations, or steps in a process. Displays little or o attention to appropriate sequencing of steps or ideas. Presents few details and a vague main idea.	Presents reason, explanations, or steps in a process. Displays some attention to appropriate sequencing of steps or ideas. Presents incomplete development, with limited details. May include a statement or implied main idea.
Persuasive	Contains an opinion and presents limited persuasive details, reasons, and/or examples supporting the position.	Contains an opinion and presents some persuasive details, reason, and/or examples supporting the position.
Audience	Displays little or no sense of	Displays some sense of audience

	Level I Does not meet standard	Level II Partially meets standard
	audience and purpose in word choice tone and language.	and purpose in word choice (tone and language)
Organization/ clarity	Displays little or no evidence or organization plan or strategy. Displays little or no sense o author involvement. Presents one or more weak, unclear controlling ideas. Gives little or not attention to topic development. May present irrelevant ideas. May commit many obvious errors in sentence formation, grammar, usage, and mechanics that interrupt the flow of communication.	Displays some evidence of an organizational plan or strategy, although ideas are loosely organized. Displays some sense of author involvement but weak author control. Uses a controlling idea but may wander from it or uses several controlling ideas. Introduces the topic and develops it minimally. Presents ideas with minimal attention to their flow. Uses basic-functional vocabulary. May commit some errors in sentence formation, grammar, usage, and or mechanics that interrupt the flow of communication.

	Level III Meets standard	Level IV Exceeds standard
Purpose	Indicates a good understanding of the writing task.	Indicates a thorough understanding of the writing task.
Content: Descriptive	Describes someone or something. Presents specific information/details. Includes other relevant details.	Describes clearly someone or something. Uses precise, vivid sensory details. Includes other relevant details.
Narrative	Presents clearly a sequence of events, telling what happened. Establishes a time frame.	Presents clearly a sequence of events, telling explicitly what happened. Provides a definite time frame.
Expository	Presents reasons, explanations, or steps in a process. Displays logical order: appropriate sequencing of steps or ideas. Contains a main idea and supporting details and may provide a conclusion.	Presents reason, explanations, or steps in a process. Uses logical order and the appropriate sequencing of steps or ideas. Contains a main idea, support details and a conclusion.
Persuasive	Contains a clearly state opinion and presents sufficiently persuasive details, reason, and/or examples supporting the position.	Contains a clearly state opinion and presents persuasive details, reasons, and/or examples that thoroughly support the position.
Audience	Displays a sense of audience and purpose in word choice (tone and language).	Displays a strong sense of audience and purpose in word choice (tone and language).
Organization/	Displays an organizational plan or	Displays a strong organizational

	Level III Meets standard	Level IV Exceeds standard
clarity	strategy. Displays a sense of author control. Uses one controlling idea with only minimal wandering from it. Introduces the topic and develops it sufficiently. Presents ideas so that they flow smoothly from one to the next with clarity. May provide a conclusion. Makes occasional errors in grammar, usage, and mechanics that do not interrupt the flow of communication. Uses a variety of sentence structures. Uses meaningful, precise vocabulary. May display creativity in presenting information.	plan or strategy with overall completeness. Displays a strong sense of author control. Uses one clear controlling idea and does not wander from it. Introduces the topic and develops it thoroughly. Presents clear ideas so that they flow smoothly from one to the next with clarity and coherence, using appropriate transitions. May provide a conclusion. Displays limited minor errors in grammar, usage and mechanics. Uses a variety of sentence structures appropriately. Uses vivid and precise vocabulary. May display creativity in presenting information.

APPENDIX F

ATTITUDE SATISFACTION SCALE

STUDENT ATTITUDE/SATISFACTION SCALE
(To be read by the teacher)

We would like to know how you feel about writing. You are asked to answer the following questions as honestly as possible. Do not put your name on the sheet. We are interested only in your answers, not your name. On this sheet in front of you are 10 statements about writing. For each statement, you are to decide if you agree, are undecided or disagree with the statement. For example, the first statement says, "I like summer." Most people would circle, agree, since we all probably like summer. Everyone find the example and circle agree, undecided or disagree to show how you feel about summers.

You are to decide how you feel about the other 10 statements. Mark each statement with your first impression. Circle what you honestly believe, not what you think you should believe.

I will read each statement. You circle either agree, undecided or disagree for each statement.

Student Attitude/Satisfaction Scale

Example:	Disagree		Undecided		Agree
I like summer.	1	2	3	4	5
	Disagree		Undecided		Agree
1. I like to write.	1	2	3	4	5
	Disagree		Undecided		Agree
2. I learned a lot from this unit.	1	2	3	4	5
	Disagree		Undecided		Agree
3. I feel that it's important to learn how to write.	1	2	3	4	5
	Disagree		Undecided		Agree
4. I liked the way this unit is taught.	1	2	3	4	5
	Disagree		Undecided		Agree
5. I wished that more writing units were taught this way.	1	2	3	4	5
	Disagree		Undecided		Agree
6. I will use what I've learned in other classes.	1	2	3	4	5
	Disagree		Undecided		Agree
7. I hate writing.	1	2	3	4	5
	Disagree		Undecided		Agree
8. I would like to write better.	1	2	3	4	5

	Disagree		Undecided	Agree	
9. I like choosing my own topics when I write.	1	2	3	4	5
	Disagree		Undecided	Agree	
10. I like to be assigned topics or be given a story starter.	1	2	3	4	5