



5-1-1989

## A study in the use of writing and self-monitoring strategies with learning disabled eighth graders

Solveig A. Bartz

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A STUDY IN THE USE OF WRITING AND SELF-MONITORING STRATEGIES  
WITH LEARNING DISABLED EIGHTH GRADERS

by  
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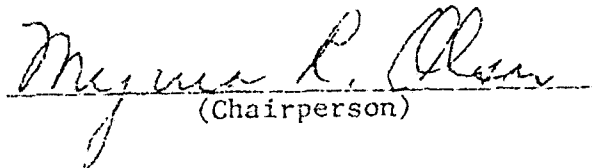
A Dissertation  
Submitted to the Graduate Faculty  
of the  
University of North Dakota  
in partial fulfillment of the requirements  
for the degree of  
Doctor of Education

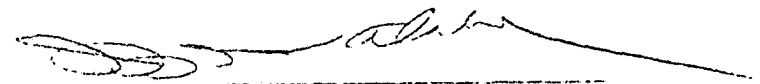
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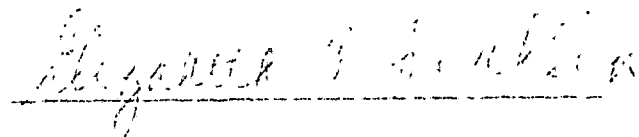
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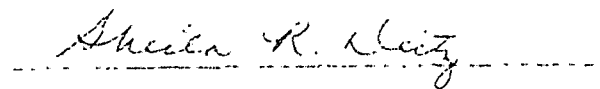
This Dissertation submitted by Solveig A. Bartz in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

  
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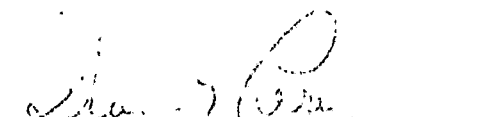








This Dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

  
Dean of the Graduate School

Permission

A Study in the Use of Writing and Self-Monitoring Strategies  
Title with Learning Disabled Eighth Graders

Department Center for Teaching and Learning

Degree Doctor of Education

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## ACKNOWLEDGMENTS

The writer wishes to express her sincere gratitude to the members of her doctoral committee: Dr. Myrna Olson, Dr. Ivan Dahl, Dr. Beth Franklin, Dr. Steven Harlow, and Dr. Sheila Deitz for their assistance throughout the doctoral program as well as this dissertation.

A special note of appreciation is extended to Dr. Myrna Olson, major advisor, for her creative insights and helpful suggestions throughout this project. Her clear, concise responses when questions arose were instrumental in providing the writer with positive feedback which contributed much to productive writing. For this, the writer is grateful.

The desire to study written language as used by learning disabled eighth graders began during a practicum experience supervised by Mrs. Holly Wilson and Mrs. Ruth Elder. Appreciation is expressed for this experience; a special thank you is extended to Mrs. Wilson for her willingness to participate in the study and for her boundless energy and enthusiasm. A thank you is also expressed to the delightful students, without whom this study would not exist, who will always be "significantly different" in the writer's memory.

Finally, the writer wishes to gratefully acknowledge her husband, Al, for his professional expertise and unlimited support. His patience, confidence, and love never faltered during the usual stresses of a doctoral program; for this, the writer will always be grateful.



## ABSTRACT

Learning disabled adolescents are expected to demonstrate more effective use of written expression as they cope with increased curricular demands at the secondary level. To compound the problem, repeated failures have helped develop strong negative affect toward school and the writing process.

### Statement of the Problem

This study was designed to teach writing and self-monitoring skills to learning disabled eighth graders. Time for practice was provided, and the effectiveness of the procedure was evaluated.

### Methods and Procedures

Unlike other studies, this study did not compare the learning disabled with non-learning disabled; instead, using appropriate statistical techniques, student performances over different time blocks were compared whereby students became their own controls.

Eleven learning disabled eighth graders participated in the yearlong study. In a self-contained classroom setting, the learning disabilities teacher used materials designed and written by the researcher. Strategies in capitalization, punctuation, sentence formation, error correction, and self-monitoring were introduced and practiced.

Pretest and posttest measures as well as weekly evaluations of student writing documented performance. Spelling errors remained unmarked but were recorded. Student journals, classroom observations,

and teacher interviews provided evidence of student affect. Data collected were submitted to qualitative and statistical analytical treatments.

### Results

Significant improvements occurred in vocabulary, thematic maturity, and handwriting during the period of strategy instruction. Student written products revealed a significant reduction in total words as the number of strategies increased.

During the last five-week time block a significant increase in the total number of words written occurred. As self-monitoring strategies were practiced, a significant reduction in spelling errors was found.

Punctuation errors increased significantly as total words increased. Data revealed no significant main effects for capitalization or organization as total words increased. Overall, the students were able to write more words with fewer errors as monitoring strategies were practiced.

Positive affect changes were evidenced in student journal entries, student written products, teacher observations, and interviews. Student behaviors demonstrated greater class participation, added eagerness in using written expression, and increased time on task.

## CHAPTER I: INTRODUCTION

### The Learning Disabled

Who are the learning disabled? Volumes have been written on this topic and the answer still remains unclear. Clements (1966) reported over 99 characteristics which served as descriptors of this population. The eight most frequently described were:

1. Hyperactivity: constant, purposeless motion;
2. Perceptual motor impairments: difficulty in organizing, discriminating, and interpreting visual or auditory symbols;
3. Emotional lability: mood shifting;
4. General coordination deficits: awkward, uncoordinated, clumsy;
5. Disorder of attention: distractible, unable to maintain attention;
6. Disorders of memory: deficits in auditory or visual memory;
7. Specific learning disabilities: inability in certain academic areas such as reading, writing, or arithmetic;
8. Language problems: deficits that affect receptive/expressive language.

With the many existing descriptors, it is not surprising that the number identified in this population has grown. In 1969 there were 125,000 children enrolled in programs for the learning disabled. Over the next 10 years the enrollment grew to reach 1,000,000. By 1984 the enrollment had doubled to nearly 2,000,000 children. Approximately

45% of the children enrolled in special education were classified as learning disabled (Kirk, 1986). In addition to the nationwide increase in students classified as learning disabled, an additional 10% to 20% had mild or moderate learning problems which interfered with educational progress but did not meet criteria for special education programs. Of the 42,000,000 in public school during the 1984-85 school year at least 8,000,000 had difficulty because of some type of learning problem (Chalfant, 1987).

The term learning disabilities was among the categories included in the definition of handicapped under Public Law 94-142 and may have contributed to the increase in prevalence (Chalfant, 1989). As special education came under closer scrutiny, employing the concept of least restrictive environment caused less separation of children into separate classes (Linn, 1986). Educators continued to be mandated by law to plan and provide appropriate intervention since all students had the right to a free, appropriate education. Learning disability services could no longer be provided only in elementary grades (Deshler, Lowrey, & Alley, 1979). "This is a most difficult task since many serious questions exist about how to proceed and few empirically defined answers are available . . . professionals tend to use instructional procedures that are based on their individual assumptions regarding education and learning" (Wiederholt, 1978, p. 11).

As the learning disabled population progressed through the educational system, they were expected to keep up with nonhandicapped peers (Dagenais & Beadle, 1984). As they reached the secondary school, curricular demands increased. It was expected they would be able to demonstrate their knowledge of content areas through written rather

than oral response. This meant a greater need existed for effective and successful use of the written language (Moran, 1980). These demands included note taking and written tests as well as other forms of written expression.

#### Written Language Is the Core

Limited research data are available on the ability of learning disabled secondary students to use written language (Wiederholt, 1978). Existing learning disabilities programs do not include writing as a predominant option (Deshler et al., 1979). If the learning disabled secondary students are in need of greater access to instruction in written expression, it becomes imperative that our options for them be expanded to meet that need (Moran, 1980).

The learning strategies model was developed to assist learning disabled adolescents in successfully adjusting to the demands of the secondary curriculum (Alley & Deshler, 1979). These authors identified learning strategies as "techniques, principles, or rules that will facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings" (p. 13). Using the learning strategies model, necessary components in the writing process can be taught to learning disabled adolescents. Providing ample structure, well-designed instructional goals, sufficient time to internalize the process, positive feedback, peer involvement, and sufficient practice, the writing process can become an effective communicative tool for learning disabled adolescents. Through appropriate instructional means, these students can learn "how to learn" and effectively write in a meaningful way.

If one is to utilize the five basic abilities as identified by Hammill and Larsen (1983) the learning disabled adolescent will develop the abilities to:

1. Form letters, words, numerals, and sentences in a legible manner;
2. Generate enough meaningful sentences to express one's thoughts, feelings, and opinions adequately;
3. Write in compliance with accepted standards of style, especially those governing punctuation, capitalization, and spelling;
4. Use acceptable English syntactic, morphological, and semantic elements; and
5. Express ideas, opinions, and thoughts in a creative and mature way.

The adolescent disabled learner needs the ability to monitor his or her own work in an effort to attain greater success in secondary school. Self-monitoring in error detection and correction has been identified as a necessary skill for this student (Alley, Deshler, & Warner, 1979; Schumaker et al., 1981). This process will also help develop a sense of independence and positive affect about the writing process.

Currently, statements have been made about the need to reorder the educational programming for the learning disabled which would include minimizing the use of self-contained classes (Kirk, 1986; Reynolds, 1985; Reynolds & Wang, 1983; Ysseldyke & Algozzine, 1982). With reordering would come greater pressure for the learning disabled adolescent to perform and meet curricular demands. In an effort to meet the escalating needs of the learning disabled secondary students,

educators need to realign how they teach writing skills to the learning disabled adolescent with an emphasis on the writing process as the core of learning and performance.

### Intention of Study

The purpose of this study was to evaluate the effectiveness of teaching writing and self-monitoring strategies to learning disabled eighth graders. Through the use of the learning strategies model, skills in the use of capitalization, punctuation, sentence formation, and paragraphing would be taught to help these students meet the curricular demands of the secondary school. Further skills in detecting and correcting errors in their written products would be taught to help develop independence and success in written expression.

The teaching process would include these goals:

1. Through the use of specifically designed strategies, the learning disabled adolescent would develop writing skills critical for success in a secondary school curriculum.
2. Error detection and correction strategies would be taught.
3. Adequate writing practice would aid the student in creatively expressing thoughts, feelings, and opinions as newly learned strategies would be internalized and actively implemented.
4. Through this developmental process and sequence of activities the student would acquire more positive affect regarding the use of written language.

### Major Questions to Be Studied

Pretest and posttest data as well as student product data were analyzed for each student. Student journals, classroom observation fieldnotes, and teacher interviews were catalogued, grouped, and

analyzed. The following major questions were among those asked:

1. As strategies are being taught what kinds of learning occur as evidenced in the pretest and posttest scores of the Test of Written Language (TOWL) (Hammill & Larsen, 1983)?
2. During first semester what changes occur among the student product variables of total words generated and spelling errors?
3. Do student performances in fluency, flexibility, and originality, as measured by the Torrance Tests of Creative Thinking (TTCT) (Torrance, 1974), change as the result of creative writing during the second semester?
4. During the second semester what changes occur among student product variables of total words, capitalization errors, organizational errors, punctuation errors, and spelling errors? Do these learning disabled students demonstrate the ability to self-monitor by detecting and correcting their errors?
5. Do student performances in fluency, flexibility, and originality correlate with areas representing writing conventions as evidenced by pretest and posttest measures on the TTCT? If so, how?
6. What evidence exists demonstrating altered affect regarding the use of written language?

#### Limitations of the Study

Two major limitations existed which needed to be considered as results were analyzed: the size of the sample and the length of time the study was in progress.

The sample was limited to the group size assigned a given teacher in the classroom. Rarely, did that number exceed 12. The second factor related to the length of time required by this population to



effectively internalize a concept and demonstrate the ability to implement strategies. Since each student would be automatically placed in another classroom setting at the close of the school year, circumstances prevented extension of the study beyond one academic school year.

## CHAPTER II: LITERATURE REVIEW

The present study was designed to evaluate use of the learning strategies model in teaching writing and self-monitoring to learning disabled adolescents. This chapter will discuss literature relevant to adolescent student needs, the error monitoring concept, feedback and motivation, pertinent aspects of written language instruction, specific teaching strategies for the learning disabled, and will conclude with selected references pertaining to affect as it is related to the writing process.

### Student Needs

Writing is central to the learning task of secondary school students in American education. In a major study of schooling in the United States, Goodlad (1984) found language arts formed a strong element in the curricula. Emphasis was placed on teaching basic language skills and writing mechanics. Work at the secondary level frequently repeated or extended materials used in elementary grades. A lack of emphasis on creative or fictional writing was evident with much daily instructional material in worksheet or workbook form. Directions often asked the students to "copy," "circle," or "combine." The study revealed lower track classes were given greater emphasis on the mechanics of English usage and were not introduced to analytical or evaluative skills such as may have been introduced in upper track classes. Goodlad stated, "One wonders about the readiness of students

in the lowest tracks of the junior and senior high schools who were still confronted again and again with these now familiar patterns" (p. 207).

Yet another study found the writing task central to teaching and learning in American education with students averaging about 44% of their classroom time in some type of writing activity. These writing-related activities leaned heavily toward tasks involving mechanical writing (Applebee, Lehr, & Auten, 1981). Teacher expectations for writing performance increased at the secondary level and included note taking during lectures, reviewing the notes for examinations, writing answers to questions, performing homework, and completing essay examinations (Fulwiler, 1982; Moran, 1980).

Writing performances in American education have reached national concerns. An evaluation of the writing achievement of American students in grades 4, 8, and 11 revealed writing performances improved from grades 4 to 8 with less improvement from grades 8 to 11. The assessment showed American students could write at a minimal level only: analytic writing was difficult for students in all grades; when writing persuasively, students had difficulty expressing their points of view; students found it difficult to write well-developed stories and had less difficulty with tasks requiring only short responses (Applebee, Langer, & Mullis, 1986). The study further showed nearly half the fourth graders and one-third of the eighth and eleventh graders reported writing fewer than three written products during a six-week period. Students who revised and edited their work were better writers than those who did not. The assessment showed an increase in the emphasis on the process writing approach which included planning,

drafting, revising, and editing. Better writers were using aspects of the writing process and performed better than students who did not plan, revise, and edit. This report showed a national emphasis existed on using the writing process approach; furthermore, students who used process strategies demonstrated higher writing achievement. Graves (1978) considered the situation at crisis levels when he stated our educational system was more concerned with reading and listening abilities rather than speaking and writing.

Writing is the basic stuff of education. It has been sorely neglected in our schools. We have substituted the passive reception of information for the active expression of facts, ideas, and feelings. We now need to right the balance between sending and receiving. We need to let them write. (p. 27)

In England a research team (Britton, Burgess, Martin, McLeod, & Rosen, 1975) analyzed 2,000 pieces of writing from British school children between the ages of 11 and 18. Each selection was classified according to its function as being transactional (that which was intended to inform, instruct, or persuade such as term papers, reports, essay examinations, book reviews, and other writing), poetic (that which was created by the student), and expressive (that which revealed feelings, opinions, and beliefs). It was found transactional writing comprised up to 63% of all student writing; poetic, 28%; and expressive, only 5.5% of the sample. The study revealed expressive writing was rarely used outside English classes yet was the type of writing which was most personal and closest to speech. Britton's team believed that neglect of expressive writing existed in the school curriculum since

Using the writing process is a concern for the older learning disabled student. This student comes through a system which may have neglected the writing process in favor of other needs requiring attention. Myklebust (1965) was among the first researchers to analyze written language disorders. Using his Picture Story Language Test he studied areas of written performance. Results suggested a hierarchal relation for the language systems with auditory language viewed as the foundation for both the read and written forms. In later work Myklebust (1973) stated, "Study of the development and disorders of the written word in handicapped children has been neglected in special education" (p. 55). An extensive study was conducted in which he investigated the effects of four handicaps (reading disability, mental retardation, speech defects, and social-emotional disturbance) on the development and disorders of written language:

Even though interactions of read and written language are complex, deficits in reading reciprocally reduce facility with the written word; this basic principle concerns the interdependence of input and output. In other words, reading and writing are facets of the same language system, reading constituting the input process and writing the output. (Myklebust, 1973, p. 70)

His studies revealed both moderate and severe learning disabled children were inferior on all aspects of written language.

It appears that the learning-disability children were retarded in written language because of their limitations in reading, and that read language was deficient because of disorders in auditory language. Presumably, if

reading ability were facilitated, written language would be improved. (Myklebust, 1973, p. 132)

These findings impacted on remedial instruction. Providing instruction in word meaning was considered essential and perhaps the most critical dimension of remediation in language. According to Myklebust (1973), "On the basis of the data at hand, it is logical to assume that such instruction is so essential as to require approximately one-half the time given to language remediation" (p. 132). This author considered programs of remediation in language one of the greatest challenges in special education if learning-disability children were to attain facility with the read and written language forms.

In a survey of three school systems, it was discovered that children from the second through the sixth grade on the average wrote only three pieces over a three-month period (Graves, 1978). It can be expected, then, that the adolescent learning disabled student will have limited preparation for the written curricular needs of the secondary school. As Smith (1984) aptly stated:

The disabled writer who reaches junior high and high school writing incomplete and run-on sentences usually favors simple constructions and has no idea of how to link or subordinate ideas. He has no system for substituting pronouns. He seldom uses descriptive words. Usage is not automatically selected by a discriminating ear for language. Number, voice and tense are mysteries to him. (p. 122)

Error Monitoring by Learning DisabledAdolescents

Research and theory regarding learning disabilities showed concern for the correctness of the student's response. The skill to monitor one's own errors provided the basis for their removal. This meant a student observed the sequence of letters, words, sentences, or punctuation in order to avoid or correct them (Deshler, Ferrell, & Kass, 1978). Studies in error monitoring (Wissink, 1972; Wissink, Kass, & Ferrell, 1975) revealed it to be an important factor in learning disabilities. Results found monitoring deficits occurred three times as often among the learning disabled when compared to those without the disability. Deshler et al. (1978) explored whether a weakness in monitoring was a factor contributing to greater errors occurring in schoolwork. Using four task areas of synonym, spelling, editing, and essay, the study revealed learning disabled secondary students demonstrated a monitoring deficit in detection of self-generated and externally-generated errors when compared to the non-learning disabled. Learning disabled students detected only one-third of their errors in the creative writing task. It was found the two groups appeared to use similar criteria in detecting errors in externally-generated material. In material they produced themselves, the learning disabled students seemed less willing to call an element an error, therefore identified fewer errors. The authors concluded teaching monitoring in one-to-one remedial sessions as an important element.

The monitoring deficit as a differentiating characteristic between learning disability and non-learning disability in the adolescent was

investigated by Deshler (1974). School-related tasks such as creative writing, editing, spelling, and vocabulary were used to assess monitoring of self-generated and externally-generated errors in an effort to discover whether a monitoring deficit would be a good indicator of learning disability. A monitoring deficit was defined as "an impairment in the child's ability to detect self-generated or externally-generated errors" (p. 14). Implications of the Deshler study suggested the learning disabled demonstrated potential for detecting their own errors and suggested the following:

They should be encouraged to check their work before turning it in. They should be given specific strategies or systems for doing so. These should be taught and practiced in remedial sessions until the process of monitoring their own performance becomes automatic. Remediation of a monitoring deficit will be difficult because many of the errors in performance are the result of incorrectly learned habits. Unlearning an incorrect habit and relearning the correct one prolongs remediation.

(p. 66)

Concerning the editing task, this study saw value in determining the type of errors the student was able to correct and the type he or she was not able to correct. Also, value was seen in teaching students skills in correcting errors which have been detected.

An 11-step procedure was used to teach error monitoring to nine learning disabled adolescents (Schumaker et al., 1981). Results showed students could detect and correct more errors after training than before, indicating the effects of teaching a specific detection



strategy. The study demonstrated improved performance of learning disabled adolescents as the result of a monitoring procedure. The authors concluded error monitoring strategies could be effectively used by learning disabled secondary students to eliminate errors in writing and consequently help the learning disabled student meet the demands of the secondary setting.

Instructional techniques that deal with error monitoring may not treat it as a primary instructional goal. Using the rehearsal technique, students were taught to monitor and correct errors in reading (Laurita, 1972). In spelling, the skill to error correct may be as important as other skills; however, few studies have examined how these skills are acquired (Lydiatt, 1984). Lydiatt stated error detection and correction tasks needed to be taught as independent skills. The problem may be that students do not know how to find errors in their writing and if they do find them, many times they do not know how to correct them (Mehlmann & Waters, 1985). It is assumed, Mehlmann and Waters continued, the students will make the transition from drill to application. "However, for students who are slow learners, learning disabled, highly mobile, or skill deficient, this transition never occurs" (p. 583).

#### Feedback and Motivation

Feedback to the teacher and students can reveal errors in learning; shortly after they occur (Bloom, 1976). Bloom stated a process of feedback was essential if appropriate corrections were to be made. Further he referred to the variations in individual learning; therefore, unless the teacher was able to get feedback on the difficulties present and the student received feedback regarding specific existing

difficulties "both students and teacher must stumble on from task to task with an inadequate understanding of what learning is or is not taking place" (p. 28). For this reason the use of feedback is a critical variable in learning. Studies in the psychology of learning have been well documented. E. A. Bilodeau (1969) investigated feedback using instructions to the subject as the experimental variable. Instructions were given before, during, or after the response. Substitutes for the spoken word were used including mechanical tones and various working conditions. If feedback was related to motivation it should serve as an incentive to stimulate performance. In another study, I. M. Bilodeau (1969) used feedback in a specific way by speaking to the subject directly about error. Results supported the conclusion that information feedback determined whether subjects continued or changed their behavior. The individual's use of feedback information was an essential part of the error monitoring process (Adams, 1971; Powers, 1973). Adams referred to the knowledge of results as essential if a correct response was to follow. Powers found much human behavior was oriented around the ability to use feedback to monitor errors.

Research centering on the study of error looked at the process of error analysis (Bartholomae, 1980). "Error analysis begins with a theory of writing, a theory of language production and language development, that allows us to see errors as evidence of choice or strategy among a range of possible choices or strategies" (p. 257). Through a process of recording and analyzing errors, instruction can begin with what the writer can do rather than what the writer cannot do. Bartholomae also saw the importance of oral reading in aiding students

with error correction. He found students often substituted correct forms for the incorrect forms on the page even though they may have been unaware of the substitution.

Concern with the psychological effect of feedback as it comes in the form of teacher comments was emphasized by Dieterich (1972). He cited examples in research identifying the view that negative criticism and fear of being judged would inhibit creativity. In his view an over amount of criticism did no good; instead it would cause students to both hate and fear writing. Calling attention to errors could enhance the negative aspect of writing (Graves, 1978; Moran, 1983). Moran suggested errors would decrease as writing increased so spelling errors did not need to be meticulously marked. Shaughnessy (1977) found evidence that over concern for correctness could be debilitating to the writer. She put forth the view that writers made choices in their struggle to handle the writing task. Errors were not only the evidence of that behavior but they occurred in predictable patterns.

Moffett (1968) saw feedback as "any information a learner receives as a result of his trial" (p. 188). But the feedback will not assist the learner if motivation is absent. "So the first reason why one might fail to learn is not caring, lack of motivation to scan the results and transfer that experience to the next trial" (p. 191).

#### Written Language Instruction

The learning disabled students are expected to catch up and keep up with their nonhandicapped peers; consequently, at the junior high level they are expected to write more with less teacher direction (Dagenais & Beadle, 1984). These authors identified reading and listening as areas receiving classroom emphasis. (Graves (1978)

discussed many reasons why writing was so important. It contributed to the development of the whole person including intelligence, initiative, overall learning, courage, reading, reading comprehension, and math.

Necessary components for success in use of the written language were identified by Hammill and Larsen (1983). These five basic abilities needed to be mastered if one was to achieve success in the writing process:

1. To form letters, words, numerals, and sentences in a legible manner;
2. To generate enough meaningful sentences to express one's thoughts, feelings, and opinions adequately;
3. To write in compliance with accepted standards of style, especially those governing punctuation, capitalization, and spelling;
4. To use acceptable English syntactic, morphological, and semantic elements; and
5. To express ideas, opinions, and thoughts in a creative and mature way.

Wiederholt (1978) stated the above five areas represented mechanics, production, convention, linguistics, and cognitive abilities in writing. With respect to the learning disabled population, each of these areas was critical:

Data on these critical areas of performance could have far-reaching impact on the understanding of the strengths and weaknesses of the pupils labeled learning disabled as well as the development of remedial procedures. Teachers are encouraged to investigate their students' performances on these writing components and to evaluate their

instructional programs as they relate to the development of comprehensive writing skills and abilities. (p. 16)

Research with both handicapped and nonhandicapped is pertinent to this field. The formal instruction of grammar becomes an issue in mainstreamed classes; although valuable in the writing process, this instruction may not improve writing skills and, for some, can have a negative effect (Braddock, Lloyd-Jones, & Schoer, 1963; Elley, Barnham, Lamb, & Wyllie, 1976; Gunderson, 1971). Braddock et al. reported statistically significant performance by an experimental group of remedial college freshmen who were taught using frequent writing and student correction rather than language usage with workbook-drill methods. Elley et al. reported a three-year study using well-chosen student groups which showed English grammar instruction had no influence on the language growth of average secondary school students.

A survey of all subject areas (Applebee, 1982) found teachers responded to student writing by assessing accuracy rather than creativity. They used writing to indicate mastery of material and reported a reason for asking students to write was to test their "ability to express themselves clearly" (p. 374).

#### Teaching Strategies for the Learning Disabled

The learning strategies model utilized in various research studies (Alley & Deshler, 1979; Deshler, Alley, & Carlson, 1980; Schumaker et al., 1981) is identified as an approach to help teach learning disabled adolescents the necessary strategies to enable them to cope in the secondary school setting. This procedure involved their ability to learn how to handle the learning process rather than emphasizing

content.

The learning strategies model is based on the philosophy that secondary students who have learning disabilities should be provided with interventions based on principles of cognitive psychology and learning. If this match can be made, the students should be able to more effectively acquire, organize, retrieve, and express information.

Following this logic, the student would be taught specific skills. (Deshler et al., 1980, p. 6)

Among other assumptions, this model is based on the assumption that students with learning disabilities at the secondary level have the intellectual ability to successfully complete school requirements.

Suggestions by the above authors include:

1. Teach the desired strategy in isolation.
2. Demonstrate the new strategy in its desired use.
3. Verbalize the steps of the new strategy.
4. Apply the strategy to provide practice once the student

demonstrates a basic understanding. The strategy can then be applied in general use to afford the student more opportunity for practice.

Any learning strategies necessary to meet the demands of the secondary school curriculum may be involved.

In a nationwide survey of junior and senior high school learning disabilities teachers, it was found only 4% used the learning strategies approach. Other options included the functional curriculum approach, 17%; basic skills remediation approach with instruction in reading and mathematics, 45%; tutorial approach, 24%; and work-study approach, 5%.

Not any of the five options identified writing as a major curricular component (Deshler et al., 1979).

A program that taught strategies for approaching the writing process was used by Whitt, Paul, and Reynolds (1988) and found students became more motivated, confident, and cooperative. Through the use of the learning strategies model, middle school students were led through each writing stage: prewriting, drafting, peer conferencing, revising, editing, teacher conferencing, and publishing in an effort to teach these learning disabled students to become independent writers.

A highly structured program on writing paragraphs was developed and used successfully with learning disabled adolescents (Moran, 1983). A set of six steps with careful introduction was used. This highly structured program identified four important features to keep in mind when working with this population:

1. Use groups smaller than regular classes.
2. Model all behaviors,
3. Use students' own writings as instructional material,
4. Provide individualized positive and corrective feedback.

A system which stressed the communication factor in writing was demonstrated by McGill-Franzen (1979). It included looking beyond the deficiencies in spelling, punctuation, and capitalization to find the student's conceptual skill. The important point here was the awareness that knowing what the student could do was as important as knowing what he or she could not do.

In an effort to help educationally handicapped students write a more organized expository paragraph, a special program was developed which included the use of focus questions, peer evaluations, and peer

writing samples (Warner, 1979). Effective use of peer involvement was also demonstrated by Neubert and McNelis (1986) in a program involving writing in disciplines other than English/language arts. Peers were instructed in providing feedback, raising questions, and suggesting improvements. The proper editing time was a significant factor as was the value of oral reading. Koch and Brazil (1978) saw editing and proofreading as two parts and considered editing an extension of the writing stage:

It is a matter of taking a fresh, critical look at one's writing, bringing to bear all the intuition, knowledge, and understanding one has of writing processes and forms, in order to be sure that the written product says or is what the writer wants it to say or be. (p. 83)

Editing was done when the first draft of a writing sample was complete; whereas, proofreading was considered the final step of the writing process. Cohen (1985) devised an approach to the revision process to help learning disabled seniors learn to self correct. This was seen as a means of preventing discouragement in the writing process. The approach included structured steps involving specific assignments, writing rough drafts, oral reading, preparing additional drafts, and devising specific steps for the revision process. A two-year individualized writing program useful for mainstreaming learning disabled students into regular English classes was devised by Berardi (1978).

Distinguishing between stages of the writing process was important and necessary. Hull and Bartholomae (1986) stated class time was required on a regular basis to give proper recognition to writing in



the curriculum. Students needed help in the writing stages so as not to try to do everything at once. The tasks of revising and editing needed to be separated. Revising involved experimentation with sentences, style, and use of language whereas editing involved the process of looking for mistakes. "If the classroom is going to become a place for writers, students must be given time to write; they must be given good reasons to write; and they must have readers" (p. 52).

The importance of goal-setting and self-regulatory skills for the learning disabled adolescents was studied by Tollefson, Tracy, Johnsen, and Chatman (1986). Eight learning disabled seventh and eighth graders were taught goal-setting and self-regulatory skills in a resource room setting. Rate of assignment completion was compared at different times. The study revealed learning disabled students exhibited uneven patterns of skill acquisition; however, they could learn to set and work toward realistic goals.

#### Affect As Related to the

#### Writing Process

A qualitative research study of one child's growth in writing identified the sequences needed in the writing and revision process (Calkins, 1983). This study pointed out the need for the process to develop and in this sense the need for teachers to allow it to develop.

Bloom (1976) stated the individual perceived that which constituted success against the background of evidence received from the tasks. An individual tended to like the activities which had been successful. "If an individual believes he has done a number of prior related tasks successfully, he is likely to approach the next learning task with some degree of positive affect. If he believes he has been

unsuccessful with such prior tasks, he is likely to approach the next learning task with some degree of negative affect" (p. 78).

Moran (1983) identified four behaviors demonstrated by learning disabled adolescents as they approached the writing task:

1. Self-deprecating (and delaying) statements about their lack of writing skills;
2. Questions probing what the examiner might "want" them to say or whether specific features such as spelling would "count";
3. Nonverbal symptoms of discomfort, such as repeatedly shifting position in the chair, nail or cuticle biting, pencil chewing, or pencil tapping;
4. Avoidance schemes, including transparent attempts to engage the teacher in discussion of any topic other than writing.

Warner (1979) used a program designed to help educationally handicapped students write a more organized expository paragraph. Focus questions were used to help students develop specific details. She found student responses were very favorable and included improved attitudes toward writing. "The grunts and groans are diminishing in proportion to the success they are experiencing" (p. 36). Neubert and McNelis (1986) in the use of cooperative learning allowed student writers to provide feedback on the strengths and limitations of each other's writing. They found if students were left alone they ignored content and concentrated primarily on grammar and spelling errors. Using focus questions as guides, they were encouraged to be open-minded and used the freedom to accept or reject suggestions. Responses indicated good feelings on the part of students about the writing process, their motivation to write well increased, and they indicated

positive anticipation of peer responses. Weiss and Weiss (1982) expressed the need for learning disabled adolescents to feel like winners rather than losers. "By the time the learning disabled student has reached the secondary level, he may have become turned off to the school experience. He often exhibits confusing symptoms, suggestive of emotional maladjustment, and he needs alternate approaches to handle his problems" (p. 75). For those who have repeated experiences with failure, problems will pervade their performance at the secondary level. The importance of the writing is evidenced by the fact that beginning in grade five approximately 90% of school performance involves written expression. Weiss and Weiss continue to say, "Mastery of writing skills should be a primary objective in the curriculum for all students, especially the learning disabled. Given appropriate tools, checklists, formulas, and strategies we can train kids to be winners in handling writing skills" (p. 82).

The impact of using the Purdue Creative Thinking Program (PCTP) with adolescent learning disabled students was studied by Jaben et al. (1982). Results found learning disabled students who used the PCTP performed better on the verbal subtest than the learning disabled who did not participate; however, the PCTP did not stimulate figural aspects of creative behavior. Implications for future research suggested examining relationships between creativity instruction, personal adjustments, and self-concepts as well as creative training as a method to develop language behavior.

## CHAPTER III: METHODS AND PROCEDURES

This study was designed to evaluate the effectiveness of using the learning strategies model with learning disabled eighth graders. Writing and self-monitoring skills were taught in an effort to improve written expression. Strategies were introduced, modeled, practiced, and reviewed for a period of 20 weeks (first semester). During the remainder of the school year (second semester), self-monitoring strategies in error recognition and correction were integrated with creative writing. This chapter will identify the methods and procedures.

### Subjects

Eleven eighth-grade students, three females and eight males, participated in the study. All had been formally diagnosed as learning disabled by a multidisciplinary team within the school system and placed in a self-contained English (reading and writing) class. The subjects fell within the normal range on the WTSC-R Full Scale intelligence quotient. Required parental permission was secured by means of a letter to the parents. District policy required permission from school personnel. The Assistant Superintendent of Curriculum, Director of Special Services, building principals, and special education teachers gave permission for use of the specially designed materials and techniques.

### Learning Setting

The 11 students were assigned to this particular English class which met five days per week for 50 minutes. Students were seated around a group of three eight-foot tables for class instruction; in addition each student had access to a study carrel for a less distractible setting. The carrel was used for writing and test taking at the student's discretion. An additional table existed for conferencing. The teacher had ready access to both chalkboard and overhead projector as instructional aids.

### Instructional Material

A manual designed and written by the researcher entitled I Love Writing was given to the teacher for the first semester with user instructions. One full-time teacher, a student intern, and a part-time parental volunteer worked regularly with this group. User instructions directed them to do the following:

1. Encourage the student's writing.
2. Accept the student's writing progress.
3. Do not worry about capitalization, punctuation, and spelling as the program begins. Do not mark spelling errors.
4. Always encourage the use of a dictionary and/or a thesaurus.
5. Be a model. While the students write -- the teacher should write.
6. Use a five-stage plan for error detection and correction in which the teacher follows the stages adapted from Mehlmann and Waters (1985, pp. 584-585).

Stage 1 - Errors are underlined and clues given in exactly the order errors occur.

- Stage 2 - Errors are underlined and clues given in random order.
- Stage 3 - Errors are underlined but no clues are given.
- Stage 4 - Errors are detected independently by the student after being told how many exist. Example: "Find three errors."
- Stage 5 - Errors are detected independently by the student without teacher assistance.

7. Encourage students to read their written products aloud. Help them be aware of their audience.

8. Comment on each piece of writing. Compare it with the student's past work noting his or her progress.

9. Do not mark spelling errors, nor errors in strategies yet to be taught. Concentrate only on those that have been introduced.

The manual included 20 lessons. Each lesson was designed to require two class periods and was built around specific components of written language (see Appendix A). The teacher was free to use the lessons in any order desired; however, it was essential that the strategies for capitalization and punctuation be utilized as introduced in the manual (see Appendix B), and strategies for sentence formation and paragraphing as presented in Lessons 11-20 (see Appendix A).

When presenting a lesson, the teacher began by involving the students in appropriate prewriting activities. Using Lesson 1 as an example, the teacher used a wide variety of photographs and pictures to demonstrate visual awareness. The lesson entitled "I See . . ." was designed to help the students observe and describe what was seen. Through brainstorming, a discussion ensued concerning details to be

observed. As students gained an understanding the teacher continued by:

1. Introducing the strategies to be used;
2. Demonstrating the strategies using the chalkboard, overhead projector, actual models, or other appropriate means;
3. Verbalizing the strategies with the students; and
4. Practicing the strategies by helping students use materials, examples, group discussions, or other satisfactory techniques.

As students gained an understanding, each selected a picture of his or her choice and proceeded to write the rough draft. Completed rough drafts were submitted to the researcher for evaluation according to procedural plans.

Instructional material for the second semester consisted of another manual entitled The World of Writing: Writing One's Mind which was designed and prepared by the researcher (see Appendix C). Specific directions were given to the teacher which included establishing a writing folder for each student, specifically identifying "first" and "second" drafts, and allowing greater freedom with topics (see Appendix D).

The combined manuals introduced a writing program which responded to the necessary five components identified by Hammill and Larsen (1983). The mechanical and conventional components were introduced by means of basic strategies; productive and cognitive components were present in the design of the lessons. The linguistic component was represented in the emphasis on meaning throughout the program. By reading their written products, students were to become more efficient in conveying the meaning they intended, thereby gradually increasing the standards

of linguistic usage.

### Procedure

Two 50-minute class periods each week were to be used for writing with the option to use an additional class period when either the students or teacher saw it as appropriate to the situation; however, no less than two full class periods each week were to be devoted to writing.

1. The learning disabilities teacher provided all instruction using materials written and designed by the researcher.
2. Each student was expected to produce one written product to be handed in for evaluation each week.
3. Ruled paper designed by the teacher was to be used (see Appendix E).
4. Each student was free to write any number of products desired and could select the best one to hand in to the researcher for evaluation each week.

Two strategies were introduced each week. Following the introduction, students were expected to use the strategies in their written products. A five-stage procedure adapted from Mehlmann and Waters (1985) was used to teach error detection and correction.

Stage 1 - Errors were underlined using a bright color.

Clues (an identifying letter beside the strategy number) were placed in the margin. Example: C3 represented the third strategy in capitalization. Errors were identified in exactly the order they appeared.



Stage 2 - Errors were underlined and the clues given in random order.

Stage 3 - Errors were underlined but no clues were given.

Stage 4 - Errors were identified independently by the student after being told how many were present.

Stage 5 - Errors were detected independently by the student without teacher assistance.

Of importance was the fact that only errors relating to the strategies presented were identified. Once the student had been introduced to a strategy, errors relating to that strategy were underlined and clues were placed in the margin (see Appendix F, first sample). Much oral review and discussion was included in each class session. Other errors in mechanics, forming letters, words, and sentences, were ignored (see Appendix F, second sample). Neatness was encouraged but not corrected. Errors in appropriate use of punctuation, capitalization, and spelling other than those involved in strategy instruction were uncorrected. However, if a student asked about a non-strategy item, it was given a full explanation.

Weekly evaluation of written products by the researcher included reading the submitted papers, evaluating the student response to strategy instruction, underlining all errors present, and placing appropriate clues in the "comments" margin of the ruled paper (see Appendix F, third sample). Total words written, total spelling errors, and all strategy errors were recorded (see Appendix F, fourth sample). Papers were returned to the students by the following class period. They were asked to follow the clues, make corrections, and return corrected papers to the researcher. It was then possible to record

both errors committed and corrected. Many comments were made by the researcher concerning ideas, originality, content, quality of thinking, and items of humor. Students were encouraged to write freely and were richly praised for creativity and unusual elements.

During the second semester, implementation of all strategies was evaluated. One writing sample was evaluated each week. Total words generated, number of paragraphs, total errors, type of error, and words misspelled were recorded for each sample (see Appendix F, fourth sample). A writing file was maintained for each student with an editing guide placed inside. An important part of the writing process was to self-monitor using a COPS system adapted from Schumaker et al. (1981) (see Appendix G). Students were expected to ask the COPS questions:

C - Have I capitalized the first word, proper names,  
and any other options for using a capital letter?

O - How is the organization? Have I indented the  
paragraphs, written complete sentences, and used a  
title?

P - Have I used end punctuation and commas as needed?

S - Have I spelled all the words to the best of my  
ability?

House editors were appointed to encourage peer involvement in the monitoring process. Spelling errors remained unmarked; however, the COPS process encouraged the students to "spell to the best of their ability." Typewritten copies of student work were placed on transparencies for group sharing. Final drafts (completed assignments) were kept in a separate writing file. Each student had the responsibility of deciding at what point a draft was considered completed.

### Quantitative Evaluation

Data for quantitative evaluation consisted of student written products, as well as pretest and posttest measures of the Test of Written Language (TOWL) (Hammill & Larsen, 1983) and the Torrance Tests of Creative Thinking (TTCT) (Torrance, 1974).

The TOWL measured four of the five components deemed necessary for success in writing: mechanical, convention, linguistics, and cognitive using both contrived and spontaneous formats. An individual's ability to generate vocabulary was measured by analyzing a written sample (spontaneous) rather than using a contrived set of vocabulary recognition words. Through the normative tables, students were compared with students of similar ages. The contents of the six subtests, administered by the learning disabilities teacher and scored by the researcher, are described below.

Vocabulary. The number of words in a written sample having seven or more letters yielded this score. The authors based this procedure upon research suggesting word length strongly related to the individual's written language skills.

Thematic maturity. The student's ability to write in a logical, organized fashion was measured. A written sample was evaluated on the basis of specific criteria. The total number of "yes" answers constituted the raw score.

Spelling. Twenty-five words were written from dictation. The total number correct constituted the raw score.

Word usage. Based upon the report of Otto and Smith (1980) and Pooley et al. (1967), items selected were consistent with findings regarding the use of informal standard English such as tenses, plurals,

cases, double negatives, possessive pronouns, and irregular verbs. A contrived, cloze format was used asking students to write the missing word in its correct form. The number correct constituted the raw score.

Style. Correct usage of capitalization and punctuation was measured. Students were given sentences void of both and asked to rewrite them using the correct form. The number correct yielded a raw score.

Handwriting. The motoric aspects of writing, often a problem for the learning disabled, were measured. Samples of student writing were rated according to graded examples. A raw score was determined by estimating the writing sample and evaluating it according to scoring and legibility guides.

The TOWL was standardized on 3,418 students in 14 states. Both percentiles and standard scores were provided. The standard score for the total TOWL was called a Written Language Quotient (WLO).

#### Reliability

Internal consistency reliability scores on three subtests (Style, Spelling, and Word Usage) yielded scores of .83, .94, and .88 as measured by the Spearman-Brown formula with the 13-year-old age group having a mean value of .86, .92, and .88 over ages 7 to 18. These were the only subtests designed with homogeneity in mind. Stability reliability (the extent of consistent performance over time) was measured using test-retest procedure over a two-, three-, and four-week span. Results showed WLO, Spelling, Word Usage, Style, and Handwriting had adequate stability whereas the Thematic Maturity subtest was borderline and the stability of the Vocabulary subtest was questionable.

Inter-scoring reliability reflected the scoring difference existing among examiners when some degree of subjectivity existed. In this case 15 experienced teachers were asked to score 15 stories at third-grade, fifth-grade, and seventh-grade levels resulting in 225 different scores for each subtest. Percentages of agreement were .93 for Thematic Maturity, .76 for Handwriting, and .98 for Vocabulary.

Reliability as reflected by standard error of measurement using the formula  $SEM = \sqrt{1 - r}$  was calculated for the subtests at each of 11 age levels. Results showed the standard errors of measurement for the TOWL standard scores as Vocabulary 1.8, Thematic Maturity 1.4, Spelling 1.0, Word Usage 1.6, Style 1.1, Handwriting 1.2, and Written Language Quotient 4.7 at all age levels.

#### Validity

To test criterion-related validity, the TOWL was correlated with the Picture Story Language Test (PSLT) (Myklebust, 1965). The scores of five mentally retarded and 16 learning disabled adolescents were correlated. Results showed the WLQ of the TOWL correlated .68 with Words Per Sentence, .80 with the Syntax Quotient, and .67 with the Abstract/Concrete subtests of the PSLT. Correlations with the Test of Adolescent Language (TOAL) and the Comprehensive Test of Basic Skills (CTBS) yielded correlations in the .50's and .60's. Other correlations have supported the validity of the TOWL subtests.

Construct validity, the degree to which the TOWL measured a theoretical construct (written expression) as it related to age differentiation, subtest interrelationships, relationship to tests of reading, and speech, was investigated. In each case the TOWL correlated well. Since the learning disabled population was a group

that often included many poor writers, the use of the TOWL with this group was investigated. Scores of the learning disabled were all below average whereas those for the non-learning disabled were above average supporting the construct validity of the TOWL with respect to group differentiation (distinguishing between students who are able to write and those who lack that ability).

Pretest and posttest performance of the second semester was measured by the Torrance Tests of Creative Thinking (TTCT) using verbal tests, forms A and B. The verbal tests were designed for group administration. All seven tasks were administered following instructions and timing as specified in the manual.

The TTCT author acknowledged the fact that many children with learning difficulties show creative behavior on the figural tests but are unable to be successful with verbal tests. These children may do well on measures such as Product Improvement Activity or Unusual Uses but have difficulty with the task of formulating a hypothesis about causation and consequence as in the Ask-and-Guess Tests.

The verbal activities included:

1. Ask-and-guess activities. These activities allowed the student an opportunity to express curiosity, develop hypotheses, and think in terms of possibilities.

Ask Activity is designed to reveal the individual's ability to sense what one cannot find out from looking at the picture and to ask questions that will enable one to fill in the gaps in one's knowledge. . . . The Guess Causes and Guess Consequences Activities are designed to reveal the subject's ability to formulate hypotheses

concerning cause and effect. (Torrance, 1974, p. 12)

A black and white picture was provided to which the examinee responded by (a) writing all the questions needed to find out what was happening, (b) list possible causes of the action, and (c) list possible consequences of the action. These three activities comprised the first three subtests.

2. Product improvement. Activity four was concerned with ways in which a product could be improved.

3. Unusual uses. Activity five required the examinee to identify as many unusual uses for a common object.

4. Unusual questions. Activity six involved the same stimulus as the previous activity; however, it required the examinee to ask as many questions as possible. This activity was devised as a measure of divergent power serving as a prediction of creative achievement which is considered essential for the kind of creativity needed in the classroom.

5. Improbable situation. The last activity asked for all the things that would happen if a given improbable situation was true.

The entire battery was entitled Thinking Creatively with Words. All seven subtests yielded scores on fluency (the number of relevant responses); flexibility (the number of shifts in thinking or different categories of questions, causes, or consequences); and originality (the infrequency of the questions, causes, or consequences listed or the extent to which the answers departed from that which was commonplace).

### Reliability

Student responses were scored by the Scholastic Testing Service; therefore, scorer reliability correlations, according to studies, would be in the .80's and .90's. Studies of alternate form reliabilities over short time intervals found coefficients in the .70's to .90's. Reliability scores in the .60's and .70's were obtained when Unusual Uses Test with Ask-and-Guess Test were done over a three-test period.

### Validity

Since behavior can manifest creativity in numerous ways, the concept of an overall content validity coefficient is unrealistic. Studies comparing personality characteristics of persons achieving high scores on tests with those who have low scores have been completed. Also, studies involving correlations between creativity test scores and other measures have been conducted. Both procedures worked to establish construct validity. Evidence of construct validity was demonstrated by these studies. Daww (1966) showed high relationships between both originality and elaboration and the creativity scale of the Minnesota Importance Questionnaire. Supportive findings were reported in Torrance and Daww (1965a, 1965b). Studies involving adults, growth resulting from experiences in creative thinking, and preferred ways of learning have been conducted and reported adding support to the construct validity concept.

Concurrent validity was difficult to measure with respect to creativity and there were no general acceptable criteria. The author of TTCT found both peer nominations and teacher nominations to be positive criteria--however, not without criticism from researchers. With eighth, ninth, and tenth graders, peer nominations correlated at



significant levels with scores in fluency, flexibility, and inventiveness. Studies have been conducted evaluating teacher nominations of students at varying educational levels. In correlating creativity with educational achievement, high correlations have not existed. Coefficients in the .20's, .30's, and .40's resulted when correlating the TTCT composite score with measures of achievement. Studies have found the presence of authoritative learning situations as compared with the discovery method of learning may be a factor. An achievement measure may represent a very small sampling of the individual's ability in learning. If the sample tapped reflects learning by authority rather than discovery, the correlations with characteristics such as fluency, flexibility, and originality will be low.

#### Qualitative Approach

In an effort to learn more about student affect, the researcher invited each student to maintain a journal throughout the year. In this journal the student wrote freely about the writing program, school, and his or her feelings about it. Writing in the journal was not an assigned experience, but a spontaneous one.

All student products were analyzed with respect to personal comments, feelings, and elements of affect. Appropriate evidence was sorted, classified, and filed according to category. In addition, teacher interviews were conducted, tape recorded, and analyzed to obtain teacher reactions to affect changes.

The researcher made classroom visits and observations two times per week throughout the school year as writing samples were collected and returned. Over an 11-week period, classroom observations were made

three times per week diminishing to twice weekly after the eighth week. These observations included classrooms other than the self-contained room. Fieldnotes were prepared following each observation. Weekly conferences occurred with the instructors as the materials were used.

At the close of the year all information collected from student journals, student written products, teacher interviews, and classroom observations was evaluated and data were analyzed to support interpretation for qualitative analysis.

#### Statistical Analyses

Correlated t tests were conducted using data from pretests and posttests of the TOWL and TTCT.

Student product data were analyzed using one-factor analyses of variance (ANOVA) with repeated measures. If the ANOVA resulted in a significant F, multiple comparisons were conducted on the means using the Tukey test (Tukey, 1977) as described by Keppel (1982).

Many experiments in psychology and education require the repeated measurement of the same subjects under a number of different conditions. In such experiments it is sometimes said that each subject acts as his own control. . . . This is the case where performance is measured at different time intervals, as, for example, in the study of changes in dark adaptation with time, or for different numbers of trials in a simple learning experiment. Such experiments are called one-factor experiments with repeated measurements. (Ferguson, 1971, p. 241)

Qualitative and statistical analyses were designed to address the following questions:

1. As strategies are being taught what kinds of learning occur as evidenced in the pretest and posttest scores of the Test of Written Language (TOWL)?

2. During first semester what changes occur among the student product variables of total words generated and spelling errors?

3. Do student performances in fluency, flexibility, and originality, as measured by the Torrance Tests of Creative Thinking (TTCT), change as the result of creative writing during the second semester?

4. During the second semester what changes occur among student product variables of total words, capitalization errors, organizational errors, punctuation errors, and spelling errors? Do these learning disabled students demonstrate the ability to self-monitor by detecting and correcting their errors?

5. Do student performances in fluency, flexibility, and originality correlate with areas representing writing conventions as evidenced by pretest and posttest measures on the TTCT? If so, how?

6. What evidence exists demonstrating altered affect regarding the use of written language?

## CHAPTER IV: RESULTS--QUANTITATIVE AND QUALITATIVE

This study attempted to evaluate the effectiveness of using the learning strategies model to improve writing and self-monitoring skills with learning disabled eighth graders. Pretest and posttest data using the Test of Written Language (TOWL) and the Torrance Tests of Creative Thinking (TTCT) were analyzed. In addition to this, student written products were evaluated throughout both semesters. Information in the form of student journals, written products, teacher interviews, and classroom observations was used to document evidence of student affect. Major questions were studied relating to student performance. This chapter will address the questions posed in Chapters I and III.

### Quantitative Evaluation

#### First Semester

As strategies were being taught what kinds of learning occurred as evidenced in the pretest and posttest scores of the Test of Written Language (TOWL)? Results are shown in Table 1.

Pre- and post- differences showed Vocabulary performance increased  $t(10) = 2.67, p < .05$ . Other increases were Thematic Maturity  $t(10) = 4.29, p < .01$ ; Handwriting  $t(10) = 3.43, p < .01$ ; Written Language Quotient  $t(10) = 5.61, p < .01$ ; and Total Words  $t(10) = 4.10, p < .01$ .

During first semester what changes occurred among the student product variables of total words generated and spelling errors? Samples of student writing were evaluated for 18 consecutive weeks.

Table 1

Pre- and Post- Differences in the Test of Written Language (TOWL)

Subtest	N	Mean	St. Dev.	t	p
Vocabulary	11	1.455	1.809	2.67	0.024
Thematic Maturity	11	3.273	2.533	4.28	0.0016
Spelling	10	0.100	0.568	0.56	0.59
Word Usage	10	0.400	1.713	0.74	0.48
Style	11	0.182	1.722	0.35	0.73
Handwriting	11	2.091	2.023	3.43	0.0065
Written Language Quotient	11	8.73	5.160	5.61	0.0001
Total Words	11	72.9	58.90	4.10	0.0021

Means and standard deviations for these products are shown in Table 2.

Table 2

Student Product Means [S.D.s] by Six-Week Blocks for First Semester

Product	Block 1	Block 2	Block 3
Total Words	626.36 <sub>a</sub> [236.74]	456.55 <sub>b</sub> [129.87]	494.73 [143.00]
Spelling Errors	34.54 [15.63]	28.91 [8.23]	24.45 [16.37]
Words/Spelling Error	19.75 [7.46]	18.41 [13.11]	97.35 [177.46]

Note. Means within a given row with different subscripts are different,  $p < .05$ .

One-factor analyses of variance (ANOVA) with repeated measures were conducted with dependent variables of (1) total words generated, (2) spelling errors, and (3) words written per error. The results of the ANOVA for Total Words are shown in Table 3.

A significant  $p < .05$  reduction in total words generated occurred between Block 1 and Block 2 (first and second six-week periods). There were no significant differences between the means of Block 2 and Block 3 or Block 1 and Block 3.

Data revealed no significant main effects for spelling errors or words per spelling error during the three six-week periods.

Table 3

Analysis of Variance for Total Words

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	p
Students	590,627	10	59,063	1.44	<.05
Blocks	174,622	2	87,311	5.09	<.05
Interaction	342,989	20	17,149		
Total	1,108,238	32			

Second Semester

Did student performances in fluency, flexibility, and originality, as measured by the TTCT, change as the result of creative writing during the second semester? Verbal Tests A and B of the TTCT were administered 12 weeks apart. All seven subtests were given. Each yielded a raw score in fluency, flexibility, and originality. Pretest and posttest results yielded no significant differences among the scores. Means and standard deviations are shown in Table 4.

During the second semester what changes occurred among student product variables of total words, capitalization errors, organizational errors, punctuation errors, and spelling errors? Did this learning disabled population demonstrate the ability to self-monitor by detecting and correcting their errors? Student products were evaluated each week for 15 weeks. During this period the editing process was practiced. Results of changes among student products are shown in Table 5.

Table 4

Subtest Means [S.D.s] of the Torrance Test of Creative Thinking

Subtest	Pretest	Posttest	t	p
Fluency	99.36 [30.78]	101.45 [27.33]	0.82	0.43
Flexibility	95.91 [27.93]	99.00 [22.70]	0.84	0.42
Originality	84.73 [10.15]	82.36 [5.35]	1.12	0.29
Standard Score Range	24.64 [18.63]	25.18 [18.61]	0.18	0.86
Standard Score Average	93.18 [21.68]	94.36 [18.11]	0.51	0.62



Table 5

Student Product Means [S.D.s] by Five-Week Blocks for Second Semester

Student Products	Block 1	Block 2	Block 3
Total Words	824.50 <sub>c</sub> [235.40]	894.90 <sub>c</sub> [277.40]	1,476.80 <sub>d</sub> [442.20]
Capitalization Errors	4.18 [3.79]	3.27 [3.61]	3.64 [3.41]
Organizational Errors	0.36 [0.81]	0.18 [0.60]	0.82 [1.17]
Punctuation Errors	2.64 [2.69]	1.91 <sub>a</sub> [1.45]	5.18 <sub>b</sub> [3.43]
Spelling Errors	30.82 <sub>c</sub> [20.52]	29.82 <sub>a</sub> [21.50]	14.91 <sub>b,d</sub> [13.69]
Words/Spelling Error	36.91 <sub>c</sub> [23.56]	42.49 <sub>c</sub> [25.04]	168.25 <sub>d</sub> [162.87]
Words/Total Errors	27.02 <sub>c</sub> [12.48]	35.84 <sub>d</sub> [24.45]	79.47 <sub>b,d</sub> [52.32]

Note. Means within a given row with subscripts are different at  $p < .05$  (a, b) or  $p < .01$  (c, d).

One-factor analyses of variance with repeated measures were conducted with dependent variables of (1) total words generated, (2) capitalization errors, (3) organization errors, (4) punctuation

errors. (5) spelling errors, (6) words per spelling error, and (7) words per combined errors. Results of the ANOVA are shown in Tables 6, 7, 8, 9, and 10.

Table 6

Analysis of Variance for Total Words--Semester II

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	P
Students	2,039,283	10	203,928	3.29	<.05
Blocks	2,820,255	2	1,410,127	22.75	<.01
Interaction	1,239,677	20	61,984		
Total	6,099,214	32			

Table 7

Analysis of Variance for Punctuation Errors--Semester II

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	P
Students	98.73	10	9.87	1.76	>.05
Blocks	64.97	2	32.48	5.78	<.05
Interaction	112.36	20	5.62		
Total	276.06	32			

Table 8

Analysis of Variance for Spelling Errors--Semester II

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	P
Students	8,255	10	825	6.71	<.01
Blocks	1,747	2	873	7.10	<.01
Interaction	2,453	20	123		
Total	12,455	32			

Table 9

Analysis of Variance for Words Per Spelling Error--Semester II

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	p
Students	116,089	10	11,609	1.44	>.05
Blocks	121,352	2	60,676	7.54	<.01
Interaction	160,983	20	8,049		
Total	398,424	30			

Table 10

Analysis of Variance for Words Per Combined Error--Semester II

Source	Sum of Squares	Degrees of Freedom	Variance Estimate	F	p
Students	14,305	10	1,430	1.39	>.05
Blocks	17,354	2	8,677	8.42	<.01
Interaction	20,604	20	1,030		
Total	52,263	32			

If the ANOVA resulted in a significant F, multiple comparisons were conducted on the means using the Tukey test in the same manner following the first semester results. A significant ( $p < .01$ ) increase in number of words generated occurred both between Blocks 2 and 3 and Blocks 1 and 3. No significant change occurred between Blocks 1 and 2. Punctuation errors increased significantly ( $p < .05$ ) between Blocks 2 and 3 with no significant change between the first and second blocks. Spelling errors decreased significantly ( $p < .05$ ) between Blocks 2 and 3 and ( $p < .01$ ) between Blocks 1 and 3. The number of words the students wrote per error increased ( $p < .01$ ) between Blocks 2 and 3 as well as between Blocks 1 and 3. When considering all errors for which the students were self-monitoring, the number of words written per error increased ( $p < .05$ ) between Blocks 2 and 3 with an increase ( $p < .01$ ) between Block 1 and Block 3.

Data revealed no significant main effects for capitalization or organizational errors during the 15-week period.

Did student performances in fluency, flexibility, and originality correlate with areas representing writing conventions as evidenced by pretest and posttest measures on the TTCT? If so, how? A significant correlation ( $p < .05$ ) existed between total words generated by the students and flexibility and originality. A significant ( $p < .05$ ) negative correlation existed between the area identified as organizational errors among student products and originality as measured by the TTCT. Only 3 of the 35 correlation coefficients were significant at the  $p < .05$  level. Results are shown in Table 11.

Table 11

Pearson Product-Moment Correlations of Torrance Test of Creative Thinking Posttest Scores and Student Products--Semester II

	TW	Cap	Org	Punc	Sp	W/Sp	W/CE
Fluency	.41	-.18	-.38	-.29	.13	-.15	.13
Flexibility	.60*	.00	-.46	-.13	.21	.00	.17
Originality	.65*	.16	-.65*	.05	.17	.15	.16
Standard Score Range	.28	-.25	-.28	-.33	-.07	-.19	.08
Standard Score Average	.53	-.07	-.45	-.20	.12	-.06	.16

Note. TW=Total Words, Cap=Capitalization Errors, Org=Organizational Errors, Punc=Punctuation Errors, Sp=Spelling Errors, W/SP=Words per Spelling Error, W/CE=Words per Combined Error; \*  $p < .05$ .

Qualitative Approach

What evidence existed demonstrating altered affect regarding the use of written language?

The first source of data for this aspect of the study was the analyses of student writing which included ongoing journal entries as well as class writing. A second source of data included discussions and formal interview sessions with the learning disabilities teacher. A third source came from classroom observations whereby the researcher was physically present to see and hear student performance, then record that which was directly observed. (Note: The following quotations from student writings are transcribed verbatim.)

### Journal Entries

Entries in student journals began in September. A wide variety of pleasurable activities were discussed which included fishing, shopping, staying with cousins, visiting grandparents, going snowmobiling, riding four-wheelers, going to cattle auctions, and visiting relatives. One such entry discussed the pleasure of riding four-wheelers in the Badlands and observing an abundance of deer, fox, elk, and antelope: "We had lots of fun out there. I would say that was one of my best times" (Student No. 10, Journal, p. 49). Other pleasures included activities such as hunting, baseball, soccer, football, basketball, spring soccer, and, as the snow melted, golf: "All most the snow is gone. Right now its raining out side. The golf cources open April 15 I can not wait" (Student No. 1, Journal, p. 44).

Likes were strongly expressed. Friends ranked high as did traveling, going on vacations, summer activities, and all forms of sports. School was met with mixed emotions. As Student No. 5 said, "School is fun because you get to see you friends more. The bad part about it is your classes when you have to work" (Journal, p. 1). Journal entries recorded fear of the new school year, concerns about

teacher relationships, and anxiety about homework. For some the feelings about school were positive but the stress produced by academic expectations was evident.

The beginning of school this year was kind of ruff for me. I was having problems with History because I was falling behind in my t notes and then I fell behind in Science but not Im all caught up. I like all my classes and teachers like I always have. Actually there kind of fun. All my teachers are very nice. (Student No. 8, Journal, p. 9)

The schoolwork itself was a problem as revealed by Student No. 1. "This school year so far is hard alot of home work expetchly History and math. I don't like History or math" (Journal, p. 4). Anxiety about homework, classwork, and school performance resulted in lower expectations of self. Student No. 1 spoke of being content when D's were received; however, his father did not share those feelings:

I finally got a good report card. I got five C's and two d's. The Effort was great A and 2's. Conduct was great too. My dad was sod of happy. But he wasn't happy about the two d's. I'm happy about my report card!  
(Journal, p. 5)

Feelings about school were reflected by Student No. 2 as he said, "The first week of school was pritty good. The first day was pritty stoupid but Im haveing fun it still is pritty shakey I mite like school this year. I like all of my teachers this year. I had lots of fun this summer" (Journal, p. 1). Whereas, Student No. 3 reflected strong feelings as he said:

one day there was a home that at (name of school). They received a phone call at 7:45 and a person said, "The school will go up in smoke at exactly 8:00 o'clock A.M." The woman that answered the phone told the Pringle she had reserved a call that there was a home and by that time it was 7:49. (Journal, p. 11)

#### Other Written Products

Students spoke freely in greater detail in their written products. Dislikes were strongly expressed. The word "hate" was often used when speaking about school. Examples which appeared early in the year include:

I hate going to school. (Student No. 10)

I hate Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays. I like Saturdays and Sundays the most because there's no school. I hate school so much I can't believe it. (Student No. 8)

I hate school on Monday's. I hate to have five hours of homework. (Student No. 7)

I hate this paper. (Student No. 3)

I hate books. I hate school. (Student No. 2)

I hate school. I hate walking around. I hate doing my homework. (Student No. 1)

I believe that school stinks. I never want to go school.  
(Student No. 2)

More lengthy negative statements about school appeared in written products. Student No. 8 said:



My perfect day was great when we didn't have school. And tomorrow will be a great day because its my birthday. But I love not having school the most theres barely any homework I have to do. And I get to do alot more stuff than when I come home from school. I get to play with friends longer.

Student No. 5 complained that being in the eighth grade was boring. One could not chew gum, write notes, listen to the radio, or get half-hour breaks. School could be much more fun and exciting.

Ample evidence existed in both student journals and their written products to document negative affect about school, homework, and academic expectations. As the year progressed, negative statements diminished in both examples of student writing. In May, Student No. 1 said, "School here is great." Student No. 2 expressed, "I'm great and school is O.K." Student No. 7 said, ". . . school is getting pretty exciting because next year . . . I'll be a freshman in high school. Wow." He continued to speak of his anticipation of being on the honor roll. His grades had improved each quarter. In his writing he asked his teacher if students who had learning disabilities ever were on the honor roll. He said, ". . . assuming that none of your students ever made it to the honor roll and a really smart kid like me has a real good chance of making it. Most of all in the 4th quarter I will be among the 30-40 smartest kids in 8th grade. Is that a big feat or what. So I feel that I can do it. I will make it O.K." (Journal, Vol. 2, p. 7).

## Teacher Interviews

Teacher interviews revealed altered student behaviors as the program progressed.

Writing behaviors became less rigid. In the teacher's opinion the students as a whole were somewhat rigid in their attitude toward writing as the program began.

When it (writing) was suggested it almost seemed as if the students were very distant. It isn't something that they seemed to relate to. As the months progressed there seemed to be much more fluency and less rigid kinds of behaviors associated with the process of writing.

(Interview No. 1, p. 1)

When speaking of Student No. 2 the teacher said, "I think this was a student who was very rigid. I don't know what caused all of his attitudes but . . . so many people have remarked about how much he changed" (Interview No. 1, p. 6). Another specific reference was made to Student No. 3 who refused to write as the program began. While working with him the teacher said, "You think of your ideas. I'll come back to you and write them down in just a moment." She continued, "He was rigid even in the ideas that he spoke. They were short, simple sentences or fragments and I simply encouraged him initially to tell me what his thoughts were on the subject" (Interview No. 1, p. 2). As the student spoke, the teacher wrote for him.

On-task writing behavior increased. The amount of writing students could do in one session increased. Initially students were expected to write a five- to eight-minute session.

Students would find a comfortable place to do their writing; then they would walk back to the table where we would assemble because they were in effect telling me, "I have finished my writing." They had completed the writing in five to eight minutes. As the year progressed not only did the students write the entire period, but they were reluctant to stop when it was time to be dismissed to go to the next class.

(Interview No. 1, p. 2)

The teacher as well as other instructors reported this as a very big, noticeable change in student behavior.

Students exhibited less dependent behavior. Some of the students demonstrated dependent behavior when the writing program began, dependent to the extent they would say they couldn't write. Student No. 3 said "I can't write" at the beginning. The teacher reported, ". . . it was almost as if he had already fully decided that since he couldn't do this then certainly something else would have to be substituted" (Interview No. 1, p. 1). Toward the close of the year, the students wrote a more lengthy writing which they called their "book." Greater independence was evidenced as they worked on their projects. Some students were not willing to put closure to their books. They wanted to continue. The teacher said, ". . . the students were not easily talked into the idea of having this book process come to an end" (Interview No. 1, p. 3).

Written products were read. The writing program included having student writing read aloud. Teacher discussions revealed this was encouraged and, initially, it was a problem. Students did not want to

read their work aloud, nor did they want it read by the teacher.

"There were certain students who opened up a bit and they would look through their writing and see whether they thought perhaps it would be acceptable to the group or to the instructors. But there certainly got to be a change in behavior whereby they became much less resistant about having their work read aloud" (Interview No. 1, p. 5).

Weekly discussions with the teacher indicated the next step was to ask them to read their own writing. As the writing program progressed, students opened up to this idea. Teacher reports indicated as they did this they read their work correctly as to grammatical form even though what was written on the paper was not correct. This became a very common occurrence.

Students functioned cohesively. Teacher reports indicated as students entered the classroom they would immediately begin talking about some topic of interest: the writing program, some school activity, or a national news event. "I wanted the students to become verbal prior to writing down these feelings on paper," the teacher said (Interview No. 1, p. 6). Students functioned as a unit. They knew it was their time to exchange ideas within the group as well as a time when the teacher exchanged ideas with them. This first part of the lesson was referred to as "brainstorming" or "prewriting":

Did we have a specific format we followed? Never! It was a free-flowing class but we were always on task. We really talked. . . . it seemed as if they worked as such a cohesive unit that a format and rigid rules were simply not applicable. (Interview No. 1, p. 7)

The prewriting stage was considered important and essential in the initial stages of writing. The teacher felt this was most helpful for those students who did not think of themselves as being creative:

. . . I think that in some respects the students felt their writing would be rejected, that they couldn't do it and so that no matter what they did it would be rejected; therefore, why try. (Interview No. 1, p. 7)

Through the brainstorming process the teacher wanted to help the students be instigators of thoughts and sentences. As they listened to others express ideas in brainstorming, they would modify their thoughts.

Acceptance of student work was a motivator. The teacher felt one outstanding feature of this program was the total acceptance of student writing.

. . . the acceptance of the students. . . . I thought that was uncanny to think that they suddenly went from black to white and they knew that what they turned in would have value. It would be pointed out, singled out, mentioned, and spoken to them and other people would hear it. I think that was just fabulous. I really do.

Accepting what they did. (Interview No. 2, p. 1)

The teacher spoke about the many sad and unfortunate incidents these students have had with writing. Many papers which they have received graded with red marks have totally turned them off.

Why would they get inspired to do something when they are absolutely certain or almost certain that they could never succeed? It is just a given. And that is . . .

why your program was so great because the strategies did so much for their self-confidence. (Interview No. 1, p. 10)

Greater freedom of expression was evidenced. Journal writing was viewed by the teacher as very helpful in giving students an opportunity to express their thoughts and feelings. All the students were asked if they would consider keeping a journal and all responded positively. However, at least half of them asked the teacher not to read their journal entries aloud. Confidentiality helped the students feel freedom of expression. As the teacher said, ". . . again we know they were putting down feelings, thoughts, and ideas that they didn't know how the group would receive . . ." (Interview No. 1, p. 8).

One area about which the teacher expressed strong feeling was the importance of creative writing for this population. In her opinion most students seemed to have a report-writing frame of reference, that is, for those who were writers. Students saw report writing as getting a book and copying from the book as best they could. Often report writing was requested by content-area teachers; however, creative writing was a much needed concept:

. . . through your writing strategies . . . I think the most marvelous thing that you did was to get students to realize that creative writing is within themselves. I don't think that they really thought that they could do it and they didn't think that's what it was. (Interview No. 1, p. 8)

Classroom Observation

Early in the year fieldnotes indicated the following sequence revealing use of class time by Student No. 5:

10:58 -- instructions ended;

10:59 -- unpiling books;

11:01 -- chewing pencil;

11:03 -- writing using very large letters;

11:09 -- scratching nose, flipping notebook pages, looking at neighbors, looking at door, adjusting glasses, and sitting quietly;

11:10 -- drawing, chewing pencil, doodling, chewing pencil, placing pencil in mouth;

11:11 -- writing;

11:12 -- placing pencil in mouth, looking around the room, placing pencil in mouth, looking at the observer;

11:14 -- chewing on pencil, looking into space, chewing on pencil, pushing up glasses, methodically folding a piece of paper;

11:15 -- writing;

11:16 -- writing;

11:17 -- writing;

11:18 -- writing;

11:19 -- writing and using a text, looking at clock;

11:20 -- piling up books, closing notebook, straightening clothes, and walking out of the classroom.

(Observation No. 9, p. 34)

As one can see, many minutes were wasted with only the last five being productive. As the year progressed, fieldnotes verified teacher statements as to increased student on-task behavior while doing written work.

During these observational experiences, questions surfaced and were explored as data were recorded by student journals, written products, interviews, or observations. Each question was explored in the event a working hypothesis would develop. Questions for which evidence existed follow.

1. As students' writing abilities increased, in what ways did students want to alter their own writing?

Student No. 1: "I'd like to change my writing so it's clearer and slower."

Student No. 9: "Something I'd like to change about my writing is I would like to make it more interesting."

Student No. 11: "Something I would like to change is I would like to write stories."

2. Did students' feelings about spelling change as the program progressed?

Student No. 3: "Spelling would be easier if I studied more. I would like to change my spelling."

Student No. 10: "Something I'd like to change about my writing is to learn how to spell some harder words correctly."

Student No. 7: "Spelling would be easier if there wouldn't be any rules in spelling otherwise spelling is about my best thing in English."



- Student No. 6: "I don't worry about spelling."
- Student No. 5: "Spelling would be easier if I was smarter."
- Student No. 8: "Spelling is too easy for me."
- Student No. 9: "Spelling would be easier if I thought about the world more."
- Student No. 10: "Spelling would be easier if I had a Dictionary in my head."

3. What feelings did students express about writing preferences?

Students indicated preferences in the following areas:

- writing about things they liked to do;
- writing about his/her own life;
- writing about people;
- writing about sports in ". . . some kind of a science sort of way" (Student No. 7 Journal entry);
- writing about baseball games;
- writing about adventures;
- writing about things that aren't true.

In addition, students made specific statements about their preferences:

- Student No. 1: "One thing I like to write to show my feelings."
- Student No. 2: "You should be able to write anything you want."
- Student No. 3: "You can write to different people you know."

4. Did students like their writing?

- Student No. 1: "I like my writing because it's interesting."
- Student No. 2: "I like my writing because I can write about anything."
- Student No. 3: "I can write to people in different towns."
- Student No. 5: "I like my writing because how it ends."

Student No. 4: "I like my writing because I'm not as sloppy as I was before."

Student No. 7: "I like my writing because it gives me able to write anything I want sports, science, or something else."

Student No. 9: "I like my writing because you know you can write a story."

Student No. 10: "I like my writing because it's my own writing."

Student No. 9: "I real don't like my writing."

Student No. 11: "I like my writing because it is my own."

5. Was writing important to the students?

Students spoke of not being able to get a job if they lacked writing skills. One student felt it would be necessary to quit school if he could not write. As Student No. 4 said, "If I couldn't write I probably wouldn't get very far in life." They spoke of feeling "bad" and "dumb" when they could not write. Student No. 7 said, "If I couldn't write it would be terrible couldn't get any checks which would give you money and in school couldn't pass anything since you can't write." Student No. 8 said, "If I couldn't write I'd hate it." Student No. 9 said, "If I couldn't write I couldn't live." Student No. 10 said, "If I couldn't write I think it would be hard to do anything."

6. What types of reinforcement were practiced and how effective were they?

Much reinforcement was given in the form of positive written comments by the researcher. Fieldnotes and teacher interviews revealed in addition to spoken reinforcement the teacher used a system which she

devised. At times she rewarded students for completing a specific task and at other times she placed the emphasis on simply being comfortable in order to do a good job:

. . . it's really hard if you are feeling hungry to do your best work because it catches up with you . . . so there was popcorn, granola, or something kept in a special place. I would simply say, "If you feel you have done something good in writing you feel perfectly free to walk over to this place." It was never just given out. At first this reinforcer was really a big thing, almost like an elementary party. Toward the end that just became phased out. (Teacher Interview No. 2, p. 7)

What at first was a very important part of the writing experience no longer was necessary.

Each day strategies were discussed and reviewed. Since a coding system was used, it was necessary for students to remember the strategy well in order to interpret the code. Students were rewarded for remembering strategies and were given oral praise when they demonstrated successful recall.

We instigated a system whereby students would receive some form of reinforcement when they could give examples of strategies in both written and spoken form. This became a reinforcer . . . to an extent that was just very pleasing. It wasn't an overly anticipated event and yet . . . they really responded well to it. (Teacher Interview No. 1, p. 5)

## 7. Did students feel their writing had changed?

Student No. 4: "I think my writing has changed this year because now I know how to put words together."

Student No. 3: "My writing has changed because the school makes me do writing exercises."

Student No. 5: "I think my writing has changed this year because of this class."

Student No. 6: "I think my writing has changed this year because I write more than ever."

Student No. 7: "I feel that my writing has changed this year because my hand writing looks neater than early in the year and I feel that I can write more in a short time but can still read it."

Student No. 9: "My writing has changed this year because it has helped me put words in different ways."

Student No. 10: "I think my writing has changed this year because we learn more about writing."

Student No. 11: "My writing has changed this year because I wrote alot."

## 8. What did students like best about writing?

Student No. 4: "One thing I like best about writing is you can usually write about anything you want, and you can express your feelings better."

Student No. 5: "One of the things I like best about writing is making things up."

Student No. 6: "I like everything."

- Student No. 7: "One thing that I like best about writing because like he said before it expresses my and other people's thoughts and it is pretty fun."
- Student No. 8: "I think my handwriting has changed a little because Ive practice for so long."
- Student No. 9: "I don't like to write but we half to do it."
- Student No. 11: "I like finishing my book in writing most because then you know it's yours."
- Student No. 3: "I like to wight when I have to."

#### Hypotheses That Evolved

Five definite hypotheses emerged through the data. All are valid topic for further investigation.

1. Observational evidence, teacher interviews, student journals, and student written products pointed to increased positive affect about the writing task.
2. Altered student behavior produced more effective use of class time resulting in greater on-task behaviors.
3. An increased amount of self-confidence was evidenced as the students moved from feelings of "I can't write" to "Maybe I can write" to "I can write a story."
4. Greater feelings of positive affect transferred to other areas of school life causing more successful academic performance.
5. Through successful experiences, students learned to claim their writing as their own and accept it as a valuable tool in their lives.

CHAPTER V: SUMMARY, DISCUSSION, IMPLICATIONS,  
AND RECOMMENDATIONS

General Summary

This study was designed to analyze writing behavior and performance of learning disabled adolescents in the junior high school setting. In order to be successful in the secondary curriculum, improved writing skills were necessary. It was hypothesized that the skill of self-monitoring in the detecting and correcting of errors would greatly increase the success level and would also produce greater writing independence.

The first semester involved basic strategy instruction in the use of capitalization, punctuation, sentence formation, and error correction. Students were given no less than two 50-minute class periods each week for writing. Instructional materials providing a variety of writing suggestions and motivations were used. Spelling errors were neither marked nor corrected. Each week student writing was analyzed and evaluated.

Self-monitoring strategies including editing skills were introduced during the second semester. Students were expected to utilize the capitalization, punctuation, and sentence formation strategies presented during the previous semester. During this part of the writing program, students were given a wider range of topics, more freedom of choice, as well as greater freedom in their writing.

Spelling errors were neither marked nor corrected. Strategies in self-monitoring included specific editing skills which encouraged the students to find and correct any strategy errors and misspelled words in their written products. Student journals, student written products, observations, and interviews were analyzed to assess any changes in student affect during this writing experience.

#### Summary and Discussion - First Semester

The first week of school students were given the Test of Written Language. Student performance ranged from the 2nd to the 37th percentile in spelling, word usage, and style (including punctuation and capitalization). The results spoke for themselves as to the level of student success in junior high school written products.

At the close of the semester, the Test of Written Language was again administered. Statistically significant increases were shown in vocabulary, thematic maturity, handwriting, total words, and the written language quotient. As strategies were being taught, students improved in their ability to use longer words (vocabulary) since the TOWL vocabulary subtest counted words comprised of seven or more letters; improved their ability to write in a logical, organized fashion (thematic maturity); improved the motoric aspects (handwriting); and increased their total word output. Handwriting which is often almost illegible among learning disabled secondary students was one of the necessary components for success in use of the written language identified by Hammill and Larsen (1983). Increased writing provided by this program gave valuable practice in motoric movements to the extent the students were able to improve their cursive writing. Without the added practice, improvement would have been unlikely.

Among student products, total words yielded a significant decrease especially between the first and second six-week period. The total word increase shown by the TOWL was not reflected in the student product analysis. A greater number of words were written during Block 1 when strategy implementation was the lowest. As the number of strategies increased, total words decreased suggesting a diminished word output as the students concentrated on strategy implementation. No significant change in either spelling performance or the number of words written per spelling error occurred during the three six-week blocks.

#### Summary and Discussion - Second Semester

Greater freedom existed for both teacher and students during the second semester. Students were given more options for topic selections and were often free to select their own. All strategies were reviewed on a regular basis. Student performances in fluency, flexibility, and originality, as measured by the Torrance Tests of Creative Thinking (TTCT), did not change significantly. According to the authors, verbal fluency meant the student could produce a large number of ideas with words; verbal flexibility meant the student could produce a variety of kinds of ideas and shift from one to another; verbal originality meant the student was able to produce ideas that were unusual and unique. All three represented activities which the learning disabled adolescent was not in the habit of doing. Considering the nationwide survey reported by Deshler et al. (1979), there were five distinct approaches used to serve learning disabled adolescents. Not any of these cultivated the type of skills utilized in verbal fluency, verbal flexibility, and verbal originality. The TTCT author acknowledged that



many learning disabled students showed creative behavior on the figural tests but were unable to be successful on verbal tests. It may be appropriate to consider the investigation of creativity training with this population as suggested by Jaben et al. (1982). Since other dimensions of student behavior point to the fact that this population requires more time for effects of learning to be manifested, it is possible a greater difference among the scores would have existed if more time had elapsed between testing periods.

Student products were analyzed each week for 15 weeks. During this period self-monitoring skills were practiced. Results showed a significant ( $p < .01$ ) increase in total words between Blocks 2 and 3 and Blocks 1 and 3. Punctuation errors increased ( $p < .05$ ) as words increased. Spelling errors decreased ( $p < .05$ ) between Blocks 2 and 3 and ( $p < .01$ ) between Blocks 1 and 3. The number of words the students were able to write without committing spelling errors increased ( $p < .01$ ) between Blocks 2 and 3 as well as between Blocks 1 and 3. Student writing improved ( $p < .05$ ) between Blocks 2 and 3 with an increase ( $p < .01$ ) between Blocks 1 and 3 when all errors were considered. No significant change occurred with regard to capitalization or organizational errors. It is noteworthy that the greatest amount of change occurred between Blocks 2 and 3 repeatedly which reinforces the theory that the learning disabled require more time to internalize a concept and put it into practice.

Spelling errors were significantly decreasing as the students wrote more. This suggested they were able to self-monitor and correct misspelled words during the editing process. Students improved in their ability to write more words without committing spelling errors.

Even though there was no significant change in capitalization and organization, the total number of words they could write without committing any of the four types of errors improved significantly. Punctuation errors increased as the writing increased suggesting the students were far from competent in this area. The strategies taught were very basic. As total words increased, students needed more strategies in punctuation. They were in need of more instruction. Results showed self-monitoring assisted the students in lowering spelling errors as they increased their word output; however, they were not able to effectively monitor their punctuation errors.

Only 3 of the 35 correlation coefficients were significant when analyzing the correlation of fluency, flexibility, and originality with areas representing writing conventions. Total words correlated with flexibility and originality at a significant level ( $p < .05$ ). A significant negative correlation existed between the area identified as organization and originality. This suggested much of what was done in writing in a traditional learning disabilities classroom would not aid in developing creativity in the writing process. The emphasis given to learning the basics would not aid creativity in writing. It was noteworthy that generating written words was necessary if verbal flexibility and verbal originality were to increase. For the students who were not given an opportunity to write, they would not increase their ability to produce a variety of kinds of ideas nor would they have the opportunity to develop a variety of approaches or strategies. Without the opportunity to write, students would fail to develop ideas that were unique and original.

### Changes in Affect

Journals reflected fewer negative statements about school. Although this absence did not guarantee altered affect, it did indicate the students were no longer compelled to write about the dislikes. A much more positive feeling about school was revealed by several students. Student dislike was obvious as the program began. Students demonstrated avoidance that reflected dislike about school, classes, writing, and anything academic. Bloom (1976) pointed to the fact that a child who has rarely been able to succeed at school tasks is unlikely to have any sense of being able to do what is right:

He is unlikely to have received much approval for his schoolwork from teachers, from parents, and even from his peers . . . he must have some sense that school is not a source of joy, success, and happiness. His attitude is likely to be generally negative or on the unfavorable side of the attitude scale toward school and school learning. School is not a good thing in his mind and generally it is a bad thing, and he is unlikely to be very eager for more of the same. (p. 7)

### Implications

In viewing the results of this study, many implications can be cited to improve our services to the learning disabled adolescent. These implications include:

1. First semester "overload." When viewing the decrease in total words generated during the three six-week blocks of time, one can conclude a type of "overload" occurred. In the first block, the number of words generated were the highest at a time when other

expectations were the lowest. As the number of learning strategies increased, the student's ability to handle all the different aspects decreased. During this period of time writing topics were for the most part assigned so students did not have free choice. Frequently in the junior high school curriculum, students must respond to "assigned" topics. It is important to be given the opportunity to write under those conditions if greater success in the secondary curriculum is desired. While students are being taught strategies, it is important that other concerns are kept at a minimum.

2. Learning strategies model. The effectiveness of the learning strategies model as a teaching technique was evident in the fact that the students were able to effectively use the strategies during the instructional period as well as later during the following semester. This agreed with the findings of Schumaker et al. (1981) who concluded learning disabled secondary students were able to effectively use strategies in eliminating errors in writing. In the present writing program, only two strategies were presented with each lesson allowing a full week for the student to adapt to the information. Of importance was the amount included in each strategy. If smaller units were used, it was more likely the learning disabled student would be able to internalize the concept.

3. Self-monitoring. The decrease in spelling errors during the second semester could be attributed to the presence of self-monitoring editing skills. The number of words per error increased and the number of spelling errors decreased. While students were not writing fewer misspelled words, they were able to identify and correct the incorrect spellings as part of the writing process. Certain problems may never

be "corrected" in that the students may never be able to avoid writing some of the incorrect words. If, however, they are able to detect them and effectively correct them, the problem will no longer be a "disability." In the present study, observations regarding oral reading supported earlier findings of Bartholomae (1980), Cohen (1985), and Neubert and McNelis (1986). Oral reading of the student's own writing strengthened error correction.

4. Time is needed. Time is required to learn to write. For most learning disabled junior high students, the amount of time allowed for the writing process is grossly inadequate. Two class periods each week did not facilitate the needs of the students in the present study. As they added an additional class period, their total word output increased. Deshler (1974) found the learning disabled demonstrated necessary potential but specific strategy systems needed to be taught. He felt it was necessary that the students could practice a strategy until the process would become automatic. If this was going to be done, adequate time needed to be given to the task.

5. Improved handwriting. As students were taught strategies, ample time was given for them to put words on paper; and several began to write cursively. Manuscript writing was used by many when the year began. At no time during this writing program were the students told or asked to write cursively. For those whose writing was grossly out of proportion, the letter formations and positioning improved. Of essence was the practice provided so handwriting could improve.

6. Freedom to write. During the second semester, the students were given more freedom to select writing topics. At this time the greatest number of words were generated. Teachers reported the

students became less rigid in the writing process. As disabled students were given the opportunity to cultivate written expression, personal ownership was realized. For the first time, learning disabled adolescents knew others were accepting what was being said.

7. Altered affect. Success in writing was a totally new experience for these learning disabled students. Class discussions became "fun" times. Receiving papers that had been evaluated became a time of excitement rather than fear. Contributing to class discussions helped the students feel good about school. Improving their performance increased their motivation. The entire process grew. Students enjoyed both one another and the class environment more.

8. A negative correlation. A negative correlation existed between organizational errors and originality. Out of 35 intercorrelations only 3 were statistically significant. Elements stressed by teachers as important in classroom instruction may not produce creativity. Through the use of the learning strategies model, necessary instruction can be provided. In this way creative talents need not remain hidden. The learning disabled students can be creative if the right opportunities are made available. In our zeal to teach perfection, we may be overlooking an extremely important commodity.

9. The tip of the iceberg. In the length of time this study existed, the writing process had just begun. More strategies were needed to assist the learning disabled adolescent in achieving more success at the junior high level. As the present study indicated, these students needed more time to internalize the concepts. The effectiveness of using one semester to present strategy instruction followed immediately by a second semester given to putting the

strategies into practice was demonstrated by this study.

10. Writing as a reality. Effective writing can be a reality for the learning disabled adolescent. Unless changes are made in our educational programs for the learning disabled, this will not happen. Writing once each week or less will not develop this skill. Meticulous marking of each spelling error by the teacher will not correct spelling problems. Constantly pointing out all the existing errors will not teach the desire to write. The implications of this study suggest a need for effective writing strategies, given in the correct amount, coupled with ample time for practice, and taught in an atmosphere of freedom as the ingredients for effective writing. The educational system can do much more to prepare the learning disabled adolescent for success in the secondary school than has been evidenced by past performance.

#### Recommendations

1. Writing programs for the learning disabled need to be designed and integrated throughout their educational experience.
2. Students need to be given the opportunity to put their thoughts and ideas on paper by writing often, over an extended period of time, with positive feedback and much encouragement.
3. Students would benefit from using their own writing for instruction rather than teacher-generated products such as worksheets or printed materials. This procedure would increase their sense of ownership as well as help build self-confidence and positive affect about writing.
4. As teachers evaluate student writing it would seem advantageous to emphasize the positive aspects, focusing less on errors. However,

error knowledge is necessary for both the teacher and student as a basis for corrective strategy design.

5. Through the use of self-monitoring strategies, spelling problems could be reduced for the learning disabled adolescent.

6. The learning strategies model could be used effectively with learning disabled students in a self-contained or mainstreamed classroom. In either setting the amount of information presented at a given time needs to be in small, concise units to facilitate learning and help students internalize the concepts.

7. Additional research could reveal the types of spelling problems which do not exist within the editing scope of the learning disabled. Specific strategies could be designed to speak to those needs.

8. Further research is needed regarding student affect in an effort to aid the learning disabled student in viewing the school environment, written expression, and the entire learning process in a more positive manner.



APPENDICES

APPENDIX A

LESSON OUTLINE: I LOVE WRITING

## Lesson Outline

I Love Writing

<u>Lesson No.</u>	<u>Title</u>	<u>Objective</u>
Lessons 1 and 2	I See	To become better at observing and describing what is seen
Lesson 3	Sentence Completion	To express feelings about self
Lesson 4	I Hear	To listen and write about what is heard
Lesson 5	Writing Instructions	To become aware of logical order and sequence
Lesson 6	My Perfect Day	To use one's imagination and reveal personal feelings and wishes
Lesson 7	Have Fun with Ads	To become aware of the power of persuasion, observation, and description
Lesson 8	Beautiful Baby	To describe self and share with others
Lesson 9	Giving Advice	To write about the needs of others
Lesson 10	(free selection)	To write as much as one likes about whatever one likes
Lesson 11	The Comics Are Here	To identify the kernel sentence
Lesson 12	Pink/Blue Kernels	To add description
Lesson 13	Dilly Day	To correct a "dilly" sentence
Lesson 14	Practice	To expand the kernel sentence
Lesson 15	A Zany Game	To add who, did what, when, where, and why
Lesson 16	Kernel Headline	To build a paragraph
Lesson 17	Kernel Story	To build more than one paragraph

Lesson 18	A Pair of Kernels	To use sentence pairs
Lesson 19	Sentence Fun	To use the compound sentence
Lesson 20	Troubleshooting	To recognize the run-on

APPENDIX B

CAPITALIZATION AND PUNCTUATION STRATEGIES

### Capitalization Strategies

Rule 1: Capitalize the first word of every sentence. Capitalize the pronoun "I" whenever it is used.

Examples: They took a trip to Washington, D.C.  
He said, "I will be there on time."

Rule 2: Capitalize the names of persons.

Examples: Uncle Sam, Harry, Jill, Mary

Capitalize groups of people belonging to religions.

Examples: Baptist, Catholic, Lutheran, Greek Orthodox

Capitalize groups of people belonging to races.

Examples: Indian, Hispanic, Eskimo, Black

Capitalize groups of people belonging to countries.

Examples: American, African, German, Asian

Rule 3: Capitalize the names of days of the week, months, and holidays.

Examples: Sunday, February, New Year's Day

Rule 4: Capitalize names of particular places. Abbreviations of names are capitalized, too.

Examples: Highway 50, Lincoln Memorial, the South

Rule 5: Capitalize the names of organizations.

Examples: Rotary Club, Boy Scouts of America, House of Representatives

Rule 6: Capitalize titles of books, plays, stories, poems, newspapers, articles, themes, works of art, and music.

Capitalize the first word, the last word, and other important words in the title. Names of ships and aircraft are capitalized, too.

Examples: Banner in the Sky, "America the Beautiful,"  
A Christmas Carol, The John F. Kennedy, The New York Times

Rule 7: Capitalize names for God and holy writings.

Examples: Heavenly Father, the Bible, the Old Testament

Rule 8: Capitalize the first word in a direct quotation.

Example: Bob said, "I will see you tonight."

### Punctuation Strategies

#### Two Main Kinds of Punctuation

There are two main kinds of punctuation. We will call them stoppers and separators. Each has its special job to do. Take a look at each of the following jobs:

Stoppers. The stoppers come at the ends of sentences. They stop main ideas and get you ready for new ones. Here are the stoppers.

1. Period. The period comes at the end of a sentence that makes a statement or tells something.

Example: Almost everyone has a radio.

2. Question Mark. The question mark comes at the end of a sentence that asks a question.

Example: Do you watch television?

3. Exclamation mark. The exclamation mark comes at the end of a sentence that expresses strong feeling.

Example: What a beautiful car you have!

Separators. Separators come inside a sentence rather than at the end. Their job is to separate certain words from the rest of the sentence. Using them will help you write sentences others can understand.

Jobs for Commas. One of the separators you will use often is the comma. It will help you keep ideas from running into each other. You will need to use commas to do the following jobs:

4. Use a comma to separate words or groups of words in a series.

Example: Ken and Betty traveled through Colorado, Kansas, and Iowa.

Note: Put a comma before the and in a series, not after.

5. Use a comma to separate the parts of an address or date.

Example: Washington, D.C., June 10, 1949

Note: If the date or address is in a sentence, you may need to use another comma. Study the following example:

On May 13, 1961, in Washington, D.C., Ken and Betty saw the White House.

6. Use a comma when you talk directly to a person and use the person's name.

Example: Ken, did you see that beautiful boat?

7. Use a comma before a direct quotation.

Example: He said, "Yes, I will call you."

8. Use a comma before but or and in a compound sentence.

Example: Ken can play basketball, and he is a good player.



APPENDIX C  
LESSON OUTLINE: THE WORLD OF WRITING

## Lesson Outline

The World of Writing - Writing One's Mind

## A. Personal Diary or Journal to Develop Personal and Emotional Growth:

Each student is invited to keep a diary or journal throughout this writing program.

## B. Units:

- (1) Practicing Paragraph Patterns (Optional).
- (2) Writing a Story - Viewing the World.
- (3) Reporting - Relating Ideas.
- (4) Reacting - Evaluating Experiences.
- (5) Writing Letters - Expressing Personal Views and Relating to Others.

## C. Editing and Revising: This will be integrated in the writing process throughout the program.

## D. Editing Guide: Each student will personalize this to his or her own needs in the editing process.

APPENDIX D  
DIRECTIONS TO THE TEACHER

The World of Writing - Writing One's MindDirections to the Teacher

1. Each student needs a writing folder or file that is used as a working file.
2. Each writing assignment is marked "first draft." Eventually revisions will be marked "second draft," etc.
3. Final drafts (completed assignments) are kept in a separate file. The student decides when his/her draft is completed.
4. Staple the Editing Guide inside each student's working file. Additional items may be added on the Editing Guide as needed.
5. The teacher is known as the "senior editor."  
Appoint "house editors" as students are ready for the task of assisting their peers in the editing process.
6. Use NAME TAGS or BADGES to designate those who have been appointed. In this capacity they can help other students do their editing. It can provide positive affect for all in the class.
7. Teach the editing process during the first writing assignment when the students complete their first draft. After that, editing will be a regular part of each writing activity. Establish an editing corner if possible.
8. The instructional units may be used in any order desired in response to student needs. Let student needs determine the order of instruction. These units may be sequenced in chronological order and repeated as the semester progresses; or, each unit may be completed more than one time before going on to another choice. Immediate repetition may be valuable for some students.

9. Write for an audience. Use class time to read student writing whenever possible.
10. Typewritten copies of student writing will be made and placed on transparencies for group sharing using the overhead projector.
11. Encourage group activity and group writing whenever it is helpful to teach a concept.
12. NOTICE: Spelling errors will not be marked. Students will be encouraged to spell correctly as they use the Editing Guide.

Above all. HAVE FUN!

APPENDIX E

ROUGH DRAFT

APPENDIX F  
STUDENT SAMPLES AND WRITING RECORD

12/18/87

ROUGH DRAFT

COMMENTS

Flowers grow under light and  
 the flowers grow best of all in the  
 Plazer 2 in about 46 days you <sup>have</sup> perfect  
 buds. Flowers grow outside in warm  
 wether and they grow in dirt and you have  
 to water them to make them grow.

Good development  
of the kernel  
sentence.

P1

Keep up the  
good work,



ROUGH DRAFT

COMMENTS <sup>11/30/11</sup>

Snow

Snow is fun you can do a lot of stuff in snow. You can sky, cross country or down hill. You can make snow men and snow forts. The thing I like to do is snowmobile and ice fish. I like to that a snowmobile out onto a lake and ice fish. Some people like to ice skate, sled and just run in it.

Capitalization and punctuation are excellent!

Keep up the good work!

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## ROUGH DRAFT

12/1/87

## COMMENTS.

1 children play in there yard	Expansion of kernel sentence is well done!	
2 children play in there house-		
3 children play in there back yard		
4 children play in there sand box		
5 children play in there toy box		
6 children play in there room		P'
7 children play at the park		P'
8 children play at school		P' c'
9 children play <del>at</del> <del>at</del> at the store		P'
10 children play at the hospital.		

Notice the clues.

What is missing?



APPENDIX G  
EDITING AND REVISING/EDITING GUIDE

Editing and Revising

The following procedures may be used in preparation for the students learning the editing strategies. Other techniques may be added as necessary for a particular student's needs.

1. Introduce the Editing Guide to each student. Review the strategies for capitalization, punctuation, and sentence formation used in the previous manual. Explain carefully the meaning of COPS.
2. Staple a copy of the Editing Guide in each writing folder.
3. Establish an "editing corner" in the room if this is helpful. If not, identify a particular procedure you want the students to use. Help them become familiar with the procedure and develop a consistency in practice.
4. Introduce the teacher as "senior editor" to be of assistance as needed.
5. Explain that a "house editor" will be appointed as the student demonstrates skill in the editing process. In this role, the student will be considered somewhat of an expert. His or her opinion will be valuable to other students in the editing task. If it is helpful, design a NAME TAG or BADGE to be worn by "house editors."
6. Each student will ask the COPS questions using his or her Editing Guide when a written draft is finished.
7. As needs arise, additional questions can be asked to answer specific student needs. The extra blanks can be filled in to help each student become familiar with his or her individual editing needs.
8. The editing process may first be done as a group activity. This will help students become familiar with the procedure. Following the necessary amount of orientation (some students may need help repeatedly), each student will be responsible for his or her editing utilizing the "senior editor" or "house editors" whenever necessary.
9. Oral reading will commence with the return of the first set of written products. Only when a student is willing and volunteers will he or she be asked to read. The gradual process may begin with the teacher reading student selections with student permission. This will gradually move to each student reading his or her own written product. Group sharing may be encouraged by using the overhead projector. Students may read their products as they are viewed on the screen.

10. Students may work together during the writing process whenever it is a valuable experience for them. Use additional ideas you have to make the task as problem-free as possible.

EDITING GUIDE

Ask yourself the COPS questions.

C - Have I capitalized the first word, proper names, and any other options for using a capital letter?

O - How is the organization? Have I indented the paragraphs, written complete sentences, and used a title?

P - Have I used end punctuations and commas as needed?

S - Have I spelled all the words to the best of my ability?

Add special needs you may have in order to edit your writing:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

Adapted from Schumaker et al. (1981, pp. 6 .

REFERENCES

#### REFERENCES

- Adams, J. A. (1971). A closed-loop theory of motor learning. Journal of Motor Behavior, 3(2), 111-150.
- Alley, G. R., & Deshler, D. D. (1979). Teaching the learning disabled adolescent: Strategies and methods. Denver: Love Publishing Company.
- Alley, G. R., Deshler, D. D., & Warner, M. M. (1979). Identification of learning disabled adolescents: A Bayesian approach. Learning Disability Quarterly, 2(2), 76-83.
- Applebee, A., Lehr, F., & Auten, A. (1981). Learning to write in the secondary school: How and where. English Journal, 70(5), 78-82.
- Applebee, A. N. (1982). Writing and learning in school settings. In M. Nystrand (Ed.), What writers know: The language process and structure of written discourse (pp. 365-381). New York: Academic Press.
- Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1986). The writing report card: Writing achievement in American schools (Report No. 15-W-02). Princeton, NJ: Educational Testing Service.
- Bartholomae, D. (1980). The study of error. College Composition and Communication, 31, 253-269.
- Berardi, L. K. (1978). Mission write: Teaching takeoffs--Galaxy 7 and Galaxy 8. (ERIC Document Reproduction Service No. ED 191 089)



- Bilodeau, E. A. (1969). Supplementary feedback and instructions. In E. A. Bilodeau & I. M. Bilodeau (Eds.), Principles of skill acquisition (pp. 235-253). New York: Academic Press.
- Bilodeau, J. M. (1969). Information feedback. In E. A. Bilodeau & I. M. Bilodeau (Eds.), Principles of skill acquisition (pp. 255-285). New York: Academic Press.
- Bloom, B. S. (1976). Human characteristics and school learning. New York: McGraw-Hill.
- Braddock, R., Lloyd-Jones, R., & Schoer, L. (1963). Research in written composition. Urbana, IL: National Council of Teachers of English.
- Britton, J., Burgess, T., Martin, N., McLeod, A., & Rosen, H. (1975). The development of writing abilities. Schools Council Research Studies. London: MacMillan.
- Calkins, L. M. (1983). Lessons from a child: On the teaching and learning of writing. Exeter, NH: Heinemann Educational Books.
- Chalfant, J. C. (1987). Providing services to all students with learning problems: Implications for policy and programs. In S. Vaughn & C. S. Bos (Eds.), Research in learning disabilities: Issues and future direction (pp. 239-251). Boston: Little, Brown and Company.
- Chalfant, J. C. (1989). Learning disabilities: Policy issues and promising approaches. American Psychologist, 44(2), 392-398.
- Clements, S. D. (1966). Minimal brain dysfunction in children: Terminology and identification (NINDB Monograph No. 3). Washington, DC: U.S. Department of Health, Education and Welfare.

- Cohen, B. L. (1985). Writing: A new approach to the revision process. Academic Therapy, 20(5), 587-589.
- Dagenais, D. J., & Beadle, K. R. (1984). Written language: When and where to begin. Topics in Language Disorders, 4(2), 59-85.
- Dauw, D. C. (1966). Scholastic aptitudes and vocational needs of original thinkers and good elaborators. Personnel and Guidance Journal, 45(2), 171-175.
- Deshler, D., Ferrell, W., & Kass, C. (1978). Error monitoring of schoolwork by learning disabled adolescents. Journal of Learning Disabilities, 11(7), 10-23.
- Deshler, D. D. (1974). Learning disability in the high school student as demonstrated in monitoring of self-generated and externally generated errors. Unpublished doctoral dissertation, The University of Arizona.
- Deshler, D. D., Alley, G. R., & Carlson, S. C. (1980). Learning strategies: An approach to mainstreaming secondary students with learning disabilities. Education Unlimited, 2(4), 6-11.
- Deshler, D. D., Lowrey, N., & Alley, G. R. (1979). Programming alternatives for learning disabled adolescents: A nationwide survey. Academic Therapy, 14(4), 389-397.
- Dieterich, D. J. (1972). Composition evaluation: Options and advice. English Journal, 61(8), 1264-1271.
- Elley, W. B., Barnham, J. H., Lamb, H., & Wyllie, M. (1976). The role of grammar in a secondary school English curriculum. Research in the Teaching of English, 10(1), 5-21.
- Emig, J. (1971). The composing processes of twelfth graders. Urbana, IL: National Council of Teachers of English.

- Ferguson, G. A. (1971). Statistical analysis in psychology and education. New York: McGraw-Hill.
- Fulwiler, T. (1982). Writing: An act of cognition. In C. W. Griffin (Ed.), New directions for teaching and learning: Teaching writing in all disciplines (No. 12). San Francisco: Jossey-Bass Publishing Company.
- Goodlad, J. K. (1984). A place called school: Prospects for the future. New York: McGraw-Hill Book Company.
- Graves, D. H. (1978). Balance the basics: Let them write. New York: Ford Foundation.
- Graves, D. H. (1983). Writing: Teachers and children at work. Exeter, NH: Heinemann.
- Gunderson, D. V. (1971). Research in the teaching of English. English Journal, 60(6), 792-796.
- Hammill, D. D., & Larsen, D. C. (1983). Test of written language. Austin, TX: PRO-ED.
- Hull, G., & Bartholomae, D. (1986). Teaching writing as learning and process. Educational Leadership, 43(7), 44-53.
- Jaban, T. H., Treffinger, D. J., Whelan, R. J., Hudson, F. G., Stainback, S. B., & Stainback, W. (1982). Impact of instruction on learning disabled students' creative thinking. Psychology in the Schools, 19(3), 371-373.
- Keppel, G. (1982). Design and analysis: A researcher's handbook (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Kirk, S. A. (1986). Redesigning delivery systems for learning disabled students. Learning Disabilities Focus, 2(1), 4-6.

- Koch, C., & Brazil, J. M. (1978). Strategies for teaching the composition process. Urbana, IL: National Council of Teachers of English.
- Laurita, R. E. (1972). Rehearsal: A technique for improving reading comprehension. Academic Therapy, 8(1), 103-111.
- Linn, R. L. (1986). Educational testing and assessment: Research needs and policy issues. Special Issue: Psychological science and education. American Psychologist, 4(1), 1153-1160.
- Lydiatt, S. (1984). Error detection and correction in spelling. Academic Therapy, 20(1), 33-40.
- McGill-Franzen, A. (1979). Beyond illiterate, what can you say? Learning Disability Quarterly, 2(4), 76-80.
- Mehlmann, M. A., & Waters, M. K. (1985). From write to right. Academic Therapy, 20(5), 583-586.
- Moffett, J. (1968). Teaching the universe of discourse. New York: Houghton Mifflin.
- Moran, M. R. (1980). An investigation of the demands on oral language skills of learning disabled students in secondary classrooms (Research Report No. 1). Lawrence, KS: The University of Kansas Institute for Research in Learning Disabilities.
- Moran, M. R. (1983). Learning disabled adolescents' responses to a paragraph-organization strategy. Pointer, 27(2), 28-31.
- Murray, D. M. (1987). Write to learn (2nd ed.). New York: Holt, Rinehart and Winston.
- Myklebust, H. R. (1965). Development and disorders of written language. Volume one: Picture Story Language Test. New York: Grune & Stratton.

- Myklebust, H. R. (1973). Development and disorders of written language. Volume two: Studies of normal and exceptional children. New York: Grune & Stratton.
- Neubert, G. A., & McNelis, S. J. (1986). Improving writing in the disciplines. Educational Leadership, 43(7), 54-58.
- Otto, W., & Smith, R. J. (1980). Corrective and remedial teaching. Boston: Houghton Mifflin.
- Pooley, R. C., et al. (1967). English language arts in Wisconsin. Madison, WI: Department of Public Instruction.
- Powers, W. T. (1973). Behavior: The control of perception. Chicago: Aldine Publishing Company.
- Reynolds, M. C. (1985). The special education of a drummer. Journal of School Psychology, 23(3), 205-216.
- Reynolds, M. C., & Wang, M. (1983). Restructuring "special" school programs: A position paper. Policy Studies Review, 2 (Special No. 1), 9-20.
- Schumaker, J. B., Deshler, D. D., NoJan, S., Clark, F. L., Alley, G. R., & Warner, M. M. (1981). Error monitoring: A learning strategy for improving academic performance of LD adolescents (Contract No. 300-77-0404). Washington, DC: Bureau of Education for the Handicapped (DHEW/OE). (Report No. IRLD-RR-32)
- Shaughnessy, M. (1977). Errors and expectations. New York: Oxford.
- Smith, P. F. (1984). Grammar texts and workbooks? Banished to the storeroom. Academic Therapy, 20(1), 121-125.
- Tollefson, N., Tracy, D. B., Johnson, E. P., & Chatman, J. (1986). Teaching learning disabled students goal-implementation skills. Psychology in the Schools, 23(2), 194-204.

Tompkins, G. E., & Friend, M. (1988). After your students write:

What's next? Teaching Exceptional Children, 20(3), 4-9.

Torrance, E. P. (1974). Torrance tests of creative thinking.

Bensenville, IL: Scholastic Testing Service, Inc.

Torrance, E. P., & Dauw, D. C. (1965a). Aspirations and dreams of three groups of creatively gifted high school seniors and a comparable unselected group. Gifted Child Quarterly, 9 (Winter), 177-182.

Torrance, E. P., & Dauw, D. C. (1965b). Mental health problems of three groups of highly creative high school seniors. Gifted Child Quarterly, 9 (Autumn), 123-127.

Tukey, J. W. (1977). Exploratory data analysis. Reading, MA: Addison-Wesley.

Warner, M. P. (1979). A successful writing program for high school learning. Pointer, 23(2), 30-36.

Weiss, H. G., & Weiss, M. S. (1982). Training kids to be winners in the handling of writing skills. Academic Therapy, 18(1), 75-82.

Whitt, J., Paul, P. V., & Reynolds, C. J. (1988). Motivate reluctant learning disabled writers. Teaching Exceptional Children, 20(3), 37-39.

Wiederholt, J. L. (1978). Educating the learning disabled adolescent: Some assumptions. Learning Disability Quarterly, 1(4), 11-23.

Wissink, J. F. (1972). A procedure for the identification of children with learning disabilities. Unpublished doctoral dissertation, The University of Arizona.

Wissink, J. F., Kass, C. E., & Ferrell, W. R. (1975). A Bayesian approach to screening for learning disability. Journal of Learning Disabilities, 8(3), 158-166.

Ysseldyke, J. E., & Algozzine, B. (1982). Critical issues in special and remedial education. Boston: Houghton-Mifflin Company.