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EVALUATING THE EFFECTIVENESS OF INSTRUCTION IN WRITING  
FOR ESL STUDENTS  
USING GRAPHIC ORGANIZATION BASED ON  
SOCIAL STUDIES CONTENT

by

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THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS

in the Faculty  
of  
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APPROVAL

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## ABSTRACT

Despite the fact that learning a language is a long, developmental process, Limited English Proficiency (LEP) students who are integrated into mainstream classes, especially at the secondary school level, need to develop proficiency rapidly in both the language and conceptual demands of academic discourse in order to succeed in their academic studies. Recent research on language acquisition in the academic domain indicates that the integration of language and content (ILC) is required in order for both linguistic and cognitive academic learning to take place. Research on genre and schemata have shown that students need modelling of the various genres and instruction in the particular registers of academic subjects so they have a bridge which serves as a link between their linguistic development and their grasp of academic concepts. Vygotsky's "learning by transaction" views the acquisition of language and knowledge as synonymous. His view emphasizes the importance of the procedures which the more proficient partner, for example, the teacher, uses in order to ease the way for the learner.

The Knowledge Framework provided by Mohan suggests a scheme for analyzing content course activities. The Framework is composed of knowledge structures which deal with either practical or theoretical structure: description/classification, sequence/principles, and choice/evaluation. These devices serve as generic underpinnings of academic discourse which may be applied to most communication contexts and are transferable across subjects, tasks, and events.

With awareness of the knowledge structures, students develop an understanding of the system of cognitive/linguistic patterns which they

can begin to apply across all academic areas. These patterns may be represented as graphics or key visuals by the teacher and student. The graphic is a scaffolding tool which can facilitate comprehension of the concepts embedded in context-reduced texts, thereby supporting success in both reading and writing tasks in the academic area classes.

The study described in this thesis examines how explicit instruction of knowledge structures using graphic representation impacts upon the proficiency of high school intermediate LEP students carrying out written social studies tasks.

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# Table of Contents

	Page
Approval.....	ii
Abstract.....	iii
Acknowledgments.....	iv
List of Tables.....	ix
List of Figures.....	x
I. Overview of Literature and Research on ESL Students in	
Mainstream Classes.....	1
The Integration of Language and Content.....	10
Theories on Language Acquisition.....	17
2. The Knowledge Framework: Knowledge Structures and	
Key Visuals.....	23
Use of Knowledge Structures and Graphics.....	28
3. Method.....	39
Preliminary Observations.....	39
Rationale for the Focus of This Study.....	39
The Research Study.....	41
The Participants.....	42
The Timeframe.....	44
Organization of the Treatment Sessions.....	45
Texts Used For Testing and Treatment Sessions.....	50
Outline of Treatment Sessions.....	50
Rating.....	53
The Wonderland of Data Analysis.....	60
Exploring the Vagaries of Conceptual Design.....	60

Exploring the Vagaries of Working with Students.....	64
4. Results of the Study.....	67
Quantitative Analysis.....	68
Analysis of the Classification Testing.....	72
Analysis of the Cause and Effect testing.....	74
Analyses of the Evaluation Writing.....	78
Participants' Comments on the Visuals and the Treatment.....	85
5. Discussion .....	88
Limitations of the Study.....	89
Conclusions .....	92
Recommendations For Future Research.....	95

## APPENDICES

Appendix A - Research Approval.....	104
Appendix B - Parental Consent Form.....	106
Appendix B - Student Consent Form.....	107
Appendix C - Examples of Principles and Cause and Effect .....	
Language.....	108
Appendix C - Examples of Evaluation Language.....	110
Appendix D - Student Graphic.....	112
Appendix D - Student Writing.....	113
Appendix E - Student Constructed Visual (Tenth Grade).....	115
Appendix E - Student Constructed Visual(Tenth Grade).....	116
Appendix E - Student Constructed Visual (Ninth Grade).....	117
Appendix F - Visuals Used For Testing:	
Chart One .....	119
Chart Two .....	120

Chart Three.....	121
Chart Four.....	122
Chart Five.....	123
Chart Six.....	124
<b>Appendix G - Examples of Students' Pretest/Posttest Writing</b>	
Example One: Eighth Grade.....	126
Example Two: Ninth Grade.....	131
Example Three: Tenth Grade.....	134
<b>References.....</b>	<b>137</b>

## List of Tables

	Page
Table 1. Student Grades in Social Studies .....	49
Table 2. Ratings Given for Pretest and Posttest Student Writing .....	69
Table 3. Difference in Rating Between pretest and posttest Scores.....	70
Table 4. Gain in Writing Proficiency in Posttests over Pretests .....	71

## List of Figures

	Page
Figure 1 - General Framework for Knowledge Structures.....	24
Figure 2 - Key Visuals for Knowledge Structures.....	25
Figure 3 - Definitions of Structures Within the Knowledg..... Framework.....	26
Figure 4 - Rating Chart Used in Mohan Study.....	55
Figure 5 - Second Rating Sheet.....	58

## CHAPTER ONE

### OVERVIEW OF LITERATURE AND RESEARCH ON ESL STUDENTS IN MAINSTREAM CLASSES

The results from surveys of pupils for whom English is a second language have shown that since 1974 ESL students have become an increasingly larger percentage of the total population in the educational systems of the lower mainland in British Columbia, in particular in the immediate Vancouver area. The 1991/1992 survey of pupils by the Vancouver School Board indicates that 45% of the total student population were ESL and that:

Approximately half the elementary ESL pupils were reported as being behind their age-peers in their English language facility. One-third of secondary ESL pupils were behind their age-peers in understanding and speaking English. Two fifths were behind in reading ability and about half in written ability (Hooper, 1991).<sup>1</sup>

The large percentage of LEP (Limited English Proficiency) students in some school districts means that the ESL minority has evolved into the majority of the school population. As the number of ESL students increases in schools, it is essential that their

---

<sup>1</sup>Hooper adds that this proficiency should not be considered a deficiency, but rather an incomplete addition to children who already speak at least one language.

success be addressed. In addition, the impact of this changing population on mainstream classes must be researched, both from student and teacher perspectives. Teachers cannot ignore the changing face of their clientele, and the crucial importance of language as the basis of instruction and learning is emerging.

Despite the fact that since educational systems aim to deliver educational services to students and since language is the major medium of learning, an important educational aim is to support language as a medium of learning to enable students to be academically successful. This applies to native speakers of English (L1 speakers) as well as LEP students (Mohan, 1990, p. 6).

The object of the study reported in this thesis was to look at ways of supporting LEP students in their academic classes. The study was designed to examine how explicit instruction of knowledge structures using graphic representation impacts upon the proficiency of high school intermediate LEP students carrying out written social studies tasks.

Until fairly recently, the usual role played by the ESL teacher has been that of instructing students in skill-based language. This followed the theory that the language that is taught in the ESL class is generic to all communicative needs and that students are able to transfer what they learn to a variety of situations. An emphasis is placed on the student learning the structure and form of language, rather than the ideas to express the message.

The use of content-based ESL instruction evolved from the essential schoolwide issue: language instruction for ESL students should include materials, texts, and tasks relevant to the demands of academic classes. This means that the ESL students' participation in reading and writing tasks in the academic area must be addressed. As Rothery points out: "... as long as they (the students) remain in school, students' progress is constantly monitored and evaluated through their ability to write" (1984, p.4). She adds that: "Abilities to write and read are critical if students are to complete their secondary education successfully and to go on to participate in the wider world, whether by entering a tertiary institution or by entering industry and commerce." (p.3). Therefore, if the ESL student is to have equal opportunity for success in education and the job market, instruction in reading and writing skills necessary for successful participation in all curriculum areas must be addressed.

It does appear that the main goal for ESL programs in the present educational system is to enable students to participate successfully both in social situations and in academic area classes. However, it appears that few programs use approaches which are designed to achieve the latter goal (Chamot & O'Malley, 1987). In relation to the academic and social goals, Cummins (1981), hypothesizes two different kinds of language proficiency known as BICS and CALP. The basic interpersonal communicative skills (BICS) are language skills used in interpersonal relationships or in informal situations. Cognitive academic language proficiency (CALP) is



required to make sense and use language in more context-reduced situations. Communicative language being by nature interpersonal, often deals with the here and now. Therefore, the skills of the interlocutor and other paralinguistic aids may be utilized to facilitate comprehension. In contrast, the language skills required to successfully utilize academic language include the ability to deal with more abstract concepts which are embedded in dense, complex texts. In addition, those learners who are required to function in both reading and written tasks are unable to use the intervention of an interlocutor for immediate support throughout the task.

Cummins (1981) has suggested that while LEP secondary school students are acquiring the basic level of both BICS and CALP in their new L2, their cognitive development is on hold unless there is instruction in the L1 (students' first language). Cummins also supports the notion that the development of proficiency in the L1 of bilingual students can contribute to increasing proficiency in their L2. This is more apparent in the development of context-reduced, cognitively demanding language (Cumming et al., 1989; Cumming, 1990). The adolescent LEP student may be at a greater disadvantage if instruction in concepts of academic subjects, which are essential for cognitive development, is absent. This is supported by results from a study by Collier (1989, 1987) which indicate that it may take LEP students from five to seven years to reach a satisfactory level of proficiency in context-reduced academic classes in their L2. The rate of acquisition of cognitive academic second language proficiency and

content-area achievement appears to be influenced by LEP students' age on arrival, with the 12 - 15 entry age group being those most at risk, These results do appear to contradict Cummins' (1981)

interdependence hypothesis which predicts that learners who have a reasonable proficiency and are more cognitively mature are better able to acquire CALP language. However, as Collier points out, the dramatic drop in the scores in this group "... may be a result of the schools' greater demands on students at the secondary level and the limited length of time LEP students have to reach those levels" (1987, p. 633).

The language required for academic purposes is complex and includes not only the organization of language but also knowledge of the concepts specific to each subject area. "As academic content becomes more complex, the student will experience serious difficulties unless his/her earlier language instruction has promoted conceptual development as well as communicative ability" (Cantoni-Harvey, 1987). Often LEP students achieve a relatively fluent oral proficiency and are able to use their L2 competently and correctly when engaged in informal conversation or in context-driven interaction. However, they may be unable to function as successfully in situations where there is little or no oral interaction with an interlocutor. Comprehension of written texts, lectures, and original writing for academic tasks require knowledge of the register of the subject and ability to decode written texts. This lack of success in these complex situations may be due to minimal exposure to models

of what is required to complete specific tasks successfully. Learners must develop the schemata relevant to these types of activities. The communicative competence of the school age student in his/her educational environment is more than the appropriate informal use of a language; it also includes the ability to read, discuss, and write about complex and abstract ideas drawn from history, science, mathematics, or any other educational field.

Second language is acquired to various degrees of proficiency depending on the context in which the acquirer needs to use it. Immigrants of school age who must acquire a second language in the context of schooling need to develop full proficiency in all language domains... and all language skills ... for use in all the content areas. Language used in school is sometimes unique to that context, and it becomes increasingly abstract as students move from one grade to the next. Language is the focus of every content-area task, with all meaning and all demonstration of knowledge expressed through oral and written forms of language (Collier, 1987, p. 618).

In order to continue essential cognitive development, the use of L1 content instruction may take place in addition to instruction in the L2. However, though this type of support is indeed valuable, especially during the initial year(s) of participation in the target language school system, the student must eventually enter the mainstream classes held in the target language and competence in the academic discourse in the L2 still needs to be developed in order to facilitate the students' successful participation in context-reduced

academic discourse. Therefore, the format of the ESL classroom must include instruction in these relevant discourse patterns.

In reference to the emphasis placed in ESL classrooms on the ability to function in interpersonal social situations, it is interesting to note that Saville-Troike (1984) found no correlation between the extent of social interaction and English language development or academic achievement. In a year long observation of the subjects in the school environment, it was noted that those non-native speakers (NNS) who were the more successful communicators "plateaued" at fairly early levels of development. This suggests that their "success" may have reduced their motivation to learn more complex linguistic forms. Often LEP students develop strategies that make them appear to be good language users: formulaic expressions/ routines, avoidance strategies in speaking, and so on (Levine, 1984, p. 233). Emphasis on interpersonal communication may even inhibit academic achievement. When LEP students attending ESL classes focus on social strategies and "getting the gist" of conversations, the additional rigour of "getting it right" might never be addressed. In addition, most of the subjects' communicative acts in the Saville-Troike study, apart from bids for the teacher's attention, were limited to responses to teacher questions and requests. The language forms used by the students in solely language driven ESL classes show little transference to the communicative demands of the mainstream lessons. This may be due to the very specific content and conceptual material discussed in the mainstream classroom.

The second language learning model proposed by Chamot (1981) identifies the highest cognitive levels as reflecting the typical types of language necessary for successful participation in regular content classes. "Though social communicative proficiency is important to a child's socialization, it is not enough to lead to success in the academic focus of school" (Chamot, 1983, p. 464). If the LEP students' academic and linguistic needs are to be addressed equally, then content and language can no longer be seen as separate. Therefore, those ESL classes which use the EFL (English as a Foreign Language)<sup>2</sup> approach to teaching language where there may be little connection made to the other academic areas in which the students are participating, are not enabling the students to succeed in a large percentage of their school activities. "If in teaching ESL we fail to teach the language needed to succeed in the regular classroom, we have failed in our first responsibility - which is our students" (Saville-Troike, 1984, p. 217).

Content-based learning (Crandall, 1987) and the integration of content and language learning (Mohan, 1986, 1991; Early & Tang, 1991; Cantoni-Harvey, 1987; Briton, Snow & Wesche, 1989; Wong-Fillmore, 1989) have become the basis for considerable research and discussion during the last decade. This research has resulted in several practice models of application in the classroom: theme-based,

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<sup>2</sup> English as a Foreign Language teaching refers to teaching situations where English is not the national language or the language of the majority.

shelter, and adjunct. The theme-based model focuses on language skills and functions within a specified topic. However, problems arise in this type of instructional model such as the dilemma of topic choice due to the diversity of cultural backgrounds and demands, and the effort to organize some continuity of learning in a particular domain, such as expository text structure. The rationale for the shelter model, where the content of the class parallels that of the mainstream classroom, is that language complexity and quantity of the material is reduced thus facilitating student acquisition. There is, however, a danger that the class becomes language focused and important cognitive development which is achieved through increased understanding of important discourse structure and concepts may well be lost. The adjunct model links both content and language. The NSs (Native speakers)/NNSs (Non-native speakers) are integrated for content instruction in the mainstream academic class. Then, in an additional class, NNSs receive language instruction using the same material and discourse as the academic class (Briton, Snow & Wesche, 1986).

In addition to these models, the immediate integration of the LEP student into the mainstream class has also been advocated so that the LEP student receives additional guidance from the ESL teacher in the academic classroom. The Calderdale Report (1986) developed by the Committee for Racial Equality in Britain states that LEP students should not be withdrawn from the mainstream class except under exceptional situations. This integration has been backed

by arguments that separation from the mainstream encourages "second class" learning. This has encouraged the players in the educational scenario to take a new look at the position of the ESL teacher in the school setting and has resulted in a dynamic changing in the role of language support in the academic curriculum. Collaboration between the ESL teacher and academic area instructors is essential as support for bilingual<sup>3</sup> students takes place in the mainstream classroom. The ESL teacher is, therefore, a part of the team rather than hidden away in the metaphorical broomcupboard!

When ESL moved into the mainstream many changes happened. ... One important effect was to make the ESL teacher far more visible in the school. As they worked alongside other teachers their skills and areas of knowledge were recognised and many of their techniques began to be valued and used by other teachers. The needs of bilingual pupils became more visible as ESL teachers attended Departmental meetings, helped with curriculum development, and attended such working parties as Language Across the Curriculum, Multi-cultural and Anti-Racist Committees (Williams, 1990, p. 4).

### THE INTEGRATION OF LANGUAGE AND CONTENT

In their rationale for integrating language and content in SLA (Second Language Acquisition), Snow, Met, & Genesee (1989) point out that an integrated approach brings the domains of cognitive and language development together. In this manner the language

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<sup>3</sup> "Bilingual" is used in Britain in place of "ESL" or "LEP".

learned and used also has purpose, and communication must be specific rather than general. Therefore, "... meaning provides conceptual or cognitive hangers on which language functions and structures can be hung" (Snow, et al., 1989, p. 202). However, even though the link between content and language has been reported to be essential, it is necessary to consider other less positive research findings in this area. Swain (1988) points out that "... not all content teaching is necessarily good language teaching" (p. 68). This observation arises from extensive research carried out in French/English bilingual schools in Canada. Though students attending such schools do indeed appear to be bilingual, recent studies have indicated that this is not strictly the case, and students' linguistic fluency does not reflect the number of years they have been studying in French. Swain discusses the role of language in the content class, and assumptions made from the study of data taken from immersion classrooms suggest that students use language only for supplying brief responses and there is little opportunity for sustained student talk and language expansion. Certain uses of language may occur infrequently in the classroom setting. The general meaning of discourse may be understood without precise syntactic and morphological knowledge, but this knowledge is essential in order for the student to achieve accurate output (Swain, 1987).



It is essential that greater demands be made on LEP students so that they are expected to extend their language skills beyond basic oral fluency.

... it is inefficient and ill-advised to teach language as a thing in itself separate from the school curriculum or conversely to submerge students in the language demands of school without structured support: ESL students require planned help with their real needs in coping with the language demands of learning in the school context (Mohan, 1988, p 1).

The findings of the Swain study underscore the importance of the teacher's choice of task types and the explicit modelling given to the students. The notion that if an LEP student stays long enough in the academic classroom s/he will metamorphose into a successful, articulate student appears to be incorrect. Each student brings a diversity of knowledge in his/her L1, and educators must consider the point at which their instruction falls upon either the ready or confused ears of their students. In addition, the Swain study emphasizes the importance of modelling the skills required in tasks at different stages so that students can move through a scaffolding framework in which they can begin to work successfully from the onset of their academic participation.

Extensive research on task (Crookes, 1986; Horowitz, 1985, 1986; Long, 1989; Long and Porter, 1985; Nunan, 1988, 1989; Pica et al., 1989; Porter, 1986) has raised many issues on the actual demands that academic tasks place on students, and on which tasks are more or less likely to encourage and extend the linguistic and higher level

thinking skills of all students. The type of task appears to affect how much interaction and negotiation takes place during an activity. The use of one-way communication tasks does not appear to facilitate negotiation as much as might perhaps be the case in two-way tasks or in pair work as opposed to either group or teacher-fronted activities (Long et al., 1976; Pica & Doughty, 1985). Tasks also play an essential role in student learning as they direct "...attention to particular aspects of content by specifying ways of processing information" (Doyle 1983, p. 161). Brown's study (1991) looks at the level of challenge of a task and whether or not this gives students the opportunity to try out "new" language, thus facilitating learning as well as practice. The results indicate that the interpretive tasks encourage more "instructional output" and "hypothesis formation" (Bennett, 1984) than procedural decision-making tasks. If LEP students are to achieve acceptable "comprehensible output" (Swain, 1986) and success in the content class then the tasks set for them by the teacher must reflect the students' present linguistic and cognitive abilities.

The use of written text as a source of information, as opposed to interactive conversation, changes the learning situation dramatically, especially for LEP students. In addition, the text types which the LEP student must be able to recognize and comprehend are quite diverse. Expository texts require a different arrangement of language as compared to narratives, and scientific texts are distinct from historical descriptions of events. Written production by students

using text sources is not only dependent upon their comprehension of the topic, which may perhaps be developed during oral tasks and discussion as well as reading, but requires additional knowledge of the particular linguistic forms required to correctly complete the task. In order to successfully report scientific experiments or to discuss the causes and effects of historical events it is necessary not only to comprehend the relevant concepts but also to use differing formats and language structures.

The emphasis in the content-based approach is on the study of specific subject matter, and it de-emphasizes the use of immediate surroundings and personal experience. The dependence on repair and accommodation by NSs during interaction with NNSs is less possible when the student is dealing with material in context-reduced situations. Therefore, the LEP student has to concentrate on further extending his or her linguistic knowledge of the required language in order to participate successfully in academic situations. The various curricula designs in ESP (English for Specific Purposes) provide an insight into the preparation of content-area curricula and language instruction. The factors affecting ESP course design proposed by Hutchinson and Walters (1987) take into consideration the importance of analysis into the linguistic structures of the particular register, as well as teacher/student methods.

As LEP students are mainstreamed, one of the most problematic areas of concern to classroom teachers is the use of textbooks by LEP students who have low reading levels. The difference between oral

language, often contained within the parameter of BICS, and the language of textbooks which display examples of CALP, goes deeper than vocabulary alone. Differences of word order, sentence length, voice, tense, metaphorical usage, and the placement and use of clauses are all evident (Levine, 1984). The reading of content-area textbooks and other written materials is a skill which plays a central role in student learning in school, especially at the secondary level (Gunderson, 1985). A low level of writing is often accompanied by poor reading ability. Reading and writing are an integral part of academic coursework and essential for achievement in these areas. Reading provides students with valuable insights into the organizational patterns appropriate for different kinds of discourse. Teachers may be well aware of the enormity of the LEP students' task when knowledge of text content is required in order to successfully complete a set assignment in class, but they are at a loss as to how to help these students. The text might be simplified, but this often leads to diluted and disfunctional language which bears no resemblance to the register or content of the text. It is important to try to provide other ways in which the text might be represented so that the relationship between the discourse and the organization of the content knowledge is kept intact. A knowledge of the specific language register of a subject area and the text schemata is required in order to acquire the ability to read and write at a satisfactory level.

In reading and writing activities in their mainstream classes, those LEP students at a low level of L2 fluency use whatever strategies and background knowledge they have acquired in their L1 and may be unable to obtain spontaneous repair and prompting from the necessary sources in their L2. Williams (1985) suggests five strategies which he sees as appropriate to the field of ESP and provides some interesting outlines for the development of the LEP learner's reading ability: inferring from context, identifying lexical familiarization, unchaining nominal compounds, searching for synonyms, and analyzing words. All of these strategies are focusing on using words in context and relating to language in a holistic manner. Students who are given explicit instruction in the use of similar strategies and encouraged to make connections between the concepts they hold in their L1 to those addressed in the L2 scenario are applying their background knowledge to the task in hand. The investigation of students' awareness of the different organizational patterns that characterize expository text (Alvermann & Boothby 1986, p. 88) emphasizes the importance of inducting the learner into essential patterns.

LEP students entering the high school educational system require increasing amounts of instruction in reading and writing skills (Chamot, 1983) and explicit instruction into the registers of the subject and text types. "In content-based academic writing instruction, writing is connected to the study of specific academic subject matter and is viewed as a means of promoting understanding

of this content" (Shih, 1986, p. 617). Explicit instruction in the manipulation of a variety of forms (summaries, research reports, critiques, and narratives) supports the student's ability to recognize a particular form and use the required language successfully. As writing is used frequently in academic subjects as the mode of demonstrating knowledge, both by the teacher and student, it is essential that the NNS be given exposure to and instruction in the forms demanded by each subject. Model essays might be used to help students assimilate the rhetorical framework each form requires (Rigg & Allen, 1989). Also, as this process centres on the content which the student is currently studying, the activity has purpose.

Consciousness develops through the organism's interaction with the world. The nature of practical activity determines consciousness. In particular the nature of the means in a goal directed activity transforms its user (Vygotsky, 1978, p. 76).

### THEORIES ON LANGUAGE ACQUISITION

Regarding other theories on language acquisition, Krashen (1982) proposes that in order for acquisition to occur, the content of the input must be comprehensible to the learner and s/he must be able to progress at "I+1" (Information plus 1). Krashen (1985) would consider the use of the integration of language and content (ILC) as the means by which the language is made more comprehensible to the student. This appears to be common sense, building on the

Vygotskian notion of the zone of proximal development. However, Krashen does not stipulate how, if at all, instruction might play a role in this process of acquisition. If students are to acquire meaning, they need to attend to the form of the utterance used to convey the message, and some form/function analyses must take place (Swain, 1988). If the LEP student is to succeed in the specific environment of the academic classroom, this explicit instruction is essential. Halliday (1978, 1985) considers language a medium of learning and learning as a semiotic process. This integration of language and culture in learning is known as Language Socialisation (Bruner, 1983; Ochs, 1988; Schiefflin & Ochs, 1986).

The input of speech to the language-acquiring child (in the L1) is often highly tailored by adults to match the child's level of developed speech and is also altered systematically to stay matched with the child's progress. Studies on mother/child talk in L1, known as "motherese" or "caretaker speech" (Snow & Ferguson, 1977), have indicated that the caretaker is constantly modifying his or her language so that the conversation is maintained with the child acquiring the language. A great deal of the language acquisition occurs in highly framed and formatted situations; intentions are recognized and the familiar and routinized settings allow for success on the part of the learner.

... the world is a symbolic world in the sense that it consists of conceptually organized, rule-bound belief systems about what exists, about how to get to goals, about what is valued. ... The culture stores an extraordinary rich file of concepts, techniques,

and other prosthetic devices that are available (often in a highly biased way, for the file constitutes one of the sources of wealth in any society and most societies do not share their wealth equally among all). The prosthetic devices require certain fundamental skills, notable among them the ability to use the language as an instrument of thought-natural language, and eventually such artificial languages as mathematics, etc., and especially written language (Bruner, 1976, p. 32).

As the child enters the more complex world of schooling, language serves two functions which are intertwined: social contact and representation. Ontogenically, the representational function grows out of the social-communicative function that is primary. In Thought and Language (1962), Vygotsky explains that language represents or refers to the referential aspects of language use which eventually results in the development of logical and abstract thought. The student's acquisition of scientific concepts provides a system of generality that changes the psychological structure of everyday concepts. In applying this to the situation of LEP students in mainstream classes, there is a need for them to receive a basic induction into the general language and concepts which recur throughout a particular subject, for example, the cause and effect language and concepts of conflict, or the movements of peoples. "There needs to be at any given stage of voyaging into the zone of proximal development a support system that helps learners get there" (Vygotsky, 1962, p. 79)

Vygotsky focusses on the adult-child interaction where "... adults provide the 'other-regulation' necessary for a child to carry out a task" (Wertsch, 1979, p.1). In his study of the ontogenesis of higher mental



functions, Vygotsky develops the idea of "the zone of proximal development" which he defines as: "... the relationship between the actual development level as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). An interesting part of Vygotsky's theoretical framework is his argument that "... higher mental functions appear first on the 'interpsychological' (i.e. social) plane and only later on the 'intrapsychological' (i.e. individual) plane" (Wertsch, 1979, p.2). This notion emphasizes the importance of social interaction and the development of speech necessary for communication. Leont'ev (1969) attributes to Vygotsky the concept that speech is an activity. Wertsch (1979) compares this view of speech to Wittgenstein's notion of a language-game where the activity determines how the language used is to be interpreted "... the term "language-game" is meant to bring into prominence the fact that the speaking of language is part of an activity, or of a form of life" (Wittgenstein, 1972, p. 11).

These ideas highlight the essential component for communication, that the interlocutors recognize the language appropriate to the social situation. In the social studies class, as in other subject environments, the situation is unique. In order for the student to take an active part in this specific scenario s/he must have been inducted in the language required. The Vygotskyian notion of "scaffolding", as described by Bruner (1976), highlights the necessity for a crucial match between a support system in the social environment and an acquisition process in the LEP learner, thus encouraging the transmission of the target (second language) culture. This

knowledge of the culture is essential for successful participation in the academic environment. Just as the young child develops an understanding of a new task situation, perhaps with the prompting of an adult or peer, the ESL student must be provided with support when entering into the activities required in the context of educational, academic learning.

Prior knowledge of concepts contained in text is crucial to effective learning. In social studies classes the material chosen by the teacher which determines student assignments and participation is culture specific. Grades 9 - 11 study a great deal of Canadian history in their social studies classes. LEP students may have little or no background knowledge in this very specific domain. It is essential that the ESL teacher be prepared to incorporate some of this background information into the language classes so that as the students work on their linguistic proficiency they are also developing in their cognition of concepts and facts which will arise in future mainstream classes. In the mainstream class, as well, the teacher's role as facilitator in the learning process, the expert in the content and cognitive discourse of the subject-area, requires that s/he take into consideration the language system used to convey the concepts and to explicitly point out to students the pattern and structure of the discourse in which the content is embedded. Collaboration between the content-area teacher and the language specialist, such that each develops a deeper awareness of how his/her areas of expertise are very much intertwined, may develop a classroom situation which enhances the learning of all students.

As academic discourse in a variety of subject areas reveals common organizational patterns, a model is required to help guide instruction. The model applied in this study is the framework for knowledge structures developed by Mohan (1986) which is discussed in Chapter Two of this thesis.

## CHAPTER TWO

### THE RESEARCH MODEL

#### THE KNOWLEDGE FRAMEWORK:

#### KNOWLEDGE STRUCTURES AND KEY VISUALS

The model for this study is based on Mohan's (1986) categorization of knowledge structures and the accompanying graphical tools or key visuals. The theoretical framework (See Figure 1) provided by Mohan (1988) is a systematic way of integrating content objectives and language objectives that may be applied across the curriculum (Early, 1990a, 1990b.). The knowledge structures are either theoretical knowledge (classification, principles, and evaluation) or practical knowledge (description, sequence, and choice). These knowledge structures are often apparent in text, but they can also be expressed in graphic form or key visuals (See Figure 2). The structures serve to encourage the student to consciously reflect on the relationship between language form and meaning (Swain, 1988).

The interdependence of thought and language is stressed by Vygotsky (1962) and is evident in the use of the Knowledge Framework paradigm which links up both the practical and theoretical structures so that they complement each other. The discourse that is particular to each of these structures is defined in Figure 3. The use of language requires background knowledge, and

Figure 1

General Framework For Knowledge Structures

(Mohan, 1988)

GENERAL FRAMEWORK FOR KNOWLEDGE STRUCTURES

	CLASSIFICATION	PRINCIPLES	EVALUATION
BACKGROUND INFORMATION	classifying categorizing defining	explaining predicting interpreting data & drawing conclusions developing generalizations (cause, effect, rules, means-ends, reasons) hypothesizing	evaluating judging criticizing justifying preferences & personal opinions recommending
ACTION SITUATION	observing describing naming comparing contrasting	time relations between events sequencing: spatially steps in a process	forming personal opinions making decisions
	DESCRIPTION	SEQUENCE	CHOICE

Figure 2

Key Visuals For Knowledge Structures

(Mohan, 1988)

Classification	Principles	Evaluation
webs trees tables graphs databases	diagrams graphs tables cycles	rating charts grids marks books
tables diagrams pictures plans/drawings maps	tables with numbered steps flow charts cycles time lines action strips	decision trees flow charts
Description	Sequence	Choice

Figure 3

Definitions of Structures Within the Knowledge Framework

(Mohan, 1988)

Classification	Principles	Evaluation
<p>Discourse that systematically groups objects/ideas based on specific or predetermined criteria</p> <p>(What concepts apply?</p> <p>How are they related to each other?)</p>	<p>Discourse that deals with a relation between two (or more) classes</p> <p>(What principles are there?</p> <p>cause-effect, means-end, methods and techniques, rules, norms and strategies.)</p>	<p>Discourse that determines the significance or worth of a decision by careful consideration of the criteria used and the payoff resulting from making that decision</p> <p>(What values and standards are appropriate? What counts as good or bad? What are typical reasons for choosing one object or course of action over another? What are usual aims and goals?)</p>
<p>Discourse that gives an image of a person, object or event</p> <p>(Who, what, where? What persons, materials, equipment, items, settings?)</p>	<p>Discourse that deals with a continuous or connected series of events such as related scenes that develop a single idea</p> <p>(What happens next? What is the plot? What are the processes, procedures or routines?)</p>	<p>Discourse that deals with decisions about possibilities, a problem situation with alternative courses of action</p> <p>(What are the choices, conflicts, alternatives, dilemmas, decisions?)</p>
Description	Sequence	Choice

the knowledge structures, internalized as schemata, help organize the knowledge so that what is acquired may be applied to other communication contexts. Explicit instruction in a particular knowledge structure introduces the student both to communicative and academic language. Students then have a base onto which they are able to add the specific lexicon unique to a given topic in the academic class. In addition, the student is able to recognize the shape of the information and to integrate background information correctly into the specific frame developed for the set task. This method proposes that the learner start with an overall picture of the 'text' and fill in the details, constructing from the 'top down' (Meyer, 1985). The patterns of text set out by Meyer are: collection, causation, response, comparison, and description. These categories can be found in all types of discourse dependent upon the intention of the interlocutors and the type of information they intend to convey.

These basic types of top-level structures or plans are familiar in various contexts. The collection relationship is exemplified in the time-order plan or history texts, Scientific treatises often adhere to the response type, first raising a question or problem and then seeking to give an answer or solution. political speeches are often of the comparison type, and in particular, its adversative type, telling us who, where, how, and when (Meyer 1985, p.270).

This view differs from the 'bottom up' approach where the learner starts building text using the individual words available and adds the specific lexicon that is unique to a specific topic in the



academic class. As Tang (1989) points out there are several differing views (Cheek & Cheek 1983, Herber, 1970) on how organizational patterns are applied. In order for teachers to use such patterns it is necessary to adopt a model which can be applied to not only to top level structures but can be applied also to the patterns of words and phrases. The knowledge structures proposed by Mohan are evident throughout the curriculum and may be applied to oral activity, similar to the conversational structures or scripts proposed by Hatch (1980), or to reading and writing activities requiring text.

Wittgenstein's study of numerous games and the rules which regulate each activity indicate the importance of the situation in which language is used. Mohan (1990) makes the analogy between the play and rules of a game and the practice and theory of a task. In the knowledge structures which make up his theoretical framework, he considers the activity which is required by the task and the background knowledge which the participant needs in order to succeed. For example, the activity of explaining a sequence of events in an historical time frame requires conceptual knowledge of the principles of cause and effect and proficiency with the discourse required to participate in the activity successfully. Prior knowledge enables the learner to define the situation so that the language applied will be correct and communication successful. Mohan considers the relationship between the 'knowledge structures' of the framework and 'student tasks' and suggests that: "Knowledge structures illuminate the shape of academic knowledge and discourse; student tasks illuminate the processes of academic

development" (Mohan, 1990, p.56). This definition of knowledge structures and tasks differs from views in education that:

"Knowledge structures, written genres and text patterns were seen as part of a static, teacher-centred, literacy-based, product-oriented approach; student tasks and activities were seen as part of a dynamic, student-centred, oral, process-oriented approach" (Mohan, 1990, p.57). In Mohan's framework the process and product are interdependent. In the classroom the learner must receive guidance as to the requirements of the task and the means by which s/he is able to use successfully the discourse inherent in the task. In this manner the learner is encouraged to become the owner of his/her learning process.

In addition, Mohan (in press) argues that the concept of apprenticeship where the expert and novice negotiate their interaction can be applied to schooling so that theory and practice are utilized in the classroom as "mutually supportive elements of a total learning process". Mohan points out that teachers and students are able to relate concrete experience to the use of graphics which illustrate abstract ideas, thus using "experience and graphics to support extended 'academic' discourse".

It is proposed in this thesis that the explicit instruction of knowledge structures using graphics has a positive effect on the writing of intermediate language level LEP students. Tang (1989) reports a wide range of ideas as to the meaning of the term 'graphic' which might entail charts, maps, illustrations, tables, technical drawings, and so on. However, for the purposes of this study the

term graphic refers to the key visuals used to present knowledge structures and the academic discourse of social studies texts.

It is suggested (Winn 1987, Tang 1989) that a graphic lays out the structure of a specific type of text in a systematic and clear fashion, thus supporting students' participation in academic type tasks. A number of important concepts, which in text form might cover several pages of a book and be beyond both the linguistic and cognitive ability of the LEP student, can be presented in a single page graphic. The use of graphics helps "to condense descriptive materials into more 'intellectually manageable' displays" (Holliday 1975, p.21) and diagrams "help low-verbal learners overcome some of their difficulty with language by providing information in a form they can handle more easily" (Winn & Holliday 1981, p. 736). The graphic format shows the relationship between the concepts embedded in the text, using a minimal number of words for the LEP student to decode. S/he, with guidance from the teacher or peers, is able to focus on the overall schema of the text and may be able to take a more active part in class activities. The graphic sets the scene, providing the background knowledge which expands the LEP student's cognitive and linguistic knowledge. The use of graphics and knowledge structures may serve to give students a way into the text as they are able to get to visualize the overall organization of information in the particular content paradigm.

The graphics which support the knowledge structures are tools to be used by both the teacher and the student; assisting in the development of the LEP students' cognitive and linguistic

understanding. It is important that the students are shown how to manipulate the graphics, construct their own and discuss them in groups, so that the content of the graphic is not copied in rote fashion. If the students are to gain ownership of this knowledge, they must be encouraged to extend the core vocabulary included in the graphic and expand on the key concepts. Nevertheless, in the initial stages, some LEP students with minimal language skills might tend to use only the format and vocabulary contained in the graphic, inserting the correct structures in a cut and paste manner. This type of pattern practice (Sampson, 1991) can help the student to develop a comfortable linguistic base on which to hang other more complicated structures and vocabulary. However, it is essential that as soon as they display comfort with the structures and the basic schemata, the students are encouraged to extend their writing, using their own words to explain the concepts.

Researchers working on the Vancouver School Board Language and Content Project (Early, Mohan, and Hooper, 1989) have found evidence that: "the use of key visuals and knowledge structures not only enabled students to produce expository language which might be transferable to other academic tasks, but also allowed for individual variation in language proficiency as well as personal expression" (p.120). The functions of visuals are generative, explanatory, evaluative, and generic to all subject areas. The use of graphics can be seen as a tool of "scaffolding", a notion developed by Bruner and his colleagues (Bruner, 1976) from Vygotsky's zones of

proximal development (1962). The zone of proximal development being:

... the distance between the actual developmental level as determined by independent problem solving and the level of potential guidance or in collaboration with more capable peers (Bruner, 1976, p. 86).

Bruner explains that a child may be assisted to advance by being under the tutelage of an adult or a more competent peer. The tutor or aiding peer then serves the learner as a vicarious form of consciousness until the learner is able to master his/her own actions through his/her own consciousness and control. "... the tutor in effect performs the critical function of 'scaffolding' the learning task to make it more possible for the child, in Vygotsky's words, to internalize the external knowledge and convert it into a tool of conscious control" (Bruner, p.25).

In its function as a "scaffold" a graphic or key visual might be manipulated by the instructor in a variety of ways. Firstly, the student might be encouraged to use a key visual which contains a summary of a section of the text. Later, as the student's proficiency in using the necessary structures and conceptual material improves, a key visual might be presented which contains half the information. The student thus has a basic introduction into the section of the text but must then complete the rest of the visual from information taken from the remaining part of the assigned reading. A final step may

have the student organizing a key visual from scratch, either individually or as a part of a group. Individuals might work apart and then pool their information, thus encouraging discussion and voicing of their opinions. This type of activity is supported by the research on the effectiveness of two-way tasks mentioned earlier in chapter one of this thesis. For LEP students with a very limited level of English proficiency it is important to point out that these steps may take a prolonged length of time. If a student is unable to move onto the next step, then it is necessary to extend further scaffolding, either in the complexity or simplification of the key visual or in the explanation by the teacher.

The visuals might be equated to instruments or props that make it possible for the child to go beyond his/her present "level of development" and to achieve higher ground and, eventually consciousness. Vygotsky's view that passing on knowledge is like passing on language "learning by transaction" emphasizes the importance of the procedures which the more proficient partner (the teacher) uses in a transaction in order to ease the way for the learner. Bruner is in agreement with Vygotsky that there is a parallel in all forms of knowledge acquisition, and it is precisely the existence of the crucial match between a *support system* in the social environment and an *acquisition process* in the learner which makes possible the transmission of the culture (Wesche, 1989). In the school situation, the segmenting of a type of task and the creation of a format is essential so that the student does what he can do and the

teacher fills in the rest with a 'raising of the ante' with each successive task.

The graphic representations which are an integral part of the framework, are tools for encouraging participation. They are used to scaffold the learner's attempt to communicate his/her concepts in a coherent and appropriate fashion. This study looks at instruction of knowledge structures and accompanying graphics. However, it is important to reiterate that the aim is to encourage learners to manipulate the graphics themselves rather than have the information presented by the teacher each time. This follows the notion that in order for an activity to be validated the individual needs to be a part of the process and not a passive onlooker. As the student acquires a frame of reference to a specific activity he/she is more able to create a graphic and manipulate it successfully as a part of his/her learning. During this process the form of language and concepts required for social studies activities can be clarified and a pattern revealed. Creating a graphic using the guidelines modelled by the expert (teacher or peer), enables the learner to display the knowledge he/she has acquired with the appropriate language.

In her ethnographic study on the role of graphic representation of knowledge structures in ESL student learning, Gloria Tang (1989) notes that even though her research revealed that graphics are often used in textbooks and that: "the teacher's guides stress the use of graphics to present information ... students do not seem to use graphic representation of knowledge structures to advantage in learning" (p.174). In addition, Tang found that:

... even when they have to extract information from, or organize information in, a graphic, students do not seem able to do it. When left to their own devices, few can make use of graphics to explain, represent, interpret or organize information... it is only when students have been taught systematically to present information graphically that they can perform the task without difficulty (Tang, p.175).

Tang also investigated the effect of explicit instruction in the construction of a tree graph which represented part of the students' social studies text on the comprehension and recall of seventh grade intermediate ESL students. The students were asked to generate their own graphic. The results of the treatment used in this study indicates that: "... seventh grade ESL students can be taught to construct a tree graph to represent knowledge after explicit teaching and practice;" (p. 172). Furthermore student feedback reveals that "... 82% of the students found the teacher-provided tree graph used to present knowledge helpful, and 77% of them found the student-generated tree graph helpful as a reading strategy" (p. 172).

The form of a graphic does not lay emphasis on large amounts of language. The learner is able to apply key words and concepts to the visual in a format which makes the linguistic connections. For example, in a cause and effect visual the arrows suggest the connections between cause and effect. By using either a teacher-created graphic or creating their own, learners are able to communicate their understanding of the concepts even though their level of language may be quite limited. The visual is a product of the



learner's thought processes and can be used to encourage her/him to participate in an activity. In addition the interlocking language required to discuss the specific structure can be introduced and practiced. For example, words and phrases which are present in discourse referring to cause and effect situations such as: "As a result", "due to the", "because", "so", "previous", and so on. In this way the cognitive development of the student carries on. The essential concepts and the language required to communicate these successfully are learnt in tandem. Learning in this manner then becomes a spiral. As the learner increases his or her ability to recognize and define essential concepts presented in social studies discourse, he/she is more able to grasp the language used to communicate further information relayed using conceptual patterns. For example, the concept of evaluating the pros and cons of past events may be considered. In order to discuss an event the student needs some proficiency in using both language of cause and effect and evaluating. In addition, the ability to recognize and use phrases which convey opinion are essential to such discourse.

The growing population of ESL students in the school districts of the lower mainland area of Vancouver highlights a need for educators to recognize the unique language of academic subjects taught in schools. As the ESL learner may learn social, interactive language in order to participate in social activities, so too he/she must learn the discourse which is particular to the academic subjects in which he/she participates in the school environment. In the course of academic learning, all students are involved in a series of

tasks and activities. For example, in order to participate successfully in social studies activities the student needs to be inducted into the patterns of the discourse particular to this subject, such as cause and effect and evaluating events and historical data. Indeed instruction which models and encourages an understanding of the type of language required in order to communicate in "social studies discourse" is valuable for all students.

The knowledge structures can be introduced at all levels and are able to accommodate increasing expertise by the student in both their language and conceptual development. "... when students, even low-proficiency ESL students are adequately supported in tasks to elicit certain knowledge and discourse structures, they are able to produce texts of which they can be proud" (Early, 1990b., p. 574). As the structures are also generic and may be transferred across academic areas, the student uses them to build on prior experience. The use of graphics allows the student to gain an overview of the text so that a top-down approach can be encouraged (Meyer, 1985; Carrell 1984, 1985). This would be a balance to the more pervasive bottom-up exercise of hunting down the dictionary meaning of each and every unknown word, an exercise which may be not only time consuming, but may fail to even lead the student to a cognitive understanding of the concepts being discussed.

Using the key visuals and knowledge structures as part of instruction in the social studies class, the underlying linguistic schemata and register of the subject is made explicit to the learner. Students are able to concentrate on applying their knowledge and

understanding of the content more effectively and can move on to more complicated concepts and language structures. The graphic display of new vocabulary essential for the grasp of a concept might be used to introduce a new section of the text. Comprehension difficulties are therefore displayed for discussion from the onset of the task. The LEP student is thus able to establish a pattern of discourse which s/he can recognize while reading texts in a particular subject area (Early, 1990a.; Early & Tang, 1991).

The following study was carried out in order to evaluate the effectiveness of modelling and explicit instruction of Mohan's framework with the use of key visuals on the writing of ESL students in social studies tasks. Both process and product were seen as integral and, therefore, analysis of the pretest and posttest results includes discussion on data collected by the researcher during the treatment sessions. This included observations of student activity and comments as they were introduced to the graphic.

## CHAPTER THREE

### METHOD

#### PRELIMINARY OBSERVATIONS

As a preliminary to the development of the study presented in this thesis, the researcher carried out a short pilot case study of an ESL subject to compare the student's communicative ability and success as opposed to his academic ability and success. The data from this study revealed that the participant was fluent in his command of language in situations where context-driven discourse which required general social language was used. However, the participant was unsuccessful in academic circumstances where he was required to complete science and social studies tasks which required knowledge of these specific language registers. The researcher introduced simple visuals which covered the structures of classification and cause and effect. Using material used in his regular class, the participant was encouraged to write using the visuals and to construct new visuals with the help of the researcher. The progress shown over a short period of time in this pilot study encouraged the researcher to try out the framework structures and graphics with a larger group of students at the high school level.

#### RATIONALE FOR THE FOCUS OF THIS STUDY

For the study reported in this thesis, the researcher chose to work with participants from eighth to tenth grade, based on the

results of research by Collier (1987, 1989) which point to this age group of ESL students as being the most at risk. In addition, the researcher focussed on intermediate language level students in order to collect data on their ability to complete written tasks using the concepts and register specific to Social Studies subject matter. The study also set out to determine whether or not instruction in the structures with the use of visuals could be effective at this level.

Results from the study carried out by Tang (1989) on a group of forty-five seventh graders indicate that instruction in the use of graphics received positive responses. Tang reports that after modelling on how graphics could be used for expressing knowledge contained in their social studies texts, and construction of their own tree graphs "... most of the students perceived graphics as facilitative of comprehension and recall after they had been taught the technique" (p.169).

In Vancouver schools both ESL and regular subject teachers have implemented explicit instruction of the knowledge structures using graphics in their classes. This study was organized in order to gain some insight into how instruction in the organizational patterns of knowledge structures, using graphics, might affect the comprehension of concepts embedded in social studies texts as revealed in the writing of intermediate ESL students. In order to test the efficacy of instruction in the type of language prevalent in a particular register, the tasks were related to concepts and material contained in the social studies curriculum.

## THE RESEARCH STUDY

The study was carried out at one high school in the Surrey School District. In order to identify the participants the researcher approached all students in the 8th - 11th grades, listed as ESL by the school, to determine if they would be willing to take part in the project. The researcher explained the nature of the study and the extent of participation required. All ESL students in these grades were given consent forms to take home explaining the project in which they were asked to take part. Parents/guardians of students willing to participate and the students themselves each signed letters of consent (Appendix B). One week was given for the return of the permission forms. The researcher considered the timetables pertaining to all affirmative responses in order to determine the logistics of setting testing and treatment sessions so that there would be the minimum of disruption to the students' timetables.

The experimental design used for this study consisted of a pretest, treatment and posttest for all the participants. The performance of each individual was assessed to ascertain the extent of progress she/he had made in their writing. The subject thus "... serves as his own control" (McReynolds & Kearns, 1983, p. 25), and is equally exposed to extraneous influences during the treatment period. This format was chosen to avoid confounds which occur when half the students act as the control group which do not receive the treatment. Confounding influences may be due to differences in age, first language, length of time in target language environment,

and previous amount of schooling. These variables were considered, however, when qualitative analysis of the participants' writing and comments made during the treatment sessions. As sixteen case-studies were included in the data collection and analysis, the individual case studies are used in cross-case analysis, as in a multiple-case study design (Yin, 1989).

The three knowledge structures, cause and effect, evaluation, and classification were tested in the students' pretest and posttest writing. However, in the treatment sessions only the two knowledge structures cause and effect and evaluation were explicitly modelled and taught to the participants. The knowledge structure, classification, was not covered during the treatment session and, therefore, was considered the control.

### THE PARTICIPANTS

The aim of the initial study had been to work with students taking both social studies and science classes. However, many of the students were not attending both of these classes. Students who had agreed to take part in the project were asked which of the two subjects they found more difficult. The overwhelming response pointed towards the difficulty of successfully participating in social studies classes and completing required tasks in these classes. Therefore, the participants for the study were chosen from those students attending both ESL classes and mainstream social studies classes. In addition, the researcher chose to concentrate on students

who were deemed intermediate language students by the ESL department. Those students who were no longer attending ESL classes, even though they were listed as ESL by the school, were not included as their language proficiency in English was considered to be advanced. The participants who took part in the study were thus intermediate ESL students, grades 9 - 11, who were attending both ESL and the mainstream social studies classes.

Eighteen students were initially included in the study. Two students left the school midway through the treatment and were omitted from the study description and analysis. Four of the remaining sixteen students attended 8th grade social studies, four 9th grade classes, and eight were enrolled in 10th grade social studies classes. The ages of the students ranged from 12 to 19 years of age. Mother tongue languages included, Mandarin, Vietnamese, French, Malay, Farsi, Hindi, Punjabi, Urdu, and Tagalog. Seven students spoke an additional language other than their mother tongue and English. These languages included Fijia, Greek, Hindi, Punjabi, and Hakka. Length of time spent in the target language environment ranged from three months to three years. Two students had had interrupted schooling in the last five years. This information was included in the qualitative notes of the study.



## THE TIMEFRAME

The data collection covered a seven week period, 11th February to 27th March, 1992. This excluded a period of one week for a school vacation.

After meeting with the social studies and ESL teachers it was decided that the test and treatment sessions would take place during the students' ESL classes. This meant that students did not miss their academic classes. It also made the grouping of students more cohesive as several took the same ESL classes. This was not the case in their social studies program where the participants in this study were divided among eight different social studies classes. The school did not have shelter classes for academic area subject areas.

The researcher met with the Social Studies teachers to determine which material had been recently covered in their classes. The pretest graphics and tasks were based on this information. The researcher also compiled a list of concepts and texts which were to be included in social studies lessons for the following six weeks. The treatment sessions were based on the material students were currently studying in their classes. After the initial testing sessions students were asked to indicate the section in their textbooks on which they were currently working. The gathering of this information did prove frustrating as so many teachers were involved and the breadth of material, even between grades, was extensive. Nevertheless, it was deemed important that the tests and treatment

reflect content and language that the students were experiencing in their social studies classes.

### ORGANIZATION OF THE TREATMENT SESSIONS

The sixteen students were divided into five groups. The groups were organized in this way to ensure the least disruption to the students' academic timetable and to keep the grades together. However, due to time constraints, one of the groups consisted of students from two grades, 8th and 9th. The treatment sessions were held in the school library.

Group one: 1 student - 8th grade (a second student left )

Group two: 3 students - 10th grade

Group three: 6 students - 3 in 8th grade and 3 in 9th grade

Group four: 1 student - 9th grade (a second student left)

Group five: 5 students - 10th grade

The study covered 9 sessions. Each session was one hour.

Pretest: 2 sessions

Treatment: 5 sessions

Posttest: 2 sessions

The pretest and posttest sessions were held in the faculty conference room. As space was limited, eight 8th and 9th grade students were taken together for the tests and the eight 10th grade students took the tests at a different time on the same day. Identical instructions were given to each group.

The visuals were handed out and the directions specific to all the tests were read out: "Use the information in the chart and write a short essay on ... You will have fifteen minutes to write up the information from the chart. You may add information you think necessary." Students were able to ask questions to help clarify these directions and were instructed to read through the visual for five minutes so that any vocabulary queries could be dealt with by the researcher. Each student was then given a sheet of paper and asked to write down their name, grade, and the date at the top. They were then instructed to begin the task. The researcher kept field notes on student performance and recorded any queries that students raised during completion of the task. These are discussed further in Chapter Four.

The test tasks using classification and cause and effect visuals were completed during the same session; a total of twenty five minutes was allotted to explanation and time on task for each visual. Two days later another pretest was given to the students using the same procedure. The emphasis of this visual was on the use of evaluation language and the task required the student to evaluate a topic which they had studied recently in their Social Studies text. After this task was completed the students were asked for information including:

1. Main language spoken at home
2. Any other languages spoken by the student
3. How long s/he had spent in an English-speaking environment

#### 4. His/her present age

Further information was also obtained from the school lists:

1. Date of birth
2. Grade given in the first semester and second semester by the social studies teachers. (Table 1)
3. Teacher comments on student's performance in both social studies and ESL classes.

At the end of the pretest sessions students were also asked to comment on the visuals, the task set for the pretest, and their participation in their social studies classes, and the tasks which were set by their teachers in this academic area. The students' comments were recorded by the researcher.

The groups then met for four treatment sessions (one hour per week for four weeks). After a one week vacation break, a fifth session was held before the posttests were administered. Students, therefore, received a total of five hours of instruction on the principles and evaluation structures. There was no instruction given on the classification structures as it stood as the control. It was hypothesized that there would be significantly more improvement in student writing in the tasks using the structures covered during the treatment, that is cause and effect and evaluation. The structure of classification was chosen as the control due to the fact that it contains language and conceptual organization which is less complex than the other two structures. Therefore, any differences in writing after instruction in use of the more complex structures (cause and effect and evaluation) would be of more significance. Nevertheless, due to

the interactive nature of language and the presence of examples of all the structures in the texts studied during the treatments, students may well have applied what was covered in the treatment sessions to the classification tasks as well. There may have been, therefore, a certain amount of transfer from the treatment structures to the control structure. Nevertheless, the researcher gave students no explicit instruction on classification structure. The treatment during these sessions followed the same format for each of the groups.

Table 1

Student Grades in Social Studies With Time Spent in English-speaking Academic Environment

Subject	Length of Time (in months)	Social Studies Grades	
		Fall Semester	Spring Semester
A	24	C-	G+
B	12	C	E
C	18	E	C-
D	6		C-
E	18	E	C-
F	36	G+	C-
G	4	NM	NM
H	7	B	B
I	4	NM	NM
J	24	E	E
K	18	C-	E
L	15	NM	C-
M	17	C	A
N	12	NM	NM
O	7		A
P	36	C-	G+

NM = No Mark Given    E = Fail

## TEXTS USED FOR TESTING AND TREATMENT SESSIONS

Content material relevant to the grade of the students. was taken from the following Social Studies' texts:

8th Grade: Patterns of Civilizations (Prentice-Hall Canada Inc.,1984)

9th Grade: Patterns of Civilizations Vol. 2 (Prentice-Hall,1985) or Exploration Canada (Oxford University Press (Canada), 1979)

10th Grade: Our Land: Building the West (Gage Educational Publishing Company, 1987)

## OUTLINE OF TREATMENT SESSIONS

### SESSION ONE:

- 1) Researcher presented the pretest graphic, introducing the discourse structures used to convey concepts of cause and effect. The participants were encouraged to comment.
- 2) The researcher constructed an example of writing on a large piece of paper as a visual. Students gave input during this activity. This served as a model answer to the pretest task. In the sessions with two different grade groups, while the students of one group worked with the researcher, the other group worked together and then presented their ideas and questions to the researcher.

### SESSION TWO:

The same format was used as for session one, but utilizing the structure of evaluation.

- 1) In the initial stages of this session it became apparent that the students had no background knowledge as to how choices are made or the language required to compare and analyze choices. This ability is essential before any choices can be evaluated and discussed.
- 2) Therefore, half the session was spent introducing the concept of rating different options and the language which is inherent in choosing and stating reasons for choice.
- 3) Then the choices were evaluated and an example of the written task required for successfully completing the pretest task was modelled by the researcher.

### SESSION THREE:

- 1) The students were given a prepared list of the basic language necessary for discussing successfully tasks which included the language and concepts of cause and effect (See Appendix C). Again the model of the pretest was used to explain vocabulary which the students found difficult to grasp.
- 2) The researcher assigned the students a section of the chapter they were currently studying in their social studies class and asked them to look for any characteristics or organisational language which indicated discourse of cause and effect.
- 3) The students pooled their observations.



- 4) A question was posed relevant to the concepts inherent in each student's text and they were asked to construct their own visual. The last part of the session involved students using their visuals to answer the questions in a written format, that is, as an essay task (See Appendix D).

#### SESSION FOUR:

The format was the same as for session three with the focus on observing relevant examples of evaluation discourse. Again, more time was spent establishing the actual parameters of evaluative discourse: the reasons for evaluating and the discourse required in order to organize a written evaluation of a concept or concepts.

#### SESSION FIVE:

- 1) The students worked on prepared questions and accompanying visuals for either the structure of principles or the structure of evaluation. As they worked on the task the researcher circulated and answered queries.
- 2) The students talked about how they were going about completing the task as they worked and the researcher noted their comments
- 3) An interesting point was raised by the group of 10th grade students: language specific to cause and effect was also apparent in the discourse they were using to evaluate, and indeed their writing on the question which focussed on the structure of principles could also be extended to include rating and giving an opinion.

- 4) In this group a visual was then constructed collaboratively using a combination of the discourse inherent in the two structures, principles and evaluation (Appendix E)

The posttests were held in the same order as for the pretests with a two day interval between the first two tests and the third.

Attendance at the treatment sessions was high. Participants who missed a session received equal instruction at another time so that all participants in the study received the same amount of instruction, except for participant P who attended the first three of the five treatment sessions. Participant I completed the pretests and treatment but left the school before the posttests were administered. The data from these two participants is included in the study.

## RATING

All tests were keyed into a word processor by the researcher following the students' organization of their writing. In order to maintain anonymity the researcher labelled the students 1 - 16 and this label was used for the tests. In addition, the pretests were labelled A/B/C and the posttests 1/2/3. This was done so that the raters would not have prior knowledge of the test status, i.e. pretest or posttest, or nationality/gender of the students which might affect their ratings.

The participants' essays on each test were collated with the respective pretest and posttest graphics. A note on each of the

graphics indicated if the main conceptual structure being tested was classification, cause and effect, or evaluation. The two raters and the researcher chose in random order a specific graphic and the relevant written tasks. It must be noted here that the diversity of the material and the large number of graphics did cause some concern. The raters found it difficult at times to focus on the amount of information, as each graphic not only covered a different content area but also the conceptual content relevant to each of the three structures. This concern will be discussed further in this chapter under the heading "Vagaries in working with students".

The first rating chart used (See Figure 4) was taken from a study made by Dr. B. Mohan and a team of researchers and ESL instructors in the Vancouver School District. Analysis of this study's data is in progress. The researcher chose this particular format in order to maintain a conformity of research procedure so that comparisons might be possible between the two studies. Using the format the three raters marked the same four tests and then compared their ratings. This was done to find any disparate allocation of values and check for consensus. A difference of more than two points was discussed. During this initial rating one of the raters gave lower scores for writing in which the information on the graphics had been successfully glued together with the correct structures, but showed no evidence of ownership. The raters agreed that three marks would be deducted if the words of the graphic were used without evidence of the writer being able to present the information in his/her own

## Rating Chart Used in Mohan Study

(Mohan 1991)

### Guidelines for Scoring Pretests and Posttest

1. Classify essays into one of the following categories based on a general impression NOT by checking off each descriptor

Value	Criteria
10	Information : complete and correct Structure : organized (introduction/conclusion etc.) and coherent throughout Expression : express relationship (e.g. cause/effect) clearly and correctly
8	Information : nearly complete and mostly correct Structure : generally organized and coherent Expression : express relationship adequately only minor flaws OR Complete in one/two, flaws in the other/s
6	Information : adequate Structure : occasionally coherent Expression : some flaws OR Nearly complete in one/two, flaws in the other/s
4	Information : incomplete, only occasionally correct Structure : lacking in organization and coherence Expression : serious errors OR Adequate in one/two, lacking in the other/s
2	Information : incomplete and/or incorrect Structure : completely disorganized and incoherent Expression : inadequate, fail to communicate
0	No attempt to address question Cannot be evaluated

2. Classify essays within each category into high and low, high = value of the category e.g. 10  
low = value - 1 e.g. 9

words. If this deduction was made, the rater would indicate this on the rating sheet.

When all tests had been marked the values were compared and any scoring problems were addressed. Several issues were raised concerning the rating chart. It was felt that the determinators for each value on the rating chart were too vague. The raters also decided that the range of 0 - 10 was inappropriate to the task set for the intermediate level of the students. In addition, the raters were unable to come to consensus on part of the rating in category four: Information: incomplete, only occasionally correct. As it was increasingly apparent that the raters were unable to use this rating sheet with any degree of confidence it was agreed that a new rating chart would be created.

#### CRITERIA FOR THE NEW CHART

One of the raters raised a concern that the students were merely copying the information contained in the visuals and so this criterion was included as a descriptor for ranking the essays. The issue of plagiarism and the level of language proficiency at which it becomes a concern will be dealt with further in the analysis discussed in chapter four. Much of the test writing indicated that for the most part understanding of the topics was minimal and therefore, the graphics were often used as word lists. It is important to point out again that all the topics given to the students had been covered in their regular social studies classes. Therefore, an assumption had

been made by the researcher that the students would have a grasp of the main concepts and that instruction in the treatment would focus on modelling the appropriate language required to express the relationships (e.g. cause/effect) clearly and correctly. This point is further discussed in this chapter under the heading "Vagaries in working with students".

Use of the specific language inherent in tasks concerned with classifying, discussing cause and effect and evaluating was also included in the marking chart as genre specific. For example, value would be given to student writing which indicated the language used for cause/effect such as "This resulted in", "The effects were". In addition, points were allocated for writing which showed a connection between the concepts underlying the prompt words used in the graphic.

The descriptor of formatting focussed on the presence of paragraphs (using a paragraph to indicate a new idea), an introduction and a conclusion in the participants' writing. The correct use of indentation to show paragraphing was not included in this descriptor.

It was agreed that the language level of the students required the raters to place a ceiling on the values and limit the categories to seven (See Figure 5).

The second rating session using the second chart was held after a two week interval in order to reduce influence from the raters initial introduction to the participants' writing. The tests were again grouped with the appropriate graphics. After the marking had been recorded

Figure 5

Second RatingSheetVALUE AND CRITERIA

7: better quality of everything in 6	
6: paragraphs look good: intro/conclusion	ownership (student is able to show he/she understands the content by using 'original wording - not specific to language in the graphic) genre specific words (class, cause/effect, evaluation)
5: paragraphs, intro/conclusion	connection genre specific new words start of ownership
4: copying with some changes paragraphs, intro or conclusion	connection genre specific trace of original words
3: copying paragraphs, intro or conclusion	some connection some genre specific
2: copying minimal formatting/paragraphs no intro/conclusion	some connection
1: copying no formatting	no connection

any scores with a discrepancy of more than one point value were discussed and consensus reached within a one point difference.

In order to make a more qualitative study of the tests, a participant was randomly chosen from each grade (one 8th grader, one 9th grader and one 10th grader) and his/her pieces were read by each rater, each of whom then made qualitative comments the pieces of writing. The structures were also grouped. For example, for each of the three subjects both the pretest and posttest writing concerning classification (A/1) were read and ranked, then cause/effect (B/2) and evaluation (C/3). Specific characteristics present in the pieces of writing were noted. Finally the six tests for each individual were ranked with accompanying comments in order to gain an overview of each subject's ability to express the three relationships correctly.

The rating session resulted in quantitative data from the scoring sheet and qualitative data from analysis of the writing of three participants chosen randomly from the three grade groups. The data collected by the researcher during the treatment sessions was analyzed by the researcher and compared with both the quantitative and qualitative findings from the tests. These data included written text, queries and comments made by the participants as they worked on the tasks, and observations made by the researcher during the treatment sessions. These findings will be discussed in Chapter Four.



## THE WONDERLAND OF DATA ANALYSIS

At this point of the methodology discussion I think it is important to look at how the design and implementation of this research study was revised. The researcher set out to evaluate the effect of instruction on the writing of intermediate ESL students in social studies tasks. In the course of the testing, treatment and rating several essential issues arose. Whilst dealing with these issues the researcher made changes to both the treatment sessions and the rating criteria. In addition, the researcher sought to work closely within the participants' school routines, incorporating current subject matter into the study material and basing the tests and treatment on both student and teacher feedback. This method of data collection affected the design of the study.

### EXPLORING THE VAGARIES IN CONCEPTUAL DESIGN

#### USE OF A PRIOR RESEARCH MODEL

As mentioned previously, the first rating chart used in this study had been applied to earlier research (Mohan et al.), results forthcoming. It was hoped that by using the same format a comparison could be made between the two studies, thus encouraging continuity of research. On reflection, however, the chart had been used to rate the writing of advanced ESL learners in the earlier Mohan study, and it proved to be inappropriate for rating the

essays of intermediate level ESL students. Therefore, it was discovered that the chart was not, in fact generalizable to a broader population. Using a revised chart the raters were able to evaluate with more effectiveness the writing of students at this intermediate level. The second chart was developed on the basis of input from the three raters in this study. As such, it too is subjective. The need to change the format of the researcher's rating device underlines the problem of establishing a format which could be used successfully in repeat study situations.

#### TRAINING OF THE RATERS

The choice of the two external raters was based on availability and interest in the study. The researcher was the third rater. This was not foreseen to be a conflict as it was felt that the consensus of the two external raters would counteract any bias on the part of the researcher's rating. However, the educational beliefs and experiences of the three raters played an important part in their evaluations. The researcher's ten years of experience included teaching a high school subject, social studies, elementary classes, and ESL throughout the school. Rater two had taught for fourteen years, covering a wide range of high school subjects with a major focus in the English department. The third rater had taught for one year as an ESL teacher working on pullout programs with elementary students, though her degree in education had focussed on high school English. The researcher felt that it was important to include both the concepts of ESL education, and crucial input of the views on writing

of a high school subject-area teacher when rating the participants' essays. The training of the judges in the use of the first device was unsuccessful. The points raised have been discussed earlier and it was clear that these questions were well-founded, based on invaluable teaching experience and roles in both ESL and subject-area classes. As the researcher had a foot, so to speak, in both camps, an attempt was made to try and reach consensus between the two polarized parties.

The researcher noted the suggestions made and it became clear that the queries raised by the two raters were important and would have to be dealt with in order to establish a rating chart which would be acceptable to all raters. Even though it may have been possible for the researcher to insist that the first chart be used, discarding any of the queries raised, the results of the rating may not have reached any consensus. In addition, the researcher would have ignored an essential tenet of research in that all the vagaries and changes which may arise during such a study are of importance. The fact that the raters had raised several queries was a valuable asset to the research. The second chart therefore, included input from all three raters and reflected the demands of both the ESL teacher and the high school subject teacher regarding the rating of student writing in these tasks.

### MECHANICAL DATA ANALYSIS

The values from each rater were keyed in to the statistical programme. The reliability between the three raters was less than

75% and therefore the rating of only the two external raters was used for the analysis. The interrater reliability between these raters was 90%. The third rater's marking values was used only when these two raters did not have the same score for a piece of writing (10% of the time) in order to reach agreement for the score entered into the statistical analysis.

#### LEVEL OF TESTING DEVICES SET BY PRIOR RESEARCH PARAMETERS

The format of the visuals used for both the testing and the treatment sessions was adapted from the Mohan research project. The format for each of the three structures was kept uniform. For example, the researcher organized the visual for the cause and effect task as a flow chart. The information for the classification essay was laid out as a tree diagram. In order to strive for naturalism in the data collection, the researcher chose to use the topics and concepts which the participants were currently studying in their social studies classes. The subjects willing to take part in the study were not, however, grouped into one social studies class in each of the three grades. In addition, within each grade the different social studies classes were focussing on a variety of topics within the grade curriculum so there was no uniform topic to focus on for the study. The researcher needed to prepare more than the six visuals anticipated for each grade, eighteen in total. Indeed, the final number of visuals required for the pretests and posttests numbered

thirty. The raters had difficulty focussing on such a varied number of visuals and topics.

Though the topics had been discussed with the subject-area teachers prior to the development of the visuals and the completed visuals were handed out to the teachers prior to the data collection so that comments and possible revisions could be made, no feedback was forthcoming. The researcher was dependent upon the knowledge of the teachers as to the level of the students, and, therefore, the lack of information did affect the efficacy of the visuals. During analysis of the essays and the student comments during the treatment sessions it was apparent that the level of some of the students was too low for the visuals to be used as effectively. This may be attributed in some part to the complexity level of the language and concepts contained in the social studies texts. However, it was felt by the researcher that by using the actual information and organizational structure conveyed in the class texts a realistic picture of the ESL student's dilemma is relayed.

## EXPLORING THE VAGARIES OF WORKING WITH STUDENTS

### TIMETABLING

In order to keep disruption of the students' studies to a minimum, the researcher organized the sessions to coincide with the students' ESL classes. This resulted in the organization of five groups. Though the researcher was able to keep the groups to one grade level in all but one of the sessions, within each grade the

students were working on a variety of topics in their social studies programs. By accommodating the studies of the students the researcher hoped to establish the type of environment which would be prevalent in mixed ability level classes.

### TEACHER FEEDBACK

Due to the constraints of time and the pressure upon the social studies teachers, there was a minimum of feedback available to the researcher. The researcher was not a teacher of any of the students, and, therefore, was dependent upon information from the participants' teachers in order to revise the conceptual design to accommodate student level and projected social studies knowledge.

### QUANTITY AND DIVERSITY OF TOPICS COVERED BY THE VISUALS

As the ESL students were scattered throughout the social studies classes, it was not possible to work with participants whose social studies topics were uniform. As outlined under the discussion on the vagaries of this study's conceptual design, in an effort to accommodate the current topics studied by all the participants the researcher applied a large number of visuals which covered several topics within each grade level.

### THE PARAMETERS OF THE DESIGN

After considering the concerns of the raters, the researcher made the decision to reevaluate the rating chart and the new chart was constructed using the input and expertise of the other raters.

Though the researcher did consider retraining other raters this would have skewed the study. The vagaries listed above are all important aspects of this study and as such could not be ignored or replaced with a new method or different raters. If the aim of research is to test and explore the effects of methods and review the reaction of real students to tasks and their studies, then it is essential that the thesis report all aspects of the research study, both positive and negative. Furthermore, the results of the data analysis discussed in the following chapter takes into consideration the complexities which arose as part of the study design.

## CHAPTER 4

### RESULTS OF THE STUDY

This study included both quantitative and qualitative analyses of the data. The qualitative observations were made as the participants took part in the treatment session and serve to explain and support the findings of the pretest and posttest quantitative study.

Therefore, findings and discussion on the two types of data will be reported together. It is important to note that as the study was made with just sixteen participants, the results are descriptive, and as such cannot be applied as examples of the general ESL population.

The analyses considered the following hypotheses:

- H1 That students' writing using the classification visual aid and structures would not improve significantly.
- H2 That students' writing using the cause and effect visual aid and structures would improve significantly
- H3 That students' writing using the evaluation visual aid and structures would improve significantly.
- H4 That there would be more participants showing improvement in their writing using the cause and effect visual aid and structures than the evaluation visual and structures.



## QUANTITATIVE ANALYSIS

The quantitative analysis was based on the scoring of the pretest and posttest writing assignments. As described in Chapter Three, the tests were scored by three raters and the marks were compared to reach consensus (See Table 2).

The tests were divided into three categories:

Classification

Cause and Effect

Evaluation

The Classification visual aid tests acted as the control, as no treatment was given to the students using classification visuals, concepts or language structures.

Analyses of the students' writing revealed that fifteen of the sixteen participants showed an improvement in their writing as shown by the ratings (See Table 3). As discussed in Chapter Three (Figure 5), the value and criterion was laid out from 1 to 7. Any difference between the pretest and posttest of one point or more was considered to be significant. Because the treatment time was brief, four hours in total, the researcher felt even a one point improvement was significant. For example, if a participant had improved from a value of two in the pretest to a value of three in the posttest, s/he had started to include some genre specific language and begun to format his/her writing.

In the tests based on the classification structures, half the students made some improvement in their writing. In the task requiring cause and effect language, fifteen students, all but one of

Table 2

Ratings given for Pretest and Posttest Student Writing

Ratings						
Subject	Pretests			Posttests		
	A	B	C	1	2	3
A	1	2	1	1	3	2
B	1	2	1	2	4	4
C	2	1	2	2	2	3
D	2	3	1	2	4	5
E	2	2	2	2	2	4
F	2	2	2	2	4	3
G	1	1	3	2	4	3
H	2	3	3	3	4	4
I	0	0	0	2	4	absent
J	3	3	2	3	4	4
K	1	2	2	2	3	3
L	1	1	1	3	4	3
M	2	1	3	4	4	3
N	1	2	2	1	3	2
O	2	2	3	4	4	6
P	2	1	2	2	2	2

Table 3

Difference in Rating Between Pretest and Posttest Scores


---

Difference in Rating Points Between Pretest and Posttest			
Knowledge Structures Tested			
Subject	Classification	Cause/Effect	Evaluation
A	0	1	1
B	1	2	3
C	0	1	1
D	0	1	4
E	0	0	2
F	0	2	1
G	1	3	0
H	1	1	1
I	2	4	absent
J	0	1	2
K	1	1	1
L	2	3	2
M	2	3	1
N	0	1	0
O	2	2	3
P	0	1	0

---

the group, improved their writing. In their evaluative piece of writing eleven students improved. Due to the short treatment period, which lasted a total of five hours, any improvement of one point or above on the rating of the posttests has been included as clinically significant (See Table 4).

As there was little difference between the ratings given to the pretest writing on the three structures, most of the participants receiving either a rating of one or two for all their pretests, it would be fair to say that the visuals were relatively uniform in terms of level.

Table 4

Gain in Writing Proficiency in Posttests over Pretests

Test Structures	Grade Levels							
	Eight		Nine		Ten		Total	
	No.	Total	No.	Total	No.	Total	No.	Total
Classification (Control)	1	4	2	4	5	8	8	16
Cause and Effect	4	4	4	4	7	8	15	16
Evaluation	4	4	3	4	4	8	11	16

### ANALYSES OF THE CLASSIFICATION TESTING

Half the participants made some progress in their posttest writing on a topic which required classification language and structure. Most of the participants were able to recognize some of the groups displayed by the visual aid and indicate that there were different groups in their writing. It is important to point out that participants might have transferred some of the skills learned during instruction given on the other two structures during the treatment sessions to their classification posttest writing. However, the improvement in the the students' posttest writing using the classification visual aids did not reflect an increase in use of specific classification language and structures. Only three of the pieces of writing showed a gain in rating of two points.

Of the three structures included in this study that of classification was found to be the most prevalent in both oral and text-based language in Vancouver Schools and students often receive modelling and examples of this structure both in and out of the classroom. As Tang (1989) points out in her study of visuals in two classroom environments, visual aids concerned with describing and/or classifying were the most common, followed by sequencing. If we consider this factor, it is interesting that the ratings for the classification pretest were not significantly higher than those for the other two structures. It could be suggested that the format of the visual was new to the participants and this was reflected in their low performance level. This hypothesis is supported by Tang's findings that the students in her study:

... did not know how to use graphics to explain (Duchastel 1979), represent (Levin et al. 1987) or reinforce (Hunter et al. 1987), organize and interpret (Levin et al. 1987) knowledge or information (Tang, 1989, p.89).

This is an important observation as graphics are often incorporated in class texts and construction of a visual is sometimes required in tasks as directed by the *B.C. Social Studies Teachers' Guides*.

Nevertheless, the performance of the participants in the study reported in this thesis did not indicate that they understood how to read or use a visual to help them with their reading or writing on a topic.

Even after the participants became relatively familiar with using and creating cause/effect and evaluation visuals during the treatment sessions, this knowledge did not appear to transfer to their performance using the posttest classification visual. A close look at the Classification pretests and posttests showed that any improvement made was in the organization of the writing into paragraphs. This could easily have been carried over from the treatment sessions as it is an organizational component present in any writing, irrespective of the type of structure being used. This lack of transference might have been due to the short duration of the study. Additional instruction in the other structures may have carried over if the participants had had more time to consolidate what they had learnt.

Nevertheless, the fact that the pieces of writing concerned with the "control" structure, which was not part of the treatment, did

not improve as much as those structures in which the participants were explicitly instructed, does support the hypothesis that direct instruction would have a positive effect on the participants' writing. It would be interesting to see whether or not there would be a marked increase in their writing proficiency in tasks requiring use of this structure, if instruction and modelling of the language and structures of classification were now given to the participants.

### ANALYSES OF THE CAUSE AND EFFECT TESTING

The results of grading indicate that the students made significant progress in their writing using the language and structure for the cause and effect essay. That is to say, their writing showed an improvement in overall presentation and use of language appropriate for discussion on the cause and effect of events.

The single student (student G) whose writing did not appear to improve after instruction in this structure in fact did not improve his/her writing in any of the three categories. As she was one of the students who had spent the least time in an English-speaking environment, four months (See Table 1), it might be hypothesized that : firstly, a basic grasp of language is necessary in order for instruction of this type to be useful: secondly, the student's limited English proficiency may have affected her ability to convey what she had understood in a written format: thirdly, perhaps the concepts contained in the Social Studies material were too advanced and the

student did not have the required background knowledge on which to begin building on the ideas presented during the treatment sessions.

Of the fifteen students who made some improvement in their writing, seven improved by one point, two by two points, three by three points and one student improved four points. However, the latter student did not attempt to write anything on the pretest so this result is undoubtedly skewed. Nevertheless, five pieces of posttest writing which were rated as having improved either by two or three points certainly did indicate that the treatment had had some positive effect. Overall these examples showed that students had begun to organize their writing using the correct connectors, such as "Due to...", "As a result of..", and so on. In addition they appeared able to connect the concept of a cause and its effect(s). The writing had begun in some cases to show some evidence of ownership. However, the students were adhering strictly to the information contained on the graphic even though it was emphasized in the instructions that they could add material relevant to the topic.

The following two passages show the development of coherence in the participant's writing:

**PRETEST TASK (CAUSE/EFFECT):**

Use the information in the chart below and write a short essay on "The causes and effects of Lord Durham's report in 1838".

The visual chart for the task is shown in Appendix F/1.

**WRITING OF PARTICIPANT 'L':**

The causes and effects of Lord Durham's report



Rebellions of 1837 - 1838 alarmed British government to Lord Durham sent as governor general to be responsible for seeking a solution. Lord Durham critic of British government and accused gov't of neglecting the North American colonies that advocated the creation of an elected assembly to include representatives from each colony to join the colonies into a single legislative union and prevent local oligarchies from gaining control of any individual colony, the colonies didn't want a union to effects Durham abandoned the idea of a legislative union.

**POSTTEST TASK (CAUSE/EFFECT):**

Use the information from the chart below and write a short essay on "The causes and effects which resulted in the creation of the Vancouver Island colony". (See Appendix F/2)

**WRITING OF PARTICIPANT 'L':**

In this essay I would like to talk about the creation of the Vancouver Island colony, the cause and how it effect.

First of all, at 1846 the treaty of Washington defined the boundary between the United States and British territories and also by 1848, the annexation of California by the United States made British government feared that Americans might try to take British territory along the Pacific with a few settlers and poorly defended. But in 1849 Vancouver Island proclaimed to be a crown colony and the port Victoria was capital that meant that the Vancouver island belonged to British government.

Secondly, the Royal charter gave Hudson's Bay company a monopoly on trade and commerce that because the company

must establish a colony in five years or control of Vancouver Island would go back to British gov't that made company encourage settlement, and also the company moved its center to Fort Victoria that meant that the company had complete control over Vancouver Island colony.

Thirdly, British government worried that they would lose more colonies that meant that all settlers must buy at least 20 acres and bring five workers with him.  
(unfinished in time allotted).

#### DISCUSSION ON PARTICIPANT'S WRITING:

The pretest writing shows very little evidence of cause/effect structure in the writing or organization of the events. The participant has taken the text from the visual without connecting the concepts and individual causes and effects embedded in the information. This lack of coherence might be due to the participant's inexperience at manipulating a visual to gain information, and as a writing tool. It would have been useful to have also had a pretest which asked the participant to write on a task with the information displayed in the usual text format. Then perhaps a clearer picture of the participant's ability to write on a given topic would have developed.

Nevertheless, after only a short period of treatment the posttest writing shows that the participant is using the visual to construct his/her writing and is not merely copying the text. There is evidence of paragraphing of different topics and relating the causes and effects of events. The sentences are overlong and it appears that the writer has lumped all effects of a cause together.

However, structural terms such as "meant that" and "because" are used correctly and a referent is used "that made" which shows the writer has understood the concept of reason defining an action. No material additional to the information in the visual was added by the participant.

### ANALYSES OF THE EVALUATION WRITING

As hypothesized, the improvement of students' writing on a topic requiring use of evaluative language and structure was not as significant as the results for cause and effect. This meant that fewer of the posttest writings indicated an improvement in the presentation of a discussion using appropriate evaluative language. The pretest rating indicated that most students were unable to follow the requirements of the task adequately. Only one student scored a rating above 2. This difficulty with conveying information requiring evaluation may well have been due to the low proficiency of their language skills. The ability to evaluate choices requires more abstract thought rather than the concrete contextual information used for classifying. It is interesting to note that though it is accepted that evaluation, arguing on a topic, and supporting an opinion, requires more sophisticated language and thought, there is less modelling of this structure both in texts and in classroom tasks. In her study Tang (1989) found that in a Social Studies text and Teacher's Guide choice and evaluation were the structures focussed on the least and when they were included the task was more a descriptive, rather than evaluative one. It was apparent during the

pretests that most of the students had not experienced this type of task before and therefore, had little or no background knowledge to utilize as they read the visual.

In addition, perhaps the task demands for written production rather than oral performance may have reduced the participants' chance to give a true example of their ability to read and understand the visuals. When the researcher used the evaluative visual for instruction during Session Two, and modelled how choices can be made and then evaluated, several students were able to articulate coherently their choices and reasons for each one. Therefore, an oral type of testing measure would perhaps have been more appropriate for this level of student.

In the breakdown of the ratings given to individuals, four posttests showed no improvement from the pretest ratings, four improved by one category, three by two, two by three and one by four. One student was absent for the posttest.

The three students whose writing showed a marked improvement in organization and use of the structures and appropriate language had also indicated during the instruction period that they were able to evaluate in their own language. This indicates prior experience and background knowledge of the essential concepts. Below are examples of student writing on the evaluation tasks.

**PRETEST TASK (EVALUATION):**

Use the information in the chart below and write a short essay evaluating "The positive and negative reasons for Confederation". (See Appendix F/3).

WRITING OF PARTICIPANT 'O':

## Reasons for and Against Confederation

People who were interested in Confederation thought that a legislative union would establish a central government and they'd have one system of laws, one taxation. And the central government would be strong enough to protect every province and avoid conflict between two provinces. They were also interested in building the intercolonial railway so that they can travel through the whole country. but some people thought that it would be a big problem because of the different region between two colonies. The small populational colonies would be weaker than the others. they also thought that the Canadian culture might be changed.

POSTTEST TASK (EVALUATION):

Use the information below and write a short essay evaluating "The causes of the Riel Rebellion in 1869". (See Appendix F/4).

WRITING OF PARTICIPANT 'O':

There were many reasons that the Metis rebelled. I think the most important one is the Metis were afraid of losing lands again. The Canadian Government bought the North West territories from the Hudson's bay Company in exchange, the Hudson's Bay Company received lands where Metis living. But the Metis were not consulted by either the Company or the Government. They were afraid that the Government would take their lands and traditional way of life again, so they thought that they had to protect themselves.

I'd say that the treatment of the surveyors wasn't the main reason that the Metis rebelled because it was the surveyor's fault. This wouldn't let the metis get angry to the Government. The Government controlled the public lands but it had given the Metis scripts to issue their ownership of lands.

So I conclude that the main reason that the Metis rebelled was that the Government sold the land to the HBCo without negotiating with the Metis.

#### DISCUSSION OF THE PARTICIPANT'S WRITING

The posttest writing shows that the participant is on the way to developing a line of argument and evaluating the facts. The pretest had some elements of comparison but no evaluation of the choices available. During the treatment sessions s/he was able to construct an evaluation visual from a given passage in the Social Studies text. This indicated that the participant had developed a schema which s/he was able to apply successfully in a variety of situations.

Both the task writing examples and observation during the treatment sessions indicated that the participants' conceptual schema needed to include the concepts of choosing and evaluating in order to carry out this task successfully. The two sessions which introduced the language and structure of evaluation appeared to have more value for those students who already had a well-developed schema from their first language experiences. Examples of student constructed visuals from their texts, using both a cause and effect format and an evaluation table, are shown in Appendix E.

As pointed out by several researchers, the most typical structure used in the classroom is that of describing and classifying,

followed by tasks requiring a knowledge of cause and effect structures and concepts. The ability to classify and consider the cause and effect of actions is essential for the student to function in society. Therefore, students are receiving modelling of the structures in their classroom tasks and are able to bring experience from their daily life to these tasks. Though choice is often made in social situations, evaluation is not as prevalent and therefore is not as readily modelled in social situations outside the classroom. At the same time tasks requiring evaluation do not appear to be presented a great deal in texts and classroom activities either. Therefore it might be suggested that more students were able to improve their writing on the cause and effect task because the visual prompted them to apply their background knowledge.

In addition, perhaps those students who were able to gain from instruction in the use of the cause and effect visuals and develop their use of the relevant structures, were not yet ready, either linguistically or conceptually, to attempt evaluative writing. The following are examples of the pretest and posttest writing of an eighth grade participant. The task requires the participant to have an understanding of both evaluation and cause and effect in order to achieve coherence.

**PRETEST TASK (EVALUATION):**

Use the information in the chart below and write a short essay evaluating "The advantages and disadvantages of church control over learning in the Middle Ages". (See Appendix F/5).

**WRITING OF PARTICIPANT 'D':**

Church control over the Preservation of Learning

The Charlemagne ordered monks to copy classical Greek and Latin texts. The most important thing that I think is the Preservation of classical texts and knowledge because they show text books to people so that they could read the books. And the another very important.

POSTTEST TASK (EVALUATION):

Use the information in the chart below and write a short essay evaluating "The most important events and their effects in the 1300s and 1400s in Europe". (See Appendix F/6).

WRITING OF PARTICIPANT 'D':

Events and their effects in 1300s and 1400s in Europe

In this essay I have to write my opinion about what is the most important events and their effects in the 1300s and 1400s in Europe.

In my opinion, I picked the Great Schism of the Church as the most important event because the church authority weakened. This meant that the Monarchs opposed the Church power. Then the Church had lost political power. In addition, the people were angry when the two popes fought each other. And the Church lost religious power.

It seems to me that the second most important event is the Black Death Plague because one-third of people in Western Europe died. The economy affected - this meant that no people to plant and harvest the crops.

For me, the third most important event is Magna Carta signed by King of England in 1215. There are three effects for this, firstly, English monarch did not have absolute powewr.



Secondly, King had to obey the law and thirdly, Rights are given to all classes e.g. nobles, townspeople, and peasants.

I think that the fourth most important event is the French King had absolute power. The Efficient bureaucracy - collected taxes and administered justice. The King able to pay his own army. They also had limited the power of the feudal lords.

I picked Hundred Years War between England and France as the last most important event because it increased in national pride in England and France and then France got back land from England.

#### DISCUSSION ON PARTICIPANT'S WRITING

During the pretest the participant read through the visual and chose two points to include in his writing. He did not appear to understand the concept of evaluating a list of points in this task. However, he does include some cause and effect language and personal opinion. In the posttest the participant read the visual through first and then rated each event and finally the cause within each event. Then he began writing. This technique had been included in the treatment instruction. In this instance the visual did appear to serve the purpose of clarifying the events and their effects and encourage evaluation of the events. Even though there is still little evidence of ownership by the writer, as the material is closely related to the format on the visual, organization and coherence have developed. Indeed, it is essential that LEP students be given formats and patterns on which to build their background knowledge and

language. Even though the writing may appear stiff and has little personal input, the writer has prepared a piece which looks and reads coherently. When this level has been achieved it is much easier to begin to model and encourage use of varied vocabulary and sentence structure.

Examples of the pretest and posttest writing of the three structures from one participant in each grade are shown in Appendix G. These pieces show how intermediate language LEP students' cognitive levels and written ability are as diverse as their language fluency. They also give further examples of the development in participants' writing in the pretests and posttests.

#### PARTICIPANTS' COMMENTS ON THE VISUALS AND THE TREATMENT

The treatment sessions were well-attended and most of the participants appeared eager to use and talk about the visuals. At the end of the pretest sessions the participants were asked if they had ever used visuals to help them with their reading and writing. One of the pretests in fact had been taken from the Social Studies text out of a section which the students had already studied in their Social Studies classes. Only one of the eight participants from this grade said he had noticed this chart in his text book. None of the other participants said they used visuals to help them and they did not know how to construct a visual from a text or discussion.

By the end of the first two treatment sessions which had focussed on cause and effect language and visuals, all but four of the participants had managed to construct their own visual from a piece of text containing mainly cause and effect structures and language.

Of these four, two of the participants had been in an English-speaking school system for three months only. One of them was able to use orally some of the cause and effect structures to explain the main ideas in the text but had difficulty writing the information down. This may have been due to a lack of experience with written tasks or perhaps the actual mechanics of forming the letters as her first language was Arabic. The inability of the other two participants to construct a coherent visual was perhaps due to disinterest rather than a lack of expertise.

Construction of the evaluation type visuals from the text proved more difficult for the participants to complete. Most of them were able to formulate orally the concept of choosing and then evaluating choice when given a visual prepared by the researcher, but had difficulty picking out relevant information from a piece of text from their Social Studies books. The participants who appeared more able to complete the task successfully had already shown facility in their construction and discussion during the cause and effect treatment sessions. This appears to support the notion of evaluation being the most complex of the structures and that often in order to understand the evaluative language and concepts embedded in the text, participants required an understanding of cause and effect concepts and language.

Comments made by the participants during the treatment sessions as they used and constructed the visuals were as follows:

"The cause tells us what made it happen and the effect tells us what happened to the cause."

"It (pointing to the arrow) explain more easier because if somethings happen then there's a effect."

"Difficult to pick which is the most important because they are all important." (when asked how they found the evaluating tasks)

"It is easier to get the main idea and pick out ideas. It is easier to understand."

"Helps me focus on the problem."

"I can see some more details and the picture it makes."

"Easier because I made a picture of what happened in my mind from the words."

Most of the participants indicated that they would try to use the visuals again though they felt they needed more instruction in the format and structures. At the end of the posttest session all the participants looked through their respective Social Studies texts and discussed any visuals they found, including drawings, diagrams, graphs, timelines, and reproduced photographs.

## CHAPTER FIVE

### DISCUSSION

The objective of this study was to discover whether or not instruction in the knowledge structures, using visual aids, improved the writing of intermediate LEP students. The quantitative data was collected from pretests and posttests completed by the participants, with an interim treatment session focusing on two of the three structures used in the tests. The majority of the participants showed improvement in the test tasks which required the use of the two structures explicitly taught during the treatment sessions.

During the course of the study, the researcher discovered that the qualitative data collected during the treatment sessions, together with the information on the participants regarding age on arrival, type of first language schooling, and length of time in English-speaking school environment, were valuable in helping to explain the test results. These additional data helped with the formulation of possible reasons for improvement, or lack of change, in each participant's writing. During the treatment sessions the participants were encouraged to voice their concerns and deductions as to the use of the visual aids, and the structural patterns displayed by them, as tools to help support their reading and writing on Social Studies topics.

## LIMITATIONS OF THE STUDY

In reviewing the results of this study, several limitations of the sample, procedure and instruments, and rating procedure should be taken into consideration.

### SAMPLE

1. As just sixteen ESL students participated in the study the results can in no way be generalized for other ESL high school populations.
2. In any study which is made in the school environment, especially by a researcher who is not a part of the instructional staff, the researcher must contend with the vagaries of timetabling and judging how much background information on the topics is presented by each of the teachers in the participants' regular academic classes.
3. The generalizability of a study of this type is limited as the participants' backgrounds and experience in English-speaking situations are so diverse for LEP students. It would be impossible to study a group of LEP students without taking into consideration these individual factors.
4. The intermediate level of ESL students necessarily covers an extensive range of abilities; some students may be considered intermediate in their written language level but may be at a higher level of oral fluency, or vice versa. As a result, the level of the graphics was possibly too high for some of the students. More simplified graphics might have yielded different results.

## PROCEDURES AND INSTRUMENTS

1. Though the information from the qualitative study was obtained through discussion with the participants and school records, I believe that a more extensive study, which included interviews with parents and teachers, would be most useful in establishing the parameters in which learning is taking place, both in and out of the school environment. This information would enable the researcher to establish the language environment of each learner. This may reveal interesting comparisons and questions such as the following:
  - a. Do students who are not involved in an English-speaking environment outside the class, progress at the same rate in academic-area classes as students who are almost totally immersed in English?
  - b. Do some LEP students need to use the graphics and learn the concepts of the structures in their first language in order to use them as a valuable resource in their academic classes while they are learning English? This latter point will be discussed further in this chapter.
2. Though the researcher made every effort to keep the material used in this study as close as possible to the content-area covered in the participants' classes, the tasks might not have been the type with which the participants were familiar, or had experienced in their Social Studies classes. The possibility of working with participants within their regular academic-area classes would help establish what type of tasks are required and

how success is measured in written tasks by their regular Social Studies teachers.

3. The duration of treatment was brief. It was apparent from the participants' progress, and their comments during the sessions, that a longer treatment period might have resulted in greater improvement in the posttest writing performances. In addition, the participants' construction of visuals while reading the Social Studies texts, and the use of these for their written tasks, might have improved significantly.

#### RATING PROCEDURE

1. The changes that had to be made in the rating charts suggest that caution must be taken when using data which includes scored pieces of writing rated on a scale which is open to individual interpretation. Each of the raters is a professional in his or her respective fields, and the discussion which ensued after the first rating session was interesting and valuable. Its value lies, I believe, in the fact that rating of student writing in this global manner is open to individual interpretation. Therefore, the chart to be used in a study needs to be discussed carefully by the study's raters to ensure that the criteria are clear and any discrepancies are outlined in the study results.
2. As well, a study which uses this type of rating, where the statistics are not based on morpheme counts but the overall structure and clarity of a piece of writing, requires qualitative data to support the quantitative findings so that the results may be discussed in context. I would suggest that, even though the



quantitative analysis did help establish that the participants' writing did improve after instruction, the qualitative data allowed the researcher to look further into possible reasons for specific improvements, or in some cases lack of effective learning, shown in the participants' writing.

3. There was a problem with using a rating chart from another study. Following on from the discussion in Chapter Three of this thesis, each study will have a different group of participants. If the rating chart is to reflect realistically the progress of the participants, their language levels and abilities need to be considered carefully. The uniqueness of each group of participants makes it difficult to make any comment on the generalizability of these results to other studies which have looked at the effectiveness of graphics and the knowledge structures on student writing. The chart compiled by the raters for the study reported here was necessarily gauged to the participants abilities and the raters' academic philosophies and teaching backgrounds.

Nevertheless, despite the limitations laid out above, the results of the study do permit some conclusions to be drawn.

1. There was improvement in the posttests for all but one of the participants and thus, instruction in the structures using the visual aids did have a positive effect on the participants' writing.
2. Explicit instruction enabled the participants to use visual aids successfully to complete written tasks and that instruction facilitated the participants own construction of visual graphics to summarize a passage from a Social Studies text.

3. Instruction in the structures was most effective if the student had background knowledge in their first language of the concepts governing the structures.
4. ESL students who are participating in Social Studies classes and are required to complete written tasks in this content-area need to have support in their learning. The participants' difficulty in reading and comprehending the texts used during the treatment, which were ones used in their regular Social Studies classes, suggests that the possibility of successful participation and completion of such tasks by LEP students is limited. The positive results of the posttests suggest that instruction in the knowledge structures might provide students with a useful framework which is generalizable to all Social Studies concepts and the content which supports them.
5. The use of the graphics did help the participants to organize their writing. This may be due to the reduction in the quantity of text and the fact that the main concepts and content were included in the graphic.
6. Participants appeared to use the model of the graphic closely during initial instruction and learning, so that it served as a scaffold. However, this scaffold must not be allowed to become a crutch such that using them becomes a matter of cut and paste with no evidence of personal understanding of the concepts. It is interesting to note that the majority of the subjects were able to use the formatting appropriately, but their use of the graphic prompts showed little genre specific language or coherent connection. This indicates perhaps the danger of presenting set

formats which are then learnt by rote and may then be used without assimilation and independent thought on the part of the writer. This will be discussed further in chapter four. Students need to be encouraged to use the graphic as a jumping off point and require encouragement to help them gain ownership of their writing by adding personal comment on the content and variation to their sentence structure.

7. The participants who were able to construct their own graphics appeared to find additional insight into the register of the academic area and were able to see the language patterns used to discuss certain concepts.
8. The participants benefitted from instruction in the language structures which recurred throughout the Social Studies texts. It is suggested that liaison between the ESL specialist and content-area instructor would mean that each is aware of the specific concepts and language structures which are necessary to successfully discuss and write about Social Studies tasks. In this way perhaps the ESL class could better help support LEP students' learning and participation in their content classes. As the conceptual patterns present in the Social Studies register are transferable across diverse content, it would be possible, perhaps, to use the visuals and knowledge structure patterns even within classes where there is a range of grade levels.

## RECOMMENDATIONS FOR FUTURE RESEARCH

The results from this study, which included a relatively brief treatment period, are promising, but further research with larger groups of students is required in order to give the results a higher degree of generalizability.

During the first rating session, the question of rating uniformity was raised. As previously stated, this is a problematic area as evaluation of student writing is open to a variety of interpretations dependent upon the focus of the raters. Is it possible to compile a marking chart which is uniform enough to be used by researchers in different studies focusing on student writing in Social Studies?

Although first language was not a focus of this study, it would be valuable to study whether or not the first language of an LEP learner does impact on their induction of the structures and successful manipulation of the graphics in their academic tasks. In addition, I believe it is important to look further at how the length of time and complexity of first language schooling impacts on the students' ability to effectively learn and utilize instruction and modelling in the structures and graphics.

Though progress in the students' writing level was apparent during the study, it is possible that some students had understood the nature of the graphics and their purpose but could not comprehend and successfully use much of the vocabulary. This may have accounted for the fact that some of the writing had a cut and paste appearance. Again, a longer period of study and use of the participants' first languages, if possible, might help to clarify whether

or not this is a stage which needs to be passed in order to develop ownership of their writing.

Further studies would be valuable which focus on whether or not the age at which LEP students begin their schooling in Canada impacts upon how much the use of visual aids and instruction in the knowledge structures might promote successful participation in class tasks. Perhaps the texts in the higher grades are at a level of complexity which requires the LEP student to have reached a relatively advanced level of English in order to comprehend and use them successfully, even with the help of visual aids as tools. Therefore, those students who enter the English-speaking school system at the high school level may require shelter classes in content areas. Further research on LEP students attending shelter classes in content areas would be valuable and help to answer questions such as:

1. Does the period in the shelter class help or hinder their performance when they enter the regular academic class?
2. Do LEP high school students require a period of instruction in a shelter academic class in order to grasp the basic concepts inherent in the particular academic register?
3. Would such classes enable LEP students to grasp both oral and written structures which are essential for successful participation in the academic class?

Longitudinal studies which follow the progress of students who are instructed in the knowledge structures and use of graphics throughout the school year might help to establish their effectiveness. Indeed, longitudinal studies might include detailed

observation of the process by which the students may first use the model of the structures and graphic as closely as possible, later branching out to create their own as scaffolds for their writing. A longer period of study would enable the researcher to establish whether or not students transfer the structures and graphic organization to other types of text in other academic classes. An example of this would be to observe whether or not students who receive instruction in the structures using Social Studies' content transfer the basic patterns of the structures and graphics to similar cause and effect type tasks required in Science classes.

As mentioned earlier in the limitations to the study section on instruments, the use of the students' first language may be of great value as the medium for initial instruction in the knowledge structures and use of graphics. Students with only a rudimentary knowledge of English may find it difficult to grasp the concepts around which the structures and their visual aids are built if the modelling and instruction is given solely in English. However, if these conceptual patterns were explained in the student's first language, perhaps cognition would be more likely to develop and later this knowledge might be transferred when the student is required to discuss these concepts in English. This use of first language in instruction may be viable in school districts where there are large groups of LEP students who have a common first language. Support might be elicited from volunteers in the community who are proficient in the students' first language. This system may support the development of those LEP students who do not have the conceptual background required for their academic classes. This

follows the concerns voiced by Cummins (1981, 1992) that LEP students in secondary schools need to continue their conceptual development in tandem with their acquisition of the new language.

It was evident from the participants' comments during this study that often they had grasped some of the material introduced on the structures and the manipulation of the graphics, but their English was too basic for them to give an explanation of their thoughts to each other or to the researcher. The participants were encouraged during the treatment sessions to try to relate the concepts taught to prior knowledge in their first language. It was apparent that there were students who had an excellent grounding of these conceptual structures in their first language. Others were unable to indicate that they had prior knowledge of these conceptual structures in their first language. However, without the interaction of a native-speaker to use their own language in the discussion it is difficult to verify the level of understanding and ability.

This study tested the students using visuals compiled by the researcher. However, the observations that were made by the researcher as the the students constructed their own visuals were of great interest. The construction of visuals by students enables them to see how the individual parts of the visuals fit together to display the underlying knowledge structures. For teaching purposes it is suggested that it might be preferable to model and encourage the construction of the visuals from the onset, as well as to present premade materials. Further research would help clarify perhaps, how students go about constructing and manipulating such visuals to help them in their academic tasks. As discussed in Chapter Four, the

modelling provided by the researcher was essential in order for successful student participation in the treatment tasks. The participants needed scaffolding as they acquired the skill of successfully manipulating both the teacher-generated visuals, and the construction of their own. The visuals specific to each structure were new to the participants and explicit instruction was essential in order for the participants to understand the concepts behind the format of each type of visual. As noted earlier in this chapter in the *Limitations to the Study* section, the graphics used for the tests were perhaps at too high a level for the students. Further studies which focus on observing students as they prepare their own visual aids using the structures found in the language of Social Studies' topics and texts would, I believe, provide a picture of how the structures and visual aids might be successfully incorporated into content-area classes.

Further research which compares the effectiveness of instruction in the framework and use of graphics with both intermediate and advanced ESL students would help establish whether or not a particular level of language proficiency is required in order for instruction in the knowledge structures and graphic interpretation to be most effective. Questions concerning the level of participants in this type of study might be as follows:

1. Can the low level language learners grasp the conceptual material in Social Studies texts using these structures and graphics?



2. Is it possible to modify texts enough for these students to use successfully and yet maintain the integrity of the academic register of the subject?
3. Is it perhaps more effective to introduce the use of the visuals and structures using concepts and content which is closely related to the students' experiences, for example introducing the conceptual patterns of cause and effect in daily activities?

The graphics used in this study required further refinement for the intermediate level of the participants. Further research studies would, I believe, gain from a longer study period where graphics could be constructed with considerable input from the content-area instructors so that the level is as close as possible to the requirements of specific grade classes and students' language abilities. If researchers are able to spend time in content-area classrooms then perhaps a clearer picture of the language and conceptual requirements might be formulated and reported. In addition, the testing instruments would become perhaps more effective and the findings more realistic.

It appeared from the comments of the participants in this study that they felt overwhelmed by the complexity of the texts used in their Social Studies classes. All the material used by the researcher to compile the visuals used in the study was carefully selected from the topics and texts which the participants had already covered in their Social Studies classes. This point underlines the importance of establishing a support system for these students in their content-area classes. It is suggested that the collaborative support of ESL

teachers in the content-area classes themselves may provide essential language support. As the reports made by the Hounslow Secondary Team (1990) on classroom practice in Britain reveal, progress is evident when the language patterns and structures implicit in a particular content-area are explicitly modelled to students as they work on their academic tasks. In order to facilitate this, the content teacher requires the language expertise of the ESL teacher. Conversely, the content teacher's input is essential so that the concepts inherent to a subject-area are not watered down or lost.

A suggestion for future studies on this model would be to concentrate on how LEP students orally use the structures and construct graphics to use in discussions. Observation of students as they are instructed in the conceptual underpinnings of the structures and use of the visuals and begin to formulate their ideas orally might help to ascertain the effects of this type of instruction on their participation and oral interaction in group discussion. The complexity of putting ideas down on paper requires the use of both thought and the mechanics of writing. By focusing on oral testing and observation, a study might be able to do away with at least this mechanical confound.

Further studies carried out by teachers themselves would be very useful. Social Studies instructors who introduce the knowledge structures and graphics into their classes would be able to ascertain first hand whether their students' participation in tasks does in fact improve. This integration with the academic content might help to establish whether or not this addition to the instructional format assists students with their participation in class tasks. Indeed, it

would be interesting to study the progress of all students in regular classes who have been introduced to this framework and use of visual aids.

Finally, it is the input of the participants themselves, which often helps clarify the questions raised in a research study. Throughout the study reported in this thesis, the participants were eager to learn more about the graphics and patterns presented by the structures. A longitudinal ethnographic study which enables the researcher to observe participants in detail might be able to establish an interesting picture of the process through which students pass as they are inducted in the concepts of the structures and manipulation of the graphics. Students could be encouraged to complete journals where they comment frequently on their understanding, queries, and frustrations as they use the structures and visuals to grapple with Social Studies texts and tasks.

In conclusion, I have raised more questions in this discussion on the process of the study rather than the actual 'product' - the quantitative data and comparison of the participants' test results. Nevertheless, the treatment sessions did appear to have had a positive effect on the participants' writing which suggests that there is indeed value in utilizing the knowledge structures and key visuals into academic area instruction. However, as this researcher discovered during the treatment sessions, the complex variety of linguistic differences, environments, backgrounds, and stage of conceptual development in the first language, all impacted upon the students' abilities to effectively manipulate the structures and visual aids. Therefore, further research is necessary in order to look more

closely at these kinds of differences and how they impact on LEP students' successful participation in academic area classes. This kind of focus requires ethnographic study over an extended period of time, with observation of the participants in their academic classes. In this way, the researcher is able to make detailed observations of LEP students in the academic learning environment, so that the effectiveness of instruction in the structures and visual aids might be considered in light of actual classroom participation and written assignments.

APPENDIX A  
RESEARCH APPROVAL

SIMON FRASER UNIVERSITY

VICE-PRESIDENT, RESEARCH



BURNABY, BRITISH COLUMBIA  
CANADA V5A 1S6  
Telephone: (604) 291-4152  
FAX: (604) 291-4860

October 18, 1991

Ms. Susan Gerken  
1132 Spruce Avenue  
Coquitlam, B.C.  
V3J 2P4

Dear Ms. Gerken:

Re: Strategies for ESL students in the academic areas

This is to advise that the above referenced application has been approved on behalf of the University Ethics Review Committee, subject to approval of Surrey school district.

Sincerely,

*for* William Leiss, Chair  
University Ethics Review

cc: Dr. R. Barrow  
Dr. Sampson

## APPENDIX B

Form 1: Parental Consent Form

Form 2: Student Consent Form

## 1. CONSENT FORM FOR PARENTS

FORM 1

CONSENT FORM FOR MINORS  
 BY PARENT, GUARDIAN AND /OR OTHER  
 APPROPRIATE AUTHORITY

Dear parent/guardian,

I am a graduate student in The Faculty of Education at Simon Fraser University. The activities in which I would like your son/daughter to participate are part of a project to find out which strategies may be helpful for English as a second language students in their academic studies. If you agree to your son and daughter's participation in the project please complete the form below and have your son/daughter return it to the classroom teacher.

Yours sincerely,

(S. GERKEN)

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

I (parent or guardian's name) \_\_\_\_\_

consent to my son/daughter \_\_\_\_\_  
 participating in a project concerned with learning English as a second  
 language, titled:

Strategies for the ESL student in the academic areas

Which will be carried out in:

Frank Hurt Secondary School

On the following days:

Dependent upon individual schedules

Supervised by: Ms. Susie Gerken - Graduate Student

From: The Faculty of Education, Simon Fraser University

## 2. CONSENT FORM FOR STUDENTS

## FORM 2

Dear student,

I am a graduate student in The Faculty of Education at Simon Fraser University. The activities in which I would like you to participate are part of a project to find out which strategies may be helpful to English as a second language students in their academic studies. Participation is voluntary.

If you agree to take part in this project please complete the form below and return it to your classroom teacher.

Yours sincerely,

(S. GERKEN)

I \_\_\_\_\_ agree to take part in a project concerned with learning English as a second language, titled:

Strategies for ESL students in the academic areas

The activities will be scheduled on: Dependent on  
individual schedules

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## APPENDIX C

## EXAMPLES OF PRINCIPLES AND CAUSE AND EFFECT LANGUAGE

Ninth Grade Social Studies Text: Exploration Canada

**Due to the fact that** the settlers had to clear the land many of them did not choose to move outside the towns.

The effects of the taxes imposed by the British government were, **firstly**, the colonists saw the King as a tyrant, **secondly**, they thought the Government had no interest in their point of view and **thirdly**, they rebelled and asked for free government.

**As** the government had imposed taxes, the colonists decided to rebel.

**If** the British Government had made more effort to see the colonists' point of view perhaps they would not have rebelled.

**Though**

**Even though** settlers received some compensation for their land, some of them decided to stay in the colony.

The British government imposed the Quartering tax **which meant that** soldiers would live in colonists' homes.

The government imposed taxes on the colonists' goods. **This meant that** the colonists made much less profit. The British traders could also sell their goods more cheaply. **In addition**, the colonists were not allowed to sell their goods in England.

The colonists moved to Canada. **Therefore**, the colony lost many of its settlers.

The government decided to repeal the tax on goods. **This meant that** the colonists could compete with British traders. **As a result** there was competition and the British traders in England were upset and complained to their parliament. This forced the government to bring back the taxes.

**There are several causes leading to the rebellion of the colonists and the Declaration of Independence. Firstly, the colonists saw the King as a tyrant. Secondly, they felt badly treated by the government. And thirdly, many of them left England due to persecution.**

**The government imposed taxes on the colonists' trade goods. This was one of the reasons for the rebellion. Another reason was.....**

**Many colonists decided to move to the north. However, there were families who decided to stay and keep their land.**

**The government repealed the Stamp Act. Nevertheless, there was still violence and rebellion.**

**Despite the fact that the colonists would lose all their belongings and land, many of them did move north. The reasons for this were...**

**Because of the taxes the colonists rebelled and there was a great deal of violence in the colony. As a result of this the government sent more soldiers who had to be paid. So even more tax had to be collected.**

**The rebellion was caused by poor government and the unfair treatment of the colonists by the government.**

**The colony was affected by the taxes as trade decreased.**

**A positive result was.....**

**A negative result was.....**

**Due to the ignorance of the government officials, the colony was lost.**

**Ultimately, the British government lost the colony because it was unprepared to allow the colonists any part of government.**

**In conclusion...**

**Finally.....**

## EXAMPLES OF EVALUATION LANGUAGE

Tenth Grade Social Studies Text: Our Land: Building the West

**It seems to me that** the settlers should have received more than land compensation.

**I think that** The British Government needed to make more effort to see the settlers' point of view.

**I don't think that** the colonists had enough economic power.

**To me it appears that** the government imposed wrong taxes.

**In my view,** the Metis rebelled because of their land.

**I consider** the surveyors' behaviour as being the most important reason for rebellion.

**I believe that** the railway changed Canada forever.

**I agree with** the government's decision to build the railway because...

**I disagree with** the Hudson Bay's treatment of the Metis.

**According to reports by** the government surveyors, the Metis had given them permission.

**It is clear to me that** the railway was built to encourage confederation.

**I conclude that** the Metis rebelled because the government did not negotiate land sales with them first.

**I am positive (certain, sure) that** the government could have made an alliance with the Metis.

## APPENDIX D

1. Student Graphic      Graphic Constructed by Students From  
Chapter 32 Exploration Canada
1. Student Writing      Using Graphic

## 1. STUDENT GRAPHIC

Question posed by the researcher: Evaluate your reasons for and against joining the militia to defend Upper Canada against American soldiers.

positive

Protect your family 1\*  
 Protect your country 2\*  
 Get a compensation for  
 the things you lost 5\*  
 Die for your country  
*heroism*  
 Hatred of the British

negative

Danger to be killed 4\*  
 Going faraway from  
 your friends and family  
 Have to kill people 3  
*morall/religious problem*

---

\* Rating added by students during discussion  
 Italics indicate input from the researcher

## 2. STUDENT WRITING

It's very hard to make a decisions whether or not to go to fight against the American. I've weight up the possibilities both positive and negative which include possibility to getting killed, killing someone else, leaving my home and protect my family and my country.

It is clear to me that protecting my family is the most important reason for my decision. I base my decision on my family prior experience when we lived in America. We were badly treated and be force to leave, we lost everything and we can't do it again. Then no where else to go. So therefore, I considered my family as a priority. In addition, even though getting componsation for what was lost is not my primary concern it still effect my decision. However though I have to decide to join the militia, it a hard decision because I disagree with having to kill people. I suppose it would be awful but protecting my family is still the most important thing. Of course, I'm very afraid to being killed.

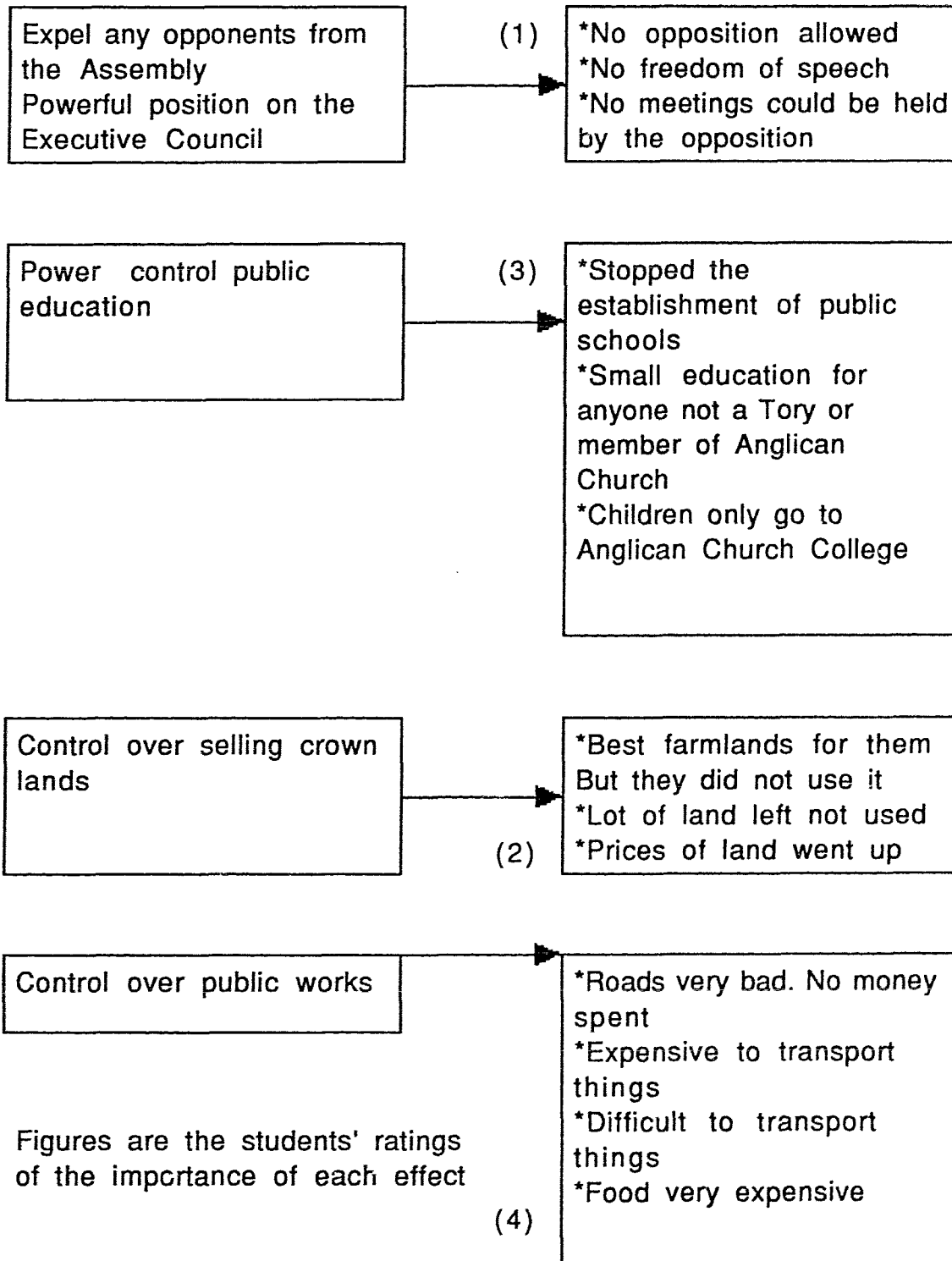
## APPENDIX E

## EXAMPLES OF STUDENT CONSTRUCTED VISUALS

- Example 1: Tenth Grade: Our Land: Building the West  
(Chapter Two)
- Example 2: Tenth Grade: Our Land: Building the West
- Example 3: Ninth Grade: Exploration Canada  
(p. 270)

## EXAMPLE ONE

Question posed by researcher: What were the effects of the Family Compact on life in Upper Canada in the early 1800s? In your opinion which were the most important?





## EXAMPLE TWO

The causes and effects of building the railway in Canada

Causes

Effects

To build CPR/  
Chinese workers were  
cheaper than Canadians



the Chinese workers were  
brought to Can.

In order to decrease  
the cost of carrying  
workers

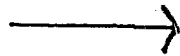


The number  
of workers  
per ship was  
1000



Many workers  
died on the  
route to Can.

many workers died  
on the job

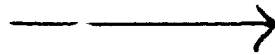


scurvy and  
other illness  
killed them



they consisted  
mainly on rice  
and stale salmon

Many workers  
were sent to B.C.B.C.



In order to build the  
section of the Railway

Lack of labor



Chinese were  
imported

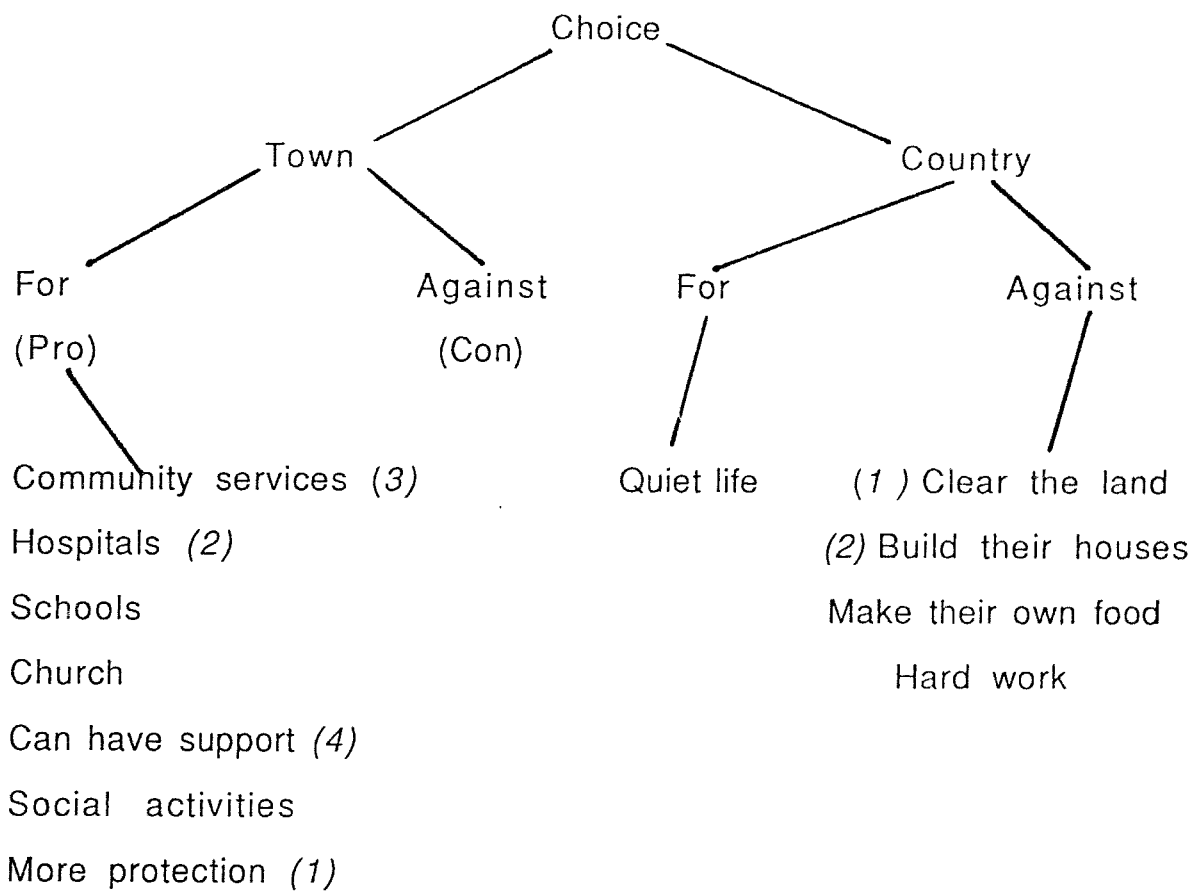


Chinese population  
grew in B.C.

## EXAMPLE THREE

An evaluation of reasons to live in either the town or the country

Exploration Canada p. 270



Figures in italics are the students' rating for the Pros and rating for the Cons.

## APPENDIX F

## VISUALS USED FOR TESTING

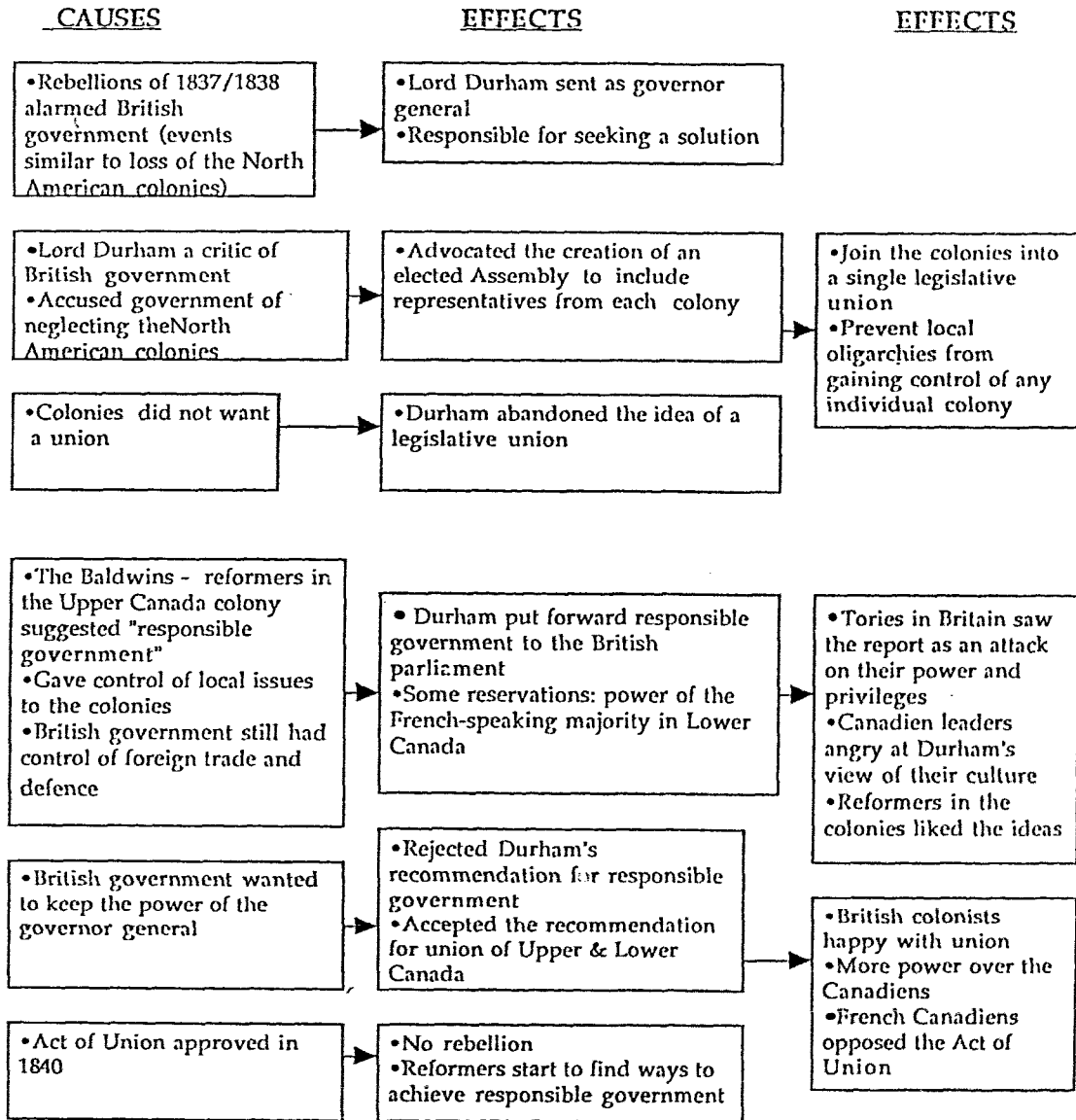
- Chart 1     Pretest 2: Tenth Grade
- Chart 2     Posttest 2: Tenth Grade
- Chart 3     Pretest 3: Tenth Grade
- Chart 4     Posttest 3: Tenth Grade
- Chart 5     Pretest 3: Eighth Grade
- Chart 6     Posttest 3: Eighth Grade

### CHART ONE

PRETEST 2  
10th Grade

Use the information in the chart below and write a short essay on "The causes and effects of Lord Durham's report in 1838." You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

#### THE CAUSES AND EFFECTS OF LORD DURHAM'S REPORT

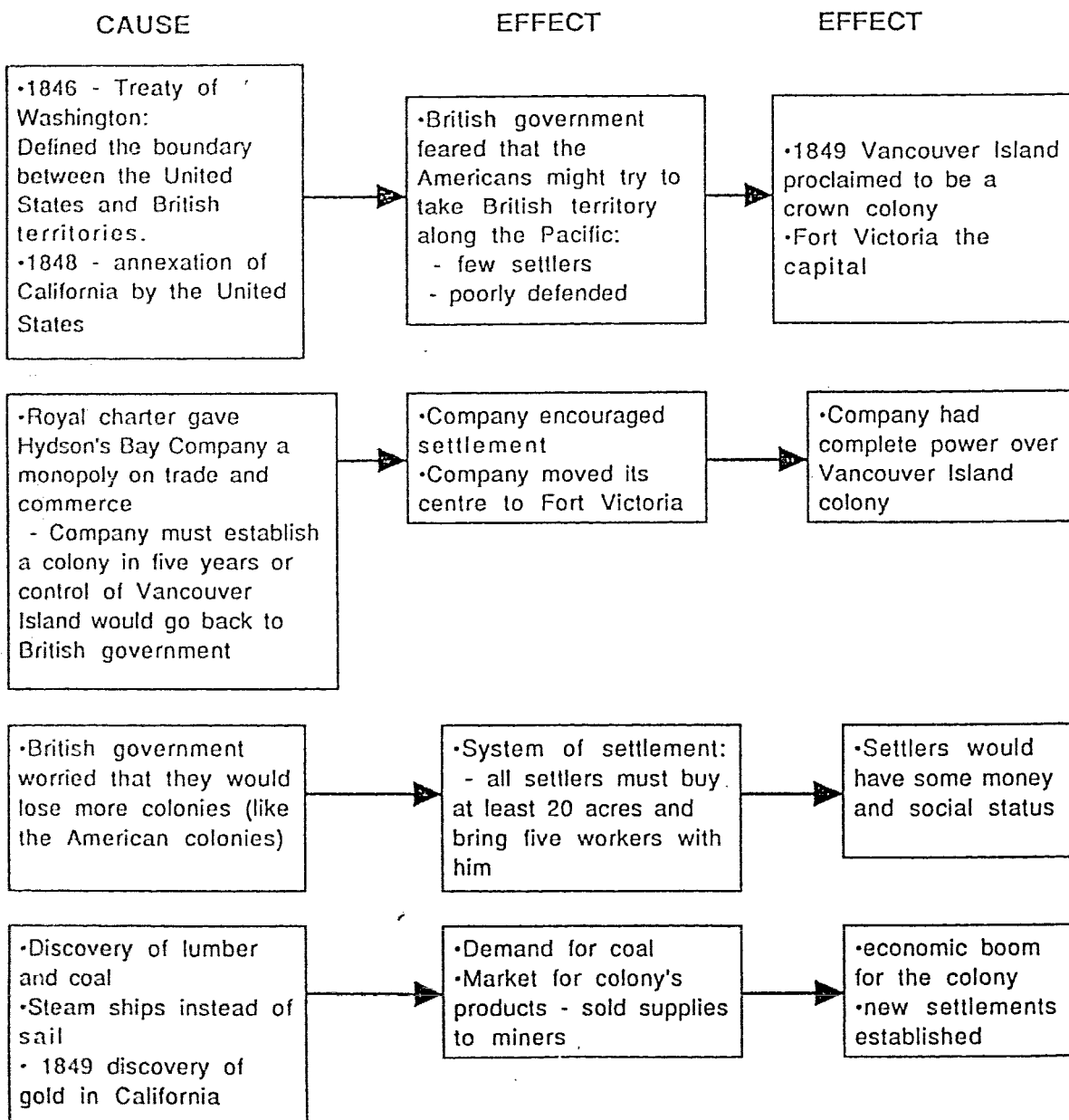


## CHART TWO

POSTTEST 2  
10th Grade

Use the information in the chart below and write a short essay on "The causes and effects which resulted in the creation of the Vancouver Island colony". You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

### CREATION OF THE VANCOUVER ISLAND COLONY



### CHART THREE

PRETEST 3  
10th grade

Use the information in the chart below and write a short essay evaluating "The positive and negative reasons for Confederation". You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

#### REASONS FOR AND AGAINST CONFEDERATION

##### FOR CONFEDERATION

- Canadian interest in the intercolonial railway
- Defence purpose
- Strengthen the power of the colonies
- Trade agreements
- A legislative union would establish a central government
- One system of laws, taxation
- Strong central government
- Avoid conflict between individual provinces

##### AGAINST CONFEDERATION

- Regional differences among the colonies
- Different culture of Canada East
- Minority groups - Canadiens thought their culture may be at risk
- Colonies with small populations feared they would have a weak position

## CHARTFOUR

POSTTEST 3  
10th Grade

Use the information in the charts below and write a short essay evaluating "The causes of the Riel Rebellion in 1869". You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

### CAUSES OF THE RIEL REBELLION

•Canadian government sold farmland to the Hudson Bay Company in exchange for the North West Territories

•Metis were not consulted by either the Company or the government about the sale of land

•Metis wanted to keep their traditional way of life and lands

•Metis feared the government would take away their hunting lands again  
•The colonists at Red River had destroyed their buffalo hunting grounds  
•Metis thought it would happen again

•They did not have documents to show ownership  
•Ottawa controlled public lands  
•Land had to be surveyed by the government and then scripts (documents of land ownership) were issued  
•Metis did not understand the value of the scripts  
•Some Metis sold their land for a few dollars or whisky  
•Metis were disallusioned with the government

•Government surveyors treated the Metis badly

•An organization was formed to protect the rights of the Metis  
•Led by a strong leader - Louis Riel

## CHART FIVE

PRETEST 3  
8th Grade

Use the information in the chart below and write a short essay giving you opinion on "The advantages and disadvantages of church control over learning in the Middle Ages". You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

CHURCH CONTROL OVER THE PRESERVATION OF LEARNING

<u>ACTION</u>	<u>ADVANTAGES</u>	<u>DISADVANTAGES</u>
<ul style="list-style-type: none"> <li>•Charlemagne ordered monks to copy classical Greek and Latin texts</li> </ul>	<ul style="list-style-type: none"> <li>•Preservation of classical texts and knowledge</li> <li>•Few writings on the ancient world would have survived</li> <li>•Irish monks produced beautifully illuminated manuscripts - The Book of Kells.</li> <li>•Designed to encourage Christian faith.</li> <li>•Kept the Church's authority strong and</li> <li>•Churchmen had complete control</li> <li>•Preserved Christianity</li> </ul>	<ul style="list-style-type: none"> <li>•Monks' Greek and Latin was poor</li> <li>•Texts not understood and poorly translated</li> <li>•Few scholars studied ancient texts</li> <li>•Left out any bits against Christian faith.</li> <li>•Did not produce anything non-Christian</li> <li>•People only given a narrow and biased viewpoint</li> <li>•People not informed enough to challenge church authority and its corruption.</li> </ul>



## CHART SIX

POSTTEST 3  
8th Grade

Use the information in the chart below and write a short essay evaluating "The most important events and their effects in the 1300s and 1400s in Europe". You will have 15 minutes to write up the information from the chart. You may add information you think necessary.

EVENTS AND THEIR EFFECTS IN 1300s AND 1400s IN EUROPE

EVENTS	→	EFFECTS
• Great Schism of the Church	→	<ul style="list-style-type: none"> <li>• <u>Church authority weakened:</u></li> <li>• Monarchs opposed Church power</li> <li>• Church lost political power</li> <li>• People were angry when the two popes fought each other</li> <li>• Church lost religious power</li> </ul>
• Black Death plague	→	<ul style="list-style-type: none"> <li>• Third of people in Western Europe died</li> <li>• Economy affected - no people to plant and harvest crops</li> </ul>
• Hundred Years War between England and France	→	<ul style="list-style-type: none"> <li>• Increase in national pride in England and France</li> <li>• France got back land from England</li> </ul>
• French King had absolute power	→	<ul style="list-style-type: none"> <li>• Efficient bureaucracy - collected taxes and administered justice</li> <li>• King able to pay his own army</li> <li>• Limited power of the feudal lords</li> </ul>
• Magna Carta signed by the King of England in 1215	→	<ul style="list-style-type: none"> <li>• English monarch did not have absolute power</li> <li>• King had to obey the law</li> <li>• Rights given to all classes e.g. nobles, townspeople, peasants</li> </ul>

## APPENDIX G

EXAMPLES OF PARTICIPANTS' PRETEST AND POSTTEST WRITING  
FOR  
CLASSIFICATION/ CAUSE AND EFFECT/ EVALUATION

Example 1: Eighth Grade: Participant D

Example 2: Ninth Grade: Participant H

Example 3 Tenth Grade: Participant O

EXAMPLE ONE  
 GRADE EIGHT  
 PARTICIPANT D

PRETEST: CLASSIFICATION

*Task: "The structure of feudalism and the feudal contract"*

The structure of Feudal Society

The King was a noble. He was the ownership of all the land. He only had power over own estates. He collected all the taxes from estates. He was the loyalty from subjects and he was the military service owed by nobles. And his obligations was protect of the subjects from external enemies. He grant land to vassals in return for loyalty and military service.

The Lords was next to the King. He power over land (lief) granted by the King. He right to collect taxes and loyalty of vassals. lesser lords was the right to challenge the King's authority. And the knights was their right to inheritance of land through death or marriage. Land divided many times conflict of loyalties. And their obligations was loyalty to the King or own land. They are the protection of own vassals. grant land in exchange for loyalty and military service conflict of loyalties.

The last position was the peasants serfs. Protection from ruler of the land (lief) during war peasants took refuge in Lords castle. And their obligations was payment of taxes for use of land and protection of lord. Service to the lord domestic or military. Loyalty to the land. Labor in the fields.

## POSTTEST: CLASSIFICATION

*Task: "The structure of the French monarchy after the Hundred years War"*

### The Structure of the French Monarchy

The King had absolute power. King controlled bureaucracy, controlled the royal courts, and King seen as a source of justice. King is divided in these two headings. First is the Royal officials and the second one is the Estates General Assembly.

Royal officials supported the royal policy. They made the French king more powerful. They protected the power of the King. They appointed to run the royal courts in the different districts in France. Royal courts had great authority. Royal officials were appointed by the King from these groups: Educated clergy, lesser knights, and townspeople.

The Estates general Assembly had to pay tax, upheld royal power and they added to the King's power for first state (clergy) second estates (nobility) and third estate (townspeople).

## PRETEST: CAUSE AND EFFECT

*Task: "The causes and effects of improved farming on life in the Middle Ages"*

### The Causes and Effects of Improved Farming

The farmers in Middle Ages have a better methods primitive and inefficient but it is not really good. So the soil exhausted and yield low. There is no surplus of food for trade. Then they oxen used for ploughing and fields always planted and only one type of crop. So disease could wipe out the whole crop and slow ploughing so there is risk of starvation.

Then they have better method of crop rotation: Winter crop, summer crop and fallow field so the soil didn't wear out and have a surplus food. The new crop introduced, have more than one crop grown so there was population growth and more people will live.

And then this new inventions: like better plough, horseshoes and harness. Horses ploughed faster than oxen so they have iron from England and france for stronger farm tools so the population growth grow more and more people were live.

Large areas of swamps and forests cleared. Clearing land not a serf's traditional obligation. Then the serfs were given freedom in exchange for land clearing. So the peasants pay rent for new land instead of feudal duties e.g. labor. And decline of feudalism. So my conclusion maybe people will grow more and mor and the farmers will improve better.

## POSTTEST: CAUSE AND EFFECT

*Task: "The causes and effects of the Magna Carta in England"*

Henry II tried to control the church law courts. In addition, Henry opposed by Becket. Then Becket was murdered by the king's knights. In this case, Henry was blamed. He had to do penance or be excommunicated.

Henry's son John also fought against the Church. He fought against the barons. But this was unsuccessful. So that Pope Innocent III excommunicated John. So John agreed to become the Pope's vassal. This meant that England became a papal fief. Annual fee paid to the papacy in Rome.

War in France was expensive. In addition, John made the barons pay heavy taxes. England lost land in France. This meant that barons were angry at taxes and loss of land. After this, barons forced John to sign a charter called the Magna Carta. This meant that the Magna Carta guaranteed the traditional rights of the barons. In addition, Magna Carta later guaranteed the rights of all classes in England peasants, and townspeople. They limited the power of the king. This meant that King had to listen to the view of the great council and King had to respect the law.

## PRETEST EVALUATION

*Task: "The advantages and disadvantages of church control over learning in the Middle Ages"*

Church control over the Preservation of Learning  
The Charlemagne ordered monks to copy classical Greek and Latin texts. The most important thing that I think is the Preservation of classical texts and knowledge because they show text books to people so that they could read the books. And the another very important.

## POSTTEST: EVALUATION

*Task: "The most important events and their effects in the 1300s and 1400s in Europe"*

Events and their effects in 1300s and 1400s in Europe

In this essay I have to write my opinion about what is the most important events and their effects in the 1300s and 1400s in Europe.

In my opinion, I picked the Great Schism of the Church as the most important event because the church authority weakened. This meant that the Monarchs opposed the Church power. Then the Church had lost political power. In addition, the people were angry when the two popes fought each other. And the Church lost religious power.

It seems to me that the second most important event is the Black Death Plague because one-third of people in Western Europe died. The economy affected - this meant that no people to plant and harvest the crops.

For me, the third most important event is Magna Carta signed by King of England in 1215. There are three effects for this, firstly, English monarch did not have absolute power. Secondly, King had to obey the law and thirdly, Rights are given to all classes e.g. nobles, townspeople, and peasants.

I think that the fourth most important event is the French King had absolute power. The Efficient bureaucracy - collected taxes and administered justice. The King able to pay his own army. They also had limited the power of the feudal lords.

I picked Hundred Years War between England and France as the last most important event because it increased in national pride in England and France and then France got back land from England.

EXAMPLE TWO  
GRADE NINE  
PARTICIPANT H

PRETEST: CLASSIFICATION

*Task: "The Loyalists and Patriots after the Declaration of Independence"*

After the revolution and the decleration of independence. Loyalist after long years of persecution lost all their goods (ce qu'ils possedaient) and were angry of that. then, the King give them money because they stayed loyal to him. Thousands of loyalists return to England. During the revolution they went North to Quebec with their families to protect them and the man loyalist return to U.S.A to "fight" against the rebellion. Loyalists were hung, killed, and....

POSTTEST: CLASSIFICATION

*Task: The Constitutional Act of 1791 and the new system of government in the colonies*

The government organized by the Constitutional act had a better effectivity then the old one.

Their government was composed of the Lieutenant Governor, executive council, legislative council and legislative assembly.

The legislative council was at least composed of seven members being the people who were mading laws for the colonies.

When a law is made up by the legislative council, this law, to be accepted had to be seen and signed by the government who sometime was helped by the executive council usually composed of nine members chosen by the government.

Sent to the legislative assembly the law have to be voted by the division and after signed by the KIng.



## PRETEST: CAUSE AND EFFECT

*Task: "The causes and effects of British taxes on the colony"*

During the night Sons of Liberty because the tea was very popular at this time, stole the tea on the boats on the way to Boston (I think) and then had what they called the Boston tea party.

They hated the king because they didn't have the same rights (droits) than in England. They did some meeting at Lexington and started to think about starting a revolution against the King of England, George III.

The 5 Intolerable Acts to stop the "crime" in the 13 colonies. They started the revolution just because they wanted the same rights than normal people in England like the possibility to vote at elections and others...

## POSTTEST: CAUSE AND EFFECT

*Task: "The causes and effects of the War in 1812"*

There were several causes and effects of the War of 1812.

Firstly, Britain stopped American ships taking American sailors. In spite that the United States asked the British to stop, they stubbornly did not make the Americans very angry.

Secondly, Britain had a war with France and in cause of that blockaded American ships making them unable to trade with France and other countries. Therefore, American traders thinking about declaring a war on Great Britain.

Thirdly, Britain encouraged Indians to fight against American settlers causing the death of many American settlers.

Looking at these unforgiving events against them, Americans without other choices declared war on Great Britain. British territories actually being Upper and Lower Canada.

American attacks and unfortunately the invasion failed. A peace treaty followed, the peace treaty of Ghent between American and British. Territories stayed the same, British agreed not to stop American ships, other business began because of the war and ultimately, peace continued to be for several years until...

## PRETEST: EVALUATION

*Task: Evaluate "If it were better or not for Loyalist farmers to leave the colony"*

I think it was better for them to leave because their life in Canada will probably be better.

First of all, Canada will offer a free land and they could continue to follow their own customs and laws and be able to stay loyal to the king. The money that the king give them in compensation of what they lost can help them a lot and if they lost all what they had nothin (reterir) them in U.S.A. They have nothing to lost and more things to gain. And the most important, not violence against their families.

## POSTTEST: EVALUATION

*Task: Evaluate "The reasons for and against settlers deciding to emmigrate from Europe to North America"*

There were several reasons for or against settlers deciding to emmigrate from Europe to North America.

One of these reasons to emmigrate to Upper Canada was that this country had rich soil for farming. But before, they had to spent a dangerous journey by ship across the Atlantic taking the danger to die of the typhus, a disease involving an unproper nutrition.

The land for the settlers were mainly given free but also not very good to cultivate making the chances of success fairly tiny. They had problems for getting goods and had to provide everything themselves.

Emmigrant were practically forced to leave their country (Europe), firstly because small farmers in England lost their land, a result of the Industrial revolution. Secondly because of the Potato famine in Ireland and thirdly cause by the unemployment in cities in Europe. Settlers had to leave their families, friends, homes and families and familiar possessions to go to Upper Canada and start a new life, help and support only by their spirit of adventure.

## EXAMPLE THREE

## GRADE TEN

## PARTICIPANT O

## PRETEST: CLASSIFICATION

*Task: "Baldwin's proposal for responsible government"*

The voters elect representatives to the Assembly and the voters must be responsible to the election. The government is responsible to the elected Assembly. Executive Council is chosen by the government from the members of the Legislative Assembly and it makes decision on domestic matters but must be accepted by the governor. if the governor doesn't want to do this, the decision can not be started. The Executive Council is more powerful than the governor. The governor is chosen by the British Government. He (She) must be appointed by the Government. The British Government has to retain power over the matters of foreign trade and it has to protect the land and the member of the country.

## POSTTEST: CLASSIFICATION

*Task: "The organization of government 1858 -1863 in the Vancouver Island colony and British Columbia"*

There were many differences between the organization of the government of British Columbia and the Vancouver Island, the voters elected the Assembly. The Governor was appointed by 2/3 of the Legislative Council. In British Columbia colony, the five representatives, appointed by the people of B.C. joined the Legislative Council and then elected the Governor. The Legislative Council in B.C. also had civil servants and magistrates. The civil servants such as the railway made the people in B.C. feel more convenient. The magestrates maintained law and orders. The civil service in Vancouver Island did not do things as many of the civil servants in B.C.

## PRETEST: CAUSE AND EFFECT

*Task: "The causes and effects of railway development in Canada"*

After the Industrial Revolution and the invention of steam, the train was invented and it was faster than old transportation. The main railway was extended from Toronto to Detroit but it was very expensive to build. The train travels fast so that cities became more important and the factories were built in the cities. New communities were built along railway and new areas were opened up because of the invention of the train. Also, telegraph lines were put up along railways and this made communication and newspapers' circulation faster. The problem of enormous size of Canada was solved by railways and this caused the discussions on the entry of Nova Scotia, New Brunswick and British Columbia into the confederation.

## POSTTEST: CAUSE AND EFFECT

*Task: "The causes and effects of the Treaty of Washington"*

As the Treaty of Washington was signed, it defined the boundary between U.S. and the British territories. However, the United States annexed California in 1848. Because of this, the British government was afraid that the U.S. would take the British territory along the Pacific. In order to protect this territory, Vancouver Island claimed to be a colony and Fort Victoria was chosen to be the capital city. The Royal charter gave the HBCo a monopoly on trade but the colony must be established or the control of Vancouver Island would go back to the British Government. Therefore, the company encouraged settlement and it moved its centre to Fort Victoria. The British Government was also afraid that they would lose more colonies if they didn't do anything. So it made a system of settlement to make sure that they wouldn't lose anything. Meanwhile, the discovery of gold in California and coal and lumber led the new settlements be established. All of these were the main reason that the Vancouver Island was established.

## PRETEST: EVALUATION

*Task: Evaluate "The positive and negative reasons for confederation"*

### Reasons for and Against Confederation

People who were interested in Confederation thought that a legislative union would establish a central government and they'd have one system of laws, one taxation. And the central government would be strong enough to protect every province and avoid conflict between two provinces. They were also interested in building the intercolonial railway so that they can travel through the whole country. but some people thought that it would be a big problem because of the different region between two colonies. The small populational colonies would be weaker than the others. they also thought that the Canadian culture might be changed.

## POSTTEST: EVALUATION

*Task: Evaluate "The causes of the Riel Rebellion in 1869"*

There were many reasons that the Metis rebelled. I think the most important one is the Metis were afraid of losing lands again. The Canadian Government bought the North West territories from the Hudson's bay Company in exchange, the Hudson's bay Company received lands where Metis living. But the Metis were not consulted by either the Company or the Government. They were afraid that the Government would take their lands and traditional way of life again, so they thought that they had to protect themselves.

I'd say that the treatment of the surveyors wasn't the main reason that the Metis rebelled because it was the surveyor's fault. This wouldn't let the metis get angry to the Government. The Government controlled the public lands but it had given the Metis scripts to issue their ownership of lands.

So I conclude that the main reason that the Metis rebelled was that the Government sold the land to the HBCo without negotiating with the Metis.

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