THE UNIVERSITY OF CALGARY

CONTEXTUAL EFFECTS IN WRITING ARGUMENTS: A COMPARATIVE STUDY OF THE WRITING SKILLS OF STUDENTS IN GRADES 10 AND 12

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DEBORAH BEGORAY

A THESIS

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DEPARTMENT OF CURRICULUM AND INSTRUCTION

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "Contextual Effects in Writing Arguments: A Comparative Study of the Writing Skills of Students in Grades 10 and 12" submitted by Deborah Leslie Begoray in partial fulfillment of the requirements for the degree of Master of Arts.

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ABSTRACT

The Purpose

The purpose of this study was to investigate possible methods for improving the writing of high school students in the expository mode. This investigation arose from a recognition amongst teachers and researchers that many students, even those who write well in other modes, have a great deal of difficulty with exposition.

The Study

The study approached the expository writing problem in two main ways. Background research revealed approaches to writing suggested by psychology, discourse processing, adolescent reasoning, and secondary world theory. The empirical study arose from the background research. It focused on the contextual effects of reality, science fiction, and fantasy on expository writing.

The experiment involved Grade 10 and 12 subjects in both academic and non-academic English classes. They were asked to write arguments based on each of three different readings: a real world expository passage, a science fiction narrative, and a fantasy narrative. The resulting compositions were then scored for average T-unit length, cohesion, and total impression. Analyses of variance were performed on the scores, and a series of <u>post hoc</u> Scheffé comparisons conducted on the relevant means. Pearson Product Moment Coefficients were calculated to examine the correlations between the total impression scores and each of the other measures.

The Findings

Background research and the experiment suggested several conclusions. Skills from work in narratives can be applied to exposition, which will be more successful if students understand the concepts they are to discuss. These concepts should not be forced into prescribed formats to the detriment of student growth in meeting personal goals.

Furthermore, the student writing is influenced by reading. The reading which prompts writing should be varied to include actual, possible and impossible worlds.

Finally, effective arguments arise from planning both before and during writing. This plan should be made plain to the reader, especially through the judicious use of cohesive ties.

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Teachers and students of the Calgary Public School System made my research project possible. I gratefully acknowledge their participation.

Special thanks to John Begoray, my husband, friend and computer technician, without whose patience and expertise this thesis may never have been completed.

DEDICATION

To my parents, Les and Grace Young, who have always encouraged my reading and writing, I dedicate this thesis.

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CHAPTER ONE

Introduction

Problems in Teaching Expository Writing

One of the main objectives of the secondary language arts program is to improve the writing skills of adolescents and, especially, to enable them to write well in the expository mode. Although they may be skilled in writing poetry or narrative prose, these activities are gradually de-emphasized in high school English classrooms in favor of learning to write exposition. The expository mode is used to explain or inform about processes, opinions, and directions. It includes such diverse writing as recipes, book reviews, encyclopedia entries, and letters to the editor.

Most educators feel, and with good reason, that expository writing forms the majority of the prose which adults read and write. This opinion is reflected in one composition manual's advice to students: "Of all the writing that you will do the rest of your life, expository writing, or exposition, will probably be the most common" (Christ, 1978, p. 89).

In high schools, the primacy of expository writing is reflected in the dominance of the essay. This is true not only in the classrooms, but also in the writing required for diploma exams. The marking guides for the written section of the English exams show the demands of the educational establishment in this area. The scoring guide for Alberta Education's English 30 major writing assignment, for example, states that exceptional writing:

presents perceptive ideas, supporting details, words and structures that form a coherent and unified whole. The writer's purpose and intended audience are unquestionably evident throughout the work, and his tone is both apparent and always appropriate. This writing communicates clearly, effectively and with vitality. Such writing demands respect (1983, p. 11).

Sadly, however, the products of many adolescents who write in the expository mode are of much lower quality than this ideal. Often, their writing shows only conventional ideas largely unsupported by any argument, or by poorly organized argument. Even if the developing ideas are present, they may lack unified and coherent presentation.

Cooper and Odell remind us that "the basic problem in writing is discovering what one wishes to say" (1978, p. xi), and it is this very lack of an involved writer which is often perceived by teachers as poor writing. In some cases, no personality, no sense of the presence of someone who wants to say something is apparent at all.

This writing problem may reflect an inability to use

appropriate tone or a complete lack of feeling by the author towards his subject. At best, such writing is lifeless and mechanical; at worst, it is incomprehensible. Gibson advises that reading is a "confrontation with a voice or personality" (1966, p. 12). Writing which lacks an appropriate voice, then, will never be judged to be entirely proficient by an expert reader.

Helping writers discover what they wish to say is, however, a complex and time-consuming process. In an effort to get students to produce at least average work in expository writing, teachers often show students a formula into which any subject can be fitted. Such basic forms as the 'five star essay' with its one paragraph introduction, three paragraph body and one paragraph conclusion are a result of these attempts to simplify the writing process to a manageable technique.

These formulas deal with one problem, the problem of essay organization, at least in a superficial manner. They may also encourage the student to grapple with the problem of stating a purpose, if the structure and basic goal of each of the three parts (introduction, body and conclusion) are discussed. However, essay formulas do nothing to solve the problem of expository writing which lacks vitality and does not reflect understanding and commitment by the writer. Explaining the lifelessness of a given student's

expository writing becomes challenging in the face of his or her ability with other modes. For example, students can write effective narration, and often become deeply committed to their stories. This suggests that they are not incapable of writing or of involvement with their writing. Furthermore, they do not find exposition inherently boring; in fact, Fader's research has shown that many of them prefer non-fiction reading to novels when offered a free choice (1968, pp. 67-68).

Perhaps part of the problem lies with the topics which are traditionally assigned for essays. Students are often asked for their opinions on, for example, capital punishment, or the results of World War I, or the causes of suicide. These are themes on which a whole series of books have been written; it seems unlikely that students could discuss them in five hundred words. They are also topics on which students may believe they have little or no knowledge Is it surprising that their writing is often or interest. disjointed and lifeless?

Another part of the problem may be in the students' perception of expository writing. It is often presented to them in only one of its possible forms, the classical essay. Such sophisticated literary forms may often seem separated from reality. Students need to see not only this structure, but could also be exposed to opinions expressed in their

more currently familiar forms; forms such as, for example: editorials, political commentaries, and concert reviews.

A second part of the perceptual problem lies in the implied purpose of writing an essay. All too often essay writing and examination writing are synonymous, and so the only goal of the composition is to elicit as high a grade as possible from an evaluator.

This lack of connection with adolescent writers' experience is especially a problem in school assigned exposition. Up until the essay is introduced, writing for students has been embedded in familiar situations. They write stories about themselves and their dreams. They put people they know into new situations. Concerning this, Margaret Donaldson has written that "they are dealing with 'real-life' meaningful situations in which they have purposes and intentions and . . . can recognize and respond to similar purposes and intentions in others" (1978, p. 121).

Clearly, the student eventually must learn to deal with writing assignments which are not immediately identifiable as familiar situations. Students who are to succeed in the high school must learn to write convincing essays on topics which must often seem very far from their real life situation. The English teacher's problem is deciding how best to assist students in learning to write exposition so

they can meet these challenges.

Qualities and Abilities of the Adolescent Writer

To investigate the expository writing problem, a useful beginning can be made by examining what we know about the adolescents we are trying to teach. The adolescent is typically undergoing profound physical, emotional, and intellectual changes. We deal with the results of these in the schools but rarely turn them to our own advantage.

According to Piaget, the adolescent is "the individual who commits himself to possibilities" (1958, p. 339). Teachers, indeed, commonly observe that students seem to spend much of their time in introspection or in lively discussions with others about what the world and society <u>could</u> be like. This idealism, which is so emblematic of students of this age, also extends to their view of themselves and of their own possibilities now and in the future. Anything is possible; their list of choices for the future is endless.

Adolescents are becoming more able to form and test hypotheses, and to examine logical relationships with a sophistication which had not been possible only a few years before. Flavell (1978, p. 104) calls this ability <u>hypothetico-deductive</u> reasoning and contrasts it with <u>empirico-inductive</u> reasoning of less mature thinkers.

Flavel postulates that adolescents develop

capabilities in theorizing and speculating. This hypothesis formation begins in the world of the possible. They realize that any single solution to a problem is probably only one of many answers. However, they choose one solution and then proceed to reality to test their theory. This movement from the possible to the real to solve problems is a characteristic, according to Piaget, of the formal-operational stage.

Formal operations are manipulations of the abstract, a stage beyond reasoning which involves only the concrete. For example, adolescents are becoming able to think about psychological processes such as language, perception and memory, which may include speculation about what others might be thinking about them and all of the attendant fears this arouses.

Another characteristic of adolescents is their desire for control over their own lives and the power to be Paradoxically, they want at the same time to individual. find a social role which makes them feel as though they are important part of a group. Langer (1962) calls these an complementary processes individuation and opposed but These are of continuing importance in adult involvement. life, but adolescents are just beginning to handle the difficulties inherent in achieving a balance between them.

Britton (1970) observes that adolecents are impatient

with the flaws of adults and their society and are anxious to put their theories into action. Although they handle abstract concepts quite well, they are often unable to deal with life's real problems due to lack of experience or a failure to see the impractical nature of their ideals.

Finally, adolescents are beings of enormous capabilities and potential who are often frustrated by modern society's desire to keep them suspended between childhood and adult status for as long as possible. They are encouraged to stay in school, to fit themselves for a role in the complex and technological society which surrounds them. The channeling and development of the adolescents' new abilities is a major challenge of the secondary schools.

Using Adolescent Interests

Possible Worlds

In philosophical terms, Bradley and Swartz (1979, pp.1-8) offer some elucidation of the term 'possible world' which is useful here. All possible worlds can be subdivided into the actual world (our universe as it was, is and will be) and an infinite number of non-actual worlds.

Within these non-actual worlds, some are physically possible; that is, they follow the natural laws of the actual world. Realistic fiction falls within this realm. So, in fact, does science fiction. It represents worlds extrapolated from the actual world and deals with the

technologically possible. Thus, it concerns the non-actual but physically possible.

Other non-actual worlds are physically impossible, meaning, of course, that they do not follow the natural laws of the actual world. These worlds, which may still be Tolkien logically possible, are often called fantasy. (1938) reminds us that "the keener and clearer is the the better fantasy it will make". This concern reason, with reason in the composition of high quality fantasy is one reason why it may be useful material in the teaching of exposition which also stresses a logical approach.

Is it possible for the teacher to use the interests and abilities of adolescents in the fostering of better Teachers are aware of the gap which expository writing? often exists between ideal and actual expository writing in Major theorists have the secondary school classroom. indicated what is presently understood about the nature of What is needed is both an acknowledgement the adolescent. of the present lack of adequate solutions to the problem and willingness to seek new answers by applying adolescent а strengths to the teaching of expository writing.

One of these strengths is a willingness and enthusiasm to deal with worlds of the possible. W.H. Auden suggested that:

Present in every human being are two desires, a desire

to know the truth about the primary world, the given world outside ourselves in which we are born, live, love, hate and die, and the desire to make new secondary worlds of our own, or, if we cannot make them ourselves, to share in the secondary worlds of those who can (1968, p. 41).

The possibilities which exist for adolescents in these secondary worlds are limitless. And it is, essentially, possibilities that students must learn to analyze and organize in convincing fashion in order to write effective exposition.

Invention and Classical Rhetoric

Classical rhetoric has recently regained its place in the study of writing. The first of its five arts (invention, arrangement, style, memory, delivery), invention, or creative discovery, is now, once again, understood to be vitally important to the task of imagining and realizing a convincing possible world. Invention also includes a consideration of several processes which are central to composition in the expository mode. Freedman and Pringle point out that:

the contemporary view of invention includes not only the retrieval of information and relevant experience [in classical terms] but also the discovery of ordering principles, and sometimes even the analysis and

formulation of those "problems which give rise to inquiry (Young, 1976, p. 39)" (1980, p. 180).

Although there is some controversy about how much control can or should be extended over this process, there is agreement that it is a process of creative discovery which demands the complete involvement of the writer.

Both classical and contemporary rhetorical tradition emphasize that the text must be viewed within the context of writers, their audience and their world. Current school standards, operating for the most part out of a conventional rhetoric which has ignored the importance of invention, still demand evidence of a writer's voice, a sense of a particular listener or group of listeners, and a welldeveloped and organized view of the world. Modern theorists are encouraging teachers to use and expand upon the insights of classical rhetoric to provide new strategies in the nurturing and encouragement of their students' ability in writing.

Invention and the Possible Worlds of Fantasy

Acknowledging and fostering invention, the discovery process, may help to overcome the difficulties many students have with expository writing. The possible worlds of science fiction and especially those of fantasy, present contexts which offer adolescents almost limitless examples of, and opportunities to engage in, invention.

In both classical and contemporary rhetoric, invention involves bringing to the conscious mind events and facts which seem to bear on the present situation. In dealing with fantasy the adolescent is being confronted with a world wherein natural laws of the actual world do not apply. He must, therefore, seek any previous information or experience which may help him to cope with this new situation. Bettelheim believes that:

He [the child] can achieve this understanding, and with it the ability to cope, not through rational comprehension of the nature and content of his unconscious, but by becoming familiar with it through spinning out daydreams--ruminating, rearranging, and fantasizing about suitable story elements in response to unconscious pressures (1975, p. 7).

It seems likely that the adolescent is engaged in the same kind of process. Fantasy, after all, is not solely the province of the young child. Teachers observe that many adolescents choose this genre as an area of primary reading interest, and this observation is supported by researchers such as Applebee. He suggests that the maturing child enjoys fantasy at first, and later rejects it, but still later returns to his initial interests and "the conventions of fantasy and the possibility inherent in alternative views

of the world [are] accepted freely and openly" (1978, p. 133).

Discovery of Ordering Principles

Of great importance to the study of reasoning in the development of fantasy is the observation that the art of invention also involves the organization of ideas. Since the fantasy world operates on rules of its own, the reader is introduced to it through extensive explanation. Setting is very important, as are the laws which govern the possible behaviour of the creatures, human and others, which inhabit that time and place. Magic is possible, but must also conform to rules which limit its use.

It is important to note one crucial difference between fantasy and science fiction: Fantasy worlds are immune to the kinds of disproof which are a problem for science fiction worlds (Carlsen, 1980). The actual world can embrace the non-realistic element, usually the technological impossibility, which before existed only in the non-actual. The order in such worlds follows natural laws and therefore does not offer the scope which fantasy worlds do for speculation on possible ordering principles. The principles or laws which control the fantasy may be symbolic and have more concrete reality for the reader who accepts them in their context than do their abstract equivalents in the real world. As such, they may help the adolescent to interpret

the real world. For example, a talisman with tremendous power to control a greedy dragon can be discovered only at the end of dangerous quest in which the brave, skillful and determined can survive. This situation presents the same logical opportunities as the real world but is expressed in more approachable terms. This suits the adolescent who is becoming able to formulate hypotheses in the possible and verify them in the real world.

Analysis and Formulation in Inquiry

Analysis, formulation and inquiry are all skills which They may, of course, be at adolescents are learning. a number of different levels of sophistication in their ability to manage this area of invention. Fortunately, fantasy exists on all of these levels. Some fantasies offer strictly conventional characters and situations, with fairly simple problems for the reader's interest. Britton reminds us that "there is a time for growth in adolescents . . . a taste for the stereotyped . . . may be the first rung of the ladder and not the first step to damnation" (1970, p. 268). Other fantasy worlds are incredibly complex and offer to adolescents a wealth of ideas which demand high levels of reasoning.

How do adolescents learn to deal with the many problems which they confront? One possible channel of negotiation involves the medium of fantasy. Applebee discusses the use

of fantasy to provide psychical distancing "to allow greater involvement in threatening situations by removing stories from the main business of life" (1978, p. 77). Once again, this is movement from the possible to the real, since the adolescent is learning from experience in the narrative world and will be able to return to the real world better able to cope.

Britton observes that "above all in adolescence the need to withdraw, to take refuge from living, is at one and the same time an expression of the need to re-organize and press on" (1970, p. 267). Tolkien adds further support for this notion:

If a fairy story as a kind is worth reading at all it is worthy to be written for and read by adults . . . [They] offer: Fantasy, Recovery, Escape, Consolation, all things of which children have, as a rule, less need than older people (1938, p. 46).

These observations and ideas, then, form the basis for intriguing questions, some of which are addressed in the present study. There seems to be a problem in teaching the writing of exposition. From consideration of the various tenets of this writing difficulty, juxtaposed as they are with the abilities, strengths and interests of adolescents, the interesting possibility arises that such students may actually benefit in their expository writing assignments

from contexts and tasks founded in science fiction and fantasy, rather than in more traditional topics.

CHAPTER TWO

A Review of the Literature

The Psychology of Writing

In the last decade, much has been discovered about the psychology of writing. Several of these discoveries have particular bearing on the present discussion about the fostering of better writing in the expository mode. Central ideas can be grouped under several headings covering such areas as the relationship between developmental stages and writing, the influence of topic on an individual's writing ability, the place of discovery in the writing act, the expression of implicit and explicit knowledge in writing, the benefits of looking at writing as a process and as a product, differences between writer-based and reader-based prose, and, finally, understanding writing by examining it as a communicative act.

Developmental Stages

Many theorists and researchers have noticed a connection between cognitive maturity and writing ability. For example, the Piagetians postulate the existence of a stage called 'formal operations' beginning at about age eleven and marking a shift into abstract thinking. Writing ability should reflect this development.

In support of a theory which links a stage development

in writing to a similar development in cognition, Bradford (1983) notes that "each of Piaget's developmental periods is initiated by some corresponding stage in language 16). acquisition and cognitive development" (p. Sternglass (1983) also operates from a developmental basis in her thinking about fostering cognitive growth and better She reminds us of the necessity to "take account writing. of the maturational level of the writer and his or her ability to perceive and construct a meaningful topic, a purpose, an audience, and a mode" (p. 153).

Other research indicates exceptions to Piagetian stage theory. Studies such as those of Donaldson (1978) show that many students will show an ability to abstract much earlier than Piagetian theory suggests. On the other hand, some will not enter this stage until much later. Research by MacKinnon (1976) indicates that 50 percent of students entering college cannot deal with abstractions (p. 11). Scardamalia and Bereiter (1982) also warn of the dangers of linking development too closely with age, although their research suggests that, generally speaking, younger students are less able to abstract than older students (p. 166).

Scardamalia and Bereiter prefer to call writers <u>novices</u> or <u>experts</u>, regardless of age. They see more effective expository writing as a function of the way in which the task is assimilated, or transformed "to fit [te writer's]

existing mental structures" (p. 165). Better writers assimilate by raising the level of the task to a problem which must be solved. Less able writers reduce the level: They summarize their current knowledge.

Individual Variation

It is not surprising to note that the professional writer and the novice writer produce work of contrasting quality. It has recently been recognized, however, that the overt ability of the individual varies greatly according to the task.

Scardamalia and Bereiter (1982), who emphasize these differences, nevertheless point out that it must be remembered that anecdotal accounts abound concerning novice writers who perform at expert levels. They cite Britton (1982) and his story of a six-year old who appeared to "have a more sophisticated approach to composition than many adults" (p. 166), and Calkins (1979) who describes an eightyear old engaging in problem-solving.

This phenomenon appears to involve students who are in a situation that is either highly motivating, or has particularly clear goals. In these situations, the student is able to meet some personal intention. Scardamalia and Bereiter (1982) suggest that one possible explanation might be that "children . . . possess the germs of more than one approach to writing" (p. 166) This does not negate the importance of recognizing that age is a consideration in the development of writing abilities, but rather makes it necessary to consider that there is no set pattern to progress in learning to write well.

Creativity and Discovery

The acknowledgement that writing is a creative act which begins with discovery is not new to the psychology of writing but has, rather, been re-discovered. Its roots, as Ramsey (1983) points out, are to be found in the theory of the Romantic poets, especially Wordsworth and Coleridge.

As Ramsey notes, that which we now call prewriting or invention was of vital importance to the Romantics as well (1983, p. 8). They struggled with the problem of whether or not they had conscious control over the imagination. Perhaps creativity sprang from the unconscious. How could it be encouraged? Did one wait for inspiration and then write, or write to promote inspiration?

These are concerns of modern composition teachers and researchers as well. Ramsey notes that "insincere, formulaic, and distorted language accompanies and to some extent occasions the fall from unified perception" (p. 6). All effective writing, it seems, begins with the discovery of personal goals which can be met within an externally imposed writing task. Scardamalia and Bereiter (1982) note the importance of recognizing that writing goals come from within. Expert writing, for example, is highly idiosyncratic, shaped by experience and meeting specific goals. Goal-setting, of course, is an abstract ability, and so does not usually emerge until the more mature developmental phases of writing ability.

This does not mean that the discovery of personal goals in writing cannot be encouraged, however. Scardamalia and Bereiter (1982) conclude hopefully that their research is proving that successful intervention is possible, and that "students may learn not only to achieve the pragmatic benefits of effective composition but at the same time make writing . . . a significant activity in their mental lives" (p. 170).

The Romantics would surely applaud.

Implicit and Explicit Knowledge

There are different ways to know something. Bruce (1982) reminds us that students can correctly identify a sentence as having some problem in meaning or structure (p. 143) before they are able to correct their own prose.

It seems logical to assume that only when knowledge is already implicit can it become explicit. Certainly, adolescents could be taught formulas to give them a recipe for writing, but these would not help them to engage in writing to express their thinking. They would demonstrate an artificial ability, one which they had not internalized.

Making implicit knowledge explicit also involves making a discovery. Perl (1982) calls this discovery a 'felt sense' which comes as one engages in composition (p. 45). This does not happen only at the invention stage of writing, however, but may be involved throughout the writing process. Writers, it seems, have many different ways of approaching composition.

Writing As Process

One of the most productive lines of inquiry in the study of the psychology of writing, following the work of Emig (1971), has been a shift away from looking at the products of writing to an examination of the writing process. Emig noted in her review of the literature that her study was preceded by a long tradition of researchers examining the results of writing, and only a very few who studied the process which writers undergo.

Bruce (1982) asserts that writing is a "decomposable process". Two of its main sub-processes are what he calls <u>idea production</u> and <u>text production</u>. Idea production is the gathering of thoughts; that is "what ideas are to be expressed and how are they related" (p. 135). Text production is designing structure; that is, choosing "what are good sentence forms, paragraph forms, and text forms" (p. 135). Process research concerns itself with the examination of how ideas and text are produced.

Recursiveness is an important characteristic of both and text production. Perl (1983) idea notes that "recursiveness in writing implies that there is a forwardmoving action that exists by virtue of a backward-moving action" (p. 44). This backward movement suggests that writing is not necessarily a linear process of plan, write, Rather, it is recursive. Ideas can be grouped. revise. That group will influence a choice of structure, and that choice may, in turn, stimulate other ideas.

Writing As Product

The shift away from looking at writing as a product to writing as a process has been helpful to our understanding of what writers are doing. Recently, however, psychologists such as Bruce (1982) have been reminding us that we still owe consideration to the idea that a piece of writing must be a successful communicative product (pp. 131-132). This is especially true of exposition where the purpose is primarily to explain, or to help someone to understand facts or beliefs.

There are further useful outcomes from focusing on the written product, such as those which result from noting the differences between professional and student compositions. Odell (1982) has used product analysis as a way to achieve insights into teaching the writing process, and to answer the question of how we can teach students to write more like

professionals. Odell argues that "writers' choice of language, syntax, and content have epistemological significance. These choices reflect ways of knowing; they involve strategies or plans or schemata for thinking about a given topic" (1982, p. 53). The final product is a result of the thinking and writing process.

The professional work which is the ultimate expression a writer's thinking fills magazines, newspapers, and of Expository writing dominates modern periodicals. A books. modern essayist, Lopate (1984), observes that "the informal familiar essay is a wonderfully tolerant form, able to or rumination, memoir, anecdote, diatribe, accommodate scholarship, fantasy and moral philosophy" (p. 1). This list of the kinds of written products indicates the variety of models which are available for consideration.

Writer-based and Reader-based Prose

Effective exposition must be written with the reader in mind, since its object is to communicate information or beliefs. In first draft form it may suggest writing which is both by and for a particular writer, but successive drafts should reflect a movement away from such egocentrism. For example, effective revision can begin by evaluating prose along a continuum from writer-based at one end to reader-based at the other. Roth (1982) notes that teachers often find it useful to point out to students "where the
paper falls" (p. 218) between these extremes.

Britton (1975) has pointed out that writing with self as exclusive audience is only useful where the writing is of no concern to anyone else, as in a shopping list, a private concern such as a diary, or a tentative concern, such as trying to sort out thoughts (p. 67). This does not mean, however, that the writer ever completely disappears as audience. Britton argues that effective writing is always done to satisfy the writer's own demands first.

The writer must, however, also learn to take the view of a potential reader. Britton (1975) argues that "our purpose is to declare that the 'indwelling of reader in writer', to borrow an expression from Polanyi, is a necessary part of the process of 'writing to enlighten rather than to mystify'" (p. 21).

This is in keeping with Bruce (1982) who maintains that learning viewpoint while writing is crucial to the development of a truly communicative writer (p. 133). Bruce identifies four objectives for a writer who is interested in composing for a reader: comprehensibility, enticingness, persuasiveness, and memorability. Meeting these goals will result in reader-based prose of all types, and this list suggests worthy objectives for all expository writing. <u>Differences between Writing and Other Communicative Acts</u>

Writing, even in its simplest form, is a tremendously

complex activity. Just how different it is from oral language is demonstrated, once again, by Bruce (1982). He maintains that both the medium and the message of writing a story are significantly different from taking part in a conversation. There are seven dimensions on which to show the differences in medium.

The first dimension is the writer's interaction with a reader, an action necessitating a conceptual model of that reader's understanding before writing is begun. The second is that involvement in writing is usually with an unknown audience, not a specific person. Third, because the mode is written speech, intonation cannot be used to indicate meaning. Gestures, moreover, are not possible, since there is no sharing of space.

Unlike oral language, writing assumes that the reader will be seeking a message at a different time than that in which it was composed. Referents in writing do not have concrete presence; they must be described. Finally, the writer must distinguish between the characters who are the sources of dialogue, which is not obvious as it would be in conversation (p. 134).

Not only is the medium different, the message of writing compared to speaking also varies. Written texts have cohesion (Halliday and Hasan, 1976), integrated themes, and clear purpose, whereas conversations tend to wander and

often change goals. It is difficult for beginning writers to remember to attend to all of the tasks which writing demands.

Problems encountered by inexperienced writers trying to move away from oral language in order to write a story are intensified in exposition. Exposition is, after all, even less like oral speech than narration is. It is more formal, and is often more distant and abstract.

Similarities between Writing and Other Communicative Acts

Although writing is different from speaking, it does bear similarities to other communicative acts such as reading. Bracewell (1982) has designed a theory which integrates or unifies reading and writing. He believes that the cognitive processes involved are similar, and even suggests that improving one skill may improve the other.

Bracewell's conclusion is that some processes are common to both production and comprehension tasks (p. 162). Similar to the way in which speakers establish a context for their listeners, writers generate frames for their readers as they compose. They are constrained by their own knowledge and what they have written previously, and they use language to control the reader's processing. Writers should be aware of this frame construction while planning, writing, and revising.

Readers, according to Bracewell's theory, must derive a

frame from the text, whether spoken or written, and integrate it in order to comprehend the message. How well they are able to understand depends on syntactical complexity, propositional complexity, topical organization, cohesion, and inferential relations. All of these variables are, of course, under the control of the writer.

Bruffee (1983) supports this point when he states that "to write is in effect to 'talk' to someone else in a focused and coherent way" (p. 165). He acknowledges that the problem is not this simple, but that much can be learned from considering writing and reading in the same context. They are, for example, mutually supportive and allow us "to overcome the limitations of time and distance" (p. 167). This displacement requires the skillful use of our imagination as we construct the message as writers, or reconstruct it as readers.

Discourse Processing

Cohesive Ties in Text

Halliday and Hasan (1976) define text as "any passage that forms a unified whole" (p. 1). One of the ways in which the elements of the text are shown to relate to one another is by the presence of cohesive ties. For example, cohesive ties between sentences indicate that they form a text.

Understanding the linking process of cohesion is a

skill vital to understanding and composing text. Williams (1983) reminds us that "the reader's ability to interpret a particular textual element depends on this ability to interpret another element" (p. 3). The importance of cohesion in writing is acknowledged in recent curriculum guides. For example, Alberta Education (1983) calls for essays which present "supporting details, words, and structures that form a coherent and unified whole" (p. 11). Such writing will show a great number of cohesive ties; that is, instances of cohesion.

Halliday and Hasan suggest that cohesion refers specifically to non-structural text-forming relations (p. 6) which lie within the text. Therefore, structural elements such as indenting paragraphs, or double-spacing between topics are not cohesive ties.

Cohesive ties must also be endophoric rather than exophoric; that is, the connective must come within the text, and not merely be situational. These endophoric references may be preceding (anaphoric), or following (cataphoric). Anaphoric ties are of primary importance since every sentence needs at least one anaphoric tie connecting it with what has gone before. Cataphora is much rarer than anaphora, and not necessary to the creation of text (p. 293). Halliday and Hasan point out that exophora is not cohesive, since it refers to something outside the

text, for example a reference to those plants (p. 18).

According to Halliday and Hasan, cohesion has two main subdivisions in the form of lexical and grammatical ties. Lexical cohesion includes collocation and reiteration of words. Collocation refers to the fact that certain words regularly occur together; for example, 'industrialized' and 'developing'. Reiteration is the use of repetition, such as <u>built/built</u>; synonyms, such as <u>objective/purpose</u>; superordinate, such as <u>waterworks/dam</u>; or general noun, such as when a large dam was built/ the matter.

There four types of grammatical cohesion: are substitution, ellipsis, reference. and conjunction. Reference is the use of pronouns to refer forward or As noted above in the discussion of backward in the text. endophoric references, a forward reference is called a cataphora, and a backward reference, an anaphora. For example, the use of a name followed by the use of the personal pronoun 'she' is an anaphoric reference. If the preceded the noun, the reference is termed pronoun cataphoric. Substitution uses five items: one/s, the same, so, not. For example: Mark jumped over the fence. do; Sue did the same.

Ellipsis is an element which Williams (1983) explains as "substitution by zero'" (p. 44). An example of a nominal ellipsis is at the point indicated by an 'x' in the following sentence: "1973 was the 25th anniversary of the World Health Organization (WHO), and (x) was celebrated by a review of the health services throughout member countries." The item that has been ellipted is "the 25th anniversary of the World Health Organization (WHO)".

The final type of grammatical cohesive tie is conjunction. Some examples are <u>and</u>, <u>yet</u>, <u>because</u>, and <u>meanwhile</u>.

Cohesion and Macrostructures

Van Dijk (1977) has proposed a model in which cohesion may be achieved by the linking of two seemingly independent The theory of Semantic ideas by one macro-proposition. postulates that "certain semantic Macro-structures on both composite sentences and discourse constraints sequences are to be accounted for in terms of notions such topic of discourse or theme" (p. 6). Sentences as expressing macro-propositions have a specific grammatical status; they are usually called topic sentences. Macrostructures not only enable the comprehension of highly complex information during input, but at the same time organize the information in memory since each sentence is coherent with respect to topic or to macrostructure.

Schema Theory

Schema theory is a recent approach to the understanding of discourse processing. For example, it has been suggested

by Freedle and Hale (1979) that in understanding and remembering stories, the reader uses a schema, or "internal representation of the information" (p. 122). Their work suggests that children first acquire a narrative schema and only later develop an expository schema for that type of discourse. According to this theory, children are able to comprehend exposition by engaging in schema transfer; that is, that children have a conception of the similarities between these types of prose, and that they are able to move from the familiar to the unfamiliar in learning to deal with exposition because of their experience with narrative Freedle and Hale cite Piaget in suggesting that passages. new structures are first learned using old contents, and new contents are first used within old familiar structures (p. Practice in the transfer condition will gradually 128). lead to a more fully realized expository schema.

In reading and composing any discourse, it is clear that the user of language must find some meaning in the text. As Dewey (1933) said:

to grasp the meaning of a thing, event or a situation is to see it in its relations to other things; to note how it operates or functions, what consequences follow from it; what causes it, what uses it can be put to (p. 135).

What can schema theory tell us about the processing of

new discourse material? First, it suggests that all readers have some world knowledge schemata; that is, patterns or frames used when confronted with discourse which they must try to assimilate or accommodate. In fantasy, more than with many other narratives, only some of their knowledge about the natural rules of the actual world will apply. Because of this, more attention must be given to discerning the relationships within the text.

Some readers will be aided by their knowledge about the general rules which govern fantasy worlds. Adams and Collins (1979) call this a specialized schema at the interpretive level (p. 20). This will aid in 'top-down' processing in which readers have a general framework which they fill in as they read.

Schema theory suggests some interesting reasons for the inability of many adolescents to write well in the expository mode. First, dealing with exposition should be helped by bridging from the patterns of narrative prose. If this is not done, it seems reasonable that less able writing will result. Second, too many of the texts adolescents use in the reading which precedes writing exposition do not have a familiar higher level schema which will aid them in finding meaning.

Third, as Adams and Collins state:

The power of a schema-theoretic account of reading

derives from the assumption that lower level schemata elements or subschemata within higher level are It is, above all, this aspect of the theory schemata. allows perceptual elements to coalesce into that that allows such abstract higher meaning, order the problem-solving schema be schemata as to appropriately and usefully accessed (p. 8).

It is, of course, this problem-solving schema which students must be able to access in order to produce well-reasoned exposition. It follows logically that if no meaning is discovered at lower levels, then the student will not be able to engage in higher level cognitive activities.

Adolescent Reasoning

As has been noted in Chapter One, the adolescent is, according to standard developmental theory, in the process of acquiring greater ability in hypothetico-deductive reasoning. This means, according to Flavell (1977), that the adolescent "creates hypotheses and then deduces the empirical states of affairs that should occur if his hypotheses are correct" (p. 145). The research question here is whether and how adolescents use this ability to write exposition.

Two factors which influence the adolescent's interest in using hypothetico-deductive reasoning were suggested by Inhelder and Piaget (1958); the first neurological, and the

second, social. Neurological factors are beyond the scope of the present argument, but it is important to review some significant social influences.

First, adolescence may be seen as a bridge between the here-and-now world of childhood and the much more abstract world of adults. As the child matures, he comes to realize that he will someday be an adult, and he begins to plan for that time. Becoming an adult, and thinking about becoming an adult, necessitate the consideration of ideas beyond the present. Inhelder and Piaget commented that "the adolescent is the individual who commits himself to possibilities" (p. 339).

Furthermore, Inhelder and Piaget believed, these possibilities often have no concrete referent in the present. The adolescent is thus said to be engaging in formal thinking; that is, in "thinking about thought" (p. 331), or dealing with ideas. Flavell (1963) also comments that the adolescent "lives very much in the non-present i.e. in the future and in the domain of the hypothetical" (p. 223). He or she is learning to deal with the vast possibilities of the world of the abstract.

The general principle of adolescent reasoning, Flavell believes, involves the consideration of many possibilities in order to discover the real (p. 203), a process which involves high level thinking skills. Such a process,

however, does not spring fully grown from the post-pubescent individual but is based, rather, on what has already been learned in the concrete-operational stage. In the stage of concrete operations, according to the Genevan school, the child learns to manipulate things. He or she can, for example, classify objects into categories. Formal thinking builds on this ability in that the results of the concrete operations become propositions which are then further operated upon.

These formal operations may, for example, be embodied in a search for logical connections between ideas. The first step is to set out what all possible eventualities might be. The more thoroughly this is done, the better the chances that a realistic solution will be found for the Formal-operational thinkers then combine and problem. This will analyze different possibilities. be most successful if they are able to fully imagine the range of They try to discover which of the answers which may exist. possibilities is the right one or ones; that is, they search for the subset of 'might be' which they can call 'is'. In other words, the large group is a set of hypotheses to be tested. Only some of them will be confirmed by reality.

According to Flavell (1963), Piagetian theory speculates that adolescents use a number of schemata or strategies to test out their ideas, schemata which are

"partially task independent but not completely general" (p. 222). In a science experiment, for example, the logical method of combining liquids to produce a pre-determined color would also apply to other problems where the end result has been defined. The same method, however, might not be so appropriate in trying to choose the ideal mix of people for a discussion group.

More recently, it has been noted that not all adolescents or even all adults engage in formal operations. Flavell (1977) comments that: "The generalization is that the higher the Piagetian cognitive stage, the less inevitable its full attainment by normal individuals across all human environments" (p. 115). Many adolescents and adults do not attain higher Piagetian levels of logical reasoning.

Flavell suggests a number of reasons for this seeming lack of development. The individual may not have been trained, or may not have had the opportunity to practice logical thinking. Alternatively, our definition of universality could be too narrow. Flavell (1977) reports that further investigation has revealed people engaged in abstract thinking in meaningful contexts where none was discovered in response to the problems of a logic textbook (p. 117).

Adolescent reasoning, then, is more likely to be formal

and abstract than that of the younger child. It is socially useful and appropriate for an individual who is looking ahead to future possibilities.

Alternative Views on Reasoning: Problems with Piaget

It should be noted that Piaget's theory has not been accepted without question. Some researchers who have discussed what they believe to be problems are Ennis (1978), Brainerd (1978), Siegel (1978), and Donaldson (1978).

Ennis and Brainerd criticize both the experimental and the claimed outcomes of methods the experiments conducted by the Genevan school. On the basis of his own research results, Ennis comments that "it appears that the children 11-12 and under claim that cannot handle propositional logic is a false, untestable, or otherwise defective claim" (pp. 238-9). He suggests, for example, that the term 'propositional logic' is not clearly defined, and therefore difficult to test. He reports further research indicating that Piagetian stage tests, which are supposed to be failed by younger children, can, in certain contexts, be successfully completed by them.

Brainerd supports these contentions by listing findings of researchers which contradict Piagetian theories. For example, children at a pre-operational age have learned concrete operations in reported experiments. He is also critical of the non-replicability inherent in Piaget's

theory: "The suggestion of untestability is so strong in the Genevan writings that I think we must also consider the possibility that tautologies rather than hypotheses are being advanced" (p. 104).

Seigel and Donaldson both comment on the problem of language in the Piagetian experiments. Seigel observes that: "There seems to be no way of determining, with the traditional Piagetian tasks, the relative contributions of cognitive or linguistic deficiencies when the child fails to achieve the correct solution" (p. 45). She notes that this is especially true with young children, deaf children, or others with great gaps between what they know and what they can understand or express through language.

(1978)also suggests that different Donaldson conclusions can be drawn from the results of Piaget's tests than those which were originally thought to be correct. For example, a young child who fails to decentre, in Piagetian terms, may instead be experiencing communicative, rather than core cognitive, difficulties. Language is, at first, heavily supported by context, and therefore if context is unfamiliar, the child may incorrectly focus on misleading comments by experimenters. He or she may, for example, assume a change in quantity in the classic conservation test, instead of only a change in shape.

In response to these objections, Flavell (1977) seems

willing to acknowledge the importance of life experience on the development of reasoning ability, and the altering of experimental method which produces more successful results (pp. 116-117). He also recognizes problems with the structure of the theory: "The existing evidence suggests to me that cognitive growth is not as stage-like a process as Piaget's theory claims it is" (p. 255).

Evidence suggests that people gradually become more able to think in an abstract manner, though this thinking may or may not occur in stages or even reach the same level. Most expository writing requires abstract reasoning; that is, reasoning which is divorced from immediate context. reasoning is an ability which needs to be Abstract encouraged if effective writing is desired. One way to accomplish this may be in the use of fantastic secondary world contexts.

Secondary Worlds

The Benton Model

secondary world and why should it What is а be so important to an understanding of the expository writing task? Secondary world theory has been discussed by a number literary theorists. Benton (1983) suggests that their of ideas have important ramifications for the practice of 74) because they show us a way English teaching (p. in which to understand the process undergone by a writer who

invents text, and also by the reader who decodes it.

The concept of the creation of a literary world which exists only in possibility dates far back in history. On this topic Aristotle wrote in <u>The Poetics</u>: "It is not the poet's business to tell what happened, but the kind of things that would happen--what is possible according to probability and necessity" (as cited by Pavel, 1976, p. 167).

The term 'secondary world' was first used by J. R. R. Tolkien (1964) and further developed by W. H. Auden (1968). Tolkien suggests that the reader of a narrative enters a 'secondary world'. It varies in some or many ways from the 'primary world' which surrounds him. For example, the 'truths' of the literary world may be quite different from those of the real world. Auden maintained that everyone desires to know about his primary world, but, because of dissatisfaction with it, he also feels compelled to create or to share secondary worlds.

Benton notes also Freud's contention that the writer and the child daydreaming at play are engaged in similar activities: creating other worlds (as interpreted by Benton, 1983, p. 69). There is however a difference between the activity of the writer/reader and the daydreamer. The writer/reader is creating a world which is controlled by the text. The activities which this creation necessitates are

those very tasks which expository writing involves: hypothesizing and deductive reasoning.

As the primary world can be apprehended spatially and temporally, so can the secondary world. Benton suggests that the secondary world can be represented in three dimensions: psychic level, distance and process (see Figure 1).

Psychic level.

The first of the three dimensions is the spatial one of psychic level. On this dimension, the text regulates the degree to which the mind is operating consciously or unconsciously on the information it is apprehending. If it becomes too conscious, the text is no longer in control, and the reader has left the secondary world for the primary one. On the other hand, if the level becomes too unconscious, the text also loses control.

Reading and writing involve a mixture of conscious and activities. Benton maintains that "the unconscious secondary world is conceived below the level of consciousness but above the unconscious" (p. 71). The preconscious is this level in between, which Goodale and Goldberg (1978) characterize as containing: "all the things you can bring to attention if you wish . . . they sit on the edge of awareness like actors waiting in the wings to be called on stage" (p. 68).



Figure 1: Structure of the Secondary World (Benton, 1983, p. 71)

It is this dimension which Bettelheim (1975) also stresses in his psychoanalytic approach to fairy tales. He believes that they carry messages to the conscious, the preconscious and the unconscious at all age levels where they are used according to need (p. 6). The message of fairy tales, he says, is a valuable one. They tell stories about the satisfaction of independence. Although the quest is dangerous, the hero (whether male or female) overcomes problems, achieves inner harmony and satisfactory relations with others.

Problem-solving is another task involved in expository writing, but in fantasy it is attempted in a more approachable context. Piper's research on the use of fantasy contexts with younger children concludes that: "the fantasy text was associated wih uniformly better reasoning in younger subjects . . [this] suggests that the fantasy passage was a far more cohesive semantic and logical framework for these younger subjects" (1985, p. 34).

Psychic distance.

Psychic distance is also a spatial dimension. It indicates the relative absorption of the reader in the secondary world. Within the controls of the text, the distance of the reader varies. At times, it is very involved; sometimes it is more detached.

There are extremes here also. Beyond certain limits, the text loses control and the reader leaves the secondary world. If, for example, the reader becomes too involved, hallucination begins. The opposite extreme is complete detachment, or disengagement, where the reader would once again be located in the primary world. Of this, Tolkien (1964) says: "The moment disbelief arises, the spell is broken; the magic or rather art, has failed. You are then out in the Primary World again, looking at the little abortive Secondary World from outside" (p. 36).

Applebee (1978) discusses the developmental aspects of distancing. As children mature, they gradually come to deal more and more with the "widening realm of the possible" (p. 74). At first, their stories are concerned only with the immediate and close at hand experiences of their primary world. Later, they can deal with stories about different times and places, things which are more distant. Finally, they can cope with the purely imaginative.

This parallels what we know of the child and adolescent in their cognitive development. Applebee's research indicates that discussions of stories move from being basically categoric, to analytic, and finally to generalizing. The older adolescent who is able to cope with formal operations sees the 'art' of literature, the general principles which it contains and how these might relate to

the actual world.

Psychic process.

The final dimension is temporal: psychic process. As controlled by the text, the reader is engaged in a process of anticipation and retrospection of the events in the secondary world. Here, the extremes are simply the beginning and ending of the story. In between, the writer or reader is operating in a fictional time, different from the flow of time in the primary world.

Fictional time can be amazingly complex. One example will serve to make this point. Lord Foul's Bane, by Stephen Donaldson (1977) is a novel which takes many hours to read The frame story concerns several in primary world time. months in the life of a leper, Thomas Covenant. This is one However, he is struck by a car and fictional time scheme. awakes to find himself in a fantasy world where he lives for what seems to be years. This is a second fictional time When he suddenly returns to the world in which he scheme. is a leper, only weeks have passed. He goes on for a few months, then lapses back into the fantasy world only to find a new generation of people in control.

The mature reader or writer seems to have no trouble integrating these various time schemes. Memory even allows thinking back for information needed to process events in fictional present time. The reader can also make predictions about occurrences in fictional future.

Anticipation and retrospection are also skills used in the writing of exposition. The writer must be aware of the coherence which binds text together and helps the reader to process information. The reader should be able to anticipate conclusions, for example, and to review supporting reasons for those conclusions.

Secondary Worlds and Literary Semantics

To conclude this section on secondary worlds, it is interesting to note a close relationship between secondary world theory and literary semantics. Pavel (1976) applies philosophical logic to literature. He is concerned with the relationship between the literary work and the real world, what we would call the secondary and the primary world.

Pavel uses Liebniz's term "possible world". He suggests a system in which K equals all possible worlds (our terms primary + secondary); G equals the actual world, a member of K (what we have called primary); R equals the relationship between G and other K members.

These terms can be used to distinguish several different types of literature. The first Pavel calls realistic. This deals with a world which is possible relative to the real world, a member of K which is not G but is an alternative to G. The other kind of literature we will call fantastic. Pavel argues that it is outside the set of possible worlds which are alternatives of G. When the reader encounters impossible propositions "it takes the reader out of G and its <u>de re</u> possible alternatives, that is, out of his ontological perspective" (p. 174). He further notes that this is "more radical when the work is written in one of Frye's higher fictional modes viz. myth, romance" (p. 174). Myth and romance are examples of fantasy literature.

What is amazing in this process is that the reader considers the situation of the story "as if he has adopted a set of new rules under which some of the previously impossible <u>de</u> <u>re</u> propositions have become entirely acceptable" (p. 175). Pavel's conclusion therefore is that "each work contains its own ontological perspective. In this precise sense, one can say that literary worlds are autonomous" (p. 175).

This quality of fantasy worlds, that they each have their own reality, often quite different from that of the primary world, makes them especially significant. They are the most abstract of the secondary worlds, and they can be understood only by a reader who can engage an ability to accept the impossible as possible. Of this, Iser (1978) says:

We are no longer present in a reality--instead we are experiencing what can only be described as an

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irrealization, in the sense that we are preoccupied with something that takes us out of our own given reality (p. 140).

The fantasy world irrealization may influence reasoning undertaken by a writer who is within its context.

<u>Expository Writing and the Adolescent</u> <u>Definitions and History of Exposition</u>

Despite the great interest in the improvement of expository writing, it is difficult to find a universally accepted definition of this term. In its most general sense, "The basic purpose of expository writing is to 'show and tell', to explain processes, to set forth points of view, to combine facts and opinions, to inform" (Christ, 1978, p. 69). Sometimes exposition refers specifically to explanation such as one might find in an auto mechanics textbook. And in the modern school system, it may refer to a rigidly structured essay, composed of a thesis supported by reasons, which is suitable for final examinations, and university papers.

The inclusion of exposition as a mode of discourse, and its subsequent dominance in the classroom, can be traced historically to the rise of the importance of science and the writing of Thomas Locke in the eighteenth century. Locke was interested in spreading scientific ideas and explanations, and of course, in a form of writing whose

primary purpose would be to accomplish those ends. Of this historic event, Corbett (1982) notes:

This view of language as primarily an instrument of communication has prevailed in American composition courses in the twentieth century. Consequently, expository writing has been the dominant mode of discourse taught in the schools, although instructors have often treated argumentative writing as a species of expository writing (p. 75).

More recently, the rules of scientific writing have been applied to all types of exposition in its most general sense. Thus we have a similar format for explanation, persuasion, and argument.

Adolescent Problems with Expository Writing

Although the teacher of secondary English has, from Locke's time up to the present, expected students to write in the expository mode, many have discovered, as Hays (1983) observed that "students who have been performing well on their comparatively simple writing tasks suddenly do abysmally on assignments requiring more abstraction" (p. 128).

What, then, is the adolescent's problem in learning expository writing? It may be a lack of understanding due to limited experience. For example, Smith (1982) notes that students "need exposure to forms of exposition and argument

whose purposes they can understand" (p. 195) and Moffett (1983) agrees:

students will learn to abstract properly only if thev asked to discourse about some raw material are from their own life, for to the extent that assignment topics are preabstracted for them the students are prevented from working their way through the prerequisite stages (p. 154).

Adolescents struggling with exposition seem to lack in two areas: knowledge of the conventions within which to formulate their ideas, and knowledge of those very ideas they need to explain. These are serious, but not insurmountable, learning problems. A significant number of adolescents learn to write very well in this mode, but this is not, it would appear, because the task is simple.

Traditional Teaching Methods and Problems

An examination of the literature on expository writing indicates that part of the problem may lie with the school's traditional assumptions about the way to teach this writing skill. It is a widely accepted pedagological belief, which Corbett (1982, p. 75) traces back through Bain (1866) and Campbell (1776), that discourse as a whole can be subdivided into modes: narration, description, exposition and argument. Britton (1975) and others have observed that this organization may falsely suggest four fundamental divisions of experience.

Experience and writing may not neatly divide into four categories. More recent composition manuals have tried to address this issue. For example, Harbrace's College Handbook (1962) states:

[There are] four main types of writing as they are conventionally classified in rhetoric--exposition or explanation (to inform), description, argument (or persuasion), and narration. . . Argument is similar to exposition but written with the intention of convincing rather than simply explaining (p. 360).

Despite Harbrace's opening contention that there are four types of writing, only three, it seems, are truly different. Logically, however, it should be noted that description never exists independently from exposition or almost This leaves only two discrete types of writing: narration. Narrative proceeds in expository. narrative and chronological fashion; exposition is organized in a causal Perhaps, then, this suggests that unless the manner. student is writing a story, he is composing exposition.

The four categories, which are of limited value, have collapsed into two. This system presents problems of its own. Corbin, Perrin, and Buxton present the writing of narration and exposition as fundamentally the same: a subject divided into paragraphs developed by details (n.d.,

pp. 311-312). Whatever superficial truth this might have, it may mislead students and teachers into believing that the expository writing task is much the same as the narrative one. This is not the case, as Smith (1982) observes: "Expository writing is notoriously difficult for children, far harder than narrative" (p. 194).

The traditional methods employed to teach exposition all seem to have one common problem: oversimplification of a writing task which is very complex for even highly skilled and experienced writers. Composition manuals and textbooks deal primarily with giving adolescents a formula within which to present their ideas, and largely ignore the problem of developing a knowledge of ideas. The emphasis is always that expository writing is simple, provided that students follow a few basic steps. Hirsch (1977) observes:

One of the more popular manuals admonishes the student to state his thesis at the end of the first paragraph, to make each paragraph four or five sentences long, and to make the conclusion an 'inverted funnel' (p. 167). The suggestion is that a formula will lead to effective writing. However, Hirsch (1977) goes on to warn:

No doubt a student who follows this formula will write better papers than one who has no schemata at all. But the formula will not teach him to write well. The rules have too many plausible exceptions to receive the

prominence they get (p. 167).

There is obviously more to writing exposition than the simple following of a formula. If formula writing worked, then expository writing would differ very little in difficulty from narrative once the formula had been taught.

The findings of a number of contemporary researchers and theorists, for example Emig (1971), Hirsch (1977), Smith (1982), and Moffett (1983) have suggested that current school practices must change as they do not reflect the way in which professional writers or successful student writers proceed. There is a problem with the imposing of a form on the writing.

Structure needs to be established for an individual writing occasion by a specific writer. Emig (1971) notes the errors of assuming that a single method will always work:

The characterization these [composition] texts convey of the composing process is of a quite conscious, wholly rational--at times, even mechanical--affair with many of the components for a piece of discourse extrinsic to the speaker or writer (p. 16).

As well as the five paragraph form, manuals usually indicate the necessity of doing an outline, a mechanical procedure which may not, however, be of any help to the writer. Emig's (1971) research shows that there is "no correlation between the presence or absence of any outline and the grade a student receives evaluating how well organized that theme is" (p. 27). Hirsch (1977) also notes the limitations of the outline: "While written outlines are highly useful for the expository essays required in college course, they are not absolutely essential devices for choosing a design and sticking to it" (1977, p. 152).

Exposition, obviously, is a complex writing task. Although there is confusion about exactly what it entails, it seems at least clear that it presents students with a fundamentally different writing problem from composing This is especially true when writing topics narration. become abstract; that is, when they become removed from the student's immediate and concrete concerns. Moffett (1983) "I'm afraid we teachers are often taken in by observes: pseudo-abstractions, which, pseudo-concepts and incidentally, the too early assigning of exposition naturally invites" (p. 154). All too often, these 'pseudoideas' are present in the work of adolescent writers. Some students, however, cope very well in this mode. The problem lies in knowing how to help more adolescents to succeed at writing exposition.

Summary and Rationale

Summary

The importance of expository writing cannot be denied.

Neither, however, can the fact that current teaching methods are not helping all students to become more proficient writers. 'At best, many of those methods are limiting writers, and at worst, they are contributing to the problems which writers face when writing exposition.

As has already been discussed, much is known about the psychology of writing. It is influenced by the maturity of the writer, involvement with the writing task, discovery of an interesting problem in the writing situation, and knowledge about a topic and a way to approach it. Writing needs to be approached as both a process and a product. Although it may begin as writer-based prose, most writing must eventually become reader-based. It needs to be quite different from oral speech in order to accomplish this. Writing can also be helped by reading.

It has also been established that exposition is marked by lexical and grammatical cohesive ties. Cohesion is also attained by the setting of a macro-proposition or topic, and the building of a frame which organizes the material. The writer who delineates a theme and structure is engaged in the vital primary steps involved in creating comprehensible text for the reader.

Adolescents are aided or limited in this situation by their ability to reason abstractly. If they typically do not engage in formal thinking, as seems to be the case with

many adolescents, they will be hampered in their production of expository prose. The teacher will need to help them to develop more mature thinking.

One way to engage this ability to reason may be to use narrative secondary worlds, especially those filled with seeming impossibilities which are called fantasy. They use a pattern familiar to the student from the fairy tales of childhood, but now speak to the adolescent interest in distant possibilities. As noted in the discussion, it would seem that adolescents must be able to distance themselves from their primary world in order to become involved in the fantasy.

Rationale

An experimental study by Applebee (1978) showed that children develop an increasing ability to deal with fantasy and distancing in their stories. By adolescence, they could provide generalizations about stories. The ability to formulate a generalization is the basis of much expository writing. This must be followed by clearly organized and perceptive ideas, especially in argument.

This suggests that one way to teach expository writing is to use narration, especially stories which present interesting possible alternatives in order to engage reasoning skills. The present study therefore investigates this idea by comparing exposition done in a real world

context with that done in the context of more distant, but still possible, narrative worlds.

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CHAPTER THREE

Design, Procedure, and Hypotheses

Independent Variation

To date, no systematic research has been conducted on the contextual effects of narrative discourse type on reasoning necessary to formulate a written argument. On this basis, three sources of independent variation were selected for the testing conducted in the present study: the subject's grade and ability levels, and passage type treatment levels.

Subject Sampling

Grades 10 and 12 were chosen on the basis of their appropriateness for the observation of any apparent distinctions between early and later development in formaloperational behaviour relating to the task. The domain of generalization was thus constrained to that of high school students.

In addition, at the grade 10 level, one English 13 (diploma stream) class was chosen, and one English 10 (academic stream) class. Similarly, at the grade 12 level, one English 33 (diploma stream) class was selected, and one English 30 (academic stream). This choice allowed for observation of possible differences in performance due to ability. Students were all from one secondary school within the school district of Calgary, Alberta. All students were enrolled in classes during the second semester (February to June, 1985). In all, 34 grade 10 students and 34 grade 12 students completed the test. Of these 68 students, 34 were enrolled in the academic stream, and 34 were in the nonacademic route.

Materials and Procedures

The construction of the three test passages and of the writing assignments based upon them was closely related to considerations introduced in the previous chapters.

Three contrasting texts were constructed: a Reality text, on the topic of adolescence, adapted from Goodale and Goldberg (1978); a Science Fiction text, concerning an adolescent on a distant planet; and a Fantasy text, consisting of a story about an adolescent struggling with magic. The later two texts were written by the experimenter for the study and were not adapted from other existing material. These texts provided the essential discourse contexts for the writing assignment.

The passages were balanced in a number of ways in order to insure internal validity by creating a stable and consistent instrument. First, they all had approximately the same number of words and level of reading difficulty. Second, all passages, whether expository or narrative,
involved adolescents to offer a similar topic appeal. Third, they were written to be free of sex bias; that is, the adolescents in the text could be male or female to balance the reader's identification with the main subject or character. The same versions of each of the passages were used with all four class groups (English 10, 13, 30, 33).

Test booklets consisted of a passage (either Reality, Science Fiction, or Fantasy), five multiple choice questions to check basic reading comprehension, and an expository writing assignment which required the student to write a one-page argument based on the passage. Passages, questions, and assignments can be found in the Appendix.

Booklets were randomly distributed in each classroom by the regular teacher so an approximately equal number of students received each passage type with its accompanying questions and assignment. Testing was done one class period per week over a span of three weeks. At the end of this time span, every subject considered in the later statistical analysis had completed each of the three booklets.

The writing assignments stressed that the students must argue for or against issues raised in the passages. For example, the reality passage called for an argument which agreed or disagreed with points raised by the authors. In addition, students were reminded to support their ideas with as many reasons as possible. Instructions to subjects were

contained in the booklets. They were asked to read the passage and to refer to it in order to answer the questions and complete the writing assignment.

Scoring of the Data

Each answer booklet collected was first subjected to the following two criteria: first, that the multiple choice questions had been answered, and second, that the writing passage had been attempted and was at least two independent clauses in length. The first insured that there had been at least some focusing on the passage, the second, that the basic experimental tests could be applied.

The written passage was scored for average number of words per T-unit (Hunt, 1977). This score was taken to obtain a basic measure of the syntactic complexity of the writing and as a basis for possible correlation with the type of discourse world which prompted the writing.

The next task involved classifying and quantifying the cohesive markers found in the text. Although cohesion is a characteristic of all text, three main types of markers were separated out so that correlational analysis might indicate if the presence of more cohesive markers in total, or of types of cohesive markers in particular, might be produced from one type of discourse world. Two structural categories of cohesive markers were examined: those between sentences, and those between T-units. The three types of cohesion were chosen from Halliday and Hasan's work as discussed by Williams (1983). The first was <u>reiteration</u>, lexical cohesive markers which operate by repetition of words, use of synonyms, or of a particular member of a general class already mentioned in the previous sentence or T-unit. The second was <u>reference</u>, grammatical cohesion achieved by the use of pronouns. The third was <u>conjunction</u>, another grammatical type of cohesive marker which bridges between sentences or T-units to show a relationship or logical connection. Some examples of this third type are: <u>because</u>, <u>nevertheless</u>, <u>the first reason</u>, and finally.

In scoring the cohesion, the principle followed was to mark the type of cohesion by examining the first instance of cohesion in each successive T-unit or sentence. As an example, for the sentences: "Rachel and Jim ran down the tunnel. He and the girl were afraid", the cohesion would be marked as type two, reference, because <u>he</u> is the first instance of cohesion between the sentences. If <u>the girl</u> had preceded <u>he</u>, it would have been marked as type one; that is, reiteration, because <u>Rachel</u> and <u>the girl</u> are synonyms according to the Halliday and Hasan system.

After scoring, inter-sentential cohesion and inter-Tunit cohesion were averaged by dividing each score by the total number of sentences or T-units. These two averages,

which included all three types of cohesion, were then added together to give a score of the general cohesion of the student's writing. Computations were also performed on each of the three types of cohesion separately, after they had been similarly averaged.

Finally, two independent teacher evaluators were each asked to rate half of the 204 written passages on a scale of 1 to 5 on their holistic impression of the work as an effective argument. These ratings were to provide the basis for analysis of the correlational relationships between the classroom teacher's point of view and longer average Tunits, or average numbers of all cohesion markers, or of specific types of cohesion markers.

Hypotheses

The study focuses on main effects, and possible interactions. The following predictions were made:

- la. There would be measurable differences in quality of written exposition between subject groups.
- 1b. Grade 12 students would write more complex arguments than Grade 10 students, as measured by average T-unit length.
- 1c. Grade 12 students would write more cohesive arguments than Grade 10 students, as measured by the presence of all types of cohesive ties.

ld. Grade 12 students would write better arguments than

Grade 10 students, as measured by a holistic score. This score would be the total impression of the effectiveness of the argument as judged by teacherraters.

- le. High ability students would write more complex arguments than low ability students, as measured by average T-unit length.
- If. High ability students would write more cohesive arguments than low ability students, as measured by the presence of all types of cohesive ties.
- lg. High ability students would write better arguments than low ability students, as measured by a holistic score. This score would be the total impression of the effectiveness of the argument as judged by teacherraters.
- 2a. There would be measurable differences in quality of written exposition based on story prompts.
- 2b. All subjects would produce better arguments following the Fantasy text than the Science Fiction text, and following the Science Fiction text than the reality text.
- 3. There would be a significant positive correlation between the independent holistic scores of students' ability and each of the other dependent measures.

CHAPTER FOUR

Analysis and Results

The numbers of subjects in each grade cell, and in each ability cell were equalized by randomly discarding two subjects. The data were then examined by four analyses of variance and by Pearson product moment correlations, as described in the following sections.

Analysis of the Dependent Measures

Average T-units

The first three-way analysis (Grade x Ability x Story, with repeated measures on Story) took average T-unit length as input. A summary of the analysis of variance appears in Table 1. The Grade x Ability x Story cell means appear in Table 2.

The F ratios reflected a significant main effect for Story together with a significant Grade x Ability interaction. A series of <u>post hoc</u> Scheffé comparisons were then conducted on the relevant means and on the basis of the experimental hypotheses.

In relation to hypotheses 2a and 2b, the first comparison made was between the combined means for Story 2 and 3 versus the mean for Story 1. In partial corroboration of hypotheses 2a and 2b, all subject groups produced significantly longer average T-units in response to the

Table l

Summary of Analysis Story: Average T-uni	<u>of Variand</u> t length	<u>ce due to Grade,</u>	<u>Ability,</u>
Source	df	M.S.	<u>F</u>
Between Subjects			
Grade	1	12.03	0.55
Ability	l	15.22	0.70
Grade x Ability	1	188.03	8.64**
Error	64	21.76	
Within Subjects			
Story	2	35.92	4.20*
Story x Grade	2	5.12	0.60
Ability x Story	2	0.59	0.07
Grade x Ability x Sto	ory 2	1.95	0.23
Error	128	8.54	and the second secon

*p<.05 **p<.01

Table 2

Average <u>T-unit length:</u> <u>Grade x Ability x Story Cell Means</u>

Grade	Ability		Story	
		l	2	3
7.0	high	12.71	13.96	14.15
10 lc	low	14.00	15.17	15.79
10	high	14.43	15.44	15.26
12	low	11.73	13.53	12.46

Science Fiction and Fantasy prompts than in response to the Reality prompt ($\underline{M} = 14.52 + 14.41$ vs. 13.21: F(2, 128) = 8.46; p<.05). There was no significant difference between the Science Fiction and Fantasy means.

In relation to hypotheses 1a, 1b, and 1e, Scheffé comparisons among the Grade x Ability interaction means revealed significantly better performance by high ability Grade 12's on all written exposition than by low ability Grade 12's ($\underline{M} = 15.04$ vs. 12.57: F(1, 64) = 7.18; p<.05). In addition, further comparisons showed that low ability Grade 10's did significantly better than low ability Grade 12's on all three written responses ($\underline{M} = 14.98$ vs. 12.57: F(1, 64) = 6.83; p<.05). The greatest increment for the low ability Grade 10's over the low ability Grade 12's was for Story 3 (Fantasy) ($\underline{M} = 15.793$ vs. 12.459: F(1, 64) = 4.34; p<.05). These findings suggest important modifications to hypotheses 1b and 1e.

General Cohesion

The second repeated measures three-way analysis (Grade x Ability x Story) took total scores for all types of cohesion as input. A summary of the analysis appears in Table 3. The Grade x Ability x Story cell means appear in Table 4.

The F ratios revealed a significant main effect for Ability and for Story. Scheffe comparisons were then

Table 3

<u>Summary of Analysis</u> Story: <u>General</u> Cohesic	of <u>Varian</u> on <u>(Total</u>	nce due to Grade, Scores)	<u>Ability,</u>
Source	df	M.S.	Ē
Between Subjects			
Grade	1	0.00	0.00
Ability	1	0.79	14.01**
Grade x Ability	1	0.10	1.77
Error	64	0.06	
Within Subjects			
Story	2	0.11	3.71*
Story x Grade	2	0.04	1.24
Ability x Story	2	0.01	0.30
Grade x Ability x Story	<u>7</u> 2	0.00	0.08
Error	128	8.54	

*p<.05 **p<.01

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Table 4

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$\frac{\text{General Cohesion (Total Scores): Grade x Ability x Story}{\text{Cell Means}}$

Grade	Ability	Story			
		l	2	3	
10	high	1.06	1.02	1.00	
ΤŪ	low	0.92	0.86	0.80	
12	high	1.02	0.94	0.99	
	low	0.96	0.85	0.90	

conducted on the basis of the experimental hypotheses.

In relation to hypotheses 2a and 2b, the first comparison made was between the combined means for the low ability group on Story 2 and 3, and the mean for Story 1. In contradiction to these hypotheses however, the low ability group did significantly better in response to Story 1 (M = 0.94 vs. 0.85: F(2, 128) = 8.88; p<.05).

In corroboration of hypothesis lf, Scheffé comparisons revealed that high ability students did significantly better than low ability students in response to all stories, and showed the greatest difference between the means for Story 3 (M = 1.00 vs. 0.85: F(1, 64) = 13.75; p < .01).

Referential Cohesion

The third three-way analysis (Grade x Ability x Story) used only type two cohesion scores; that is, those markers called <u>reference</u>. The analysis is summarized in Table 5. The Grade x Ability x Story cell means appear in Table 6.

The F ratios demonstrated a significant main effect for Story. A Scheffé comparison conducted on the means was based on the experimental hypotheses 2a and 2b.

This test compared the combined means for Story 1 and 3 against the mean for Story 2, and found that all subject groups did significantly better on Story 1 and Story 3 $(\underline{M} = 0.22 + 0.20 \text{ vs.} 0.14: F(2, 128) = 8.17; p<.05)$. This suggests important modifications to hypotheses 2a and 2b.

Table 5

<u>Summary of Analysis</u> Story: <u>Referential Co</u>	of <u>Varia</u> phesion	nce <u>due</u> to	Grade,	<u>Ability,</u>
Source	<u>df</u>	М	.s.	<u>F</u>
Between Subjects				
Grade	1		0.01	0.23
Ability	1		0.07	2.95
Grade x Ability	l		0.02	0.65
Error	64		0.03	
Within Subjects				
Story	2		0.12	3.95*
Story x Grade	2		0.02	0.72
Ability x Story	2		0.07	2.48
Grade x Ability x Sto	ry 2		0.02	0.66
Error	128		0.03	

*p<.05 **p<.01

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Table 6

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Referential Cohesion: Grade x Ability x Story Cell Means

Grade	Ability	Story		
		1	2	3
10	high	0.32	0.18	0.17
	low	0.18	0.10	0.22
• •	high	0.22	0.15	0.20
12	low	0.17	0.13	0.21

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Holistic Scores

The fourth and final three-way analysis (Grade x Ability x Story) used holistic scores. A summary of the analysis appears in Table 7. The Grade x Ability x Story cell means appear in Table 8.

The F ratios demonstrated significant main effects for Story and for Ability. Scheffé comparisons were then conducted on the relevant means and on the basis of the experimental hypotheses.

In relation to hypotheses 2a and 2b, a comparison was made between the combined means for Story 1 and 3, and for Story 2. The test showed that all subject groups produced a significantly greater holistic score on Story 1 and 3 than on Story 2 ($\underline{M} = 2.824 + 2.706$ vs. 2.382: F(2, 128) = 7.74; p<.05). This result indicates modifications to hypotheses 2a and 2b.

The second comparison, based on hypotheses la and lg, used the means for the high ability and low ability groups. The high ability group did significantly better than the low ability group ($\underline{M} = 2.99$ vs. 2.28: F(2, 128) = 12.50; p<.01). This finding corroborates hypotheses la and lg.

Finally, since hypothesis 3 anticipates significant correlation between the holistic scores and each of the other dependent measures, Pearson Product Moment Coefficients were calculated. These scores are recorded in

Table 7

 $\frac{Su}{St}$ df F M.S. Source Between Subjects 5.67 3.46 1 Grade 15.53** 25.41 Ability 1 Grade x Ability 0.00 0.00 1 1.64 64 Error Within Subjects 3.55 4.20* 2 Story 0.30 0.25 Story x Grade 2 0.41 0.49 Ability x Story 2 0.49 Grade x Ability x Story 0.41 2 0.84 128 Error *p<.05 **p<.01 Table 8 Holistic Scores: Grade x Ability x Story Cell Means

ummary	of Ana	lysis	of	Variance	<u>đue</u>	<u>to</u>	<u>Grade,</u>	Ability,
cory:	Holistic	Score	5					

Grade	Ability	Story			
		1	2	3	
	high	2.82	2.71	2.94	
10	low	2.35	1.77	2.24	
1.0	high	3.47	2.94	3.06	
12	low	2.65	2.12	2.59	

Table 9. Significant F ratios showed correlations between the holistic scores and the general cohesion measures (r = 0.25, p = .00), and between the holistic scores and logical cohesion (conjunctions) (r = 0.12, p = .05).

Summary of Findings

The study found that there were significant differences the guality of the written exposition between subject in groups. With reference to average T-unit length, hypotheses high ability Grade 12 students wrote 1b le, and significantly more complex sentences than low ability Grade However, low ability Grade 10 subjects also 12 students. performed significantly better than the low ability Grade 12 subjects. Hypotheses 2a and 2b were shown to be partially verified by results which show significantly longer average T-units in response to the Science Fiction and Fantasy prompts than to the Reality prompt.

Analysis of general cohesion once again showed the high ability group using significantly more cohesion markers in total than the low ability group (hypothesis lf). Contrary to hypotheses 2a and 2b, however, the low ability group responded significantly better to the Reality prompt than to either the Science Fiction or Fantasy prompt. There was no support for hypothesis lc, which suggested that Grade 12 students would use more total cohesion than Grade 10 students would.

Table 9

Intercorrelations between Holistic Scores and Other Tests

		Ave.T-unit length	General	Logical	
Holistic Scores		.10	•25**	.12*	
*p<.05	**p<.01				

Referential cohesion measurement and analysis revealed that all subject groups used significantly more of this type of cohesion in response to the Reality and Fantasy prompts than they did in response to the Science Fiction prompt. This is in some contradiction to hypotheses 2a and 2b. There was no further support for hypothesis 1c or 1f, that Grade 12 students would perform better than Grade 10 students and that high ability students would do better than low ability students.

When holistic scores were analyzed, they showed confirmation of hypotheses la and lq. The teacherevaluators assigned significantly better scores for the high Once again, in partial opposition to ability groups. hypotheses 2a and 2b, scores for all subject groups showed significantly better performance in response to the Reality and Fantasy prompts than following the Science Fiction No support was found for hypothesis ld, that Grade prompt. 12 students would be judged significantly better.

Hypothesis 3 was partially corroborated by way of significant correlations between holistic scores and general cohesion measures, and also between holistic scores and logical cohesion measures. No support was found for the suggestion in hypothesis 3 that there would be significant correlations between holistic scores and average T-unit length.

CHAPTER FIVE

Discussion and Implications

The term exposition is used to mean many different kinds of writing. Reasons for this are largely historical. Nevertheless, in one form or another, expository writing dominates the modern high school classroom. For the purposes of this study, argumentative writing was chosen for research because it is the form of exposition most often demanded.

It was expected that many students would have difficulty in expressing themselves effectively in this mode. Theorists and researchers have observed these problems and have discussed a number of ways to help adolescents cope with exposition.

These solutions include making the purpose of such writing clear and using the student's own life experiences. Teachers, they suggest, must also remember that exposition does not represent a separate category of experience, but it does present the student with unique problems which cannot be solved by essay writing formulas. Forcing the student into a form which does not arise from the content, or specifying content which is too far removed from the student's world will certainly produce labored prose.

The experiment described in Chapters Three and Four was

designed to compare exposition done in different contexts. It arose from Chapter Two, the general research background, and more specific findings by Piper (1985), that younger students solved problems better in a fantasy (science fiction) context, and Applebee (1978), that adolescents do well at providing generalizations about stories and show the ability to cope well with fantasy.

Three different prompts were used. The first was written in expository form and concerned the qualities of adolescents, a topic close to any high school student's was expected that students would do experience. It reasonably well in this context. The second and third were written in narrative form and presented prompts adolescent characters in challenging situations. The second was science fiction, a possible future world, and the third was fantasy, a world of magic, impossible in relation to our actual world.

It was expected that students would perform better in response to the science fiction prompt, and best in writing after the fantasy prompt since it should do the most to encourage adolescent reasoning about possibilities. This increased ability to reason was expected to be revealed in their writing.

To evaluate these compositions, a number of empirical tests were used to reveal syntactic complexity and types of

cohesion. In addition, teachers were asked to mark each piece of writing for total impression as an effective argument. It was expected that there would be a high positive correlation between the tests and the teacher marks.

Outcomes

Examining the results of the experiment refined expectations in four general areas: high school students as subjects, textual cohesion, relationships between teacher and empirical test evaluations, and the effect of context on writing.

First, high school students were revealed to be an extremely diverse group. Individually, their scores often showed extreme differences when one compared marks obtained by a single subject in response to the different prompts. Often, one prompt seemed to be markedly favored over another. Even when the subject group showed overall better performance in response to one prompt, it should be noted that some students did much better writing for the other prompts.

Not only was there extreme individual variation, but subject groups (English 10, 13, 30, 33) often differed in ways which were unexpected. For example, low ability Grade 10 subjects (English 13) wrote significantly more complex sentences than did low ability Grade 12 subjects (English

33). Although there were significant differences between the groups, the results of some tests revealed a surprising lack of difference between Grade 10's and Grade 12's, and between high ability and low ability subjects. It would appear that it is wrong to assume that students have less writing prowess because of a difference in age, or because of the academic level of their stream of English.

revealed the engaging in this study Second, complexities and resultant problems associated with any attempt to examine cohesion. Van Dijk (1977) suggests that a group of sentences are on topic then they have if In practice, it is often difficult to determine cohesion. whether a sentence is following a theme. For example, how does one judge a sentence which represents a diversion associated by memory? What about another memory prompted by first? A better question to ask about the writing is the whether or not the memories reinforce or detract from the central argument.

Halliday and Hasan's classification system (1976) is more specific, but some of their cohesive markers are, once again, open to interpretation. Collocation is one example. Words associated in meaning, such as <u>doctor</u> and <u>hospital</u>, give cohesion. However, often it is difficult to judge what words may be associated in the writer's mind, or indeed, which of these associations will also be understood by a

selected reader.

Other types of cohesive ties are more easily determined. Three of these were selected: repetition of words, pronominal reference, and conjunctions. In working with these three types, one is led to speculate on whether or not there may be a hierarchy of cohesive ties, with some being more sophisticated than others, and perhaps more indicative of a higher level of cognitive processing.

Additional problems arose in considering which cohesive ties should be counted in order to simplify the task, since all text is filled with cohesive ties. The question to consider was which ones are crucial to argument. An associated problem was whether to consider ties between sentences, or those between independent clauses, or both.

It was decided to count the first instance of cohesion in one T-unit with the previous T-unit, and also the first instance of cohesion in a sentence with the previous sentence. This procedure is justified by speculating that the first connection made is the primary tie considered by the writer, and may best reflect the reasoning process.

Third, there were enlightening and promising positive correlations between the total impression evaluations obtained from teacher-assessors and those obtained from empirical tests of cohesion. This seems to indicate that numbers of cohesive ties in general, and specifically

conjunctions, may have a major influence on a teacher's judgement about the efficacy of an argument.

General cohesion took the total numbers of all three types of ties and included cohesion between sentences and between T-units. This was very highly positively correlated with the scores from teachers who were instructed to judge writing for the effectiveness of the argument presented. This suggests that the connections between ideas in the text are, at least for teachers, an impressive way of differentiating between less persuasive and more persuasive arguments.

Conjunctive cohesion included only this one type of tie, but represented a total score of both conjunctions between T-units and those between sentences. Writing which was high in numbers of conjunctions also received high total impression scores from teacher-evaluators.

Finally, story had a significant effect on students as revealed in tests for average T-unit length, general cohesion, logical (conjunctive) cohesion, and holistic (total teacher impression) scores. Although it was first hypothesized that fantasy would produce the highest scores, and reality the lowest, results were very mixed.

Comparing average. T-unit length revealed that all subjects wrote with more syntactic complexity in response to the science fiction and fantasy prompts, but that there was

no significant difference between these two. Of interest here also is the fact that the highest cell mean score was obtained by the low ability Grade 10 subjects in response to the fantasy prompt. This may reflect only the reaction of a particular group of students, or it may indicate a general trend amongst this age and ability group.

Results were somewhat different for the test of general cohesion. The story effect this time showed higher scores for the lower ability subjects in response to the reality prompt. The fantasy prompt, however, showed the greatest difference in scores between the high and low ability groups.

Tests for referential cohesion and for total impression both showed the same general pattern: Higher scores for the reality and fantasy prompts than for the science fiction prompt. The highest cell mean was recorded for the high ability Grade 10 group in response to the reality prompt.

Two main generalizations can be made concerning the pattern for story effect. Students seemed to find the reality and fantasy prompts the most helpful. The science fiction prompt did not elicit as favorable a response.

These results require some interpretation. If it is assumed that students are responding to the context, then why do the real and fantasy worlds elicit more effective arguments? Reasons for the positive effect of the fantasy

world has been discussed at length previously. In addition, however, two reasons should be mentioned to account for student response to the real world prompt.

First, students have been exposed to a great deal of real world expository writing as reading material. For example, all of their textbooks, with the exception of narratives in their English classes, are in the expository mode. They are usually required to respond to these readings in the expository format. Perhaps, then, their performance in response to the reality prompt is due to experience with this task.

Second, as was mentioned before, the reality prompt was chosen for its appeal to all adolescents. It may be speculated that these students would not do as well in response to a passage which is totally removed from their life experience.

The question of why the science fiction prompt did not elicit as effective arguments is a more complex one. The study of logic, as noted in Chapter One, suggests that science fiction lies between the real world and fantasy world of impossibilities because it uses extrapolated reality; that is, what might someday be actual if present knowledge and events follow through to logical conclusions. Science fiction, then, is more closely connected to the real world than it is to the world of fantasy.

If science fiction is to be considered more in the light of its connections and distance from reality, rather than as a midpoint between reality and fantasy, the reason for its general problem as a prompt may become clearer. As a midpoint, there is no reason to predict that it will produce less effective arguments than reality and fantasy.

However, it may be that its closer connections with reality become problematic for many students, because it does not follow actual world laws as does the reality surrounding them, neither does it introduce the magic of the fantasy world. Perhaps it is neither familiar nor unfamiliar enough for most students to find it effective. It may not allow them to refer to their lives, or encourage them to discover the wondrous new realities of the fantasy world.

This brings us to the problem of the difference between the <u>abstract</u> and the <u>concrete</u> (see also Piper, 1981, pp. 105-106). Inhelder and Piaget (1958), dealing with real world cognitive processing, divide concrete-operational and formal-operational reasoning by examining a subject's ability to deal with ideas, which have no concrete referents in the real world. Is a fantasy really more abstract, thus requiring formal operations, or does it present a different reality in which the abstract and concrete must be judged on new terms? Does a reader make a

shift to this new reality, and become, therefore, able to apprehend what would be abstract in actual world terms, as concrete?

An example will serve to illustrate this point. Within the confines of the real world, evil is an abstract concept. It has no concrete referent, though we attempt to label those whose actions we find loathsome with this adjective and call them 'evil personified'. In reality, however, there is no purely evil person to point at. Those who commit massacres are found to be loving sons and daughters, or charity workers, or generous neighbors. We must content ourselves with calling specific actions evil, and perhaps then discover that what is evil to some is desirable to others.

In the fantasy world, evil is neither abstract nor difficult to identify because it takes solid, concrete form. It is personified, and the thing so labeled emanates a detectable force.

Science fiction may be more abstract since it deals with ideas about what may be true at some future date. These are less clear, perhaps, to the student reader in general, than either the concreteness of the real world or of the fantasy world. The adolescent encountering this kind of discourse context may, for these reasons, argue less effectively. It is important to note, however, that some

students responded very favorably to the science fiction prompt, which may be as a result of more experience with the abstraction which it offers.

The present study began with the purpose of examining the effects on written exposition caused by varying the context on which those arguments are based. During this examination, however, it was discovered that finding the answer to such a question involved wider problems, such as the nebulous concept of argument itself.

It seems that the writer who composes successfully in the expository mode has indeed accomplished a complex task. Those of us who evaluate this writing can certainly recognize differing quality in arguments, but just how we identify the traits of a text which make it an argument is somewhat uncertain.

Promising possibilities for unraveling the cues which differentiate exposition, especially argument, from other modes, exist in the study of textual cohesion. It seems that choosing and arranging certain cohesive ties help to shape a text into an argument. Skill in using these ties may be a major signal to the reader that an effective argument is being presented.

These tentative suggestions lead down but one path of many in a discussion of how to improve the writing of exposition in the secondary schools. The expectations which

served as an impetus to this study were much more diverse.

Experience in the school system showed that there are many students who are struggling to express themselves in written argument. Reasons abound for the production of unsatisfactory exposition. The problem which remains, however, is that students must learn to take any assigned topic and produce an argument which convinces a reader.

This ability is an endpoint. It seems unlikely that students will learn to argue well on any topic simply by receiving assignments which force them to produce one piece of examination-style writing after another. Surely the only outcome of this approach will be a reliance on essay formulas.

The initial hypothesis of the present study, that reasoning could be fostered by science fiction and fantasy contexts, was derived from the work of a number of theorists. Fantasists, such as Tolkien (1938) and Auden (1954), and philosophers, such as Bradley and Swartz (1979), suggest that narrative worlds, which move beyond the scope of what is possible in the world around us, involve a special kind of reasoning by the reader. Considering the newly awakened interest of the adolescent in dealing with the hypothetical, it seemed logical to assume that they would be engaged by narrative models which presented natural laws in contrast to those in effect in the real world which

surrounds them in their daily existence.

Secondary worlds are an extension of fairy tale worlds which, Bettelheim (1975) speculates, offer unconscious insights into the real world. There is something in fantasy to appeal to readers and thinkers at any stage, from the stereotypical to the interpretive, but reading fantasy always involves discovering the ordering principles which control the narrative universe.

Encouraging better writing by using secondary world contexts is still an underinvestigated area. As more traditional ways of considering writing ability come under attack, however, inquiry into the effects of varying reading contexts to encourage better exposition presents a viable teaching approach.

Expectations of positive results from using secondary worlds arose from tantalizing hints within new research into the psychology of writing. Scardamalia and Bereiter (1982) postulate that effective expository writing follows assimilation of the writing task, a process which leads more able writers to find within the assignment a problem to be solved.

The writing process is idea production and text production, with one sub-process continually influencing the other. The final product of writing, especially when that product is a piece of expository prose must, above all else

communicate clearly. It is speculated, however, that clear writing reflects clear thinking: It indicates that the writer has a fully realized schemata for discussing the topic.

The question, of course, then becomes how to help novice writers learn to build that internal thinking strategy. One way, hopefully, is with the reading of materials whose understanding can only be achieved by analysing the rules which control them, such as is the case with secondary worlds. Secondary worlds are filled with opportunities for finding and solving problems, since they are shaped by laws which often differ greatly from those of the real world. The next step is the application of that thinking to the writing task.

Teachers have always demanded unity and cohesion, but definitions of these qualities remained rather vague. Halliday and Hasan's classification system seems to offer one promising and specific way to examine student produced texts. Teachers may be aware of cohesion in text, either by the presence of key words or perhaps by the relation of every idea in the text to a macro-proposition, otherwise known as topic or theme.

More information on the achievement of successful writers of exposition is found in schema theory. Especially interesting here is the theory of schema transfer which

suggests that children learn to deal with exposition by applying the knowledge they have gained from reading narratives. In addition, readers in general apply already learned patterns or schemata to any new material which they encounter. Fantasy should engage any reader's full attention to discover similar patterns, learned from other encounters with secondary worlds, and different patterns which are unique to this particular world.

Research into adolescent reasoning suggested further possibilities for the use of secondary world contexts. The adolescent gradually becomes more interested and more able in abstract contexts as the future becomes a central topic for consideration. Sophisticated thinking skills are necessary to discern the possibilities which exist, to test these, and to arrive at a final decision. This is especially true when these possibilities lack concrete referents, and are real only in the realm of abstract ideas.

Even supporters of the Piagetian school now reject the suggestion that there are rigid stages, and tests which identify those stages, in human development. Certainly there does seem to be a connection between age, cognitive development and writing ability, but many exceptions exist to any assumption that there is a relentless, parallel growth among the three. Context seems to be an especially important factor in the successful solving of any cognitive

problem, including that of effective expository writing.

Following the suggestions in all of these areas of research, the present study involved an examination of the use of secondary worlds in the encouragement of better writing in the argumentative mode.

Benton's model shows one way to understand the involvement of a writer or reader with any secondary world. The text which presents a secondary narrative world controls the spatial dimensions of psychic level, between consciousness and unconsciousness; psychic distance, between involvement and detachment; and the temporal dimension of psychic process, between anticipation and retrospection. Some modifications in the concept of psychic distance, arising from the present study, make this model even more useful for teachers of adolescents.

Modifications to Benton's Model

Applebee (1978) sees a basic paradox inherent in psychic distance for the more mature reader:

It is precisely when the reader begins to talk of 'identification' or 'engagement' that the experience becomes further distanced psychologically: the response has become indirect, mediated through the recognition that it is only '<u>like</u> I was there', whereas for the younger child it is directly and immediately exciting (p. 112).

Perhaps Benton's single dimensions is not sufficient, because Holland (1968) also suggests:

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On the one hand we separate the work of art from our On the other, and partly practical, immediate lives. by virtue of that separation, we allow ourselves to become deeply involved in the aesthetic experience because we know we will not have to act on it (p. 77). This involvement or detachment, but rather is not involvement because of detachment, once the reader is mature enough to engage in this kind of distancing.

some modification of Benton's For these reasons, Benton's psychic distance, which diagram may be useful. fluctuates between involvement and detachment, we will label Psychic Distance I. The involvement mentioned here is with the secondary world, and the detachment is a separation from Next, we must add another dimension, belief in that world. This still uses involvement to mean Psychic Distance II. belief in the secondary world which can fluctuate along a two-way path, but also acknowledges a one-way movement from detachment of the reader from primary world threat in order to become involved in the secondary world problems.

This can also be understood in this way: Psychic Distance:

(see Figure 2)

Benton (1983) himself acknowledges this role of the reader, of whom he notes that their shifting viewpoint is used only as observer and recorder: They are not required to do anything else in the secondary world. This he calls "negative capability" (p. 73).

Pavel (1976) further points out that the reader's involvement with the secondary world involves acceptance of the impossible, to use actual world parameters, as possible. This is most radically true in fantastic literature such as myth.



Figure 2: Proposed Modified Structure of the Secondary World (adapted from Benton, 1983, p. 71)

Conclusions and Implications

Background research and the results of the experiment included in this study suggest several conclusions and their implications for teaching adolescents to write more effective arguments:

- Adolescents learn to generalize through experience with narratives. Teachers should attempt to build bridges for students between the generalizations or themes of narrative, to the theses or controlling macropropositions of expository writing.
- 2. Students experience less difficulty in writing arguments when they understand the concepts they are to discuss. This suggests that background reading and topics be chosen in which students can find ideas which can be understood by them as concrete.
- 3. Prescribed formats limit student growth in writing. Therefore, teachers should avoid assigning formal essays with externally imposed forms, at least until students have abundant experience with exposition in many incarnations. This experience should include the finding of personal goals in assigned topics.
- 4. Adolescents have individual interests and abilities which cannot be surmised from their age or course assignment. This implies that teachers must be sensitive to the interests and abilities of a
particular class and the unique students within that class. Allowances should be made so that the individual may have the option of shaping an assignment.

- 5. The reading process supports the writing process. Teachers should choose reading for variety, stimulation and appeal. They should also encourage students to evaluate their own writing through the eyes of a potential reader.
- 6. Discourse worlds which are effective for some students are not as effective for others. Teachers, therefore, should vary reading assignments to include actual, possible and impossible worlds.
- 7. Problem-solving abilities are valuable in expository writing and can be encouraged in adolescents. This implies that students be allowed time and opportunity to discuss possibilities, through talk and writing, before asking them to compose.
- 8. Clear, communicative, compelling prose arises from clear thinking and fully realized schemata. Students must be allowed and encouraged to plan both before and during writing.
- 9. Cohesive ties in general and conjunctions in particular are central to a perception of a text as argument. Students should become more aware of the power of

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connectives in their writing of effective arguments. Further Research

This study suggests many interesting questions for further research into cohesion, writing evaluation, and the effect of context on writers.

There are many unanswered and unaddressed problems in More work needs to be done study of cohesion. to the discover more about what cohesion is, and how knowledge about cohesive ties can be applied to studies of writing. example, one wonders whether exposition has more For cohesive ties than other types of text, or whether some types of cohesion are more characteristic of narration. Research could also examine the possibility that some types cohesion are more characteristic of expert writers, and of whether or not the choice and use of cohesive ties indicates greater depths of understanding. This may lead to a proposal for a hierarchy of cohesive ties.

Correlations between empirical tests of cohesion and total impression scores from teachers also deserve further examination. For example, would expert writers who are not teachers of writing still find that more cohesive writing and more effective arguments were related? At what stage in the writing process is it possible and desirable to teach students how to improve their use of cohesion? Is it possible to write an effective argument with less cohesion? Interesting questions also remain in the study of secondary worlds and their effect on the reader. How much does the usual discourse context of a student's unassigned and out of class reading influence an ability to use reality, science fiction or fantasy in the classroom? Do readers of science fiction cope more effectively with abstractions? How much does the story effect vary with age? What effect does real world narrative (as opposed to real world exposition) have on an adolescent's ability to argue effectively?

Following the results in this exploratory study, only tentative answers to these questions can be offered. More detailed analyses must be undertaken to clarify further the important relationships between textual stimuli and expository writing in adolescents.

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APPENDIX

PASSAGE A

Adolescence is a time of change. Teenagers change in the way they think, relate to others and feel emotions. They develop more ability to think about ideas. It is common for adolescents to want everything to be perfect. Real life seems dull. Good qualities and bad qualities of other people seem very important. Young people may spend hours thinking about perfect love, the best possible life, and possibilities for adventure and change.

One of the advantages of having more thinking ability is that it helps teenagers to deal with problems in life. But it is also true that more thinking ability can make an adolescent very hard to live with. Family members may influence whether or not the adolescent feels confident about himself, but he is able to see ways to change and improve them.

Adolescents may criticize their parents for a lack of perfection. This criticism can include everything from the parents' table manners and clothing to the way parents treat their friends and manage their money. At times, there may be a general feeling of tension as the parents criticize their son or daughter for unacceptable friends or clothes and social habits, and the teenager criticizes them and their home. (adapted from <u>Experiencing Psychology</u>, Goodale and Goldberg, 1978, p. 405)

INSTRUCTIONS

Read the article on the page to your left. When you are done, answer the five multiple choice questions and the one writing question on the next two pages. You may read the questions and writing topic before you start.

Multiple Choice Questions

Answer the following five (5) questions by circling the letter of the correct answer.

1. According to this article, adolescence is a time when teenagers believe that

- a) people are uninteresting
- b) other teenagers have more money
- c) their parents are perfect
- d) daily life is boring

2. These writers say that adolescents spend some time

- a) pointing out how their family needs to change
- b) complaining about their own friends and clothes
- c) rebelling against the rules of their school
- d) wishing that they had the free time of childhood

3. This article states that tension in the home with adolescents is caused by

- a) parents who do not love their children
- b) adolescents and parents criticizing each other
- c) too many rules about how family members behave
- d) poor choice of adolescent friends and clothes

4. The writers believe that the adolescent

- a) should try to make his parents happy
- b) needs more feedom to choose his own life
- c) is changing in many ways
- d) becomes more like a younger child

5. This article states that the teenager wants

- a) more money to spend
- b) to be treated as if he were an adult
- c) everything to be perfect
- d) a chance to imitate his parents

Writing Question

Respond to the following:

You have read the opinions of two writers who believe that they are experts on teenagers. The authors suggest adolescents are "hard to live with". Do you agree with them about this, and with their other comments on adolescents? Give as many reasons as you can for your opinions.

Prepare a rough copy of your response on the page titled Rough Copy (next page).

Write your good copy on the page titled Good Copy which follows.

Your response should be about one page long.

Please write or print clearly.

When you have finished, please give your booklet to your teacher.

PASSAGE B

I fired my last charge from my laser pistol desperately wishing I had something more powerful and modern. The rock disintegrated without a sound. There was no air on this planet, so I couldn't even hope to attract a rescue party with noise. At least I now had blasted a way out of this cave through the rock that had fallen to block the entrance.

I had become separated from my parents and the rest of their party some hours before. I only wanted a quick look into the cave, the first one I'd seen since we began exploring. Everyone else was searching for carbon traces, a long boring procedure, so I left the group quietly. Obviously, no one had noticed.

I'd always been encouraged to be independent, I thought glumly, looking out over the eerie, alien landscape. The two moons were now high in the sky, so at least I could see the craters and rocky outcroppings around me. It all looked very much the same...except for over there. I blinked in astonishment, wondering if I was suffering from some space disease. A huge shiny black metallic sphere was sitting less than 100 metres away from me.

At that moment, a lot of things began to happen at once. I caught sight of a rescue flare streaking up into the sky to my right. The black sphere rolled quickly away from me. And then the ground began to shake. I thought quickly and ran toward the retreating object.

INSTRUCTIONS

Read the article on the page to your left. When you are done, answer the five multiple choice questions and the one writing question on the next two pages. You may read the questions and writing topic before you start.

Multiple Choice Questions

Answer the following five (5) questions by circling the letter of the correct answer.

1. The occupation of the main character's parents is probably

- a) artist
- b) soldier
- c) scientist
- d) athlete

2. The best way for the main character to be rescued would be to

- a) yell loudly
- b) fire his laser pistol
- c) light a fire
- d) walk toward the flare

3. This planet's main feature seems to be

- a) rock formations
- b) petrified forests
- c) rolling hills
- d) dry river valleys

4. The main character leaves his group because

a) he detects a carbon source

- b) the cave looks interesting
- c) the black sphere attracts him
- d) his laser pistol breaks down

5. At the end, the main character is being threatened by

- a) suffocation
- b) alien attack
- c) his parents
- d) the earthquake

Writing Question

Respond to the following:

You have read about someone in a difficult situation. In the story, the main character decides to be "independent". Do you agree with this decision, now that you have read about some of this person's experiences? Give as many reasons as you can for your opinions.

Prepare a rough copy of your response on the page titled Rough Copy (next page).

Write your good copy on the page titled Good Copy which follows.

Your response should be about one page long.

Please write or print clearly.

PASSAGE C

I peered down the next bend of the twisting cave tunnel which I had been following for hours. It was dimly lit by glowing blue organisms which clung to the rough stone walls. They looked like human faces, I thought, thousands of them. Whatever they were, they made high-pitched squeals as I passed and the constant sound grated on my nerves. I knew that I was lost, and in danger of failing this final test. <u>She</u> had sent me here, saying only: "It is a challenge for your mind."

But how could anyone think in this noise?

In sudden overwhelming anger and frustration, I struck out with my sword at the creature nearest me on the wall. As my sword touched it, however, the face became familiar. It was my mother's, more old and tired than when I had seen her last. "My dear one", it whispered, "the way ..."

I dropped my sword with a low moan. As I stared in horror, the blue thing shrivelled, fell to the ground, and dissolved into sand. My mother! She was only ill, I thought wildly. Perhaps her powers were fading, but I would soon be able to take her place...why hadn't she told me how to escape from this maze of tunnels?

I was suddenly aware of a terrible quiet. The glowing shapes were silent, but their light was beginning to change. They began to flash off and on in a strange rhythm.

And then, I heard a new sound. Something huge and misshapen was lurching toward me out of the dimness. I wanted to run, but I swallowed hard and drew a dagger from my belt.

INSTRUCTIONS

Read the article on the page to your left. When you are done, answer the five multiple choice questions and the one writing question on the next two pages. You may read the questions and writing topic before you start.

Multiple Choice Questions

Answer the following five (5) questions by circling the letter of the correct answer.

- 1. The "I" character is walking through the tunnel because
- a) the mother is lost
- b) it contains dangers
- c) it is part of the test
- d) night is approaching
- 2. The blue organism speaks after
- a) it falls to the ground
- b) a question is asked
- c) the light begins to flash
- d) the sword touches it

3. The "I" character seems to be a person who

- a) likes dark places
- b) acts quickly
- c) enjoys tests
- d) looks for fights

4. At the end, the "I" character has decided to

- a) run down the tunnel
- b) touch another 'face'
- c) speak to the approaching figure
- d) expect the worst

5. The word "she" in the first paragraph probably refers to

- a) the blue organism
- b) the "I" character
- c) the mother
- d) the approaching figure

Writing Question

Respond to the following:

You have read about someone who is lost. In the story, the main character worries about being "in danger of failing this final test." Do you think this person will be successful, now that you have read about part of the test? Give as many reasons as you can for your opinions.

Prepare a rough copy of your response on the page titled Rough Copy (next page).

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