

THE EFFECTS OF TYPE OF WRITTEN PRACTICE AND TIME OF WRITING SAMPLE  
ON SIXTH GRADE STUDENTS' ARGUMENTATIVE WRITTEN RESPONSES TO LITERATURE

by

Julie Kelly Kidd

Dissertation submitted to the Faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of  
DOCTOR OF EDUCATION  
in  
Curriculum and Instruction

APPROVED:

Barbara Hutson

Barbara Hutson, Chair

Gabriella Belli

Gabriella Belli

Donald Gallehr

Donald Gallehr

James W. Garrison

James Garrison

Thomas Gatewood

Thomas Gatewood

March, 1992

Blacksburg, Virginia

c.2

LD  
5655  
V856  
1992  
K533  
c.2

THE EFFECTS OF TYPE OF WRITTEN PRACTICE AND TIME OF WRITING SAMPLE  
ON SIXTH GRADE STUDENTS' ARGUMENTATIVE RESPONSES TO LITERATURE

By

Julie Kelly Kidd

Committee Chair: Barbara Hutson  
Curriculum and Instruction

(ABSTRACT)

The purpose of this study was to determine the effects of type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) on sixth grade students' argumentative responses to literature and on the development of three elements of argument (stating claims, citing data, and using warrants). Forty-eight sixth grade students from a small, metropolitan Northern Virginia public school participated in three weeks of training. Training included instruction plus collaborative written practice or instruction plus independent written practice. Students were assigned randomly to the two treatment groups. Writing samples, which were written individually, were collected at three points in time (pre-training, mid-training, and post-training).

Each writing sample was scored for how well the student stated the claim, cited data to support the claim, and used warrants to connect the data to the claim. A composite score made up of the scores for the three elements reflected the student's total effectiveness. The scores for each element and the composite scores were analyzed by employing analyses of variance with repeated measures. The design was a 2 x 3 mixed design with repeated measures on one factor.

The results of the analyses of variance indicated that type of written practice and time of writing sample had significant effects on

sixth grade students' total effectiveness scores and on the scores of two of the three elements of argument. There were significant interactions for total effectiveness, citing data, and using warrants. The results of all three analyses indicated that the collaborative written practice group scored, on average, significantly higher than the independent written practice group on the mid-training and the post-training writing samples. Results also indicated that the members of the collaborative written practice group increased their citing data, using warrants, and total effectiveness scores significantly from the pre-training writing sample to the mid-training writing sample. Although not significant, increases for the collaborative written practice group were noted from the mid-training to the post-training writing samples as well. No significant interactions or main effects existed for the stating claims element.

Based on these results, instruction and collaborative written practice appeared to emerge as effective strategies for developing the citing data and using warrants elements of argument resulting in an improvement in the students' total effectiveness. The pattern of development suggests that when provided appropriate training, sixth grade students can develop their argumentative written responses to literature.

## ACKNOWLEDGEMENTS

I would like to give a special thanks to all the people who helped make my dream a reality:

My advisor and chairperson, Dr. Barbara Hutson, for her never-ending encouragement, support, and advice.

My committee members, Dr. Gabriella Belli, Dr. Donald Gallehr, Dr. James Garrison, and Dr. Thomas Gatewood, for the knowledge each one of them shared with me.

My principal, Catherine Malone, for her support and confidence.

The teachers and staff for their cooperation and moral support.

My father, John Kelly, for his assistance with scoring the writing samples and editing the drafts.

My mother, Jean Kelly, and my in-laws, Claralou and Fred Kidd, for their many hours of child care and assistance while I was attending classes, studying, and working on papers.

My son, Christopher Kidd, for his patience and cooperation when I was studying and could not be there for him.

My husband, John Kidd, for his encouragement, support, and for all the things he did that made it possible for me to follow my dream.

## TABLE OF CONTENTS

	Page
ABSTRACT . . . . .	ii
ACKNOWLEDGEMENTS . . . . .	iv
TABLE OF CONTENTS . . . . .	v
LIST OF TABLES . . . . .	vii
LIST OF FIGURES . . . . .	ix
Chapter	
1. INTRODUCTION . . . . .	1
Background Information . . . . .	1
Statement of the Problem . . . . .	13
Purpose of This Study . . . . .	17
Research Questions . . . . .	18
Definitions . . . . .	18
Delimitations . . . . .	19
Limitations . . . . .	20
Summary . . . . .	20
2. REVIEW OF THE LITERATURE . . . . .	22
Functions of Writing . . . . .	23
Argument . . . . .	27
Cooperative Learning . . . . .	55
Collaborative Writing . . . . .	57
Summary . . . . .	61
3. RESEARCH DESIGN AND METHOD . . . . .	62
Design . . . . .	62

	Subjects . . . . .	66
	Materials . . . . .	68
	Instruments . . . . .	70
	Procedures . . . . .	71
	Methods of Analysis . . . . .	78
	Summary . . . . .	79
4.	RESULTS . . . . .	81
	Pooling Data Collections One and Two . . . . .	82
	Total Effectiveness . . . . .	82
	Stating Claims . . . . .	85
	Citing Data . . . . .	85
	Using Warrants . . . . .	88
	Ability . . . . .	91
	Summary . . . . .	94
	Conclusion . . . . .	95
5.	DISCUSSION, CONCLUSIONS, AND IMPLICATIONS . . . . .	97
	Discussion . . . . .	99
	Conclusions . . . . .	110
	Implications . . . . .	111
	Implications for Future Research . . . . .	113
	Summary . . . . .	116
	REFERENCES . . . . .	120
	APPENDICES . . . . .	127
A	Subjects . . . . .	128
B	Summary Tables . . . . .	129

C	Materials . . . . .	144
D	Revisions to the Directions for Obtaining the Writing Samples . . . . .	145
E	McCann's (1989) Scoring Criteria for Elements of Argument . . . . .	155
F	Informed Consent Disclosure Procedures and Letters . . .	157
G	Procedures for Administering the Writing Samples . . . .	162
H	Prompts for Writing Samples . . . . .	163
I	Lesson Plans for Instruction and Practice . . . . .	167
J	Prompts for Practice Sessions . . . . .	170
VITA	. . . . .	173



LIST OF TABLES

Table		Page
3.1	Schedule for Testing and Training . . . . .	72
4.1	Data Collections One and Two Comparisons . . . . .	83
4.2	Total Effectiveness Means & Standard Errors . . . . .	86
4.3	Elements of Argument Means & Standard Errors . . . . .	89

## LIST OF FIGURES

Figure		Page
2.1	Functions of Writing . . . . .	24
2.2	Argumentative Structure . . . . .	28
3.1	Total Effectiveness Research Design . . . . .	63
3.2	Elements of Argument Research Design . . . . .	64
4.1	Type of Practice by Time of Sample Interaction for Total Effectiveness . . . . .	84
4.2	Type of Practice by Time of Sample Interaction for Citing Data Element . . . . .	87
4.3	Type of Practice by Time of Sample Interaction for Using Warrants Element . . . . .	90
4.4	Type of Practice by Time of Sample Interaction for Ability Levels . . . . .	92

## Chapter 1

### INTRODUCTION

Analytic writing using an argumentative structure is viewed by many as an important and desirable skill for writers to possess and yet results from studies indicate that American students are not proficient at analytic and argumentative writing (Applebee, Langer, & Mullis, 1986, 1990; Crowhurst, 1983, 1991; Durst, 1987; Hidi & Hildyard, 1983; Kahn, Walter, & Johannessen, 1984; Langer, 1982; McCann, 1989; Pringle & Freedman, 1985; Reed, Burton, & Kelly, 1985). Applebee, Langer, and Mullis (1986) described analytic writing as one of "the skills necessary for successful academic study and for understanding complex situations in business and the professions" (p. 15). Argument, a tool for effective analysis, is considered a vital means of communicating knowledge, resolving social and moral issues, accomplishing professional goals, carrying out business transactions, and pursuing academic studies (Applebee et al., 1986; Applebee, Langer, Mullis, & Jenkins, 1990; Pringle & Freedman, 1985; Singley & Stockton, 1984; Sproule, 1981; Toulmin, 1964). Because of the importance of argumentative analysis in society, determining effective means for teaching students how to write effective argumentative discourse is imperative.

#### Background Information

Toulmin, Rieke, and Janik (1979) referred to argumentation as the activity of making claims and supporting them with evidence that is logical and well-developed. According to Toulmin's model of

argumentation, writers state claims, cite data to support their claims, use warrants that are backed by theory to connect the evidence with the claims, provide qualifiers to indicate the strength of their convictions, and respond to opposing views (Toulmin, 1964; Toulmin et al., 1979). Toulmin (1964) referred to these six interdependent elements as claims, data, warrants, backings, qualifiers, and rebuttals.

Jensen (1981) stated that the essential elements of the model are the claims, data, and warrants. The claim is the assertion or thesis that writers present for acceptance by an audience (Toulmin et al., 1979). Writers support their theses by gathering data that indicate why they are justified in making their particular claims (Jensen, 1981; Toulmin, 1964). They strengthen their arguments by using warrants to serve as a connection between the initial claim and the supporting data. The warrants show that the data legitimately support the claim (Toulmin, 1964).

Although backings, qualifiers, and rebuttals are not as vital to the presentation of an effective argument, they can add to the strength of the argument (Jensen, 1981). Warrants possess more strength when drawn from theories or generalizations relative to the field in which the claim is made (Toulmin, 1964; Toulmin et al., 1979). Statements that explain the theory supporting warrants are referred to as backings. An indication of how confident writers feel about their claims adds credibility. Qualifiers such as definitely, probably, and sometimes alert the audience to the reliability of the claims (Jensen, 1981).

Finally, responses to alternate points of views, referred to as rebuttals, allow writers to stipulate the conditions in which claims can and can not be upheld (Jensen, 1981; Toulmin et al., 1979).

### Analytic Writing

Writers employ the argumentative structure in their analytic writing when they explain, analyze, or interpret situations. As a complex level of informative writing, "analytic writing builds upon describing and reporting skills and also requires that writers explain relationships among the ideas and information they are dealing with" (Applebee et al., 1986, p. 21). Analytic writers may trace causes and effects, explain the motivation behind actions, or provide support for opinions and points of view (Applebee et al., 1986). According to Applebee et al. (1986), analytic writing tasks "are the tasks that reflect the ability to provide evidence, reason logically, and make a well-developed point" (p. 24).

One popular analytic assignment that teachers require students to undertake in high school and college courses is the argumentative essay (Applebee, 1984a; Durst, 1984, 1987). This type of essay requires students to state a thesis and support it with evidence. Because analytic writing provides a means to foster critical thinking (Langer, 1982; Marshall, 1987), teachers require students to write effective argumentative essays in a variety of subject areas, including the study of literature (Applebee, 1984a).

When readers respond to literature analytically, their writing serves as a means to shape and influence their ideas, not just to record and evaluate their understanding (Marshall, 1987). The structure employed to write this type of response "is an argument in the sense that the writer is attempting to convince a reader that his conclusions about the text are accurate" (Kahn, Walter, & Johannessen, 1984, p. 7). As readers strive to express their points of view, they must delve deeper into the text and actively interact with the concepts. The reader responds to literature by stating a claim, locating data, and explaining how the data support the claim (Durst, 1984). As they write, readers frame their points "in a well-marked hierarchical structure" and link them "to the thesis statement" (Durst, 1984, p. 86). The structure of the discourse becomes an argument (Toulmin, 1964; Toulmin, Rieke, & Janik, 1979) which provides a framework for effective interpretation and analysis. Marshall (1987) explained,

. . . when students form an argument, locate the evidence that will support it, and choose the language that will carry it, they may be constructing both a written product and an intellectual representation of the story—a representation that may stay with them and become for them, finally, the basis for what is remembered and understood about the story over time (pp. 59–60).

The inherent structure of argument promotes the accommodation and assimilation of new ideas and is essential for presenting logical, well-written, analytical essays supporting a point of view.

### Difficulties Writing Argumentative Discourse

Despite the apparent importance of mastering the argumentative structure, few students are able to use argument effectively in their writing (Applebee et al., 1986; Crowhurst, 1991; Langer, 1982; McCann, 1989). The National Assessment of Educational Progress (NAEP) studied two functions of writing that utilize the argumentative structure: informative and persuasive. Informative writing employs the argumentative structure to analytically explain and reflect upon a given point of view, whereas persuasive writing uses argument to attempt to bring about a change in the readers' beliefs and/or courses of action through the use of well-developed arguments.

In an attempt to determine students' levels of proficiency with informative and persuasive compositions written in the argumentative mode, NAEP studied writing samples from students in grades four, eight, and eleven. The results of the informative task indicated that few students produce analytic essays that are rated adequate or better (Applebee, Langer, & Mullis, 1986). Applebee, Langer, & Mullis (1986) reported similar results on the persuasive writing samples. The results suggest that the majority of the students in grades four, eight, and eleven are able to express their points of view but experience difficulty supporting their views with evidence (Applebee, Langer, & Mullis, 1986). McCann's (1989) study with sixth, ninth, and twelfth grade students supports the results of the National Assessment of

Educational Progress (NAEP) studies. He examined their ability to identify arguments in writing and to write in the argumentative mode. His results indicated that although students at all levels appear to be able to identify arguments in writing, they seem to experience difficulty reproducing the structure in their own writing (McCann, 1989).

Essentially, research indicates that many students state claims successfully with effectiveness increasing with grade level (Applebee et al., 1986; McCann, 1989). However, many students of all grade levels appear to experience difficulty citing data to support the claim and using warrants to connect the data with the claim (Applebee et al., 1986; Applebee et al., 1990; Crowhurst, 1991; McCann, 1989). The results from McCann's (1989) study suggest that students are weak "in offering and interpreting data" (p. 70) and that the data cited is often unexplainable. Therefore, it makes sense that sixth grade students seldom use warrants to explain how the evidence relates to the claim (McCann, 1989). Based on the results from studies by NAEP (Applebee et al., 1986; Applebee et al., 1990; and McCann, 1989), it is evident that many students experience difficulty with writing assignments that require the use of an argumentative structure.

### Reasons for Difficulty

Some researchers speculate on the reasons for the apparent inability to write effectively in the argumentative mode. The abstract nature of argumentation may contribute to student's difficulty employing the



argumentative structure in their writing (Bereiter & Scardamalia, 1982; Crowhurst, 1983; Moffett, 1983). Moffett (1983) and Crowhurst (1983) asserted that as children develop cognitively, their ability to handle tasks of higher abstraction increases. At first, they write low level discourse that gradually includes hints of abstract thinking. As they mature, their writing becomes more abstract and includes only fragments of lower abstraction (Moffett, 1983). Crowhurst's (1983) findings in a study of fifth, seventh, and eleventh graders support Moffett's assertion. She reported that when asked to write an argumentative piece, the lower level function of reporting was more apparent in fifth and seventh grade essays than in eleventh grade essays and that eleventh graders were more apt to give generalized reasons (Crowhurst, 1983).

Similarly, as students mature, they develop schemata for writing opinion essays. According to Bereiter and Scardamalia (1982), argument requires writers to anticipate readers' responses and to respond to them despite the absence of an audience. Their schema for oral argument must be developed so that writers may draw upon their "knowledge of the moves and countermoves used in conversational attempts at persuasion" to write effective argumentative essays (Bereiter & Scardamalia, 1982, p. 34). Possessing background knowledge of and experience with oral argumentation increases writers' likelihood of success with the argumentative mode but may not be enough to ensure success.

Another factor that is attributed to difficulty in writing argumentation is writers' affective development. According to Pringle

and Freedman (1985), affective development in writing begins with an awareness of one's own feelings, moves to a growing sense of commitment to those surrounding the writer, and then shifts to a focus on the community and world at large. Argumentation requires writers to anticipate and respond to possible feelings and opinions of the audience. In order to do that, writers must be aware of readers' needs and not only their own (Pringle & Freedman, 1985). Writers who are unable to consider others' points of view may experience difficulty writing an effective argument.

In addition to cognitive and affective development, students' instructional background appears to have a significant impact on their ability to write arguments. Pringle and Freedman (1985) stated that "students may simply not know what the appropriate structure of argumentation is" (p. 34). Langer (1982) and McCann (1989) asserted that lack of instruction in school contributes to the students' apparent lack of knowledge about and proficiency in argumentative writing. According to Vygotsky (1978), appropriate instruction provided in advance of development awakens the internal developmental processes and promotes achievement in the specified area. Therefore, proficiency in writing arguments is not only a result of chronological age but also a result of the effects of the home language environment and the previous instruction provided at school (Moffett, 1983).

### Suggestions for Improving Argumentative Writing

Bereiter and Scardamalia (1982) supported the assertion that instruction affects students' development in writing arguments. They claimed that fourth and sixth grade students possess the concepts needed to write arguments; however, they lack the ability to put this knowledge to functional use. They further suggested that students can be taught effective strategies for writing in the argumentative mode by drawing upon their existing schemata and modifying the expectations to fit the students' cognitive development.

Crowhurst (1991) also suggested that by providing appropriate instruction and practice, teachers can increase the likelihood of students becoming more effective argumentative writers. In her study, Crowhurst (1991) compared the scores of argumentative writing samples of sixth grade students who participated in instruction and written practice in persuasion, instruction and reading practice in persuasion, a single lesson in persuasion, and no instruction or practice in persuasion. The results of the study indicated that instruction and practice improved the overall quality of the argumentative writing, as well as the organization, text markers, and conclusions. Crowhurst (1991) concluded, "The types of instruction which produced improvement in writing quality were presentation of the persuasion model together with practice either writing or reading persuasive pieces" (p. 330).

Despite the need for instruction, elementary schools tend not to provide instruction on argumentative writing and secondary schools do not typically introduce it in their curricula until eleventh grade (McCann, 1989). Langer (1982) believes this is a mistake. She stated, "Students need to learn to use analytic skills as tools for their own personal use—to increase their ability to explain and share their ideas with others" (Langer, 1982, p. 339). To achieve this goal, teachers must change their teaching strategies. The teacher must learn to "assist the student in learning to refine ideas, defend reactions, and elaborate thoughts" (Langer, 1982, p. 339). Langer (1982) suggested that examining instructional strategies and searching for ones that will foster improvement in students' analytic writing is imperative. Although it may seem that elementary students are unable to write in the argumentative mode, they can and should become proficient at analytic writing (Langer, 1982).

### Cooperative Learning

One set of strategies that has resurfaced in recent years as an alternative to the traditional approach to teaching students new writing concepts and strategies is cooperative writing groups (Gere, 1987) in which students learn from each other by working together in small, mixed ability learning groups (D. Johnson, R. Johnson, Holubec, & Roy, 1984; Slavin, 1987; Stevens, Madden, Slavin, & Farnish, 1987). According to Vygotsky (1978), cooperative learning is essential for learning new

strategies because it is "only when the child is interacting with people in his environment and in cooperation with his peers" (p. 90) that development is enhanced. He explained that once the developmental "processes are internalized, they become part of the child's independent developmental achievement" (Vygotsky, 1978, p. 90). The results of recent research appear to support Vygotsky's assumptions.

D. Johnson, R. Johnson, Holubec, & Roy (1984) stated that, based on a meta-analysis of studies conducted on cooperative learning in a variety of academic areas, "cooperative learning experiences tend to promote higher achievement than do competitive and individualistic learning experiences" (p. 15). They claimed that they have found no learning task in which cooperative learning does not produce similar or greater achievement than competitive or individualistic situations (Johnson et al., 1984). These results imply that cooperative learning experiences in reading and writing should prove beneficial as well. More specifically, collaborative writing should enhance students' argumentative written responses to literature.

### Writing and Collaboration

In writing, cooperative learning takes on a variety of forms. Cooperation may occur in an informal setting where one writer seeks assistance with an idea, a change in wording, or grammatical error. It may be evident in a small group of writers formed to help each other with their individual pieces at various points throughout the writing

process. Or cooperative learning may take place in an intentional grouping of writers brought together for the purpose of collaborating on a written project. All of these instances require writers to work cooperatively while writing.

One popular use of cooperative learning in writing is writing groups which meet to help the members progress with their own individual pieces. Stevens, Madden, Slavin, & Farnish (1987) investigated the effects of collaboration during the writing process on written samples of third and fourth graders working in heterogeneous cooperative learning teams. Their findings indicate that students who work in cooperative groups that collaborate during the writing process score higher on writing samples than students who continue receiving instruction using traditional methods and materials. Moberg's (1988) study of college freshman produced similar results. He reported that after using small cooperative groups in his English course, scores on the Writing Assessment Test given at the end of the semester improved an average of fifty percent (Moberg, 1988).

Cooperation also occurs in collaborative writing when the writers work together to compose a single piece. It differs from collaboration on individual writings throughout the writing process because the writers must come to a consensus by sharing ideas and expressing concerns orally. In a study of fourth and fifth grade students composing in dyads, Nunn (1982) observed that oral discourse in collaboration maintains interpersonal relationships, solves writing task

problems, explores language and new ideas, and examines existing ideas critically. Based on her observations, Nunn (1982) concluded that when composing collaboratively, fourth and fifth grade students learn from one another.

The learning that occurs when students collaborate is attributed partially to the oral discourse which occurs when the members of the group interact. D. Johnson, R. Johnson, Holubec, & Roy (1984, p. 15) suggested that the oral interaction "promotes the discovery and development of higher quality cognitive strategies for learning than does the individual reasoning found in competitive and individualistic learning situations." As group members discuss their differing points of view and information is repeated, motivation to achieve is increased, a higher level of retention and achievement is attained, and understanding is enhanced (Johnson et al., 1984). The result is a greater understanding of the processes involved in the writing task.

### Statement of the Problem

Argumentative writing appears to be a mode of writing that is valued in our society and used as a means for learning and developing deeper understandings of ideas and concepts. Teachers employ argumentative writing as a vehicle for fostering critical thinking about literature (Applebee, 1984). Results from Marshall's (1987) study of eleventh grade students appear to support this practice. He concluded that when students wrote well-argued analytic responses to literature that employed "quotations and other evidence from the story to explain the

nature and quality" of a relationship (Marshall, 1987, p. 43), they were "better able to recall and interpret its features than when they had written in a restricted mode" (Marshall, 1987, p.57). These results support the use of argumentative writing as a way of enhancing the study of literature.

Although argument is considered a valuable academic tool and can be used to further the understanding of literature, few studies provide insight into how to foster the development of the elements of argument in sixth grade students' argumentative responses to literature. Several studies documented the apparent difficulty sixth grade students experience when employing the elements of argument in their argumentative writing (Applebee, Langer, & Mullis, 1986; Langer, 1982; McCann, 1989). Other experts offered reasons that students appear to be unsuccessful with argument (Bereiter & Scardamalia, 1982; Crowhurst, 1983; Langer, 1982; Moffett, 1983; Pringle & Freedman, 1985). A few studies examined the effects of training on students' argumentative writing (Bereiter & Scardamalia, 1982; Crowhurst, 1991). But even these studies don't provide an examination of what type of written practice most effectively facilitates the development of the elements of argument in sixth grade students' argumentative written responses to literature. Nor do any of these studies document the developmental changes of the elements of argument at different time points throughout the study.

The information collected through these studies indicates that students experience difficulty writing argumentative discourse



(Applebee, Langer, & Mullis, 1986; Langer, 1982; McCann, 1989). Analyses of argumentative writing samples suggest that students are able to make claims, but show minimal competence in citing data and using warrants (Applebee, Langer, & Mullis, 1986; McCann, 1989). Difficulty with argumentative writing is attributed to the higher levels of cognitive and affective development required (Crowhurst, 1983; Durst, 1987; Moffett, 1983; Pringle & Freedman, 1985) and to lack of instruction designed to enhance the students' cognitive and affective development of argumentation (Langer, 1982; McCann, 1989; Moffett, 1983; Pringle & Freedman, 1985).

Because of the debate over whether the cognitive difficulty of the task, lack of training, or a combination of both contribute to sixth grade students' difficulty with argumentative writing, studies were developed to examine this question. A recent study by Crowhurst (1991) was designed to determine whether instruction could improve persuasive discourse and what effects written and reading practice would have on their compositions. To do this, she compared the effects of (a) instruction plus written practice, (b) instruction plus reading practice, (c) a single lesson on persuasion, and (d) no instruction or practice on students' overall quality of their persuasive writing. She also examined the organization, the number of conclusions, the use of text markers, and the degree of elaboration. Because Crowhurst (1991) administered a pretest and a posttest, she was able to determine that students who received instruction plus written or reading practice

improved significantly after training, whereas the single lesson group and the control group did not.

Although Crowhurst (1991) determined that instruction plus written practice improved students' persuasive writing, she did not examine what effects different types of written practice would have on argument. In Crowhurst's (1991) study, the students wrote independently and then met with a partner to share their essays and receive feedback. They were then given an opportunity to revise their essays before turning them in to the teacher. Results from studies that have focused on collaborating on individual pieces indicate that students who work in cooperative groups score higher on writing samples than those who do not (Moberg, 1988; Stevens, Madden, Slavin, & Farnish, 1987).

Other studies on collaborative writing suggest that working together to compose a single essay can promote learning and enhance writing. Nunn (1982) observed fourth and fifth grade students as they composed stories and writings of their choice. She concluded that fourth and fifth grade students "are capable of learning from and actively helping one another in a collaborative writing setting" (Nunn, 1982, p. 23). Although no studies have documented the effect collaborative writing has on the development of the elements of argument in students' argumentative responses to literature, it seems reasonable to expect collaborative writing to enhance the development of argument.

Because recent studies on argument and collaborative writing did not address the effects of instruction plus collaborative writing on

argumentative responses to literature and the patterns of development of the elements of argument, a need existed to conduct a study that would determine the effects of type of written practice and time of writing sample on sixth grade students' argumentative written responses to literature and the elements of argument. Specifically, there was a need to compare the effects of collaborative written practice and independent written practice on students' writing samples and to determine the pattern of development over time for the various elements of argument.

#### Purpose of This Study

The purpose of this study was to determine the effects of type of practice (collaborative written practice and independent written practice) and time of writing sample (pre-training, mid-training, and post-training) on sixth grade students' argumentative written responses to literature. In order to determine the pattern of development of the elements of argument (stating claims, citing data, using warrants) and of the total effectiveness, the effects of type of practice and time of writing sample on the scores for each element of argument and on the composite scores were examined. Given no interaction, the main effects of type of practice and time of writing sample on the elements of argument and the total effectiveness were analyzed.

### Research Questions

The following questions were addressed in this study.

1. For each element and total effectiveness, was there an **interaction between type of practice and time of writing sample?**
2. For each element and total effectiveness, was there a difference between the **types of practice** (collaborative written practice and independent written practice) when scores were combined across the three times of the writing sample?
3. For each element and total effectiveness, was there a difference among the **times of the writing sample** (pre-training, mid-training, and post-training) when scores are combined across the two treatment groups?

### Definitions

- Collaborative Writing:** Writing that occurs when a group of two or more writers compose a written piece together.
- Argumentative Writing:** Writing that requires the writer to state a claim, cite evidence to support the claim, and use warrants to connect the evidence to the claim.

<b>Analytic Writing:</b>	Informative writing that may require the writer to trace causes and effects, explain the motivation behind actions, or provide support for opinions and points of view.
<b>Claim:</b>	Proposition or thesis that the writer wishes to support.
<b>Data:</b>	Evidence or information that appears to support the claim.
<b>Warrant:</b>	Statements made by the writer to connect the data to the claim.

### Delimitations

This study was delimited in that the subjects were not randomly selected. The subjects were selected based on enrollment in the school in which the study was conducted. Students assigned to the talented and gifted and the regular language arts programs participated. Learning disabled resource students who participated in the regular classroom language arts program were included in the sample. Students primarily assigned to the English-as-a-second-language and learning disabled modified self-contained language arts programs, who normally did not participate in the regular classroom language arts program, did not participate in the study.

This study was also delimited in that data were collected from two groups of subjects in different school years. The first set of data were collected from sixth graders during the spring of 1990. The second set of data were collected from sixth graders the following school year during the spring of 1991. Tests of equivalency were used before combining data.

### Limitations

A potential shortcoming of the study was the effect of instruction or activities missed due to absences from the class. Although absences were not frequent and appeared to be similar for both practice groups, accommodations had to be made. Students who missed all or part of a pre-training, mid-training, or post-training writing sample were administered the writing sample prior to further instruction and practice. Missed instruction and practice were not made up. Students were expected to participate in the review sessions and continue along with the rest of the class.

### Summary

In this first chapter, the need for determining the effects of instruction and collaborative writing on students' argumentative responses to literature was discussed. An introduction and background information were presented and followed by a discussion of the problem statement, the purpose of the study, and the research questions.

Essential terms were defined. Finally, the delimitations and limitations were discussed.

The following chapters will be developed and expanded in the following manner:

In chapter two, a review of the literature will be provided. Relevant information pertaining to argumentative writing, analytic writing, written responses to literature, and collaborative writing will be discussed.

In chapter three, the research design and the methods will be described. Descriptions of the sample, the instrumentation, the data collection procedures, and method of analysis will be provided.

In chapter four, the results will be presented.

In chapter five, the results will be discussed, the conclusions will be stated, and recommendations for further study will be suggested.

## Chapter 2

### REVIEW OF THE LITERATURE

Argument is a complex form of writing that writers employ for a variety of reasons and in a variety of circumstances. Because of its prevalence, American society expects its citizens to write effective argumentative discourse and use it as a means to study situations analytically. Although the expectations exist, many American students experience defeat when attempting argumentative discourse (Applebee, Langer & Mullis, 1986; Langer, 1982; McCann, 1989). Because the study of literature is one field that utilizes written arguments to enhance understanding and to share view points, teachers search for strategies that will enhance the process of teaching argument as a written response to literature. In recent years, collaboration has surfaced as a strategy for improving students' writing (Dauite, 1986; Moberg, 1988; Nunn, 1982; Stevens, Madden, Slavin, & Farnish, 1987). Because of its nature, collaborative writing should emerge as an effective strategy for teaching sixth grade students how to write successful argumentative responses to literature.

This chapter will examine argument as an analytic response to literature first by determining how argument fits in the field of writing, then by examining the elements of argument, and finally by focusing on how argument enhances the study of literature. After reflecting upon argument as a mode of writing, this chapter will deliberate on how argument is employed in society, the difficulties students experience in the argumentative mode, and strategies that



teachers employ to encourage success. Finally, this chapter will contemplate the use of collaborative writing strategies to promote effective argumentative responses to literature.

### Functions of Writing

People write for a variety of reasons and purposes. According to Kinneavy (1971), they write to provide information, support a scientific thesis, explore concepts, persuade an audience, create a literary piece, and/or express their emotions. Britton, Burgess, Martin, McLeod, & Rosen (1979) categorized the aims of discourse according to their functions: expressive, poetic, and transactional (see Figure 2.1). Expressive writing expresses and explores one's feelings, attitudes, and ideas. Poetic writing creates literary pieces. Transactional writing informs, instructs, supports theses, and persuades. As writers perform in these functional categories, they employ one or more modes of writing. The modes most commonly referred to in textbooks are narration, description, exposition, and argumentation (Britton et al., 1979; Kinneavy, 1971).

A closer examination of Britton et al.'s (1979) model of writing shows that transactional writing can be divided into two categories: informative and conative. Conative writing includes writing to instruct and persuade. Both instruction and persuasion attempt to influence readers. Instructive or regulative discourse describes what is or should be done. The regulative piece focuses on influencing readers'

**FUNCTIONS OF WRITING**  
Britton et al. (1979)

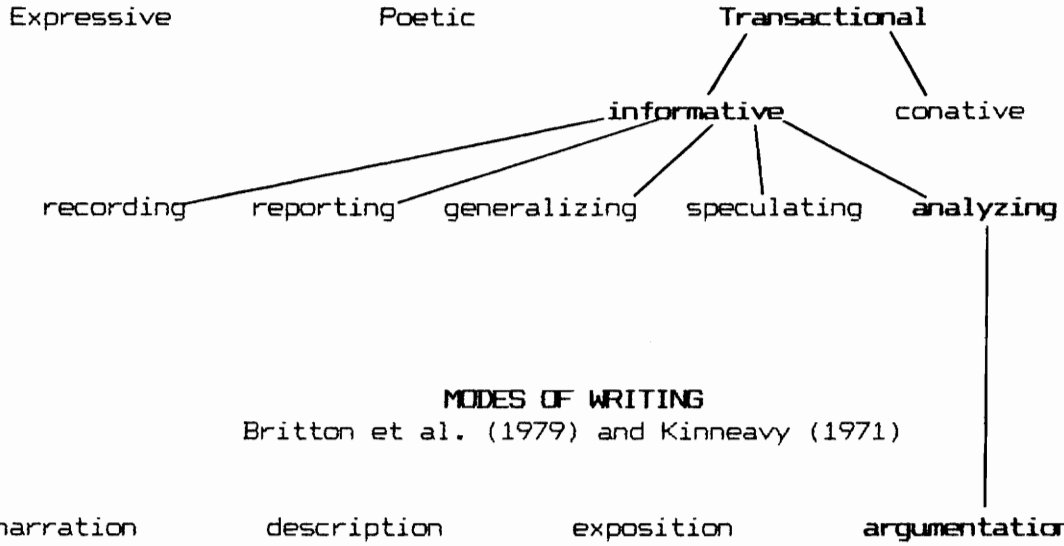


Figure 2.1

actions (Britton et al., 1979). Persuasion differs from instruction in that it attempts to change not only readers' actions but also their attitudes, beliefs, and opinions. It requires the utilization of complex strategies such as reason and argument (Britton et al., 1979).

Informative writing encompasses recording, reporting, generalizing, speculating, and arguing (Britton et al., 1979), and enables people to share knowledge and ideas with others on a variety of levels (Applebee, Langer, & Mullis, 1986). Informative tasks range from simply filling in forms to reporting occurrences to analyzing events (Applebee et al., 1986). Like conative tasks, informative writing at its lowest levels requires description and narration and at its highest levels demands exposition and argument.

The lower levels of transactional writing are characterized by their linear ordering. When writers instruct, record, report, or summarize, they present their information in a sequential, step-by-step progression (Matsuhashi, 1981). Their written pieces tend to be descriptive or narrative in nature. Whereas, more complex transactional writing such as analyzing and persuading appear matrix-like (Matsuhashi, 1981) and require a hierarchical organization (Hays, 1982). Matsuhashi (1981) described persuasion and analysis as a "matrix-like mix of abstraction with detail" that "creates a self contained, internal logic" (p.128). For this reason, writers employ the logical modes of expository and argumentative writing when composing analytic and persuasive pieces.

Although persuasion and analysis utilize similar modes of writing, significant differences exist between the two writing functions. When writing persuasive pieces, writers focus on the audience (Matsushashi, 1981; Pringle & Freedman, 1985). By taking a stand on issues and providing support for their opinions, writers set up an argument in an effort to influence readers' actions, attitudes, and/or beliefs (Applebee et al., 1986; Kinneavy, 1971; Prater & Padia, 1983). In an effort to bring about change, writers appeal to readers' emotions rather than to reason by using language and styles chosen to evoke an emotional response (Pringle & Freedman, 1985).

Analytic writers state a point of view and provide logically organized details to support and explain the assertions (Applebee et al., 1986; Durst, 1984, 1987). Although the argumentative structure is similar to the one used in persuasion, analytic pieces differ from persuasive pieces in purpose, focus, and style. Analytic writing, a complex subset of informative writing, requires writers to analyze and explain situations and events. Writers go beyond simply presenting information. Instead of describing an event, writers explain why it happened. Analytic writing draws on prior knowledge and experiences and combines them with new information to explain relationships. Analytic writers examine cause and effect relationships, explain the motivation behind actions, compare and contrast two or more situations, and/or present the foundations for a point of view (Applebee, et al., 1986).

When writing analytically, writers focus on the subject matter as opposed to the audience (Pringle & Freedman, 1985). The purpose is to interact with concepts by elaborating on the ideas, establishing relationships among them, and manipulating the relationships to represent complex thought processes (Hays, 1982). Because analytic writers concentrate on conveying messages based on analyses of information, they avoid emotional and value-laden language (Pringle & Freedman, 1985). Instead, writers develop logical and carefully worded arguments to accomplish their goals.

### Argument

Due to the complexity of analytic and persuasive essays, writers rely upon argumentation as an effective mode for conveying their messages. Although the structure is similar for both functions of writing, the purposes for utilizing argument are different. According to Perelman (1969), the use of argument in persuasion is a verbal, as opposed to physical, attempt to convince people to change not only their actions but also their beliefs. He explained that the use of a gun or other physical force may persuade people to change their behavior; however, their convictions may not be altered. In an analytic essay, the argument provides reasons for supporting a particular thesis (Perelman, 1969). Physical coercion is not an alternative because analytic writing does not attempt to bring about a change in actions. Therefore, the informative nature of the argument in analysis differs from its conative role in persuasion. However, in both functions, argument serves as a

**ARGUMENTATIVE STRUCTURE**

Toulmin (1964); Toulmin, Rieke, & Janik (1976)

State a claim

Cite data to support the claim

Use warrants to connect the data to the claim

Provide backings to explain the theory supporting the warrants

Qualify the claim to indicate confidence

Provide rebuttals that respond to possible opposing views

**Figure 2.2**

means for attaining a desired goal. The characteristics of argument enable writers to accomplish goals that other modes of writing would not.

### Argumentative Structure

The argumentative structure provides the reader with a clear explicitly or implicitly stated thesis, (see Figure 2.2). The thesis is supported by logically developed points and/or examples that attempt to provide evidence that support the claim (Pringle & Freedman, 1985). Warrants connect the data to the claim and are backed by theory and modified by qualifiers that add weight to the justification. Possible rebuttals include statements about circumstances in which the argument may not stand (Toulmin, 1964; Toulmin, Rieke, & Janik, 1979). Effective use of this structure provides writers with a vehicle for supporting theses and persuading audiences.

An effective argument begins and ends with the claim. Claims, as defined by Toulmin et al. (1979), are "assertions put forth publicly for general acceptance" (p. 29). Each claim contains a subject which states the topic being discussed and a predicate which indicates what is being said about the subject (Jensen, 1981; Secor, 1983). For example, the statement, "Education is important," contains the subject education and a predicate stating its importance. As an initial claim, this statement begins as an unsupported stand; but through the process of analysis, it becomes an established conclusion supported by evidence. For this reason when analyzing "the force and procedure of any argument, the

relevant claim defines both the starting point and the destination" of the procedures (Toulmin et al., 1979, p. 29).

The nature of claims differs according to the purpose of the argument. Jensen (1981) and Secor (1983) proposed ways of categorizing claims in an attempt to determine the best type of support for the argument. Jensen (1981) categorized claims as factual claims, value claims, and policy claims. Secor (1983) divided factual claims into two categories: categorical propositions and causal statements. The other two categories presented by Secor (1983) are evaluations and proposals which are similar in nature to Jensen's (1981) value claims and policy claims respectively. According to Jensen (1981) factual claims are made about the occurrence of an event, the existence of a person, or the state of being of a person, institution, object, or idea. Secor (1983) referred to two types of factual claims: categorical and causal. Categorical propositions are claims that place their subject in the category of the predicate. In the statement, "The car is blue," the car is placed in the blue category, and therefore, is considered a categorical proposition. Because the statement describes the state of being of an object, it is considered a factual claim. Assertions about cause and effect relationships are factual in nature, also (Jensen, 1981). Secor (1983) stated that causal statements assert that a cause and effect relationship exists. The claim, "Going to the pool after 3:00 p.m. reduces the chances of skin cancer," is a causal statement because the action affects the outcome.



Value claims or evaluations state an opinion about a person, event, place, institution, object, or idea (Jensen, 1981; Secor, 1983). An evaluative statement such as, "He is an excellent teacher," is an example of a value claim. The similarities to a categorical proposition are apparent because the claim contains a subject, he, that is classified as an excellent teacher. However, the classification is made on a value judgment about the subject. For this reason, the purpose of the value claim is to influence the audience's judgment.

Policy claims or proposals focus on whether or not a course of action should be taken (Jensen, 1981; Secor, 1983). They imply that a change should or should not take place. For example, the claim, "Teachers' pay should be increased," would call for a change in policy. Therefore, the purpose of a policy claim is to convince the audience to act upon a proposal in a certain manner.

After stating claims, arguers support their assertions by providing data to indicate why they feel justified in making their claims (Jensen, 1981; Toulmin, 1964). The data, also referred to as evidence and grounds, are the specific facts and information that are "relied on to clarify and make good the previous claim" (Toulmin et al., 1979, p. 33). When preparing arguments, arguers search for the data that will provide a strong case in support of the claim (Jensen, 1981).

The type of data varies according to the type of claim (Jensen, 1981; Secor, 1983), the availability the data, and the relevancy of the data (Toulmin et al., 1979). Categorical propositions that are factual in

nature are supported by a definition of the predicate or category and evidence that links the subject to the category (Secor, 1983).

According to Secor (1983), "the definition of the predicate must be acceptable to the audience, and the evidence about the subject must be convincing or verifiable" (p. 70). Generally, categorical claims are substantiated through the senses and supported with objective data (Jensen, 1981). The factual nature of the claim promotes the use of verifiable data.

Causal statements are not as easily verified as categorical propositions (Jensen, 1981). Arguers experience more difficulty attempting to provide objective data because the claim "is supported not so much with a definition, either assumed or explicit, but with an appeal to or an argument for agency, a basic belief about what can cause what" (Secor, 1983, p. 70). If the causal statement is based on commonly accepted relationships, the audience accepts the assertion with greater ease. However, if the relationship is not based on widely accepted assumptions, the arguer produces data to show how the subject affects the predicate.

Arguers experience more difficulty supporting evaluations than factual claims because they can not rely on objective data to unequivocally support the claim. Similar to the categorical proposition, an evaluation is argued for "by identifying criteria, assumptions, or definitions of value, and applying them to the particular subject under discussion" (Secor, 1983, p. 71). However, the

data tend to be selected based on the arguers own value system (Jensen, 1981). Because evaluations often judge the consequences and only the qualities of a situation, causal arguments may be employed by the arguer to give more insight into the evaluation.

A proposal requires the most complex argumentative structure because the data are often a mixture of facts and values (Jensen, 1981) and it is often a combination of smaller arguments (Secor, 1983). For example, "Teachers' pay should be increased," is a policy claim that proposes an increase in salaries. Arguers begin supporting the proposal with an argument that states the existing situation and uses factual data to support it. They might claim that teachers' salaries are lower than salaries of professionals in comparable professions. After stating this fact, the arguers attempt to convince the audience by making a value statement about the positive or negative consequences that result. Arguers might use a causal argument such as, "Potential teachers are not entering the field because they can earn higher salaries in other professions." After arguers set up the situation and show a need for the proposal, they submit the proposal to raise teachers' salaries. This is followed by a statement about the benefits of adopting the proposed policy such as, "More people will consider entering the teaching profession and the best and brightest applicants can be chosen. This will result in a better education for the students." The complexity of supporting a proposal requires that arguers gather and organize a variety of types of data (Secor, 1983).

Regardless of the type of argument, effective arguers choose evidence that is relevant to the claim and readily available. A piece of evidence might appear to be strong but if it does not relate to the claim, it is not effective. Likewise, the data must be available to the arguers. Data that arguers can not get a hold of will not support the claim. Therefore, in choosing data, arguers choose evidence that is not only available but also relevant.

The available data takes on many forms. Observations, statistical data, testimonies, and conclusions based on previous experiences serve as evidence for supporting a claim (Jensen, 1981). Arguers classify data as personal or real, primary or secondary, prearranged or impromptu, reluctant or willing, negative or positive, and direct or circumstantial (Jensen, 1981). These classifications can affect the weight of importance that an audience might place on the argument. For example, a stronger case exists when arguers use data that are received first hand from primary sources as opposed to hearsay from a secondary source. Also, the audience may place more value on arguments based on facts that are experienced by the senses rather than personal facts and opinions given by another person. Reluctant testimonies carry more weight than willing testimonies because the witness has nothing to gain from the testimony and may be harmed by it. Audiences tend to consider intentional reporting of observations more seriously than observations of a person who happened to be there but was unable to record the observations as accurately as the person who planned to keep records.

Positive data provide stronger evidence than negative data because negative data are the absence of data. Finally, data that is directly verifiable is stronger than circumstantial evidence that is added to other pieces of evidence to provide its strength (Jensen, 1981).

Arguers keep these classifications in mind as they attempt to build the strongest arguments possible.

Once arguers gather relevant data, they strengthen their arguments by providing warrants to connect their evidence to their claims. Toulmin (1964, p.98) stated that the purpose of warrants is "to show that, taking these data as a starting point, the step to the original claim or conclusion is an appropriate or legitimate one." The warrants serve as a connection between the initial claim and the supporting data. They justify the use of the specific data to support the stated claim.

Despite the presence of data and warrants, questions about the acceptability of the warrants may arise. When this occurs, backing or support for the warrant strengthens the argument (Jensen, 1981; Toulmin, 1964; Toulmin et al., 1979). Backings are generalizations or theories from which the warrants are drawn (Toulmin et al., 1979). They provide the foundation upon which the warrants are built. The nature of the backing depends upon the field or context of the argument (Toulmin et al., 1979).

Instances exist in which the strength of the initial claim is contingent upon the existing data. Modal qualifiers indicate the strengths and limitations of the claim by stating "what kind and degree

of reliance is to be placed on the conclusions" (Toulmin et al., 1979 p. 69). Words such as definitely, probably, certainly, possibly, and sometimes qualify or limit the claim to the reality of the situation (Jensen, 1981). When used appropriately, qualifiers indicate how confident the arguer feels about the claim (Jensen, 1981).

Despite arguers' care in selecting data, warrants, and qualifiers to support their claims, "extraordinary or exceptional circumstances that might undermine the force of the supporting arguments" could exist (Toulmin et al., 1979, p. 75). If that is the case, then rebuttals or reservations stipulate the conditions under which the claim would not be accurate (Jensen, 1981; Toulmin et al., 1979).

Although Toulmin's (1964) model described six separate elements of argument, their interdependence is apparent. The strength of the claim depends upon the accuracy and relevancy of the data. The effectiveness of the data depends upon the warrants that are used to justify how the evidence supports the claim. Although Jensen (1981) stated that backings, qualifiers, and reservations are secondary and nonessential elements in the Toulmin model, he admitted that they add strength to the overall argument (Jensen, 1981).

### Uses of Argument

A greater understanding of argument can be realized by examining the ways in which argument pervades all areas of society. Arguments emerge in communication of knowledge, social interactions, business transactions, professional contexts, commercial ploys, ethical issues,

and academic environments. In each of these realms, argument takes on a different purpose but the underlying structure remains the same.

Argument, as a means for communicating knowledge, gives people a way to express themselves and to understand and interpret others' uses of language (Sproule, 1981). According to Pringle and Freedman (1985), argument perpetuates the development and communication of knowledge in Western society. The study of argument enables people to "be consumers and producers of knowledge via language" (Sproule, 1981, p. 1).

Argument arises in social contexts. When people make assertions about others' emotions, actions, personality, roles, or appearance, they base it on the evidence they gather from the situation (Durst, 1987; Toulmin, 1964). Whether they use the data to draw conclusions for their own use or to influence others in a social situation, the assumptions affect the nature of the interactions (Sproule, 1981). In situations of conflict, argument may be used to reconcile differences and encourage a cooperative atmosphere (Sproule, 1981). Similarly people use argument to change others' beliefs and actions (Applebee et al., 1984, 1990; Pringle & Freedman, 1985; Sproule, 1981). Using argument to influence others is evident especially when confronting religious, philosophical, and moral issues (Singley & Stockton, 1984; Toulmin, 1964).

Many transactions that occur in the work environment rely on arguments. Businesses convince clients or consumers to use their services or buy their products by presenting reasons that suggest that it is to their advantage to do so. Professionals use arguments to

accomplish their goals. For example, teachers explain why students should complete their homework; doctors give reasons for following a prescribed exercise routine; and lawyers argue in defense of their clients. In the political realm, argument is prevalent, also. Candidates present reasons for why they should be elected; representatives prepare speeches supporting particular legislation; and lobbyists attempt to persuade politicians to support their views.

Argument prevails in the academic environment, also. Historians present artifacts to support their theories about ancient cultures. Scientists record observations in an attempt to explain scientific phenomena. Artists explain the aesthetic value of a painting. Argument is used in the study of literature to assist in the interpretation of literary works.

Because of its prevalence in society, it is not surprising that argument plays an important role in high school and college courses. Applebee (1981) and Britton et al. (1979) stated that summarizing and analyzing prevail as the most common functions of written discourse. Of the writing studied, Britton et al. (1979) reported that at the beginning of high school 54% of the assignments were transactional. By the senior year, 84% were in that category. The emphasis on transactional writing continues to exist throughout college. Crowhurst (1983) found that an emphasis on analytic writing is evident on college entrance exams. According to Hays (1982), in order to succeed in college, students must be able to write effective analytic discourse.



### Argumentative Written Responses to Literature

Composing is critical to thought processes because it is a process which actively engages the learner in constructing meaning, in developing ideas, in relating ideas, in expressing ideas. Comprehending is critical because it requires the learner to reconstruct the structure and meaning of ideas expressed by another writer (Squire, 1984).

Because argument fosters higher level thinking processes, many teachers assign thesis/support essays as a means to examine a passage critically (Applebee, 1984a). This type of analytic response promotes a deeper understanding of literature (Langer, 1986b; Langer & Applebee, 1987; Marshall, 1987; Newell, 1986; Newell & MacAdam, 1987). When students write about their own point of view, they "move beyond citing information to reformulating passage content to support and explain their understanding" (Newell & MacAdam, 1987, p. 25).

Recent studies examine the relationship between argumentative written responses to literature and comprehension. In his study of eleventh graders, Marshall (1987) asked students to respond to passages by answering short answer questions or by writing an argumentative response. Based on the results of the study, Marshall (1987) concluded that well-argued analytic responses that use data from the passage to explain a relationship result in greater recall and deeper interpretation than restricted short answer responses. The findings of

Newell and MacAdam (1987) revealed similar results. They concluded that when given posttests that require students to apply concepts and recall information, students who write responses to the text score better than those who read and review the passage. Also, when asked to apply concepts, those who write analytic responses score better than those who respond to short answer questions (Newell & MacAdam, 1987).

### Student Capabilities

Despite the prevalence of argumentation in society, many students experience difficulty writing effective arguments (Applebee et al., 1986, 1990; Crowhurst, 1983; Durst, 1987; Hidi & Hildyard, 1983; McCann, 1989; Pringle & Freedman, 1985; Reed, Burton, & Kelly, 1985). In an effort to understand and search for effective remedies, some studies attempted to determine the strengths and weaknesses of students' argumentative writing. These studies suggest that students experience more success with certain elements of the argumentative structure than with others (Applebee et al., 1986; McCann, 1989).

It appears that many ten to twelve year old students possess a structural knowledge of argument, but many do not use it (Bereiter & Scardamalia, 1982). McCann's (1989) study of sixth, ninth, and twelfth grade students supported this assertion. McCann (1989) asked students and a group of adults to identify which of seven passages contained features of argument. All four groups classified the same three passages as arguments, indicating that most students are able to

identify arguments in written discourse. Although students could identify arguments, the use of the elements of argument were not apparent in the writing analyzed by McCann (1989).

To further determine the extent of students' expertise with the argumentative structure, researchers have examined students' apparent success with the various elements of argument. Of the six elements, claims, data, warrants, backings, qualifiers, and reservations, students appear to experience the most success when stating claims. The 1986 National Assessment of Educational Progress (NAEP) report on writing concluded that most fourth, eighth, and eleventh graders who participated in the study were able to express a point of view (Applebee et al., 1986). McCann's (1989) study of sixth, ninth, and twelfth grade students supports this conclusion. The mean score on stating claims was higher for each grade level than the score on any other elements measured.

McCann (1989) examined the use of propositions in addition to claims. Although propositions are not identified in the Toulmin model, McCann (1989) expected to find propositions in the students' samples, and therefore, included them in his analysis. He defined a proposition of policy as "a specific kind of claim which stipulates a policy or procedure to be followed to alleviate a problem" (McCann, 1989, p. 67). McCann (1989) reported that all three grade levels successfully used propositions. However, he cautioned that this apparent success may be

due to inexperienced writers' tendencies to write a series of claims with no support (McCann, 1989).

Beyond identifying argument and stating claims, students appear to experience difficulty with the other elements of written argumentative discourse. Using data to support a claim, seems to be difficult across the grade levels (McCann, 1989). McCann (1989) reported that students in grades six, nine, and twelve experience difficulty citing evidence. The 1990 NAEP report on writing suggests that many students in grades four, eight, and eleven are unable to support their ideas successfully (Applebee et al., 1990). Applebee, Langer, and Mullis (1986) explained that most students understand the need to take a stand and support it with evidence. However, the evidence tends to be "unresponsive to the concerns of their readers, disorganized, or unelaborated" (Applebee et al., 1986). Many students provide lists of information in support of their claims rather than coherently organized arguments (Applebee et al., 1986).

Using warrants to connect the data with the claim appears to be difficult for students, also. The 1986 NAEP report concluded that most students in grades four, eight, and eleven experienced difficulty writing coherent and organized explanations that justified the use of the data (Applebee et al., 1986). McCann's (1989) findings suggest that most ninth and twelfth graders rarely use warrants and sixth graders almost never use them. He attributes the lack of usage by the sixth

graders to the finding that most sixth grade students seldom cite data that can be explained (McCann, 1989).

Recognizing and responding to opposition appeared to be two areas of weakness for all grade levels (Applebee et al., 1986; McCann, 1989). According to McCann (1989), sixth graders rarely recognize that opposition for their point of view could exist, and therefore, seldom respond to possible opposition. Although the ninth and twelfth grade students' mean scores were significantly higher than the sixth graders in recognizing and responding to opposition, their scores indicated that they experience difficulties with these two elements of argument, also (McCann, 1989).

In addition to being able to develop the elements of argument, another indication of writers' effectiveness is whether they are able to stay within the mode of writing for which the task calls. According to Hays (1982, 1983b), ineffective analytic writers tend to write edicts or narratives rather than arguments when attempting to write an analytic piece that requires supporting a point of view. Other researchers reported similar findings. When given a task that requires argumentation, many students will revert to a more familiar mode. Pringle and Freedman (1985) reported a high percentage of essays that appear to be expressive in the younger grades but that as the students become older the percentage of expressive writing decreases and the percentage of exploratory writing increases.

### Reasons for Difficulty

Researchers attribute the difficulties students experience with argumentation to a variety of factors. Studies cite cognitive development, affective development, and previous experience with argumentation as reasons students experience success or failure with argument and its elements. Argument, by nature, is more abstract than other modes of writing such as description and narration. Therefore, writing arguments requires writers to achieve a level of cognitive and affective development that allows them to deal with the abstract nature of the task. Also, writers need exposure to and experience with the mode of argument in order to express themselves effectively using an argumentative structure.

Studies suggest that argument requires a higher level of processing than other modes of writing such as narration. To arrive at this conclusion, researchers examined elements of writing that indicate that higher levels of thinking occur. They concluded that argumentative writing appears to be more difficult for most students to handle than writing narratives (Crowhurst, 1980; Crowhurst & Piche, 1979; Hidi & Hildyard, 1983; Matsuhashi, 1981; Pianko, 1979; Prater & Padia, 1983; Sommers, 1980).

Pianko (1979) studied the amount of planning that occurs when writing narratives as opposed to the amount of time needed to write arguments. Pianko (1979) concluded that arguments require more planning than narratives. Sommers (1980) approached the comparison of argumentation

and narration by examining the amount of revising that occurs in both modes. She documented more revising activity taking place in arguments than in narratives. Matsuhashi (1981), working under the assumption that greater number of pauses indicates more thinking, reported that writers pause more often when writing arguments implying that argument requires more thinking time than narratives.

Crowhurst (1983) studied writers' ability to stay in mode. She concluded that when asked to write an essay requiring argumentation, younger students find it difficult to stay in mode. When comparing the number of reporting sentences found in fifth, seventh, and eleventh grade students' persuasive essays, Crowhurst (1983) reported that fifth and seventh graders used significantly more reporting statements than eleventh graders. Reporting sentences signal that the writer is writing out of mode and is writing a narration or description. Some of the fifth and seventh grade students wrote their entire essays in the narrative mode. A few others wrote partially out of mode. Some began in the proper mode but were unable to continue; others surrounded their arguments with narration (Crowhurst, 1983).

After examining written products from third and fifth grade students, Hidi and Hildyard (1983) reported that students at both grade levels experienced more success writing narratives than writing arguments. Most of the fifth grade students were able to write good quality narratives but few were able to write effective opinion essays. In the third grade, not all of the students produced good narratives but

there appeared to be a correlation between good narratives and good opinion essays (Hidi & Hildyard, 1983). An analysis of the elements of each mode suggest that most students are able to provide at least three of the five identified narrative elements; however, only 20% of the third graders and less than 70% of the fifth graders produced more than one element of argument, and none of them provided more than two of the elements (Hidi & Hildyard, 1983).

Another indication that arguments are more difficult to write than narratives is the length of the written product. Hidi and Hildyard (1983) stated that most students in grades three and five write longer discourse when writing narratives than when writing arguments. This is attributed to the appearance of a single conversational turn evident in many of the opinion essays. Hidi and Hildyard (1983) explained that in narration the structural elements such as characters, setting, and plot serve as cues for writers to continue writing. Whereas, in argument, the structure is not internalized resulting in essays that resemble a conversational turn (Hidi & Hildyard, 1983).

Research on syntactic complexity (Crowhurst & Piche, 1979; Crowhurst, 1980) attempts to show that writing arguments is a more complex task than writing narratives. In a study of sixth and tenth grade students, Crowhurst and Piche (1979, p. 107) concluded that "argument was more syntactically complex than narration and description" and "suggest that narration places fewest demands and argument greatest demands on writers to make use of their syntactic resources." Crowhurst (1987) supported



these results in a study of sixth, tenth, and twelfth grade students. When examining the relationship between high syntactic complexity and scores on narrative writing samples, Crowhurst (1987) stated that "the absence of a positive relationship" . . . suggests "that effective narrative style is not greatly dependent on complexity of syntax" (p. 230). These results indicate that writing arguments places greater demands on the writer than writing narratives.

Instead of comparing the modes of writing, Durst (1987) was interested in comparing two functions of writing, summarizing and analyzing. Summaries restate in a chronological sequence the content of a passage. The focus is on the product. It relies heavily on the narrative and descriptive modes to accomplish its goal (Applebee, 1981; Durst, 1987). In comparison, analytic writing is evaluative in nature. The focus is on the analytic process as opposed to the resulting product. An analytic piece contains a thesis statement and evidence to support it. Because of this structure, analysis relies heavily on argument to convey the message (Durst, 1987).

In a study of twenty eleventh grade students, Durst (1987) reported that the cognitive responses of students to analytic and summary writing prompts were significantly different. The results "indicate that students writing analytically employed a more varied and complex set of cognitive operations than when writing summaries" (Durst, 1987, p. 356). The results suggest that students who write analytic essays ask higher-level questions, appear to participate in higher-level planning,

construct new meaning, and evaluate their own writing more often (Durst, 1987). Further analysis suggests that summary writers focus on local as opposed to global concerns when writing (Durst, 1987). They tend to develop details in a chronological order. Whereas, analytic writers pay more attention to larger units of text (Durst, 1987). They tend to focus on the overall message and the organization of the text more so than the summary writers (Durst, 1987).

### Cognitive Development

Because argument seems to require a higher level of thinking than other types of writing, cognitive development appears to have an effect on writers' development in the mode because as they develop, their ability to handle tasks of higher abstraction increases (Crowhurst, 1983; Moffett, 1983). Moffett (1983) explained that as students mature, they include fewer examples of lower abstraction and display greater instances of higher abstraction. It appears that the ability to handle tasks that require argumentation increase with age (Prater & Padia, 1983). In a study of fifth, eighth, and twelfth grade students, Prater and Padia (1983) reported that the percentage of students who successfully wrote argumentative discourse increased throughout the grade levels with a 29% success rate at the fifth grade level, 40% at the eighth grade level, 48% at the 12G (at grade) level, and 65% at the 12A (above grade) level.

The 1986 National Assessment of Educational Progress (NAEP) report suggests that overall writing performance improves the most dramatically

between grades four and eight and less dramatically between grades eight and eleven (Applebee et al., 1986). On a persuasive task requiring the students to select a school rule and to convince the principal to change it, 4% of the fourth graders, 15% of the eighth graders, and 22% of the eleventh graders wrote essays that were considered to be adequate or above (Applebee et al., 1986). These results suggest that students experience difficulty writing essays with an argumentative structure; however, some improvement occurs as the students develop their writing abilities.

McCann's (1989) findings in his study on sixth, ninth, and twelfth graders indicate similar developmental patterns. The analysis reveals a significant difference among the three grade levels (McCann, 1989). The sixth grade students, on average, scored significantly lower than the eighth and twelfth grade students on the total score, the use of claims, the use of warrants, recognizing opposition, and responding to opposition (McCann, 1989). No significant differences among the three grades were reported for use of data (McCann, 1989). Based on these results, McCann concluded, "...younger writers are less skillful in producing arguments than the older writers" (p. 70).

Crowhurst (1983) compared argumentative pieces written by fifth, seventh, and eleventh grade students. She reported no significant differences among the three grades in interpreting, generalizing, and speculating. However, she concluded that the eleventh graders were more apt to give generalized reasons (Crowhurst, 1983). Wilkinson, Barnsley,

Hanna, & Swann (1980) supported this finding in their study of seven, ten, and thirteen year old students. They stated that each age level did more generalizing than the earlier ages.

Crowhurst (1983) explained that older students' greater cognitive development makes them better able to generalize. Wilkinson et al. (1980) stated that the older students are moving toward formal operations, and therefore, are more capable of generalizing and speculating. Whereas, the younger writers are operating in concrete operations and are more inclined to describe and interpret rather than generalize and speculate (Wilkinson, et al., 1980). All grade levels tend to interpret more than generalize and speculate. All grade levels used speculating scarcely.

As students develop cognitively, they develop the schemata for using the argumentative structure in their writing. According to Bereiter and Scardamalia (1982), students develop their schema for oral argument prior to developing their schema for written argument. By doing so, writers draw upon their knowledge of conversational turns to make their statements and then predict what type of responses the reader would make in an oral conversation (Bereiter & Scardamalia, 1982). Writers address these hypothetical responses through the use of data, warrants, and rebuttals as they compose their essays. Anticipating and responding to the audience's feelings and opinions is an essential task that writers undertake when writing arguments. Possessing schemata for argument assists writers in writing arguments effectively.

Rather than comparing samples across grade levels, Hays (1982, 1983a, 1983b) analyzed samples from high school seniors and college students in an effort to describe writers' development from ineffective to effective writers of argument in analytic discourse. By comparing papers written early in the study with papers written later in the study, Hays (1983b) concluded that as writers develop, their essays increase in complexity geometrically. Development does not occur in a linear fashion but rather in a matrix-like fashion. She identified a predictable sequence of development that occurs.

According to Hays (1983b), writers in the first stage of development tend to make simple and unsupported claims. In the second stage, data is added to support the claims and justification or warrants begin to emerge. However, recognition of opposing views is non-existent (Hays, 1983b). By the next stage, writers recognize opposing views but have difficulty responding to them. Hays (1983b) observed, "writers display a reasonably full recognition of multiple perspectives and some elaboration of these perspectives but lack the ability to deal with and resolve their implications" (p. 140). In the final stage, mature writers not only recognize opposing points of view but address them in their writing. Their own positions become stronger as they elaborate and qualify their arguments more fully (Hays, 1983b).

Concerned with examining the various aspects of the development of analytic writing, Hays (1982, 1983a) analyzed selected samples to determine how writers make the transition from ineffective analytic

writers to effective analytic writers. She observed seven areas of development present in analytic writing: awareness of self as writer, awareness of reader, basis of argument, type of argument, sense of own position, amount of planning, and complexity of thought. Within each area of development, Hays (1982, 1983a) described a continuum that traces the development of ineffective writers to effective writers of argument. Awareness of self as a writer and of the reader range from no awareness to high awareness. The appeal of the piece shifts from moralistic to emotional to logical and pragmatic. The mode of writing shifts from edict to narrative to explanation to problem solving to argumentation. Position taken ranges from absolutist to tentative to reasonable to sense of own position. Planning is non-existent at first, then it becomes excessive, and finally it becomes efficient. Sense of issue's complexity shifts from none to some to much to too much and back to much (Hays, 1982, 1983a).

### Affective Development

Affective development, which refers to the emotional and social growth of people (Wilkinson et al., 1980), affects the writers' responses to the readers' needs. Hays (1983b) suggested that immature writers are self-centered and are unable to anticipate the needs of the reader. In a study of fifth, eighth, and twelfth grade students, Pringle and Freedman (1985) examined the affective growth evidenced in written arguments. "What emerges is a movement from an awareness of

one's own feelings outward, to an empathetic response towards others, and then to a growing sense of commitment on behalf of others, to community and to the world at large" (Pringle & Freedman, 1985, p. 58). As writers develop an awareness of their audience, they become less self-centered and more aware of their readers. This enables writers to consider others' points of view and use that knowledge to develop effective arguments (Hays, 1983b).

### Instruction

Lack of instruction provided in the school (Langer, 1982; McCann, 1989) and lack of exposure to literary models of argumentation (Pringle & Freedman, 1985) contribute to the deficiencies that are apparent in students' argumentative writing. McCann (1989) claimed that schools introduce argumentative writing into the curriculum around the eleventh grade. Langer (1982) suggested that eleventh grade is not early enough and that argument should be included beginning in elementary school. Even as early as elementary school, students need to use analysis as a tool for explaining and sharing their ideas with others (Langer, 1982).

According to Vygotsky (1978), the timing of instruction impacts on students' development in a particular area. He claimed that when instruction is provided prior to development, instruction promotes achievement in that area. Bereiter and Scardamalia (1982) suggested that students are ready for instruction in the fourth grade. According to their research, fourth and sixth grade students possess the concepts needed to write arguments. However, instruction must be provided to put

this knowledge to functional use (Bereiter & Scardamalia, 1982).

Bereiter and Scardamalia (1982) recommended that instruction build upon the writers' existing schemata. Teachers should begin with what the students already know about argument and draw upon that knowledge to enhance the development of argumentative writing. Also, they suggest that the level of expectation correspond with the writers' cognitive development (Bereiter & Scardamalia, 1982). This implies that writers should be encouraged to write argumentative essays but should not be considered failures if they can not produce an essay with the sophistication of a mature writer.

The findings from Crowhurst's (1991) study support Bereiter and Scardamalia's (1982) assertion that students can be trained to write argumentation. Crowhurst (1991) provided five weeks of training to sixth grade students for 45 minutes twice a week. She examined two types of training (instruction plus written practice and instruction plus reading practice). These were compared to a single lesson group and a control group. Results of the study indicated that the students who received training performed better on posttests than students who did not receive intensive training on argumentation. Also, students who participated in the instruction plus written or reading practice improved their scores significantly over time. Based on these results, Crowhurst (1991) concluded that instruction plus practice can improve sixth grade students' ability to write arguments.



Current research (Bereiter & Scardamalia, 1982; and Crowhurst, 1991), suggests that training can affect sixth grade students' performance on argumentative written tasks. It would seem reasonable to conclude that with the appropriate training, sixth grade students would be able to improve their argumentative written responses to literature, as well. Because students appear to possess weak analytical skills, Kahn, Walter, and Johannessen (1984, p. 2) suggest "that new ways must be found to teach students the skills and strategies which will enable them to write effectively about the literature they read."

#### Cooperative Learning

One set of instructional strategies that may facilitate argumentative written responses to literature is cooperative learning. Cooperative learning refers to a set of strategies that encourages cooperation among learners as an alternative to the competitive and individualistic approaches that are found more traditionally in America's classrooms. Cooperative learning occurs when students work together in small, mixed ability learning groups to accomplish a goal (D. Johnson, R. Johnson, Holubec, & Roy, 1984; Slavin, 1987; Stevens, Madden, Slavin, & Farnish, 1987). Within these groups, students encourage each other to excel by working together for a common purpose.

Based on a meta-analysis of studies examining cooperative learning in a variety of academic areas, D. Johnson et al. (1984) concluded that cooperative learning tends to promote high academic achievement. Johnson, Maruyama, Johnson, and Nelson (1981) claimed that achievement

appears to be higher in situations where teachers employ cooperative learning strategies as opposed to individualistic and competitive strategies (Johnson et al., 1984). DeVries and Slavin (1978) summarized ten experiments that examined the effects of cooperative learning on third, seventh, and twelfth grade students' achievement in language arts, mathematics, and social studies. They reported that cooperative learning strategies appear to have a positive effect on achievement in mathematics and language arts. Based on recent studies, it appears that, in general, cooperative learning affects students' achievement in a positive manner.

Further studies examined various ways of organizing and implementing cooperative learning within the classroom. Sharan (1980) recognized five methods employed in cooperative learning classrooms. He classified three of the methods, Aronson's Jigsaw classroom, DeVries' Teams-Games-Tournaments, and Slavin's Student Teams and Academic Divisions, as peer-tutoring models and the other two, Johnsons' cooperative learning approach and Sharans' Small-group Teaching method, as group-investigation models. He described peer-tutoring methods as limited to the acquisition of information and skills; confined to rehearsal of materials; restricted to tutoring relationships; oriented toward individual products and evaluation; and reliant upon extrinsic motivation. In contrast, group-investigation models encourage problem-solving, interpreting, synthesizing, and applying information; promote an exchange of ideas among the group members; produce products collectively; evaluate both the individual and the group; and foster

intrinsic rewards (Sharan, 1980). In a study of students in grades two through six, Sharan, Hertz-Lazarowitz, and Ackerman (1980) reported that Israeli students who participated in small group tasks using group-investigation strategies responded more successfully to higher level questions than students who were taught in a traditional classroom without compromising their achievement on the lower level tasks. Because the nature of argumentative written responses to literature requires higher level reasoning and problem solving skills, collaborative writing, the collective writing of a single piece, employs the group-investigation approach.

#### Collaborative Writing

Stevens, Madden, Slavin, and Farnish (1987) suggested that cooperative learning strategies can be applied to enhance students' writing processes. They investigated the effects of implementing writing groups to help third and fourth grade students with their writing throughout the writing process. Each learning team was grouped heterogeneously. The teachers encouraged the members of the groups to work cooperatively to assist writers with revising and editing their individually written samples. They reported that students who participated in cooperative learning teams scored higher on writing samples than students who used traditional methods and materials to learn to write effectively. These results appear to be supported by Moberg's (1988) study of college freshman. He reported a fifty percent

improvement on the end-of-the-semester Writing Assessment Test after using small cooperative writing groups in his English course.

Another form of collaboration is collaborative writing in which writers work together to produce a single piece of writing (Dickerson, 1989; Ede & Lunsford, 1985; McEachern, 1986). Chann (1988) described collaborative writing as an opportunity "for students to write as members of communities" (p. 1). In order to produce the written piece, the members must come to a consensus. They do this through the verbal exchange of ideas. Because members must agree upon the written product and are held accountable for what they produce, collaborative writing heightens the importance of sharing ideas, expressing concerns, and listening to others' thoughts. Because group members rely upon each other, writers "become active participants, making for more productive and more lasting learning" (Chann, 1988, p. 5).

### Benefits of Collaboration

Vygotsky (1978) suggested that more effective learning occurs because collaboration helps learners internalize strategies in order to apply them independently in appropriate situations. In case studies of fourth and fifth grade students who wrote collaboratively in pairs, Nunn (1982) concluded that students' oral discourse when writing collaboratively helps them solve the problem of what to write and how to phrase the thoughts effectively. She viewed this as "relevant to Vygotsky's theory that inner speech serves as an organizer for writing" (Nunn, 1982, p. 11). Dauite (1986) also suggested that the theory

underlying collaboration is "the Vygotskyian (1972) notion that children are better able to develop thinking and communication skills if they model them directly on social interactions" (p. 383).

Throughout collaboration, modeling of effective strategies occurs as students verbalize and share their ideas, thereby learning from each other. Based on a study of fourth and fifth grade students composing in dyads, Nunn (1982) asserted that students learn from one another as they compose collaboratively. She concluded that the oral discourse that occurs in collaborative writing is responsible for enhancing the learning. D. Johnson, R. Johnson, Holubec, & Roy (1984) claimed that the oral interaction "promotes the discovery and development of higher quality cognitive strategies for learning than does the individual reasoning found in competitive and individualistic learning situations" (p. 15). Based on a study of fourth grade students, Dauite (1986) suggested that the reason collaboration is more effective than competition and individual study is that students learn how to conceptualize the writing process and how to master the form of a specific type of writing from one another. The amount of learning that occurs in a short amount of time enhances the use of collaboration during writing (Dauite, 1986).

Effective learning occurs during collaboration because writers develop their schemata of writing. By verbalizing what is known, collaboration activates the students' prior knowledge (Flood, 1986). Relating the known to what is unknown, encourages writers to accommodate

and assimilate the information and ideas they share, therefore, developing the writers' schemata of writing to a higher level. Johnson et al. (1984) explained that as group members discuss their differing points of view and information is repeated, motivation to achieve is increased, a higher level of retention and achievement is attained, and understanding is enhanced. Also, as the writers express their thoughts and challenge others' ideas, writers achieve a greater understanding of the concepts. Because of the interaction among the group members and the opportunity to verbalize concepts, students achieve a greater understanding of what is involved in writing.

Because of the social nature of collaboration, affective development in writing is enhanced, also. Effective writers anticipate the needs of the readers and write accordingly. The self-centered nature of immature writers makes it difficult for them to respond to the readers' needs (Hays, 1983b). Collaboration provides an audience that through oral discourse enables writers to recognize opposing points of view and address them in the writing. Dauite (1986) explained that collaborative writing provides "writers with the explicit experience of talking about writing as they write and thus they serve as models for role playing the reader and the writer" (p. 385). Therefore, writers gain a higher level of awareness.

### Collaborative Writing of Argumentative Responses to Literature

By examining the nature of argumentative writing and the nature of collaborative writing, it is evident that the strategies employed during

collaborative writing will enhance written argumentative responses to literature. Argument is a complex form of writing that requires writers to actively engage in higher level thinking processes as they prepare structurally sound arguments that respond to the points of view of the readers. Because collaborative writing requires writers to work together to write a collective piece, members of the group interact in such a way that motivates writers to become involved actively. By creating their own audience, writers become aware of the thoughts and responses that might be evident in their readers.

As group members model and verbalize the strategies required to state claims, cite data, and use warrants, they internalize the argumentative structure. The oral discourse promotes a greater understanding of the structure and encourages writers to think more critically by awakening higher level cognitive processes. The results are writers who are more aware of the argumentative structure and are more prepared to respond to literature in the argumentative mode.

### Summary

A review of the current literature on argumentative writing, analytic writing, written responses to literature, and collaborative writing was presented in this chapter. This information provided the foundation for the study on improving sixth grade students' argumentative responses to literature that will be described and discussed in the subsequent chapters.

## Chapter 3

### RESEARCH DESIGN AND METHOD

The results from recent studies indicate that many students are unable to use argument effectively in their analytic writing (Applebee et al., 1986, 1990; Langer, 1982; McCann 1989). The purpose of this study was to determine the effects of type of written practice and time of writing sample on the overall development of argument and on the development of the elements of argument (stating claims, citing data, and using warrants) in sixth grade students' argumentative written responses to literature over the course of a unit of study.

#### Design

The effect of two types of practice (collaborative written practice and independent written practice) on the overall development of argument and on the development of three elements of argument (stating claims, citing data, and using warrants) in students' written responses were examined at three time points throughout the study (pre-training, mid-training, and post-training). The design was a 2 x 3 mixed design with repeated measures on one factor (see Figures 3.1 and 3.2). The first independent variable was the type of practice in which the students engaged throughout the study, and the second independent variable was time of writing sample. The dependent variables analyzed were the scores on three elements of argument (stating claims, citing data, and using warrants) and the composite scores of the three elements of argument (total effectiveness).



Total Effectiveness  
Research Design

		Time of Writing Sample		
		Pre-training	Mid-training	Post-training
Type of Written Practice	Collaborative			
	Independent			

Figure 3.1

Elements of Argument  
Research Design

		Time of Writing Sample								
		Pre-training			Mid-training			Post-training		
Element*		C1	D1	W1	C2	D2	W2	C3	D3	W3
Type of Written Practice	Collaborative									
	Independent									

\* C = Claims  
D = Data  
W = Warrants

Figure 3.2

The between-subjects factor, type of practice, contained two levels (collaborative written practice and independent written practice). The students were assigned randomly to one of these two treatment groups. The 24 students assigned to the independent written practice treatment group wrote their argumentative practice essays individually. They received no assistance from their classmates. In contrast, the 24 students assigned to the collaborative written practice treatment group wrote their argumentative practice essays collectively in groups of three students.

In order to be consistent with research and common classroom practice (D. Johnson, R. Johnson, Holubec, & Roy, 1984; Slavin, 1987; Stevens, Madden, Slavin, & Farnish, 1987), each student in the collaborative written practice treatment group was assigned to a collaborative writing group based on gender, ethnicity, ability, and the researcher's judgment based on her knowledge of the students' strengths and weaknesses. Each group consisted of one male and two females or two females and one male. The ethnic backgrounds of the students were identified to assure that the groups were balanced for ethnicity. Ability was judged based upon the students' level of performance in language arts (below grade level, on grade level, and above grade level) as stated on their report cards and teacher judgment.

The within-subjects factor, time of writing sample, contained three levels. Each student wrote one pre-training sample. This sample served as a control to determine whether the two groups were significantly

different prior to training and whether training had a significant effect on the students' argumentative writing. The mid-training and post-training writing samples were administered to examine the pattern of development over time and to determine whether a significant difference existed on the average scores for each element at each time due to the type of written practice in which the students engaged.

### Subjects

Data were collected from two different samples at two different times. During the first collection of data, 26 sixth grade students enrolled in the regular classroom and gifted language arts programs participated in the study in the spring of 1990. In the spring of 1991, 22 sixth grade students enrolled in the regular classroom and gifted language arts programs participated in the second collection of data. Students primarily assigned to the Modified Self-Contained Learning Disabilities and English-as-a-Second-Language language arts programs, who did not participate in the regular language arts program, were not included in the sample during either data collection. Learning disabled resource students who participated in the regular classroom program were included in the sample during both data collections. One student in the spring of 1990 was identified as a learning disabled resource student, and three students during the spring of 1991 were identified. All of these students functioned on grade level in language arts. Because this study employed a mixed-ability model of cooperative learning (D. Johnson, R. Johnson, Holubec, & Roy, 1984; Slavin, 1987; Stevens,

Madden, Slavin, & Farnish, 1987), the sample included six students during the first collection of data and three students during the second collection of data who had been identified as at-risk students by the school system based on reading scores on a norm-referenced standardized test and seven students in the first collection of data and ten in the second collection of data who had been identified as being gifted in the area of language arts (see Appendix A).

The students participating in the study were enrolled, at the time of their data collection, in the same small, metropolitan public school in Northern Virginia. The students came from varied socio-economic backgrounds consisting of lower, middle, and upper-middle class families. Of the students in the first data collection, 54% were Caucasian, 23% were Black Americans, 12% were Hispanic, and 12% were Asian. In the second data collection, 55% were Caucasian, 36% were Black Americans, 5% were Hispanic, and 5% were Asian.

Because there were only 26 sixth grade students available to participate in the study at the school during the first data collection and 22 sixth grade students were available to participate in the second data collection, the two samples were pooled. Tests of equivalency were employed on the scores from the pre-training, mid-training, and post-training writing samples to determine whether the students' scores from the two data collections differed significantly at each point in time. Results of the analyses indicated that no significant differences existed between the two data collections (see Appendix B).

Because all of the students in the regular classroom and gifted language arts programs participated in the study, the subjects in both data collections were not selected randomly. However, they were assigned randomly to one of two written practice groups (collaborative or independent written practice).

### Materials

All passages selected for use during the study were chosen from The Random House Achievement Program in Literature anthologies. In an attempt to select passages of equivalent difficulty, three passages from the fifth grade anthology were selected for testing purposes. These passages were "The Spider Plant" by Yetta Speevack, "Thank You, M'am" by Langston Hughes, and "Lassie, Come-Home" by Eric Knight. These passages were chosen because they appeared to be equivalent in reading difficulty and lent themselves to similar responses. Students were asked to respond to the main characters' feelings about a particular event on which the story centered. Each of these passages dealt with characters' feelings about an event which occurred in the story. In each of the passages, a claim about the character's feelings could be made and stated clearly. Also, each passage provided ample data to support the students' claims.

Using the Spache Readability Formula, the passages were not significantly different in level of difficulty (see Appendix C). "The Spider Plant" has an average grade level readability of 4.3 and contains 2,104 words; "Thank You M'am" has an average grade level readability of

4.7 and contains 1,253 words; and "Lassie Come-Home" has an average grade level readability of 4.3 and contains 1,732 words. Because the passages were read orally to the students as they read along silently and the students were given two one-hour sessions to complete the task, the length of the passages did not appear to affect the results adversely.

In order to determine the effectiveness and equivalence of the prompts and the test passages, the prompts and test passages were field tested prior to use in the study. A reading specialist reviewed the prompts and concluded that they should elicit similar responses across the three passages. She read each test passage and stated that all three should lend themselves equally well to the argumentative responses elicited by the prompts. After reviewing the materials, she chose three heterogeneously grouped sixth grade classes in her school to write argumentative responses to the three passages. Based on her knowledge of and work with the three classes, she stated that all three classes were similar in ranges of ability. Because of scheduling constraints, she was unable to assign the students randomly to the three test passages. Therefore, each class was administered a different one of the three passages.

The feedback from the field testing was used to revise the prompts and procedures. As the reading specialist administered the tests, she noted that students seemed to handle all three passages without any difficulty. She also recorded notes about students' questions and areas

of confusion relating to the prompts and the oral directions. Based on the recommendations, changes were made to the prompts and to the amount of time allotted for testing (see Appendix D).

### Instruments

Writing samples were scored using an adaptation of McCann's Scoring Criteria based on Toulmin's Model of Argument (McCann, 1989). McCann's scale was used to score each writing sample on six elements - stating claims, citing data, using warrants, recognition of opposition, response to opposition, and stating propositions. Although McCann (1989) employed this scale to evaluate persuasive arguments, the scoring for three of these elements was applicable to the analytic arguments the students wrote in this study. Because students were taught how to state claims, cite data, and use warrants, these three elements were assessed using McCann's scale.

Scoring for propositions, recognition of opposition, and response to opposition was not employed. Because the prompts in this study did not require the students to state a claim about policy, the scoring for propositions were not used. Recognition of opposition and response to opposition were not taught in this unit. Therefore, these two criteria were not employed.

Scoring criteria based on McCann's (1989) scale are described in Appendix E. A total effectiveness score for each sample was obtained by combining the scores for the three elements. Each score ranged from zero to three, with zero indicating no evidence of the element and three



indicating effective use of the element. The composite scores for total effectiveness ranged from zero to nine.

One rater scored all of the writing samples and another rater re-scored over half of the samples. A Spearman's rank correlation coefficient indicated a correlation of .84 for inter-rater reliability on the pre-training writing sample, .91 on the mid-training writing sample, and .84 on the post-training writing sample. These results are consistent with the reliability factor of .83 reported by McCann (1989).

### Procedures

Prior to the study, all students were gathered in one room for an explanation of the upcoming unit of study. The focus of the new unit of study was presented and an outline of the schedule was shared (see Table 3.1). The students were told that although the unit would not be taught by their regular language arts teacher, it would be treated like any other work they did in the language arts classroom. It was stressed that grades for language arts would be earned on their written and oral work, as usual.

Expectations placed on the students were similar to previous writing workshop expectations. All students were familiar with the writing process and the need to plan, draft, revise, edit, and publish their writing. They also had experience in both collaborative and independent writing. The area with which they were not familiar was writing argumentative responses to literature.

Table 3.1

## SCHEDULE FOR TESTING AND TRAINING

Week	Day	Minutes	Activity
1	1	60	Begin Pre-training Writing Sample
	2	60	Complete Pre-training Writing Sample
2	1	40	Whole Class Instruction & Practice
	2	40	Whole Class Instruction & Practice
	3	40	Whole Class Instruction & Practice
	4	40	Whole Class Instruction & Practice
3	1	40	Collaborative or Independent Written Practice
	2	40	Collaborative or Independent Written Practice
	3	40	Collaborative or Independent Written Practice
	4	40	Collaborative or Independent Written Practice
4	1	60	Begin Mid-training Writing Sample
	2	60	Complete Mid-training Writing Sample
5	1	40	Collaborative or Independent Written Practice
	2	40	Collaborative or Independent Written Practice
	3	40	Collaborative or Independent Written Practice
	4	40	Collaborative or Independent Written Practice
6	1	60	Begin Post-training Writing Sample
	2	60	Complete Post-training Writing Sample

As stipulated in the human subjects review, the students were informed that all written work would be saved and studied as part of an experiment on writing (see Appendix F). They were assured that the results of the experiment would be reported based on aggregated scores and the individual results would not be published. They were told that if at any time they did not want their writing to be studied, they could exercise that option by informing the researcher, the principal, or their language arts teacher and that no penalties would prevail. Following the information session, the students signed an informed consent disclosure sheet indicating that they were aware of the study and were willing participants. Before the training began, parents received a letter and an informed consent disclosure sheet that was sent through the United States Postal Service (see Appendix F). Parents were given the opportunity to withdraw their child from the study at any time without penalty.

### Writing Samples

The three passages selected for testing purposes were assigned randomly to the three times of the writing sample. "The Spider Plant" was read during the pre-training writing sample. "Thank You, M'am" was read during the mid-training writing sample. For the post-training writing sample, "Lassie, Come-Home" was read.

The following procedures were followed during each of the three writing samples during both collections of data (see Appendix G). To allow students time to plan, draft, and revise their writing samples,

two one-hour blocks were set aside for each writing sample. The two one-hour blocks occurred on two different days in order to encourage students to utilize the writing process. All students reported to the same room each time they worked on the writing samples to reduce the effect of the testing environment as a confounding variable.

During the first block of testing, the testing materials were distributed. Each student was given a manila folder with loose leaf notebook paper, two pencils, a copy of the short story, and a copy of the directions and prompt. The students were instructed to read to themselves as the story was read aloud. The students followed along with the text as the short story was read orally.

Following the oral reading, the prompt was read and the procedure was explained. The students were given an opportunity to ask questions. But no training was given at this time. Then they were given one hour to begin planning, drafting, and revising their responses. The students worked independently and quietly the entire time as the researcher circulated around the room answering procedural questions but not offering advice. At the conclusion of the hour, the students placed all of their work in their manila folder. All materials were collected. At the beginning of the second block, the materials used in the previous session were distributed. The manila folders contained the work from the previous day, as well as clean loose leaf notebook paper. The students were instructed to continue to draft and revise their papers. They were told that their final essays would be collected at the

conclusion of the hour. Once again, the students worked independently and quietly the entire time while the researcher circulated and answered procedural questions. No advice was given on the written work. At the conclusion of the hour, all materials were collected.

For the pre-training writing, a passage by Yetta Speevack, "The Spider Plant," was read orally as the students followed along silently. The students were asked to explain how Carmen, the main character, felt about her upcoming move. They were instructed to support their statements using evidence from the story and to explain how the examples supported their statements (see Appendix H).

After two weeks of training, the students completed their mid-training writing sample. The students listened to the passage, "Thank You, M'am" by Langston Hughes as they followed along silently in their text. They were asked to explain how Roger, the main character, felt when he was caught attempting to steal a purse. They were instructed to support their claims with evidence from the story and to explain how the examples supported their statements (see Appendix H).

After the third week of training, the students completed their post-training writing sample. The passage, "Lassie Come-Home" by Eric Knight, was read orally as the students followed along silently in their text. They were asked to explain how Joe, the main character, felt about Lassie being sold. They were instructed to support their claims with evidence from the story and to explain how the examples supported their statements (see Appendix H).

### Instruction and Practice

Training began with four sessions held on four consecutive days (see Appendix I). Because English class periods and/or writing workshop sessions in the sixth grade are typically 40 to 50 minutes long, 40 minutes were allotted for each session. During the first week of training, students engaged in whole class instruction and practice designed to provide the necessary background for writing argumentative responses to literature. The sessions focused on developing three of the elements of argument. The passage, "The Spider Plant," was used as the basis for teaching the students how to state a claim, cite data, and use warrants.

During the first week of instruction and practice, the teacher presented and modeled the skills, the students practiced the skills collectively as a class, and then the students tried them independently. The first session provided background information on writing argumentative responses to literature and instruction and practice on how to state a claim. During the second session, how to state a claim was reviewed and how to locate and cite data was presented and practiced. This was followed by a session focusing on how to connect the data to the claim by using warrants. The students spent the final session learning how to put the elements together in an argumentative essay. During each session, all of the students met with the researcher in the same room at the same time; therefore, the instruction and

environmental conditions were exactly the same for both treatment groups.

During the second week of training, the students were given an opportunity to expand their understanding of the elements of argument and apply their knowledge by writing an argumentative essay in response to a passage from literature. The students listened to a short story, "The Torn Invitation" by Norman Katkov and were asked to write an argumentative essay explaining how Harry felt about his mother attending the open house (see Appendix J). The other three 40 minute sessions began with the whole class meeting together for instructions and a five minute mini-lesson. The first mini-lesson reviewed the elements of an argumentative essay and encouraged the students to spend time planning their essays before drafting. The second mini-lesson focused on developing the data with details when revising the draft. The final mini-lesson emphasized connecting the data to the claim by using warrants. Students were encouraged to make sure that warrants were evident in the final drafts that would be turned in for grading at the end of the work session.

Following the presentation, the two treatment groups were sent to two different rooms to work on an argumentative essay. Students in one group worked independently to produce individual essays. Students in the other treatment group worked collaboratively in groups of three to produce a single essay per group. The students were informed that the essays would be due at the end of the third working session. These

essays were collected, graded, and returned with feedback; however, they were not used in the analyses. Following the week of collaborative or independent written practice the students wrote their mid-training writing samples. This was followed by a third week of training. During this week, the students followed along silently as "Before Breakfast" by E. B. White was read orally to all of the students. After reading the passage, the students were instructed to write an essay stating how Fern felt about her father killing the runty pig (see Appendix J). During the next three 40 minute sessions, the students met together in one room for a five minute mini-lesson and then were sent to separate rooms according to their treatment group. The first mini-lesson focused on a review of the elements and the need to plan, draft, and revise before turning in the final draft. In the second mini-lesson, students' questions about using warrants in their essays were addressed. The final mini-lesson encouraged students to review their essays to make sure they developed each element to the best of their ability before turning the final drafts in for grading.

### Methods of Analysis

An analysis of variance (ANOVA) with repeated measures was performed for each element of argument (stating claims, citing data, and using warrants) and for the composite of the scores for the three elements (total effectiveness). Each analysis included one between-subject



variable (type of practice) and one within-subject variable (time of writing sample). The subjects were assigned randomly to one of two types of practice groups (collaborative written practice or independent written practice). Each subject produced three writing samples over time (pre-training, mid-training, and post-training). Each writing sample was scored for effectiveness in stating claims, citing data, and using warrants. A total effectiveness score was obtained by combining the claims, data, and warrants scores.

Because the data were collected during two different years with the intent to pool the data from the first and second collections if feasible, three t-tests were employed to determine whether significant differences existed, on average, between the composite scores of the two data sets on the pre-training, mid-training, and post-training writing (see Appendix B). Because there were no significant differences, the data sets were pooled before analyzing the effects of type of written practice and time of writing sample on the students' argumentative written responses to literature.

### Summary

Forty-eight sixth grade students from a small, metropolitan Northern Virginia public school participated in this study on argumentative written responses to literature. Twenty-six students from the first data collection and twenty-two students from the second data collection were randomly assigned to one of two treatment groups. Half of the

students participated in collaborative written practice while the other half engaged in independent written practice.

All students participated in three weeks of training. During the first week of training, both treatment groups remained together for instruction and whole class practice which consisted of teacher modeling, class collaboration, and individual practice to develop the necessary background for writing argumentative responses to literature. During the second and third weeks of training, the students wrote argumentative essays either collaboratively or independently depending upon their treatment group.

Writing samples were collected three times throughout the study (pre-training, mid-training, and post-training). After the data were collected, the two sets of data were pooled and then analyzed. In order to determine the effects of type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) on sixth grade students' written argumentative responses to literature,  $2 \times 3$  analyses of variance with repeated measures were employed on the stating claims, citing data, using warrants, and total effectiveness scores.

## Chapter 4

### RESULTS

In order to analyze the overall effect of type of practice (collaborative and independent written practice) and time of writing sample (pre-training, mid-training, and post-training) on the students' total effectiveness, a 2 x 3 analysis of variance (ANOVA) with repeated measures on one factor was employed on the students' composite scores. This analysis was followed up by an ANOVA with repeated measures for each element of argument (stating claims, citing data, and using warrants) to examine the role of each element in the students' total effectiveness and to determine the effects of type of practice and time of writing sample on each element. The analyses tested for interactions between type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training). Given an interaction, the results were graphed and tests of simple main effects were employed. In order to compare the two treatment groups, t-tests were performed at each point in time. An analysis of variance was employed for each treatment group to determine whether any significant changes occurred across time. Given a significant difference among the three times of the writing sample for a given treatment group, a Duncan's multiple range test ( $p < 0.05$ ) was employed to determine which times of the writing sample were significantly different. Given no interaction, the main effects of type of written practice and time of writing sample were analyzed.

### Pooling Data Collections One and Two

Prior to the analyses of the scores for the elements of argument and the total effectiveness scores, the data from year one and year two were analyzed to determine whether the data from the two times of collection could be pooled. Results of the t-tests employed on the total effectiveness scores indicated that there were no significant differences between the scores from collection one and collection two on the pre-training writing sample ( $t = 0.38$ ,  $df = 46$ ,  $p = 0.70$ ), the mid-training writing sample ( $t = 0.09$ ,  $df = 46$ ,  $p = 0.93$ ), and the post-training writing sample ( $t = 1.03$ ,  $df = 46$ ,  $p = 0.31$ ) (see Table 4.1). Therefore, the data from collection one and two were pooled and then analyzed.

### Total Effectiveness

For total effectiveness, a significant interaction existed ( $F = 4.88$ ,  $df = 2$ ,  $p = 0.01$ ) between type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) (see Figure 4.1). Results also revealed significant main effects for type of written practice ( $F = 6.18$ ,  $df = 1$ ,  $p = 0.02$ ) and for time of writing sample ( $F = 17.30$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B).

There was no significant difference between the two practice groups ( $t = 0.40$ ,  $df = 46$ ,  $p = 0.35$ ) on the pre-training (time 1) writing sample for the composite scores. However, there were significant differences between the two practice groups on the mid-training (time 2)

Table 4.1

Data Collections One and Two Comparison  
of the Total Effectiveness Scores

Time of Writing Sample	M (Collection One)	SD	M (Collection Two)	SD	t	p
Pre- training	4.62	1.65	4.45	1.18	0.38	0.70
Mid- training	5.54	1.77	5.59	2.34	0.09	0.93
Post- training	5.77	2.05	6.41	2.26	1.03	0.31

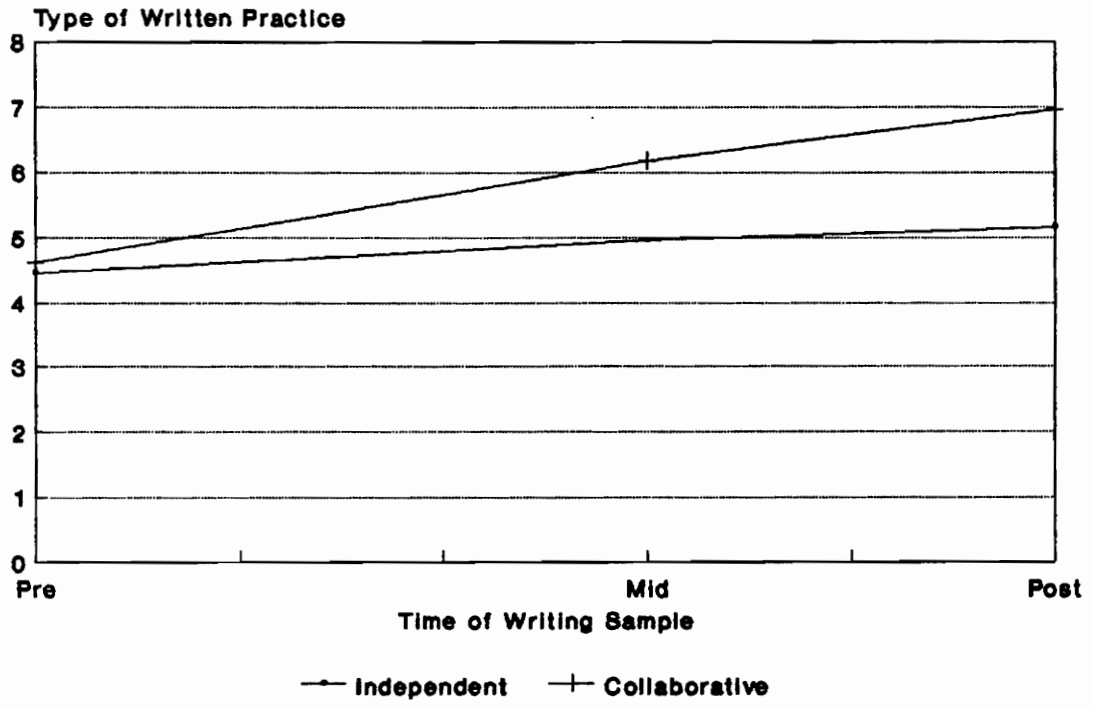


Figure 4.1

Type of Practice by Time of Sample  
Interaction for Total Effectiveness

writing sample ( $t = 2.14$ ,  $df = 46$ ,  $p = 0.02$ ) and on the post-training (time 3) writing sample ( $t = 3.15$ ,  $df = 46$ ,  $p = 0.001$ ) (see Appendix B). In both cases, the collaborative written practice group, on average, scored higher than the independent written practice group (see Table 4.2).

A significant difference existed among the three times of the writing sample for the collaborative written practice group ( $F = 9.80$ ,  $df = 2$ ,  $p = 0.001$ ), but not for the independent written practice group ( $F = 1.02$ ,  $df = 2$ ,  $p = 0.36$ ) (see Appendix B). Significant growth in total effectiveness occurred from time 1 to time 2 and from time 1 to time 3, but not from time 2 to time 3.

#### Stating Claims

There was no significant interaction ( $F = 0.02$ ,  $df = 2$ ,  $p = 0.98$ ) between type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) for the stating claims element. Likewise, no significant main effects existed for type of written practice ( $F = 0.04$ ,  $df = 1$ ,  $p = 0.84$ ) and time of writing sample ( $F = 0.66$ ,  $df = 2$ ,  $p = 0.52$ ) (see Appendix B).

#### Citing Data

For the citing data element, there was a significant interaction ( $F = 2.68$ ,  $df = 2$ ,  $p = 0.07$ ) between the type of written practice and the time of the writing sample (see Figure 4.2). Significant main effects existed for type of written practice ( $F = 4.23$ ,  $df = 1$ ,  $p = 0.05$ ) and

Table 4.4

Total Effectiveness  
Means & Standard Errors

Type of Written Practice	Time of Writing Sample			
	Pre- training	Mid- training	Post- training	Across Time
Collaborative	4.63 (0.32)	6.17 (0.39)	6.96 (0.42)	5.92 (0.30)
Independent	4.46 (0.28)	4.96 (0.41)	5.17 (0.38)	4.86 (0.30)
Total Sample	4.54 (0.19)	5.56 (0.19)	6.06 (0.19)	5.39



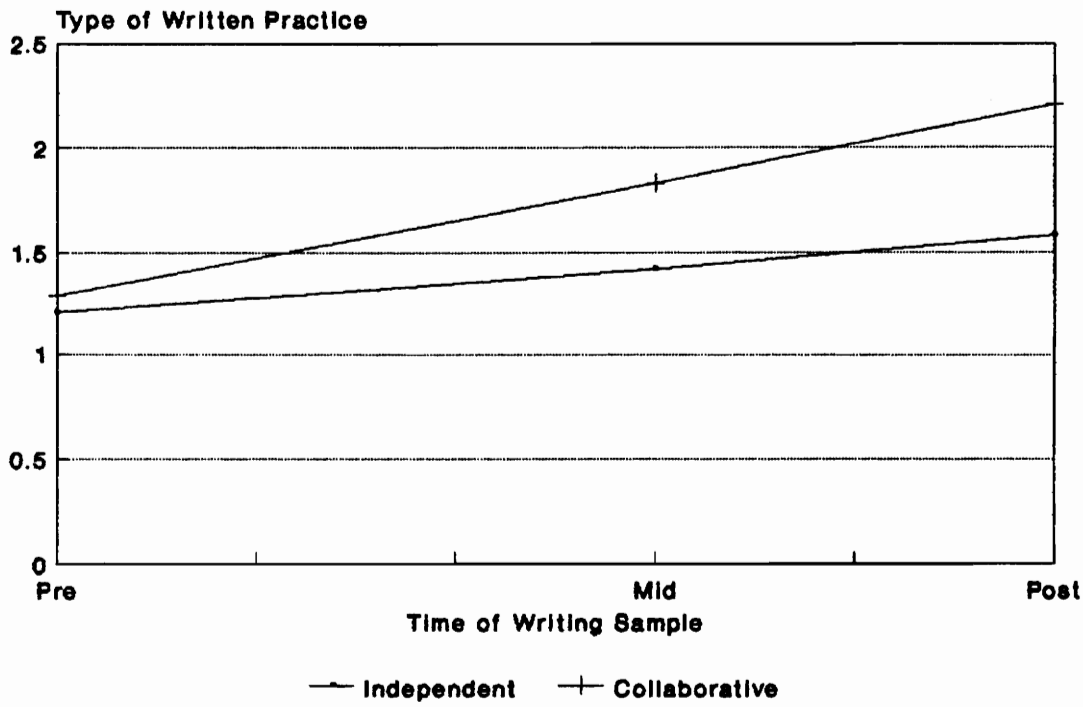


Figure 4.2

Type of Practice by Time of Sample  
Interaction for Citing Data Element

time of writing sample ( $F = 15.09$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B). Students in the collaborative written practice group scored, on average, higher than students in the independent written practice group when citing data (see Table 4.3).

No significant difference existed between the two practice groups on the pre-training (time 1) writing sample ( $t = 0.41$ ,  $df = 46$ ,  $p = 0.34$ ). However, the scores from the collaborative written practice group were significantly higher than the scores from the independent written practice group on the mid-training (time 2) writing sample ( $t = 1.81$ ,  $df = 46$ ,  $p = 0.04$ ) and on the post-training (time 3) writing sample ( $t = 2.53$ ,  $df = 46$ ,  $p = 0.01$ ) (see Appendix B).

There was a significant difference among the three times of the writing sample for the collaborative written practice group ( $F = 8.32$ ,  $df = 2$ ,  $p = 0.001$ ) but not for the independent written practice group ( $F = 1.34$ ,  $df = 2$ ,  $p = 0.27$ ) (see Appendix B). There were significant increases for the collaborative written practice group between time 1 and time 2 and between time 1 and time 3, but not between time 2 and time 3.

#### Using Warrants

A significant interaction ( $F = 6.48$ ,  $df = 2$ ,  $p = 0.002$ ) existed between type of written practice (collaborative written practice and independent written practice) and time of writing sample (pre-training, mid-training, and post-training) for the using warrants element (see Figure 4.3). Significant main effects existed for type of written

Table 4.3

**Elements of Argument\***  
**Means & Standard Errors**

Type of Written Practice	Time of Writing Sample			
	Pre- training	Mid- training	Post- training	Across Time
<b><u>STATING CLAIMS</u></b>				
Collaborative	2.83 (0.13)	2.75 (0.15)	2.88 (0.09)	2.82 (0.09)
Independent	2.83 (0.13)	2.71 (0.15)	2.83 (0.12)	2.79 (0.09)
<b>Total Sample</b>	<b>2.83 (0.08)</b>	<b>2.73 (0.08)</b>	<b>2.85 (0.08)</b>	<b>2.81</b>
<b><u>CITING DATA</u></b>				
Collaborative	1.29 (0.15)	1.83 (0.16)	2.21 (0.17)	1.78 (0.13)
Independent	1.21 (0.13)	1.42 (0.17)	1.58 (0.18)	1.40 (0.13)
<b>Total Sample</b>	<b>1.25 (0.08)</b>	<b>1.63 (0.08)</b>	<b>1.90 (0.08)</b>	<b>1.59</b>
<b><u>USING WARRANTS</u></b>				
Collaborative	0.50 (0.13)	1.38 (0.20)	1.88 (0.24)	1.25 (0.13)
Independent	0.42 (0.13)	0.83 (0.16)	0.75 (0.18)	0.67 (0.13)
<b>Total Sample</b>	<b>0.46 (0.10)</b>	<b>1.10 (0.10)</b>	<b>1.31 (0.10)</b>	<b>0.96</b>

\* All three elements of argument were scored on a 0-3 scale

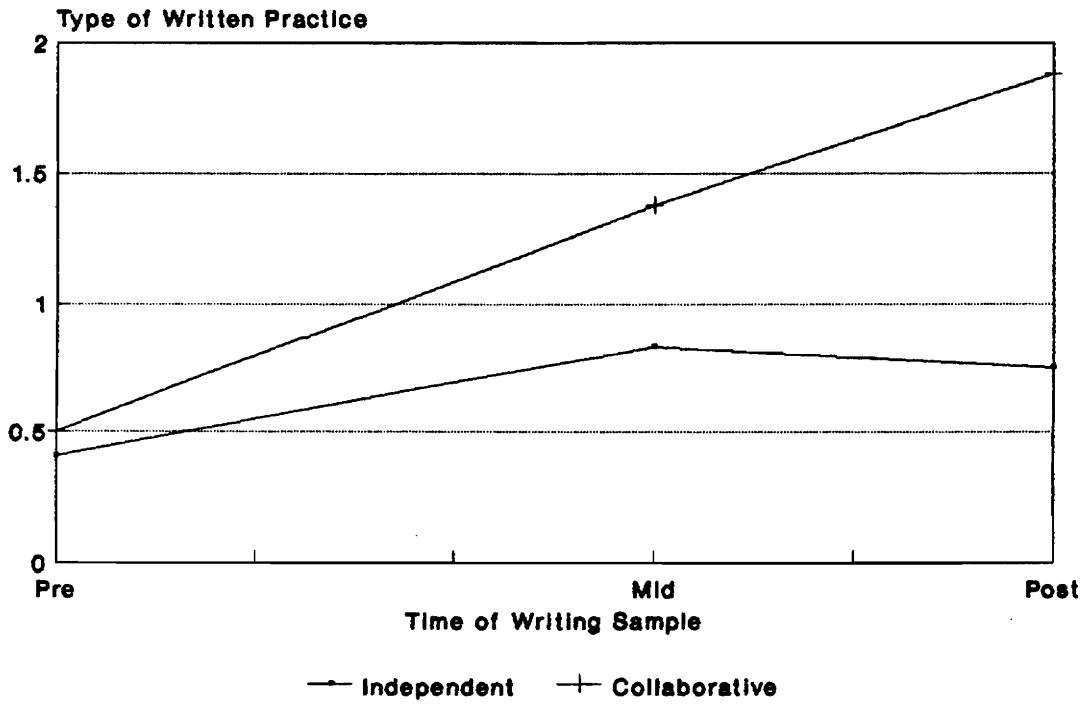


Figure 4.3

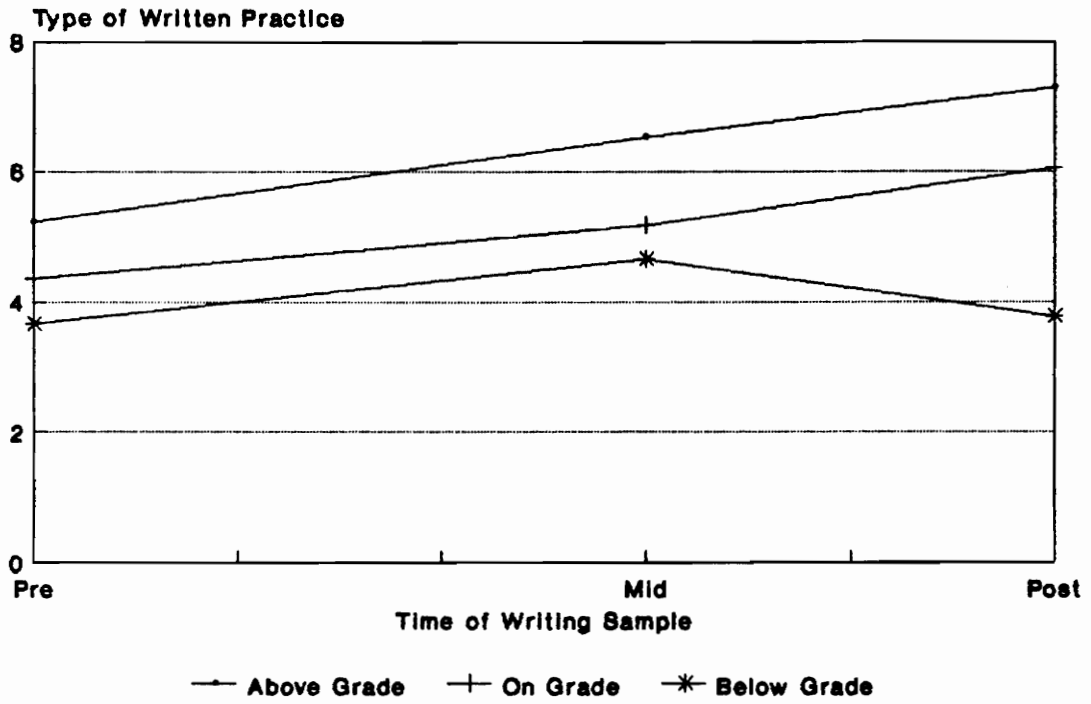
Type of Practice by Time of Sample  
Interaction for Using Warrants Element

practice ( $F = 9.80$ ,  $df = 1$ ,  $p = 0.003$ ) and for time of writing sample ( $F = 18.87$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B). There was no significant difference between the two practice groups on the pre-training (time 1) writing sample ( $t = 0.44$ ,  $df = 46$ ,  $p = 0.33$ ) when using warrants. Significant differences between the two practice groups existed on the mid-training (time 2) writing sample ( $t = 2.15$ ,  $df = 46$ ,  $p = 0.02$ ) and on the post-training (time 3) writing sample ( $t = 3.77$ ,  $df = 46$ ,  $p = 0.001$ ) (see Appendix B). In both cases, the collaborative written practice group, on average, scored higher in use of warrants than did the independent written practice group (see Table 4.3).

A significant difference existed among the three times of the writing sample ( $F = 12.89$ ,  $df = 2$ ,  $p = 0.001$ ) for the collaborative written practice group, but not for the independent written practice group ( $F = 1.93$ ,  $df = 2$ ,  $p = 0.15$ ) (see Appendix B). Significant growth for the collaborative written practice group occurred from time 1 to time 2 and from time 1 to time 3 but not from time 2 to time 3.

### Ability

Because the students participating in the study were classified by their ability (below, on, or above grade level) in language arts, a supplemental analysis employing an ANOVA with repeated measures on the composite scores was performed to determine the effect of ability on the students' total effectiveness scores. The results indicated that there was a significant interaction ( $F = 2.29$ ,  $df = 4$ ,  $p = 0.07$ ) between the students' ability and the time of the writing sample (see Figure 4.4).



**Figure 4.4**                      **Type of Practice by Time of Sample**  
**Interaction for Ability Levels**

Significant main effects existed for ability ( $F = 9.31$ ,  $df = 2$ ,  $p = 0.001$ ) and time of writing sample ( $F = 16.86$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B).

Tests of simple main effects indicated that there were significant differences among the three levels of ability on the pre-training (time 1) writing sample ( $F = 4.32$ ,  $df = 2$ ,  $p = 0.02$ ), the mid-training (time 2) writing sample ( $F = 3.53$ ,  $df = 2$ ,  $p = 0.04$ ), and the post-training (time 3) writing sample ( $F = 11.37$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B). Duncan's multiple range tests ( $p < 0.05$ ) indicated that significant differences existed at times 1 and 2 between the above grade level and below grade level students but not between the on grade level and the above grade level nor between the on grade level and the below grade level students. A Duncan's multiple range test ( $p < 0.05$ ) employed on the scores for time 3 revealed no significant difference between the above grade level and on grade level students. Both of these groups scored significantly higher than the below grade level group on the post-training writing sample.

Tests of simple main effects on the time dimension indicated that the scores for the above grade level students were significantly different among the three times of the writing sample ( $F = 8.84$ ,  $df = 2$ ,  $p = 0.001$ ) (see Appendix B). A Duncan's multiple range test ( $p < 0.05$ ) revealed no significant difference from time 1 to time 2; however, significant increases occurred from time 1 to time 3 and from time 2 to time 3. Analysis of the scores for the on grade level students

suggested that there was a significant difference among the three times of the writing sample ( $F = 4.20$ ,  $df = 2$ ,  $p = 0.02$ ). A Duncan's multiple range test ( $p < 0.05$ ) indicated that no differences existed between time 1 and time 2 and between time 2 and time 3; however, a significant increase occurred from time 1 to time 3. Results of the analysis of the scores for the below grade level students indicated that there were no significant differences among the three times of the writing sample ( $F = 1.13$ ,  $df = 2$ ,  $p = 0.34$ ).

#### Summary

Analyses of variance with repeated measures on the total effectiveness, stating claims, citing data, and using warrants scores were employed to determine the effects of type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) on sixth grade students' argumentative written responses to literature and on the development of the elements of argument within their responses. For the stating claims element, there was no significant interaction between type of written practice and time of writing sample. Also, no significant main effects existed.

There were significant interactions between type of written practice and time of writing sample for citing data, using warrants, and total effectiveness. In all cases, the members of the collaborative written practice group, on average, scored higher than the members of the independent written practice group with significant growth occurring for



the collaborative written practice group but not for the independent written practice group from time 1 to time 2 and from time 1 to time 3, but not from time 2 to time 3.

### Conclusion

Based on the results of this study, it is evident that instruction plus written practice had an effect on sixth grade students' argumentative written responses to literature and on the development of elements within their responses. Although training did not seem to have an effect on the students' effectiveness at stating claims, instruction plus written practice appeared to have a positive impact on the students' citing data, using warrants, and total effectiveness scores. Because the students in the collaborative written practice group scored, on average, higher than those in the independent written practice group, it is evident that instruction and collaborative written practice were more effective strategies for promoting growth in sixth grade students' argumentative writing than instruction and independent written practice. Also, the results indicate that the members of the collaborative written practice group made significant growth between the pre-training and mid-training writing samples. Although not significant, growth was evident between the mid-training and post-training writing samples as well. Overall, it appears that even when both groups receive instruction, type of written practice and time of writing sample have an effect on students' argumentative written responses to literature. Also, it is

evident that the developmental pattern is similar for two of the three elements, as will be discussed in the next chapter.

## Chapter 5

### DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to determine the effects of type of written practice (collaborative and independent) and time of writing sample (pre-training, mid-training, and post-training) on sixth grade students' scores on argumentative written responses to literature. The effects of type of written practice and time of writing sample on the composite scores (total effectiveness) and the scores for three elements of argument (stating claims, citing data, and using warrants) were examined.

The first writing sample was administered prior to training. These samples were scored for stating claims, citing data, and using warrants. The total of the scores for these three elements comprised the total effectiveness score. The total effectiveness scores were analyzed to determine whether there was a difference between the two treatment groups prior to training. Results revealed no significant difference between the two groups. The elements of argument were examined as well. Results before training indicated that most sixth grade students were able to state claims effectively but were unable to cite data or use warrants successfully. The data offered were weak, inaccurate, and/or incomplete. Warrants were almost non-existent.

By the mid-training (time 2) writing sample, growth was evident and significant differences between the two practice groups emerged. The collaborative written practice group scored, on average, higher than the

independent written practice group for citing data, using warrants, and total effectiveness. Because students stated claims effectively on the pre-training (time 1) writing sample and continued to do so on the mid-training writing sample, no difference existed between the two groups for stating claims.

Also noted were improvements in citing data, using warrants, and total effectiveness scores from time 1 to time 2. On average, the data cited were judged relevant, though incomplete and warrants were attempted by students from both treatment groups. Although scores from both groups improved, there was a significant increase in the citing data and using warrants scores for the members of the collaborative written practice group but not for the members of the independent written practice group. Because there was an increase in scores for citing data and using warrants, the total effectiveness scores increased significantly as well.

After the training was completed, a post-training (time 3) writing sample was administered. Once again, the collaborative written practice group scored significantly higher than the independent written practice group for citing data, using warrants, and total effectiveness. No differences were noted for stating claims. Students continued to state effective claims.

For both groups, no significant increases were noted from time 2 to time 3 on any of the element or total effectiveness scores. Although not significant, the citing data, using warrants, and total

effectiveness scores increased for the collaborative written practice group. The scores for citing data remained within the relevant but incomplete range. However, the scores for using warrants increased enough to indicate a qualitative improvement from time 2 to time 3. Students from the collaborative group, on average, used warrants that explained the data in some way but did not specifically link the data to the claim.

### Discussion

The results of this study suggest that given instruction and appropriate practice conditions, sixth grade students can learn to write argumentative responses to literature. Those sixth graders given the opportunity to practice writing argumentative responses in collaborative writing groups were able to improve their individual written responses significantly from the pre-training to the post-training writing samples. In contrast, those who practiced writing responses independently made minimal growth. This was evident in the results of the analyses employed on the total effectiveness scores and on the scores of two of the three elements of argument examined. For citing data, using warrants, and total effectiveness, type of written practice and time of writing sample had an effect on the average scores of the students.

### Total Effectiveness

An examination of the results for the students' total effectiveness on writing argumentative responses to literature revealed that there was an interaction between type of written practice and time of writing sample. The nature of the interaction suggests that the type of practice in which the students participated affected their performances differently across time. For those who participated in the collaborative written practice group, a significant increase in scores was evident from the pre-training to the mid-training writing sample. Although it was not statistically significant, an increase from the mid-training to the post-training writing sample was also noted. This suggests that the more time the students were engaged in collaborative written practice, the greater the effect of the practice on their overall ability to write argumentative responses to literature. Conversely, the average scores for those who participated in independent written practice did not change significantly over time indicating that independent written practice did not have a significant impact on the total effectiveness of the response.

The total effectiveness score was comprised of scores from the three elements of argument (stating claims, citing data, and using warrants). Examination of each element provided insight into the role of the elements in the students' total effectiveness on writing argumentative responses and provided information on how type of practice and time of writing sample affected the development of each element.

### Stating Claims

Consistent with current literature (Applebee et al., 1986; McCann, 1989), the students from both treatment groups (collaborative and independent written practice) appeared to state claims effectively on the pre-training writing sample, leaving a minimal margin for improvement in a few students and a non-measurable margin for improvement in others. For all three points in time, the students, on average, stated claims which were related to the prompt, as well as clear and concise. For example one student stated on the pre-training writing sample, "... Carmen feels unhappy about moving." A similar claim was written by another student on the mid-training writing sample, "Roger felt scared when he got caught trying to steal Mrs. Bates' purse." The post-training writing sample produced similar responses, "Joe feels upset because his parents sold his dog Lassie without him knowing about it." In each case, the students referred specifically to the character, the event that took place, and the character's feelings about the event.

Because the students in both groups generally produced similar claims at all three times of the writing samples, type of written practice and time of writing sample had no significant effect on the students' ability to state claims when writing argumentative responses to literature.

### Citing Data

The need for training on citing data was evident on the pre-training writing sample. The students, on average, produced samples in which the data were weak, inaccurate, and/or incomplete. According to recent studies (Applebee et al., 1986; McCann, 1989), this is not surprising. After examining the results of the National Assessment of Educational Progress (NAEP) writing assessment of students in grades four, eight, and eleven, Applebee et al. (1986, p. 9) concluded, "most students were able to express their points of view" but "had difficulty providing evidence" to support them. Apparently, this was true of the students who participated in this study.

In the pre-training writing sample, many of the students attempted to offer data; however, it was often weak, inaccurate, and/or incomplete. One student stated, "Like when she is playing tag and she knew it would be her last time playing with the kids." He was attempting to show how sad Carmen was by referring to a game of tag in which Carmen reflects upon how this may be the last time to play tag with her friends and therefore, continues playing even though she tripped and hurt herself. He mentioned a relevant event in the story but failed to provide the details that support the claim that Carmen feels sad about moving.

Other students failed to provide the context for the piece of data cited. A student who felt that "Carmen feels uneasy about moving" stated, "Seeing firmiliar <familiar> buildings being knocked down, only makes her feel worse." She made no attempt to explain that Carmen had



been watching the demolition of the brick building with her friends and had gotten so mad that she threw a brick at the building.

Another student inaccurately stated, "The throwing and giving is also pretty hard on her." Although a section of the story tells about the family sorting through their possessions and deciding whether to keep them or throw them out, no reference is made to this task being difficult for Carmen. Although he offered the statement as an attempt at providing data that support the claim that "Carmen doesn't feel to <too> positive about moving away," he chose an event that, in this story, did not contribute to the thesis of his response.

By the mid-training writing sample, the students in the independent written practice group had not increased their scores significantly. However, the scores for the students in the collaborative written practice group improved significantly resulting in a significant difference between the two treatment groups. Students in the collaborative written practice group were beginning to cite data that were relevant to the claim, though incomplete. Often the evidence supported the claim but not enough details were provided to allow the reader to determine the significance of the data. The reader was expected to make inferences from the data cited. One student stated that "Roger felt frightened" and then accurately supported his claim by quoting, "sweat popped out on the boy's face." However, he offered no further details about the situation. The reader can infer that the sweat is related to the event in which Roger felt frightened; however,

the student did not elaborate enough for the reader to make a positive connection.

Although the average score for the collaborative written practice group on the post-training writing sample was not significantly higher than the average score on the mid-training writing sample, the collaborative written practice group still scored, on average, significantly higher than the independent written practice group. The average score continued to fall within the range of data that were relevant but incomplete. One student offered several pieces of data that supported her claim that "Joe felt very unhappy when he found out his beloved <beloved> dog had been sold." She supported this claim by citing, "Joe cried out in horror" when he found out his dog had been sold. Later she stated, "Joe refused to eat his bread and butter because he was so upset." Finally she stated, "Joe wanted to bye <buy> the dog back and he rejected the idea of a new dog." All three of these citations are relevant to the claim and could accurately support her claim that Joe was unhappy; however, her citations lacked the details that provide the reader with an accurate picture of the situation.

Although not significant, the average score increased from the mid-training writing sample to the post-training writing sample. This may be due to the fact that by the post-training writing sample, more students cited data that were judged complete, accurate, and relevant than previously. One student claimed, "Joe feels upset about his dog being sold." Later she cited the following, "In another part of the

story you can see that Joe is upset when he is very quiet and does not eat his lunch when his mother tells him to. When she asks Joe just replies that he doesn't want any and is not hungry." In this example, the student provided data that were relevant to the claim, included enough details to understand the context of the data, and linked the citation specifically to the claim.

From the results of the analysis and an examination of the writing samples, it is obvious that growth was evident throughout the training. This suggests that training had a positive effect on the students' ability to cite data. Prior to training, the data cited on the students' samples were rated as being, on average, weak, inaccurate, and/or incomplete. After training, most students cited data that were relevant to the claim, though judged incomplete. Some students were able to produce data that were relevant, accurate, and complete.

### Using Warrants

Because of the interaction between type of written practice and time of writing sample, the pattern of development for the warrant scores was similar to the pattern for citing data. However, due to the complexity of the task, the scores for using warrants were lower than the scores for citing data, indicating that sixth grade students found it more difficult to use warrants than to cite data in their argumentative responses to literature. This appears to be consistent with current research (Applebee et al., 1986; McCann, 1989). McCann (1989) noted

that the sixth graders in his study seldom used warrants. Applebee et al., (1986) concluded that students experienced difficulty using warrants. Results of the analysis indicated that no significant difference existed between the two groups on the pre-training writing sample. For both groups, warrants were almost non-existent.

By the mid-training writing sample, the collaborative group had made significant gains but the independent group had not, resulting in a significant difference between the two groups. The warrants for the independent group remained almost non-existent, whereas the collaborative group members, on average, attempted to use warrants even though many of them failed to make the connection between the data and the claim.

It is evident in some of the students' samples that they recognized a need to make a connection between the claim and the data. After providing evidence that Roger is scared, one student stated, "That shows that he was very scared." He recognized the need to make a connection between the data and the claim but did not explain the connection. Therefore, although an attempt was made, the use of a warrant was unsuccessful.

By the post-training writing sample, the members of the independent group, on average, still had not improved their use of warrants. However, the average score for the participants in the collaborative group increased from the mid-training to the post-training writing sample. Although this increase was not statistically significant, the

increase was enough to suggest that collaborative written practice continued to facilitate growth in using warrants. By the post-training writing sample, the members of the collaborative group, on average, moved beyond attempting to use warrants to providing warrants which explained the data in some way even though the explanation was not linked specifically to the claim.

In his final writing, one student claimed, "Joe felt upset that his parents sold his dog, Lassie." As evidence he cited Joe's speech, "I don't ever want another dog. Never! I only want Lassie!" Then he offered the following warrant, "Now, if he didn't love his dog it would be rather strange to say that, don't you think? And he wouldn't mind the idea of a new puppy." He appears to be trying to explain that Joe's statement and refusal of another dog indicates that he's upset; however, he doesn't quite make the connection because he refers to loving the dog instead of being upset about the dog being sold. He leaves it to the reader to infer that if you love a dog, you'd be upset about it being sold.

Because the average scores increased enough from the mid-training to the post-training writing sample to indicate improvement, it was surprising that the scores were not significantly different. One possible explanation is that due to the small sample size, there wasn't enough power to show a significant difference. Another reason may be due to the almost non-existent use of warrants on the pre-training writing sample. Students may not have used warrants, because they were

not aware of the need for warrants; or they may not have known how to use them. After the initial training, the students' scores may have increased significantly because any attempt to use warrants would indicate improvement over no use of warrants. The task of moving from an attempt at using warrants to using relevant warrants may be cognitively more difficult. Therefore, more time and practice and/or higher levels of cognitive development may be needed before a significant difference would exist.

### Ability

Because the students in the study were classified by their ability in language arts (below, on, or above grade level), a supplemental analysis of the effects of level of ability and time of writing sample on the total effectiveness scores for their argumentative responses to literature was performed. The results indicate that ability and time of writing sample impact on the students' total effectiveness. On the pre-training (time 1) writing sample, there was a significant difference among the three ability levels. Although there were no significant differences between the above grade level students and the on grade students and between the on grade level students and the below grade level students, there was a significant difference between the above grade level and below grade level students. For time 1, these results appear to be reasonable. Because of their higher ability level, the above grade level students would be expected to perform higher than the

below grade level students, with the on grade level students bridging the gap between the two groups.

On the mid-training (time 2) writing samples, the above grade level students continued to score, on average, significantly higher than the below grade level students. The on grade level students' scores, on average, were not significantly different from the above grade level students' scores and the below grade level students' scores.

By the post-training (time 3) writing sample, the average score for the below grade level students still had not increased, whereas the average scores for the on and above grade level students increased significantly from time 1 resulting in no significant difference between the above and on grade level students' scores and a significant difference between their scores and the below grade level students' scores. Training appears to have had a positive effect on the above and on grade level students but not on the below grade level students.

Because of the small number of students who were identified as below grade level students, the results of this analysis may not accurately reflect the effect of ability and time of writing sample on their performance. Further research involving a larger sample size with students blocked for ability might provide a better understanding of the relationship of ability to the development of argumentative writing.

### Summary

It is evident from the results of the analyses on scores for total effectiveness and the elements that type of written practice and time of

writing sample had an effect on the students' written argumentative responses to literature. Except when stating claims, students in the collaborative written practice group tended to score higher than the members of the independent written practice group on the mid-training and post-training writing samples. Although time had an impact on the students' scores, the pattern of development over time varied by element and by group. No significant changes were noted for the stating claims element over time. However, the citing data and using warrants elements increased significantly from the pre-training to the mid-training writing sample and slightly from the mid-training to the post-training writing sample for the collaborative written practice group but not for the independent written practice group. No significant changes over time existed for the independent written practice group for citing data and using warrants. These results suggest that collaborative writing promoted growth in students' written argumentative responses to literature. Likewise, the amount of training in which the students had participated also contributed to proficiency in argumentative writing.

### Conclusions

Although argument is a cognitively difficult task, provided appropriate training, the sixth grade students in this study were able to utilize three elements of argument to varying degrees of success to produce argumentative responses to literature. The findings in this study suggest that the sixth graders were capable of stating claims prior to training and were able to improve their effectiveness at citing



data and using warrants after training. Collaborative written practice emerged as an effective way to facilitate growth in citing data and using warrants which then contributed to growth in the students' total effectiveness.

### Implications

The results of this study suggest that training in argumentative writing can begin as early as sixth grade. Exposing students to the elements of argument at a young age will provide them with the schema on which to build in future years when more complex uses and analyses of argument will be expected. As several experts (Bereiter and Scardamalia 1982; Langer 1984) suggest, educators should take a look at what can and should be expected from sixth graders and provide training that facilitates the growth of argument to the developmental level that the students can achieve realistically. In doing so, cognitively more advanced students will utilize the argumentative structure in their writing and others, at the very least, will have the background knowledge on which argument can be developed in subsequent years.

When searching for appropriate strategies for teaching argumentative writing to sixth grade students, collaborative writing groups plus direct instruction should be considered as an effective way to teach students how to write argumentative responses to literature. Based on the results of this study, collaborative written practice appeared to improve students' ability to cite data and use warrants, thereby improving their argumentative responses to literature. In contrast,

students participating in the independent written practice seemed to show no significant growth despite three weeks of training. This suggests that the oral discourse and the modeling in which the students were engaged in the collaborative groups promoted their understanding of the elements of argument which resulted in better use of these elements in their own individually written responses.

The results of this study imply that the strategies employed during collaborative writing transfer to the development of students' independent writing. Vygotsky (1978) suggests that exposure to cognitively more difficult tasks should precede and assist development. Because of the higher level of thinking needed to write arguments, the exposure to argument in collaborative writing groups appeared to assist with the students' cognitive development of argument. Studies indicate that the oral discourse present and the modeling which occurs in collaboration promotes higher levels of thinking (D. Johnson et al., 1984) by activating the writers' prior knowledge (Flood, 1986) and helping them internalize strategies that they can apply independently at a later time (Vygotsky, 1978).

Although some students in this study practiced in collaborative writing groups, they wrote their pre-training, mid-training, and post-training samples independently. The higher scores received by the students in the collaborative written practice group and the significant improvement over time indicate that students in the collaborative written practice group were able to transfer what they had learned to a

different situation. On the other hand, the students in the independent written practice groups practiced and tested in similar situations but were unable to experience the success that the collaborative written practice group experienced.

### Implications for Future Research

The results of this study indicate that training can improve sixth grade students' written argumentative responses to literature and that collaborative writing may be an effective strategy for teaching argumentative writing to sixth graders. The results also suggest that the development of the citing data and using warrants elements are also affected by type of written practice over time. As a result, there are issues related to these findings that should be pursued through future research. Further examination of time and amount of training may produce interesting and useful information.

An immediate question that arises from the results of this study is whether or not additional training would have an effect on the development of citing data and using warrants. An examination of additional training on citing data may indicate that sixth grade students are capable of citing data that are relevant and complete or that relevant and incomplete data are the best that can be expected from sixth graders. Likewise, the patterns of development for citing data and using warrants suggest that students were improving over time. It is possible that with additional collaborative written practice, the

increase in scores might become significant. It may require additional time and practice to facilitate this improvement because of the relative difficulty of the task. The fact that scores had not plateaued supports the belief that potential for further growth exists.

Because of the complexity of writing arguments, another consideration for future study may be to determine at what point in time training no longer has an effect and what level of achievement can be expected, on average, at that point. Sixth grade students may reach a level of writing argument that is appropriate for their cognitive development. Providing additional training may not yield expected results. Therefore, it would be advantageous for teachers to know what can be expected from training and when training has reached its pinnacle.

Another interesting study would be to determine the effect of spreading the training throughout the year as opposed to the intensive three weeks of training and three writing samples. One possible approach would be to introduce argument and expose the students to models of argument at the beginning of the year and then emphasize the development of each element as the students read and write throughout the year. By the time the students concentrate on using warrants near the end of the year, stating claims and citing data would be easier for them, and they would be able to spend their energy on using effective warrants. In this study, the students did not have time to fully assimilate and accommodate citing data before they were expected to use warrants. McCann (1989) concluded, "It is not surprising that the

sixth-graders did not explain data, since they rarely offered data that could be explained" (p. 70). This may account partially for why the students experienced difficulty using warrants.

Age-related studies could also provide valuable information about the effect of training, specifically collaborative written practice, on the development of argument at various ages. It may be possible to begin building the foundation of argument at an earlier age and then extend the expectations as the students move beyond the sixth grade. Information could be provided that would allow teachers to hold developmentally appropriate expectations and provide developmentally appropriate training at each grade level. In addition, information could be gathered on the effectiveness of the collaborative written practice at each grade level. There may be a grade level at which the collaboration is not as effective as it was on the sixth grade level.

Besides investigations of time related issues, further examination of types of practice may prove to be interesting. Crowhurst (1991) found that both instruction plus written practice and instruction plus reading practice resulted in significant improvements from the pretest to the posttest. Another worthwhile study might be to expose some students to a combination of written and reading practice and compare them to students who receive only written practice or only reading practice. Reading models of argument and then writing arguments in collaborative groups might provide the students with a greater chance of successfully producing arguments.

Ability is another factor that would be interesting to investigate. Although ability was briefly examined in this study, there were not enough students in the sample to fully explore the implications of ability on the development of the elements of argument and on the effect of collaborative written practice. With a larger sample that could be blocked for ability, more precise information could be gathered.

### Summary

The results of this study suggest that although sixth grade students initially experienced difficulty with employing the elements of argument to write argumentative compositions, participation in appropriate training promoted the development of argument in their writing. Collaborative written practice and direct instruction emerged as effective strategies for training sixth grade students to write argumentative responses to literature. Examination of each element of argument (stating claims, citing data, and using warrants) indicated that the pattern of development differed by element, which was possibly due to the differing complexity of each element. This study not only documents sixth grade students' initial level of proficiency with argument and the effect of instruction plus practice on the development of argument but also examines the development of the elements of argument and suggests appropriate strategies for developing argumentative responses to literature.

The results of the analyses of the pre-training writing samples support the findings that sixth grade students experience difficulty when employing the elements of argument, especially citing data and using warrants, in their argumentative writing (Applebee, Langer, & Mullis, 1986; Langer, 1982; McCann, 1989). The cognitive complexity of the task noted by some experts (Crowhurst, 1983; Durst, 1987; Moffett, 1983; Pringle & Freedman, 1985) is recognized as well. However, the results of this study indicate that under some conditions, the cognitive limits are not as apparent as under other conditions. Specifically, instruction plus collaborative written practice appeared to promote the cognitive development of argument, whereas independent written practice did not.

The results of this study also support research suggesting that training can have an effect on the development of argument in sixth grade students' argumentative writing (Bereiter & Scardamalia, 1982; Crowhurst, 1991). Like Crowhurst's (1991) study, significant improvement in students' argumentative writing was noted after students participated in several weeks of training, which included instruction and written practice. However, in this study, analyses were performed midway through the training as well. By that time, significant increases in scores were already noted and a pattern of development for each element was beginning to emerge.

Unlike other studies, this study examined the effects of type of written practice on the pattern of development for each element of

argument (stating claims, citing data, and using warrants) over the course of the unit of study. On the pre-training writing sample, students, on average, stated claims effectively; therefore, collaborative written practice and time of writing sample had no effect on the development of claims. Citing data was a more complex task which required students to locate evidence and use it to support the claim. A pattern of growth emerged that suggested that as students participated in instruction and training, they became more proficient at citing data in their argumentative responses to literature. On the mid-training and post-training writing samples, students who participated in collaborative written practice scored, on average, higher than those who participated in independent written practice.

The most complex element, using warrants, was virtually non-existent in the pre-training writing samples; therefore, an attempt to use warrants resulted in a significant increase for the collaborative written practice group between the pre-training and mid-training writing samples. Although no significant increase was noted between the mid-training and post-training writing samples, a pattern of growth emerged suggesting that continued training may have facilitated significant improvement in using warrants.

Development of each of these elements contributed to the overall development of the argumentative written responses to literature. Improvement was noted from the pre-training to the mid-training writing sample on the total effectiveness scores for the collaborative written



practice group. Although not significant, an increase in scores was also evident from the mid-training to the post-training writing samples. The independent written practice group, on the other hand, did not improve significantly at any point in time.

These results suggest that a need exists to provide sixth grade students with appropriate instruction and practice that will enhance the development of their argumentative responses to literature. An examination of the pattern of the development of the elements of argument (stating claims, citing data, and using warrants) reveals the need to focus on strategies that will improve students' abilities to cite data and use warrants. Because of the cognitive complexity of these tasks, instruction and independent written practice were not enough to stimulate development even though time was provided to engage in these activities. Instead, instruction plus collaborative written practice emerged as effective strategies for encouraging the development of argumentative responses to literature and specifically, the ability to cite data and use warrants. For these reasons, instruction and collaborative written practice provided over time should be considered viable strategies for teaching sixth grade students how to write effective argumentative responses to literature in which students state a claim, cite data to support the claim, and use warrants to connect the data to the claim.

## References

- Applebee, A. N. (1981). Writing in the Secondary School: English and the Content Areas. Urbana, IL: National Council of Teachers of English.
- Applebee, A. N. (1984a). Contexts for Learning to Write: Studies of Secondary School Instruction. Norwood, NJ: Ablex Publishing Corporation.
- Applebee, A. N. (1984b). Writing and Reasoning. Review of Educational Research, 54, 577-596.
- Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1984). Writing: Trends Across the Decade, 1974-84. Princeton, NJ: National Assessment of Educational Progress at Educational Testing Service.
- Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1986). The Writing Report Card: Writing Achievement in American Schools. Princeton, NJ: National Assessment of Educational Progress at Educational Testing Service.
- Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1987). Learning to Be Literate in America: Reading, Writing, and Reasoning. Princeton, NJ: National Assessment of Educational Progress at Educational Testing Service.
- Applebee, A. N., Langer, J. A., Mullis, I. V. S., & Jenkins, L. B. (1990). The Writing Report Card, 1984-88: Findings From the National Report Card. Princeton, NJ: National Assessment of Educational Progress at Educational Testing Service.
- Bereiter, C. & Scardamalia M. (1982). From Conversation to Composition: The Role of Instruction in a Developmental Process. In R. Glaser (Ed.), Advances in Instructional Psychology (Vol. 2, pp. 1-64). Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc.
- Britton, B. K. & Black, J. B. (1985). Understanding Expository Text: From Structure to Process and World Knowledge. In B. K. Britton & J. B. Black (Eds.), Understanding Expository Text: A Theoretical and Practical Handbook for Analyzing Explanatory Text (pp. 1-10). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Britton, J. (1978). The Composing Processes and the Functions of Writing. In C. R. Cooper & L. Odell (Eds.), Research on Composing (pp. 13-28). Urbana, IL: National Council of Teachers of English.
- Britton, J., Burgess, T., Martin, N., McLeod, A., & Rosen, H. (1979). The Development of Writing Abilities (11-18) (rev. ed.). Urbana, IL: National Council of Teachers of English.

- Chann, M. M. (1988, March). Learning by Doing, Discussing and Questioning: A Collaborative Writing Course. (Report No. CS 211 346). Paper presented at the annual meeting of the Conference on College Composition and Communication, St. Louis, MO. (ERIC Reproduction Service No. ED 296 339)
- Crowhurst, M. (1980). Syntactic Complexity and Teachers' Quality Ratings of Narrations and Arguments. Research in the Teaching of English, 14, 223-231.
- Crowhurst, M. (1983, April). Persuasive Writing at Grades 5, 7, and 11: A Cognitive-Developmental Perspective. (Report No. CS 207 719). Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. (ERIC Reproduction Service No. ED 230 977)
- Crowhurst, M. (1987). Cohesion in Argument and Narration at Three Grade Levels. Research in the Teaching of English, 21, 185-201.
- Crowhurst, M. (1991). Interrelationships Between Reading and Writing Persuasive Discourse. Research in the Teaching of English, 25, 314-338.
- Crowhurst, M. & Piche, G. L. (1979). Audience and Mode of Discourse Effects on Syntactic Complexity in Writing at Two Grade Levels. Research in the Teaching of English, 13, 101-109.
- Dauite, C. (1986). Do 1 and 1 Make 2?: Patterns of Influence by Collaborative Authors. Written Communication, 3, 382-408.
- Dauite, C. (1989). Research Currents: Play and Learning to Write. Language Arts, 66, 656-664.
- DeVries, D. & Slavin, R. (1978). Teams-Games-Tournaments: A Research Review. Journal of Research and Development in Education, 12, 28-38.
- Dickerson, M. J. (1989, March). The Implications of Collaborative Writing: A Dialogue. (Report No. CS 211 756). Paper presented at the annual meeting of the Conference on College Composition and Communication, Seattle, WA. (ERIC Reproduction Service No. ED 305 644)
- Durst, R. K. (1984). The Development of Analytic Writing. In A. N. Applebee (Ed.), Contexts for Learning to Write (pp. 79-102). Norwood, NJ: Ablex Publishing Corporation.
- Durst, R. K. (1987). Cognitive and Linguistic Demands of Analytic Writing. Research in the Teaching of English, 21, 347-376.

- Durst, R. K. (1989). Monitoring Processes in Analytic and Summary Writing. Written Communication, 6, 340-363.
- Ede, L. (1988, March). What is Social About Writing as a Social Process? (Report No. CS 211 146). Paper presented at the annual meeting of the Conference on College Composition and Communication, St. Louis, MO. (ERIC Document Reproduction Service No. ED 293 151)
- Ede, L. & Lunsford, A. (1985). Let Them Write Together. English Quarterly, 18, 19-127.
- Fahnestock, J. & Secor, M. (1983). Teaching Argument: A Theory of Types. College Composition and Communication, 34, 20-30.
- Flood, James. (1986). The Text, the Student, and the Teacher: Learning From Exposition in Middle Schools. The Reading Teacher, 39, 784-791.
- Gere, A. R. (1987). Writing Groups: History, Theory, and Implications: Studies in Writing and Rhetoric. (Report No. CS 210 702). Conference on College Composition and Communication, Urbana, IL. (ERIC Reproduction Service No. ED 284 258)
- Hays, J. N. (1982, October). The Development of Analytic Writing Abilities: A Preliminary Report. (Report No. CS 207 374). Speech given at the annual meeting of the Southwest Regional English Teachers' Conference, Phoenix, AZ. (ERIC Document Reproduction Service No. ED 226 367)
- Hays, J. N. (1983a). The Development of Discursive Maturity in College Writers. In J. N. Hays, P. A. Roth, J. R. Ramsey, & R. D. Foulke (Eds.), The Writer's Mind: Writing as a Mode of Thinking (pp. 127-144). Urbana, IL: National Council of Teachers of English.
- Hays, J. N. (1983b, October). An Empirically-Derived Stage Model of the Development of Analytic Writing Abilities During the College Years: Some Illustrative Cases. (Report No. CS 208 197). Paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson Hole, WY. (ERIC Document Reproduction Service No. ED 247 553)
- Hidi, S. E. & Hildyard, A. (1983). The Comparison of Oral and Written Productions in Two Discourse Types. Discourse Processes, 6, 91-105.
- Jensen, J. V. (1981). Argumentation: Reasoning in Communication. New York, NY: Litton Educational Publishing, Inc.
- Johnson, D. W., Johnson, R. T., Holubec, E. J., & Roy, P. (1984). Circles of Learning: Cooperation in the Classroom. Alexandria, VA: Edwards Brothers, Inc.

- Johnson D. W., Maruyama, G., Johnson, R., & Nelson, D. (1981). Effects of Cooperative, Competitive, and Individualistic Goal Structures on Achievement: A Meta-Analysis. Psychological Bulletin, 89, 47-62.
- Kahn, E. A., Walter, C. C., & Johannessen, L. R. (1984). Writing about Literature. Urbana, IL: National Council of Teachers of English.
- Kinneavy, J. L. (1971). A Theory of Discourse: The Aims of Discourse. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Langer, J. A. (1982). Reading, Thinking, Writing . . . and Teaching. Language Arts, 59, 336-341.
- Langer, J. A. (1986a). Children Reading and Writing: Structures and Strategies. Norwood, NJ: Ablex Publishing Corporation.
- Langer, J. A. (1986b). Writing to Study and Learn. (Report No. CS 210 098). Washington, DC: Stanford University, California School of Education. (ERIC Document Reproduction Service No. ED 297 316)
- Langer, J. A. & Applebee, A. N. (1987). How Writing Shapes Thinking: A Study of Teaching and Learning. Urbana, IL: National Council of Teachers of English.
- Marshall, J. D. (1987). The Effects of Writing on Students' Understanding of Literary Texts. Research in the Teaching of English, 21, 30-63.
- Matsuhashi, A. (1981). Pausing and Planning: The Tempo of Written Discourse Production. Research in the Teaching of English, 15, 113-134.
- McCann, T. M. (1989). Student Argumentative Writing Knowledge and Ability at Three Grade Levels. Research in the Teaching of English, 23, 62-76.
- McEachern, W. R. (1986, November). Group Compositions: A Model for Report Writing. (Report No. CS 210 627). Paper presented at the annual meeting of the National Council of Teachers of English, San Antonio, TX. (ERIC Documentation Reproduction Service No. ED 283 193)
- Moberg, G. (1988). Merging Computer Writing & Collaborative Learning. (Report No. CS 211 625). Washington, D.C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 302 849)
- Moffett, J. (1983). Teaching the Universe of Discourse (rev. ed.). Portsmouth, NH: Boynton/Cook Publishers.

- Newell, G. E. (1986, April). The Effects of Writing in a Reader-Based and Text-Based Mode on Students' Understanding of Two Short Stories. (Report No. CS 210 083). Paper presented at the annual meeting of the American Educational Research Association in San Francisco, CA. (ERIC Document Reproduction Service No. ED 276 018)
- Newell, G. E. & MacAdam, P. (1987, April). Writing and Learning from Test: Case Studies of Process and Product. (Report No. CS 211 078). Paper presented at annual meeting of the American Educational Research Association in Washington, D. C. (ERIC Document Reproduction Service No. ED 292 101)
- Nunn, G. G. (1982). Peer Interaction During Collaborative Writing at the 4th/5th Grade Level. (Report No. CS 208 873). Washington, D. C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 257 074)
- Perelman, C. & Olbrechts-Tyteca, L. (1969). The New Rhetoric. Notre Dame, IN: University of Notre Dame Press.
- Perl, S. (1983). Understanding Composing. In J. N. Hays, P. A. Roth, J. R. Ramsey, & R. D. Foulke (Eds.), The Writer's Mind: Writing as a Mode of Thinking (pp. 43-52). Urbana, IL: National Council of Teachers of English.
- Pianko, S. (1979). A Description of the Composing Processes of College Freshman Writers. Research in the Teaching of English, 5-22.
- Prater, D. & Padia, W. (1983). Effects of Modes of Discourse on Writing Performance in Grades Four and Six. Research in the Teaching of English, 17, 127-134.
- Pringle, I. & Freedman, A. (1985). A Comparative Study of Writing Abilities in Two Modes at the Grade 5, 8, and 12 Levels. (Report No. CS 208 964). Toronto, Ontario: Ontario Department of Education. (ERIC Document Reproduction Service No. ED 258 202)
- Reed, W. M., Burton, J. K., & Kelly, P. P. (1985). The Effects of Writing Ability and Mode of Discourse on Cognitive Capacity Engagement. Research in the Teaching of English, 19, 283-297.
- Secor, M. (1983). Modes of Thinking, Modes of Argument. In J. N. Hays, P. A. Roth, J. R. Ramsey, & R. D. Foulke (Eds.), The Writer's Mind: Writing as a Mode of Thinking (pp. 67-74). Urbana, IL: National Council of Teachers of English.
- Sharan, S. (1980). Cooperative Learning in Small Groups: Recent Methods and Effects on Achievement, Attitudes, and Ethnic Relations. Review of Educational Research, 50, 2441-271.

- Sharan, S., Hertz-Lazarowitz, R. & Ackerman, Z. (1980). Academic Achievement of Elementary School Children in Small-Group Versus Whole-Class Instruction. Journal of Experimental Education, 48, 125-129.
- Sharan, S. & Shachar, H. (1988). Language and Learning in the Cooperative Classroom. New York, NY: Springer-Verlag New York Inc.
- Singley, C. J. & Stockton, K. B. (1984). Merging Discovery and Control. New Approaches to Persuasion and Argumentation. (Report No. CS 209 291). Paper presented at the Penn State Conference on Rhetoric and Composition. (ERIC Document Reproduction Service No. ED 264 554)
- Slavin, R. E. (1983). Cooperative Learning. New York, NY: Longman Inc.
- Slavin, R. E. (1985). An Introduction to Cooperative Learning Research. In R. Slavin, S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb, & R. Schmuck (Eds.), Learning to Cooperate, Cooperating to Learn (pp. 5-16). New York, NY: Plenum Press.
- Slavin, R. E. (1987). Cooperative Learning and the Cooperative School. Educational Leadership, 7-13.
- Sommers, N. (1980). Revision Strategies of Student Writers and Experienced Adult Writers. College Composition and Communication. 378-387.
- Sproule, J. M. (1980). Argument: Language and Its Influence. New York, NY: McGraw-Hill, Inc.
- Squire, J. R. (1984). Composing and Comprehending: Two Sides of the Same Basic Process. In J. M. Jensen (Ed.), Composing and Comprehending (pp. 23-32). Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills.
- Stevens, R. J., Madden, N. A., Slavin, R. E., & Farnish, A. M. (1987). Cooperative Integrated Reading and Composition: Two Field Experiments. Reading Research Quarterly, 22, 433-454.
- Toulmin, S. E. (1964). The Uses of Argument. Cambridge: Cambridge University Press.
- Toulmin, S., Rieke, R., & Janik, A. (1979). An Introduction to Reasoning. New York, NY: Macmillan Publishing Co., Inc.
- Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.

- Webb, N. M. (1985). Student Interaction and Learning in Small Groups: A Research Summary. In R. Slavin, S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb, & R. Schmuck (Eds.), Learning to Cooperate, Cooperating to Learn (pp. 5-16). New York, NY: Plenum Press.
- Wilkinson, A., Barnsley, G., Hanna, P., & Swann, M. (1980). Assessing Language Development. Oxford: Oxford University Press.



## **APPENDICES**

## APPENDIX A

## SUBJECTS

	<u>1990</u>	<u>1991</u>
48 Sixth Grade Students	26	22
24 Collaborative	12	12
24 Independent	14	10

**Ability** (Based on screening by school personnel)

16 Talented and Gifted Program (TAG)	7	10
22 Regular Classroom Program	13	9
9 At Risk in the Regular Program	6	3

**Ethnicity**

26 Caucasian	14	12
14 Black	7	8
4 Hispanic	3	1
4 Asian	3	1

**Gender**

23 Males	14	9
25 Females	12	13

<b>Treatment Groups By Ability</b>	TAG	Classroom	At-Risk
24 Collaborative Written Practice	9	12	3
24 Independent Written Practice	8	10	6

<b>Treatment Groups By Ethnicity</b>	Caucasian	Black	Hispanic	Asian
24 Collaborative Written Practice	14	6	1	3
24 Independent Written Practice	12	8	3	1

<b>Treatment Groups By Gender</b>	Male	Female
24 Collaborative Written Practice	10	14
24 Independent Written Practice	13	11

**APPENDIX B**

**Summary Tables**

Data Collections One and Two Comparison  
of the Total Effectiveness Scores

Time of Writing Sample	M (Collection One)	SD	M (Collection Two)	SD	t	p
Pre-training	4.62	1.65	4.45	1.18	0.38	0.70
Mid-training	5.54	1.77	5.59	2.34	0.09	0.93
Post-training	5.77	2.05	6.41	2.26	1.03	0.31

Total Effectiveness Summary Table

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
Between Subjects					
Group	1	40.11	40.11	6.18	0.02
Error	46	298.78	6.50		
Within Subjects					
Time	2	57.68	28.84	17.30	0.001
Group x Time	2	16.26	8.13	4.88	0.01
Error	92	153.39	1.67		
Total	143	566.22			

Total Effectiveness  
Tests of Simple Main Effects

Time of Writing Sample	M Collaborative	SD	M Independent	SD	t	p
Pre-training	4.63	1.56	4.46	1.35	0.40	0.35
Mid-training	6.17	1.90	4.96	2.01	2.14	0.02
Post-training	6.96	2.07	5.17	1.86	3.15	0.001

Total Effectiveness  
Tests of Simple Main Effects by Group Over Time

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
<u>COLLABORATIVE WRITTEN PRACTICE</u>					
Time	2	67.58	33.79	9.80	0.001
Error	69	237.92	3.44		
Total	71	305.50			

INDEPENDENT WRITTEN PRACTICE

Time	2	6.36	3.18	1.02	0.36
Error	69	214.25	3.11		
Total	71	220.61			

Stating Claims Summary Table

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
Between Subjects					
Group	1	0.02	0.03	0.04	0.84
Error	46	29.86	0.65		
Within Subjects					
Time	2	0.43	0.22	0.66	0.52
Group x Time	2	0.01	0.007	0.02	0.98
Error	92	30.22	0.33		
Total	143	60.56			



Citing Data Summary Table

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
Between Subjects					
Group	1	5.06	5.06	4.23	0.05
Error	46	55.10	1.20		
Within Subjects					
Time	2	10.10	5.05	15.09	0.001
Group x Time	2	1.79	0.90	2.68	0.07
Error	92	30.78	0.33		
Total	143	102.83			

Citing Data  
Tests of Simple Main Effects by Group at Each Time Point

Time of Writing Sample	M Collaborative	SD	M Independent	SD	t	p
Pre-training	1.29	0.75	1.21	0.66	0.41	0.34
Mid-training	1.83	0.76	1.42	0.83	1.81	0.04
Post-training	2.21	0.17	1.58	0.18	2.53	0.01

Citing Data  
Tests of Simple Main Effects By Group Over Time

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
<u>COLLABORATIVE WRITTEN PRACTICE</u>					
Time	2	10.19	5.10	8.32	0.001
Error	69	42.25	0.61		
Total	71	52.44			

INDEPENDENT WRITTEN PRACTICE

Time	2	1.69	0.85	1.34	0.27
Error	69	43.63	0.63		
Total	71	45.32			

## Using Warrants Summary Table

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
Between Subjects					
Group	1	12.25	12.25	9.80	0.003
Error	46	57.50	1.25		
Within Subjects					
Time	2	19.04	9.52	18.87	0.001
Group x Time	2	6.54	3.27	6.48	0.002
Error	92	46.42	0.50		
Total	143	141.75			

Using Warrants  
Tests of Simple Main Effects by Group at Each Time Point

Time of Writing Sample	M Collaborative	SD	M Independent	SD	t	p
Pre-training	0.50	0.66	0.42	0.65	0.44	0.33
Mid-training	1.38	0.97	0.83	0.76	2.15	0.02
Post-training	1.88	1.15	0.75	0.90	3.77	0.001

Using Warrants  
Tests of Simple Main Effects by Group Over Time

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
<u>COLLABORATIVE WRITTEN PRACTICE</u>					
Time	2	23.25	11.63	12.89	0.001
Error	69	62.25	0.90		
Total	71	85.50			

INDEPENDENT WRITTEN PRACTICE

Time	2	2.33	1.17	1.93	0.15
Error	69	41.67	0.60		
Total	71	44.00			

Ability Summary Table

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
Between Subjects					
Group	2	99.17	49.59	9.31	0.001
Error	45	239.72	5.33		
Within Subjects					
Time	2	57.68	28.84	16.86	0.001
Group x Time	4	15.67	3.92	2.29	0.07
Error	90	153.98	1.71		
Total	143	566.22			

Level of Ability  
Tests of Simple Main Effects by Group Over Time

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
<u>ABOVE GRADE LEVEL</u>					
Time	2	37.69	18.84	8.84	0.001
Error	48	102.35	2.13		
Total	50	140.04			

<u>ON GRADE LEVEL</u>					
Time	2	31.12	15.56	4.20	0.02
Error	63	233.32	3.70		
Total	65	264.44			

<u>BELOW GRADE LEVEL</u>					
Time	2	5.41	2.70	1.13	0.34
Error	24	57.56	2.40		
Total	26	62.96			



Level of Ability  
Tests of Simple Main Effects at Each Time Point

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Ratio	Probability
<u>PRE-TRAINING</u>					
Ability	2	15.77	7.88	4.32	0.02
Error	45	82.15	1.83		
Total	47	97.92			
<u>MID-TRAINING</u>					
Ability	2	26.30	13.15	3.53	0.04
Error	45	167.51	3.72		
Total	47	193.81			
<u>POST-TRAINING</u>					
Ability	2	72.77	36.39	11.37	0.001
Error	45	144.04	3.20		
Total	47	216.81			

**APPENDIX C****MATERIALS**

All passages used for testing were taken from the fifth grade Random House Achievement Program in Literature anthology.

**Testing Materials**

## Writing Sample 1

"The Spider Plant" by Yetta Speevack

Readability: 4.3

Prompt: In "The Spider Plant," Carmen is preparing to move. Explain how Carmen feels about moving. Support your statement using evidence from the story. Explain how your examples support your statement.

## Writing Sample 2

"Thank You, M'am" by Langston Hughes

Readability: 4.7

Prompt: In "Thank You, M'am," Roger attempts to steal a purse and gets caught. Explain how Roger feels when he is caught. Support your statement with evidence from the story. Explain how your examples support your statement.

## Writing Sample 3

"Lassie, Come-Home" by Eric Knight

Readability: 4.3

Prompt: In "Lassie, Come-Home," Joe finds out that his dog, Lassie, has been sold. Explain how Joe feels about his dog being sold. Support your statement using evidence from the story. Explain how your examples support your statement.

**Practice Materials**

## Practice Session 1

"The Torn Invitation" by Normal Katkov from the Sixth Grade Random House Achievement Program in Literature anthology

## Practice Session 2

"Before Breakfast" by E. B. White from the Fifth Grade Random House Achievement Program in Literature anthology

## APPENDIX D

## REVISIONS TO THE DIRECTIONS FOR OBTAINING THE WRITING SAMPLES

**Revision 1:** The second sentence of each prompt was changed from "Support your statement using evidence from the text and your own personal experiences" to "Support your statement using evidence from the story."

- a. "Text" was changed to "story" because all of the students were familiar with the term "story". There was a possibility that some students may be confused by the term "text."
- b. The phrase "and your own personal experiences" was deleted from the prompt. During the field testing, students appeared to be confused by this phrase. Students asked whether they were to write about themselves or the character in the story. Others expressed concern over not being able to identify with the characters' experiences because they had not moved like Carmen, attempted to steal a purse like Roger, or lost a dog like Joe.

Because the purpose of the assignment was to cite data from the text and use warrants to connect the data to the claim, the phrase "and your own personal experiences" was deemed irrelevant to the task and was deleted from the prompt.

**Revision 2:** The amount of time and the distribution of the time allotted for obtaining the writing samples was changed from four or five 40 minute sessions to two one hour sessions.

- a. During the first session of the writing sample, 40 minutes did not allow enough time for students to listen to the story, plan their responses on paper, and begin drafting. One hour gave the students time to explore and record their thoughts so they could work with them during the second hour session.
- b. The number of sessions was changed from four or five to two. During the field testing, many students completed their essays by the second 40 minute session and all of them had completed them by the third 40 minute session. Therefore, two one-hour sessions appeared to be a more suitable allotment of time.

**DIRECTIONS FOR OBTAINING THE WRITING SAMPLES DURING FIELD TESTING**  
**"The Spider Plant"**

1. **Explain:** In a few minutes, I will read to you a short story about a girl named Carmen whose family is planning to move. While you are listening, I want you to think about how Carmen feels about moving and what happens in the story that lets you know she feels that way. After reading the story, you will be asked to write a paper explaining how Carmen feels about the move. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "The Spider Plant,"** pages 67 - 74.
4. **Pass out the prompts.**
5. **Explain:** You will be given the rest of the class period today and three more class periods to plan, draft, and revise a paper explaining how Carmen feels about moving. I will read the directions to you and then you may begin.
6. **Read:** In "The Spider Plant," Carmen is preparing to move. Explain how Carmen feels about moving. Support your statement using evidence from the text and your own personal experiences. Explain how your examples support your statement.
7. **Questions:** I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else. Are there any questions before we begin?

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Carmen's feelings about moving. You will need to begin or continue drafting. If you finish your draft, begin revising.
2. **Questions:** I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else. Are there any questions before we begin?

**"The Spider Plant"  
Directions/page 2**

**DAY 3**

- 1. Explain:** Today you will continue to work on your paper about Carmen's feelings about moving. When you finish your draft, take time to make revisions before writing your final copy.
- 2. Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

If you find that four days are not sufficient, allow the students an additional day to finish.

**DAY 4 or 5**

- 1. Explain:** Today you will finish your paper about Carmen's feelings about moving. When you are finished, raise your hand and I will collect your papers. Please turn in all drafts along with the final copy. Leave the drafts in your folder. Place your final copy on top of the folder. Make sure that the number on your folder is on all of your papers, including the final one. You may read or draw if you finish before the whole class is finished.

**DIRECTIONS FOR OBTAINING THE WRITING SAMPLES DURING FIELD TESTING**  
**"Thank You, M'am"**

1. **Explain:** In a few minutes, I will read to you a short story about a boy named Roger who gets caught while attempting to steal a purse. While you are listening, I want you to think about how Roger feels when he is caught and what happens in the story that lets you know he feels that way. After reading the story, you will be asked to write a paper explaining how Roger feels when he is caught attempting to steal the purse. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "Thank You, M'am,"** pages 126 - 131.
4. **Pass out the prompts.**
5. **Explain:** You will be given the rest of the class period today and three more class periods to plan, draft, and revise a paper explaining how Roger feels when he is caught attempting to steal a purse. I will read the directions to you and then you may begin.
6. **Read:** In "Thank You, M'am," Roger attempts to steal a purse and gets caught. Explain how Roger feels when he is caught. Support your statement using evidence from the text and your own personal experiences. Explain your examples fully.
7. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Roger's feelings when he is caught attempting to steal a purse. You will need to begin or continue drafting. If you finish your draft, begin revising.
2. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

"Thank You, M'am"  
Directions/page 2

DAY 3

1. **Explain:** Today you will continue to work on your paper about Roger's feelings when he attempts to steal a purse. When you finish your draft, take time to make revisions before writing your final copy.
2. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

If you find that four days are not sufficient, allow the students an additional day to finish.

DAY 4 or 5

1. **Explain:** Today you will finish your paper about Roger's feelings when he gets caught attempting to steal a purse. When you are finished, raise your hand and I will collect your papers. Please turn in all drafts along with the final copy. Leave the drafts in your folder. Place your final copy on top of the folder. Make sure that the number on your folder is on all of your papers, including the final one. You may read or draw if you finish before the whole class is finished.

**DIRECTIONS FOR OBTAINING THE WRITING SAMPLES DURING FIELD TESTING**  
**"Lassie Come-Home"**

1. **Explain:** In a few minutes, I will read to you a short story about a boy named Joe whose family had to sell his dog, Lassie. While you are listening, I want you to think about how Joe feels about selling his dog and what happens in the story that lets you know he feels that way. After reading the story, you will be asked to write a paper explaining how Joe feels about selling his dog. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "Lassie Come-Home,"** pages 274 - 279.
4. **Pass out the prompts.**
5. **Explain:** You will be given the rest of the class period today and three more class periods to plan, draft, and revise a paper explaining how Joe feels about selling his dog. I will read the directions to you and then you may begin.
6. **Read:** In "Lassie Come-Home," Joe finds out that his dog, Lassie, has been sold. Explain how Joe feels about his dog being sold. Support your statement using evidence from the text and your own personal experiences. Explain your examples fully.
7. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Joe's feelings about selling his dog. You will need to begin or continue drafting. If you finish your draft, begin revising.
2. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.



"Lassie Come-Home"  
Directions/page 2

**DAY 3**

- 1. Explain:** Today you will continue to work on your paper about Joe's feelings about selling his dog. When you finish your draft, take time to make revisions before writing your final copy.
- 2. Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

If you find that four days are not sufficient, allow the students an additional day to finish.

**DAY 4 or 5**

- 1. Explain:** Today you will finish your paper about Joe's feelings about selling his dog. When you are finished, raise your hand and I will collect your papers. Please turn in all drafts along with the final copy. Leave the drafts in your folder. Place your final copy on top of the folder. Make sure that the number on your folder is on all of your papers, including the final one. You may read or draw if you finish before the whole class is finished.

**DIRECTIONS FOR OBTAINING THE PRE-TRAINING WRITING SAMPLES**  
**"The Spider Plant"**

1. **Explain:** In a few minutes, I will read to you a short story about a girl named Carmen whose family is planning to move. While you are listening, I want you to think about how Carmen feels about moving and what happens in the story that lets you know she feels that way. After reading the story, you will be asked to write a paper explaining how Carmen feels about the move. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "The Spider Plant,"** pages 67 - 74.
4. **Pass out the prompts.**
5. **Explain:** You will be given until (state time) today and an hour tomorrow to plan, draft, and revise a paper explaining how Carmen feels about moving. I will read the directions to you and then you may begin.
6. **Read:** In "The Spider Plant," Carmen is preparing to move. Explain how Carmen feels about moving. Support your statement using evidence from the story. Explain how your examples support your statement.
7. **Questions:** I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else. Are there any questions before we begin?

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Carmen's feelings about moving. You will need to begin or continue drafting. When you finish your draft, revise and edit it. I will collect your final drafts at (state time).
2. **Questions:** I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else. Are there any questions before we begin?

**DIRECTIONS FOR OBTAINING THE MID-TRAINING WRITING SAMPLES**  
**"Thank You, M'am"**

1. **Explain:** In a few minutes, I will read to you a short story about a boy named Roger who gets caught while attempting to steal a purse. While you are listening, I want you to think about how Roger feels when he is caught and what happens in the story that lets you know he feels that way. After reading the story, you will be asked to write a paper explaining how Roger feels when he is caught attempting to steal the purse. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "Thank You, M'am,"** pages 126 – 131.
4. **Pass out the prompts.**
5. **Explain:** You will be given until (state time) today and an hour tomorrow to plan, draft, and revise a paper explaining how Roger feels when he is caught attempting to steal a purse. I will read the directions to you and then you may begin.
6. **Read:** In "Thank You, M'am," Roger attempts to steal a purse and gets caught. Explain how Roger feels when he is caught. Support your statement using evidence from the text and your own personal experiences. Explain your examples fully.
7. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Roger's feelings when he is caught attempting to steal a purse. You will need to begin or continue drafting. When you finish your draft, revise and edit it. I will collect your final drafts at (state time).
2. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

**DIRECTIONS FOR OBTAINING THE POST-TRAINING WRITING SAMPLES**  
**"Lassie Come-Home"**

1. **Explain:** In a few minutes, I will read to you a short story about a boy named Joe whose family had to sell his dog, Lassie. While you are listening, I want you to think about how Joe feels about selling his dog and what happens in the story that lets you know he feels that way. After reading the story, you will be asked to write a paper explaining how Joe feels about selling his dog. Are there any questions before we begin?
2. **Pass out the passages:** You may read to yourselves silently as I read aloud.
3. **Read "Lassie Come-Home,"** pages 274 - 279.
4. **Pass out the prompts.**
5. **Explain:** You will be given until (state time) today and an hour tomorrow to plan, draft, and revise a paper explaining how Joe feels about selling his dog. I will read the directions to you and then you may begin.
6. **Read:** In "Lassie Come-Home," Joe finds out that his dog, Lassie, has been sold. Explain how Joe feels about his dog being sold. Support your statement using evidence from the text and your own personal experiences. Explain your examples fully.
7. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

**DAY 2**

1. **Explain:** Today you will continue to work on your paper about Joe's feelings about selling his dog. You will need to begin or continue drafting. When you finish your draft, revise and edit it. I will collect your final drafts at (state time).
2. **Questions:** Are there any questions before we begin? (Pause.) I will be available to answer questions as you work but I will be unable to offer any advice. Please work by yourselves and do not talk to anyone else.

## APPENDIX E

## McCann's (1989) Scoring Criteria for Elements of Argument

## Claims

- 0 No claim related to the proposition or topic.
- 1 The writer makes generalizations that are related to the proposition or topic, but the assertions lack specificity or offer unclear referents. The writer leaves much for the reader to infer in order to determine the impact of the claim.
- 2 The writer states generalizations that are related to the proposition or topic, but the assertions are not complete. Enough information is available to figure out the writer's intent, but much is left to the reader to determine.
- 3 The writer states generalizations which are related to the proposition and which are clear and complete.

## Data

- 0 No data are offered or the data have no relevance to the claim.
- 1 The data that are offered are weak, inaccurate, or incomplete. \*Examples may include the following: (a) an attempt at using an example from the story without establishing the context; (b) the use of examples from the story that do not support the claim; (c) the lack of sufficient data.
- 2 The data that are offered are relevant but not complete. The writer leaves much for the reader to infer from the data. The writer may have offered the data without the complete citation which would allow the reader to determine the reliability of the data as evidence. The writer may offer data which are not complete enough to allow the reader to determine their significance.
- 3 The supporting data are complete, accurate, and relevant to the proposition.

\*Examples have been changed to be specific to this study.

Warrants

- 0        No warrant is offered.
- 1        An attempt is made to elaborate about some element in the data. The attempt suggests that the writer recognizes a need to connect the data to the claim, but the writer fails to make the connection.
- 2        The writer explains the data in some way, but the explanation is not linked specifically to the claim.
- 3        The writer explains the data in such a way that it is clear how they support the claim.

McCann (1989, pp. 74-75)

APPENDIX F

INFORMED CONSENT DISCLOSURE PROCEDURES AND LETTERS

**INFORMED CONSENT PROCEDURE**  
**Julie K. Kidd**

1. A cover letter and informed consent disclosure will be sent by mail to each participant's home.
2. The researcher will explain the study to the participants prior to the first testing session.
3. The study will be a part of the regularly scheduled language arts class; therefore, signed consent from the students and parents will not be sought. The principal, Mrs. Malone, has granted permission to conduct the study as a part of the language arts program.



April 30, 1990

Dear Sixth Grade Parents:

Currently, I am working on my doctorate degree from Virginia Tech at the Northern Virginia Graduate Center. For the past few months, I have been on a leave of absence from Barrett to pursue research for my dissertation. I have completed my background research and am ready to begin my research study. Mrs. Malone has granted me permission to gather data from the sixth grade students at (Name of School). The data will be gathered from a writing unit that I will be teaching to the sixth graders in the language arts classrooms during the months of May and June. Because I will be gathering and analyzing writing samples from the students, it is important that you are aware of the purpose and procedures of my study.

On the enclosed sheet, I have outlined specific information about the study. Please read it carefully and contact me at (703) \*\*\*-\*\*\*\* for further information. I appreciate your support.

Sincerely,

Julie K. Kidd  
Reading Specialist

April 15, 1991

Dear Sixth Grade Parents:

Currently, I am working on my doctorate degree from Virginia Tech at the Northern Virginia Graduate Center. Mrs. Malone has granted me permission to gather data from the sixth grade students at (Name of School). The data will be gathered from a writing unit that I will be teaching to the sixth graders in the language arts classrooms during the months of April and May. Because I will be gathering and analyzing writing samples from the students, it is important that you are aware of the purpose and procedures of my study.

On the enclosed sheet, I have outlined specific information about the study. Please read it carefully and contact me at (703) \*\*\*-\*\*\*\* for further information. I appreciate your support.

Sincerely,

Julie K. Kidd  
Reading Specialist

**INFORMED CONSENT DISCLOSURE**  
**IMPROVING ANALYTIC RESPONSES TO LITERATURE:**  
**A RESEARCH STUDY**  
**By Julie K. Kidd**  
**(703) \*\*\*-\*\*\*\***

- Purpose:** To determine the effects of instruction and type of practice on students' written analytic responses to literature.  
To determine the trends in the students' development of various elements of argument in their written responses to literature.
- Rationale:** The 1990 National Assessment of Educational Progress report on writing by Applebee, Langer, Mullis, and Jenkins concludes that students in grades four, eight, and eleven appear to have difficulty writing analytic and persuasive essays that require them to use an argumentative structure. Other studies appear to support this finding. Few studies have been conducted to determine what instructional practices affect students' growth in analytic writing using an argumentative mode. This study will analyze the effects of instruction and type of practice on sixth grade students' use of argumentation in analytic responses to literature.
- Procedure:** Students will be assigned randomly to one of two practice groups. The researcher will teach the groups a unit on writing analytic essays using the argumentative mode in response to passages from literature. Both groups will receive the same class instruction but their written practice activities will differ. One group will work in small groups of three on their practice assignments; the other students will work individually.
- Gathering Data:** Data will be gathered throughout the study. Students will write analytic responses using the argumentative mode to three different passages from literature. They will respond independently to the passages before, during, and after the unit of study. Oral interactions during group work will be tape recorded.
- Confidentiality:** Measures will be taken to assure the confidentiality of all students who participate in the study. The data gathered throughout the study will be combined and analyzed. Individual scores will not be reported. All reports will be based on aggregated (grouped) data.
- Participation:** All sixth grade students enrolled in the classroom and gifted language arts programs will participate. This unit is part of the students' quarterly language arts requirements. However, parents are free to withdraw their child from the project at anytime without penalty or prejudice.
- Contact:** This project has been approved by the Human Subjects Committee and the Institutional Review Board. If you have any questions you may call Dr. Barbara Hutson at the Northern Virginia Graduate Center at (703) \*\*\*-\*\*\*\* or Dr. Thomas Sherman on the Blacksburg campus at (703) \*\*\*-\*\*\*\*.

## APPENDIX G

## PROCEDURES FOR ADMINISTERING THE WRITING SAMPLES

To allow students time to plan, draft, and revise their essays, students will be given 2 one-hour sessions to complete the writing sample.

## Session 1

1. Distribute the following materials:
  - a. a manila folder,
  - b. loose leaf notebook paper,
  - c. two pencils,
  - d. a copy of the short story, and
  - e. a copy of the directions and prompt.
2. Read the story aloud as the students follow silently.
3. Read directions and prompt.
4. Answer any questions.
5. Instruct students to begin planning, drafting, and revising their responses.
6. Collect all materials at the conclusion of the hour.

## Session 2

1. Distribute materials from the previous day.
2. Review the directions and the prompt.
3. Instruct students to continue planning, drafting, and revising their responses.
4. Remind them that their final copies will be collected at the conclusion of the hour.
5. Collect all materials at the conclusion of the hour.

**APPENDIX H**

**PROMPTS FOR WRITING SAMPLES**

PROMPT FOR PRE-TRAINING WRITING SAMPLE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**"The Spider Plant"**

By Yetta Speevack

In "The Spider Plant," Carmen is preparing to move. Explain how Carmen feels about moving. Support your statement using evidence from the story. Explain how your examples support your statement.

PROMPT FOR MID-TRAINING WRITING SAMPLE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**"Thank You, M'am"**  
By Langston Hughes

In "Thank You, M'am," Roger attempts to steal a purse and gets caught. Explain how Roger feels when he is caught. Support your statement with evidence from the story. Explain how your examples support your statement.

PROMPT FOR POST-TRAINING WRITING SAMPLE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**"Lassie Come-Home"**

By Eric Knight

In "Lassie Come-Home," Joe finds out that his dog, Lassie, has been sold. Explain how Joe feels about his dog being sold. Support your statement using evidence from the story. Explain how your examples support your statement.



## APPENDIX I

## LESSON PLANS FOR INSTRUCTION AND PRACTICE

## Whole Class Instruction and Practice

## Session 1

1. Introduce argument and its elements.
  - a. Define terms.
  - b. Explain importance.
2. Model how to state a claim.
3. Elicit statements from the students about Carmen's feelings about moving in "The Spider Plant." Record claims on chart paper.
4. Review procedure for stating claims.

## Session 2

1. Review argument and its importance.
2. Review stating claims.
  - a. Elicit an explanation of stating claims from the students and record it on chart paper.
  - b. Discuss how to state an effective claim.
3. Introduce locating and citing data.
  - a. Define data.
  - b. Explain importance of citing data to support the claim.
4. Locate and cite data.
  - a. Model how to use the text to locate data to support the claim. Record the page number and the data on the chart paper.
  - b. Elicit additional data from the students.
  - c. Ask students to locate and record data to support one of the claims. Explain that this will be completed individually and will be collected at the end of the class period.
5. Review stating claims and citing data.

**Session 3**

1. Review stating claims and citing data.
  - a. Review the written explanation of stating claims.
  - b. Elicit an explanation of citing data and record it on chart paper.
  - c. Discuss how to cite effective data.
2. Introduce using warrants.
  - a. Define warrants.
  - b. Explain the importance of using warrants to connect the data to the claim.
3. Use warrants.
  - a. Model how to use warrants by using the claim stated and the data cited the previous sessions.
  - b. Elicit additional warrants from the students.
  - c. Ask students to attempt to write their own warrant to connect data to the claim.
4. Review stating claims, citing data, and using warrants.

**Session 4**

1. Review stating claims, citing data, and using warrants.
  - a. Review the written explanations of stating claims and citing data.
  - b. Elicit an explanation of using warrants and record it on chart paper.
  - c. Discuss how to state claims, cite data, and use warrants effectively.
2. Discuss how claims, data, and warrants form an effective argument.
3. Use the work from the previous sessions to form an effective argument.
4. Review elements of an argument.

## Individual and Collaborative Practice One

### Session 1

1. Read "The Torn Invitation."

### Session 2

1. Review stating claims and locating data.
2. Divide into treatment groups to begin essays either collaboratively or independently.

### Session 3

1. Review citing data and using warrants.
2. Divide into treatment groups to continue writing essays.

### Session 4

1. Review elements of the argumentative essay.
2. Divide into treatment groups to complete essays. Due at the end of the session.

## Individual and Collaborative Practice Two

### Session 1

1. Read "Before Breakfast."

### Session 2

1. Review the assignment.
2. Divide into treatment groups to begin essays either collaboratively or independently.

### Session 3

1. Review warrants.
2. Divide into treatment groups to continue writing essays.

### Session 4

1. Remind students that essays are due at the end of the session.
2. Divide into treatment groups to complete essays.

**APPENDIX J**

**PROMPTS FOR PRACTICE SESSIONS**

**PROMPT FOR PRACTICE SESSION 1**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**"The Torn Invitation"**

By Norman Katkov

In "The Torn Invitation," Harry's mother decides to attend the open house at his school. Explain how Harry feels about his mother attending the open house. Support your statement using evidence from the story. Explain how your examples support your statement.

PROMPT FOR PRACTICE SESSION 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**"Before Breakfast"**

By E. B. White

In "Before Breakfast," Fern's father decides to kill the runty pig. Explain how Fern feels about her father killing the runty pig. Support your statement using evidence from the story. Explain how your examples support your statement.

## VITA

The writer of this dissertation, Julie Kelly Kidd, was born September 20, 1958 in Washington, D. C. to Eldora Jean and John Francis Kelly. She completed her elementary and secondary education in the Fairfax County Public Schools. Her Bachelor of Arts Degree in Elementary Education was earned at the University of Richmond.

Following graduation in 1980, she married John S. Kidd, received a position in Page County as a sixth and seventh grade teacher, and moved to Harrisonburg, Virginia. While teaching in Page County, Julie pursued her Master of Arts Degree in Reading Education at James Madison University. On March 23, 1983, her son, Christopher Kelly Kidd, was born.

Upon completion of her Master of Arts Degree in August, 1984, Julie moved to Northern Virginia and took a position as a Chapter 1 Reading Specialist in an elementary school. While in this position, she entered the Graduate School of Virginia Polytechnic Institute and State University and pursued a Doctor of Education in Curriculum and Instruction. Julie is employed currently as a Reading Specialist in an elementary school in Northern Virginia.

  
Julie Kelly Kidd