

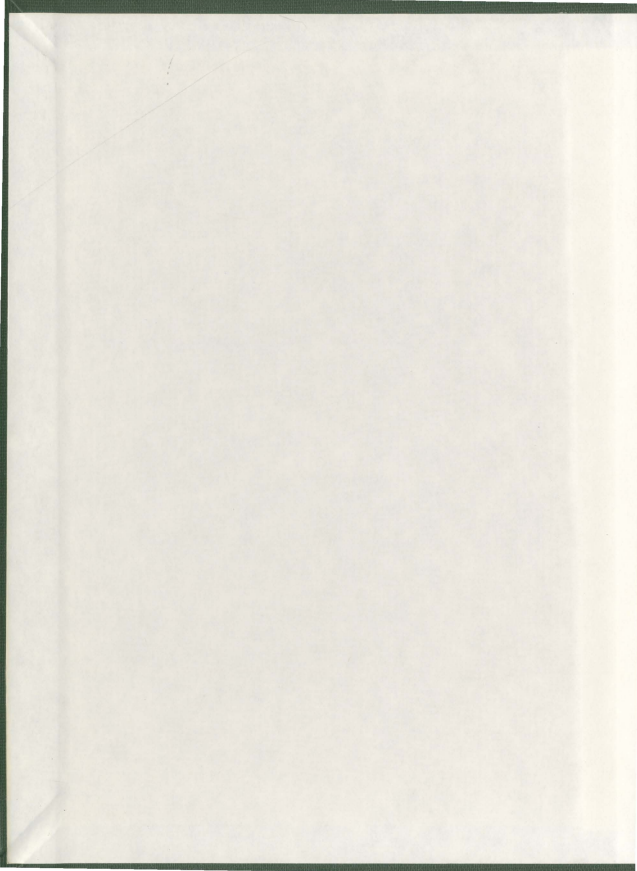
DEVELOPMENT OF GUIDELINES FOR USING
CHILDREN'S LITERATURE IN THE SOCIAL
STUDIES AND SCIENCE PROGRAMS IN THE
ELEMENTARY GRADES

CENTRE FOR NEWFOUNDLAND STUDIES

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ROBERT CHARLES PARSONS



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LITERATURE IN THE SOCIAL STUDIES AND
SCIENCE PROGRAMS IN THE
ELEMENTARY GRADES

by



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ABSTRACT

Children's literature is necessary to extend and enrich the content of social studies and science texts. Many teachers in the elementary grades, however, are unfamiliar with a large number of good books suitable for this purpose. Even when many books are available to them, most teachers do not have the time needed to develop activities for use with each book.

The primary purpose of this study was to select appropriate children's books which could effectively enrich units presented in the elementary social studies and science programs currently in use in the schools of Newfoundland, and to provide for each book an annotation, complete bibliographical information, and an indication of the level of reading difficulty. A secondary purpose was to develop, at each grade level, discussion questions and activities for a sample of several books.

Through a study of the prescribed textbooks, teachers' manuals, guidebooks, and programs of study, the units of study contained in the social studies and science programs in the elementary grades were identified. The subject indexes of reputable selection aids were used to determine the titles of children's books which were related to these units of study. A listing was made of the titles, and each

available book was read to determine its suitability for enrichment purposes in elementary social studies and science. An annotated list of books for each grade was prepared. Complete bibliographic information, a summary, an indication of the level of reading difficulty, and at least one recommending source were prepared for each book. For a sample of books at each grade level, examples of related activities and discussion questions were developed to serve as guides for teachers when developing their own activities for these or other children's books.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Bringing children and books together is the pleasant task of the teacher who knows not only books but also children. The teacher who introduces and reads good books to children makes possible learning experiences which no school program can afford to omit. Regarding these learning experiences, Shipley (1965) says that "distinguished picture-story books and good books of fiction and fact have become a significant way of knowing or learning about oneself and others" (p. 48). Through books the child experiences the interests, concerns, and emotions of other children and families around the world. There are many ways of knowing about the world and, as Smith (1972) points out:

Many of these abound in literature. Teachers who are creative catalysts will spur explorations. Teachers who know children's literature will read to and with children for mutual delight; encourage discovery and discussion; foster the realization that genuine knowledge is not hand-me-down but is of every individual's tailor making. (p. 18)

By encouraging discovery and discussion, the elementary teacher can lead the child into extended reading about

other lands and other times. A good book used wisely in the classroom provides the aesthetic pleasures of literature while extending the child's knowledge of the world, past and present. Literature, as Whitehead (1968) claims, "can be correlated easily and in diverse ways with almost all areas of the curriculum" (p. 78).

Some of the most usable books which children's literature can offer are the informational books. Enriching the textbook content with such books has many advantages. According to Shipley (1965):

Well-illustrated informational books supply accurate, detailed facts in diagrams, maps, charts, and photographs. Well-written, "scrupulously" accurate books widen the child's vista of the world and bring him an understanding of its beauty and its secrets. Concept formation, a major task of young children, is aided through well-selected materials. Books acquaint the child with the earth's features, climate, and resources. They invite him to explore its plants and soil, and to locate himself in its realm. (p. 50)

Some fiction, as well as biographies and informational books, can widen a child's vista of the world for, as Somers and Worthington (1979) say, "books of a caliber similar to The Matchlock Gun and A Wrinkle in Time are often firmly grounded in history or science" (p. 2).

The climate for bringing books and children together in the classroom is established by the teacher. Larrick (1960) says that while textbooks provide the framework for bringing children and books together and manuals recommend

further reading in all directions, it is the teacher who must create the climate for reaching out. One of the most helpful ways to establish this climate is to introduce books to children and to read aloud to them. Cramer (1975) firmly believes this, for he writes, "Teachers can't teach children to love books, but by reading to them every day they can create an atmosphere that will help children appreciate the gift of literature" (p. 460). The International Reading Association has long been concerned with reading aloud to children. Chan (1974) comments in an IRA micro-monograph that "reading to children helps them to learn what reading is all about. It enlarges their vocabulary and exposes them to new and exciting experiences" (p. 12). Brown (1973) reiterates these viewpoints. She says, "Yes, I do read aloud to my children for the values from reading aloud are endless" (p. 635). These values include introducing the children to a variety of different literary styles and enabling them to gain moral values (p. 635).

Reading aloud without any follow-up activities or discussion of the book may not be enough. Sebasta (1970) believes that "the most effective work in literature may reside in interpretation" (p. 89). Many teachers, including those who already read to children, may not plan teacher-pupil interpretation activities to achieve particular learning outcomes. According to Somers and Worthington

(1979), teachers are unable to plan learning outcomes because of a lack of time. They maintain:

We consider valid the claim by many teachers that they lack the time to design effective and exciting learning experiences around children's books. Teachers frequently read books like Charlotte's Web and The Borrowers to children, but they seldom use books as sources of activities and instruction. (p. 2)

The teacher shows children through his own enthusiasm that reading is a rewarding form of recreation and information gathering. Teachers can initiate reading experiences in the classroom through introducing some and reading other good books to children. There are excellent opportunities for teachers, through reading aloud, to make possible both the appreciation of children's literature and the learning of content. Regarding this matter, Chambers (1971) maintains:

Good and thoughtful use of children's trade books can undergird and add strength to the social studies program by offering opportunities to deepen the concepts we hope to teach. They can help us take children beyond the facts. They can provide real understanding about why the facts exist and what they mean in terms of the social movements we hope to bring to the awareness of children. (p. 42)

The Problem

Teachers in the elementary grades are generally unfamiliar with a large number of good books appropriate

for the enriching of the curriculum in social studies and science. Even if many books were available to them, most teachers would not have the time needed to develop suitable activities for use with each book.

Purpose of the Study

The main purpose of this study was to select appropriate children's books which could effectively enrich units presented in the elementary social studies and science programs currently in use in Newfoundland schools, and to provide an annotation, complete bibliographical information, and an indication of the reading difficulty level for each one. A secondary purpose was to develop, at each grade level, discussion questions and activities for a sample of several books to excite and stimulate the child to read or listen to the books with enthusiasm.

Need for the Study

Elementary social studies should be enriched with appropriate children's books. The single textbook developed around the study of particular lands, times, or peoples "no longer satisfies the curious young reader" (Shipley 1965:48). Smith agrees that "the child does not comprehend through facts and skills alone, but through the full thrust of his being--his mind and emotions; his sensing and imagining"

(p. 18). Children's books not only broaden the child's knowledge of peoples and places, but they let him see how these people adjust to their environment. Montebello (1972) states that "stories, poems, folktales, and biographies help children gain a feeling for the people about whom they are studying as well as an understanding of their way of life" (p. 57). In this regard, Whitehead (1968) maintains that "wide use of literature in the social studies invariably brings to children a new and deeper understanding as well as factual knowledge" (p. 78).

Children's literature, such as informational books and biographies, can extend information presented in the science content. Huck (1979) states that "careful observation will . . . raise questions which will then send children to books for additional information" (p. 539). Montebello (1972) agrees that "the teacher must insure comprehensive information by providing additional sources" (p. 79).

In the elementary grades children need good trade books that tell of the adventurous side of settlement in North America. As well, they need a selection of non-fiction and informational books to enrich, enhance, broaden, and extend concepts beyond the basic textbook. In these grades, too, children need books about people in other lands. Children's literature--fiction, biography, and informational--can enliven and enrich the facts and information supplied in the social studies and science texts.

The development of a list of children's books which have potential for enriching social studies and science is necessary to assist teachers in choosing books which would meet the needs of the curriculum and the students. The problem of selecting appropriate books for Newfoundland curricula is complicated for several reasons. Despite the abundance of many excellent selection aids, the task of sifting through these is time-consuming for librarians and classroom teachers. Quite often, as well, many selection aids and book lists available to schools are produced for use with other Canadian or American curricula. Any book list designed for Newfoundland elementary grades should give consideration to local educational needs and recommended texts. (See Appendix B for titles of texts prescribed for social studies and science in the elementary grades in Newfoundland schools).

Surrounding children with good books does not necessarily mean that all children in a class will read them. Teachers must share their enthusiasm for certain books. Similarly, providing teachers with book lists and books is not sufficient. The problem remains to recommend or suggest ways in which teachers can use children's books to enrich, enliven, extend, or enhance social studies or science. Activities and discussion questions need to be developed to serve as a guide for teachers when introducing or reading a book to children.

Organization of the Study

Chapter 1 has dealt with background information to introduce the study, a statement of the need, and the purpose of the study. Chapter 2 presents a review of the literature related to the study and chapter 3 contains the methodology used in selecting, reviewing, and annotating children's books. Chapter 4 summarizes the study and makes some recommendations.

Part B of the study includes the annotated list of children's books for use in elementary social studies and science programs in Newfoundland schools. It also provides examples of related activities for use with the children's books.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter the literature related to children's books which have potential to enrich elementary social studies and science is reviewed. It is presented under the headings Children's Literature Enriching the Curriculum, Creative Techniques for Exploring Children's Literature in the Classroom, Reading Interests of the Elementary Pupil, and The Need for Book Selection Aids.

Children's Literature Enriching the Curriculum

In recent years much attention has been focused on children's literature as a promising avenue for enriching the curriculum, and a great deal of entertaining, high quality children's literature with potential for teaching in the content areas has been published. As Troy (1977) maintains, "Good books which teach in a pleasurable way are not rare. There are a number of these pleasurable ways in which children's literature is preferable to lectures and textbooks" (p. 471).

Regarding the availability of instructional children's books, Greenlaw (1978) considers that "inquisitive

young minds crave new information and there is a world of literature awaiting them . . . that can be used to enhance learning and provide pleasure as well as knowledge" (p. 498). This is similar to the view expressed by Wheeler (1971) in a commentary related to the tremendous increase in the number of informational books and their possible use in schools. He maintains that "the use of trade books as an integral part of the curriculum has become an increasingly important innovation" (p. 196).

Good children's books are a rich source for expanding and enriching topics in textbooks. In a report on children's literature providing a springboard to the content areas, Billig (1977) states that "children's literature offers provocative material that lends interest and excitement and encourages children to go beyond the superficial, low-level comprehension required in some basal readers" (p. 856). With reference to children's books enriching the curriculum, especially social studies, science, and mathematics, Billig points out that "many of the skills in all of these areas can be taught--and ever so much more effectively--through trade books" (p. 856). Billig firmly believes in the importance of informational books as enrichment material, and notes that "there are a growing number of non-fiction books on all grade levels and all reading levels that constitute excellent supplements to augment understanding and supply factual knowledge"

(p. 856).

To provide those enrichment materials, teachers must take their students to the library or bring the library to the classroom. Cole (1963) recognizes the school library as one of the most vital yet often neglected sources for extending and augmenting factual knowledge. He claims:

In the final analysis, it is the classroom teacher who actually sees that the library resources are used extensively. The classroom teacher who is a slave to the textbook is not likely to sponsor research or reading programs embracing many and varied viewpoints. (p. 12)

It is important for teachers to remember that one of the most important reasons for teaching children to read is to enable them to find information. Webb (1978) notes that elementary teachers can use trade books to go beyond decoding skills to provide enjoyable literary experiences. The trade books not only provide these literary experiences, but they contain information relevant to the child's course of study "in far greater depth and detail than the generalized text book" (p. 1). Porter (1972) reports that in a review of research related to children's books in the elementary classroom, Odland found that "literature is being used as an adjunct to other curricula areas in most elementary schools" (p. 1035).

The review of the literature presented in the above section indicates that children's books can offer

interesting and exciting material which has great possibilities for enriching the elementary curriculum. Research studies and educators' commentaries related to two components of the curriculum, social studies and science, will be reviewed below.

Literature as Enrichment for Social Studies

In 1970, Bard reported an analysis of the Newbery Award books that had been done to determine if the selections contained topics and characterization which would serve to illustrate social studies themes or concepts. He sampled twelve winners or runners-up for the Newbery Award for the period 1960-1970. The examiners (three elementary teachers and the researcher) used a form of the Semantic Differential to determine the extent to which the books appeared to illustrate selected social studies themes. The analysis indicated that the sample of books did illustrate the selected social studies themes. Some of the themes were illustrated in all of the books analyzed, and all of the themes were illustrated in some of the books. The books showed that different types of literature (for example, non-fiction, fantasies, tales, and novels) can illustrate social studies themes. Bard recommended that an investigation should be made of the use and effectiveness of various types

of literature in the social studies curriculum. To him it seemed imperative that children be introduced to social studies concepts or themes in related trade materials.

According to Wheeler (1971), trade books enhance the social studies in several ways: "Trade books will offer a student the very latest information, trade books encourage children to arrive at their own conclusions, whereas textbooks tend to preach, and good trade books breathe life into people and places . . . recreating the charm and lifestyle of other times and places" (p. 167).

The skillful use of trade books can enhance and enrich children's understanding and achievement in all curriculum areas, but particularly in the social studies. Chambers and O'Brien (1969) claim that "one of the richest curricula areas for the inclusion of trade books is the area of elementary social studies" (p. 590). On this subject, Richards and Murphy (1977) point out that "the paperback book is making great inroads into the language arts, social studies, and other content curricula as a legitimate and integral part of day-to-day classroom reading as well as supplementary or extra enrichment reading" (p. 130).

Many genres of children's literature have potential for enriching the social studies in the elementary grades. Huus (1961) cautions teachers to "select not only obvious books about historical periods or geographical areas or

biographies but also fairy tales and folklore that show the enduring and universal qualities of people" (p. 45).

Children's literature in the elementary grades can play a very significant part in the child's education. Wheeler (1971) contends that "educators value trade books in the social studies curriculum for their ability to teach concepts and facts concurrently, in a manner more appealing and with more lasting effect than textbooks alone" (pp. 166-167). Chambers (1971) agrees with this position in that he says:

Children's literature, both the realistic fiction and informational variety, can add needed flesh to the skeleton of information supplied by a basic social studies text, or a group of texts. These trade books reinforce and corroborate specific data such as routes of travel, climatic conditions, population distribution, geographic manifestations, and other environmental phenomena. Many good children's books are written so that children can put themselves into the story. (p. 43)

Montebello (1972) considers these books the lifeline of textbook learnings in that "they enhance textbook teaching by providing for a wide-range of reading levels which cannot be provided for with a single social studies text and trade books offer up-to-date information--information which is often outdated in the textbooks found in many classrooms" (p. 77). In the study of history, Troy (1977) says that "fiction seems to be preferable and many times nearly replaces textbooks" (p. 473).

Literature as Enrichment for Science

In 1976, Fisher conducted a study in which she investigated the use of science trade books in seventh grade biology. She found in her review of literature an intuitive belief among teachers that children's literature can extend, enrich, stimulate, emphasize, reinforce, reiterate, clarify, and summarize science concepts. This led her to test the hypothesis that the use of science trade books in the classroom does indeed affect cognitive learnings. She conducted her study in grade seven using a control group and two experimental groups. The control group received no treatment while experimental group One was given access to selected trade books but was not required to read them. Experimental group Two was required to read selected science trade books as part of their required course of study.

At the end of the experimental time period--nine weeks--the results of the study showed a statistically significant difference among the control and experimental groups. The experimental group showed significantly higher achievement than did the control group and her comparison of the experimental groups showed that experimental group Two gained significantly higher than did experimental group One.

According to Chambers (1971), the science textbook must be augmented by other reading materials. He states

that "the children's trade book, particularly the science informational book, is of inestimable value in helping children learn about the scientific world" (p. 85), while Billig (1977) maintains that children's books "can provide impetus for scientific research and experimentation" (p. 856).

Quite often the emphasis in science is in the direction of firsthand experiences in the discovery of scientific principles through observation and experimentation. With reference to this, Troy (1977) believes that, in fact, "children cannot discover everything in science through firsthand experiences. . . . early satisfying experiences with reading to discover are also important for children" (p. 471). Selsam (cited in Troy, 1977) contends that:

the role of the writer is to write the book so that a child can feel he is participating in the observation of a discovery. . . . A good nature book should stimulate a young person to hear, see, smell, and taste things--to use all of his senses to observe. (p. 471)

When science trade books are used to enrich science programs, they must meet certain standards. These standards, Montebello (1972) states, are: 1. Science trade books must have accuracy and authenticity of information. 2. Illustrations should clarify the content which should be recent and current. 3. Interrelationships of facts and principles should be shown (p. 79). As well, Montebello suggests that

"trade books can also be used to extend information found in textbooks and very often are more up-to-date than the 'aged' publication of some textbooks found in the classrooms" (p. 79).

There is much agreement in the literature that science trade books can extend, enrich, and enhance the textbooks, and that trade books hold certain advantages over a textbook. In this respect, Chambers (1971) maintains that "it would be naive to expect a single text, or group of texts for that matter, even when enhanced by science magazines and pamphlets, to provide all the information a youngster wants and needs once he is underway in a science project" (p. 77).

It must be remembered, however, that children's literature should be used primarily for enjoyment. Any social studies or science concepts are bonuses which may be derived when the teacher and class enjoy a book together. There is a great deal of interesting, quality literature which can teach without preaching to the students, and without putting pressure on them. Troy (1977) says that "we should be aware of the possible danger of making literature too much of a teaching-learning medium which could turn children off to all literature for fun" (p. 474). The use of children's literature can provide interesting story content and at the same time enrich both the social

studies and science content.

Summary

The elementary teacher can enrich the content of social studies and science textbooks through exciting, entertaining, and informative children's books. The skillful use of children's books, which avoids over-teaching and pressure to learn concepts, can promote positive attitudes toward reading.

Creative Techniques for Exploring Children's
Books in the Elementary Classroom

This section presents a review of literature related to effective ways of sharing, interpreting, and exploring children's literature with a class. Studies related to the enjoyment of reading and listening to books through the creation of an inviting reading environment are reviewed in this section as well.

Teachers need to find effective ways to bring children and books together. Willems and Willems (1979) maintain that "by encouraging children to read on their own, by providing recreational materials, and of utmost importance, showing by their actions and words that they enjoy reading, teachers can foster an enjoyment of reading" (p. 90). It is, in Goldberg's (1964) opinion, the school's responsibility to stimulate an interest in reading matter, and for those children who have had limited experience with books, the school must assume an extra responsibility to provide learning experiences that will awaken an interest in reading matter. With regard to the innovative techniques a teacher can use when stimulating an interest in reading, Teidt (1970) believes that "teachers must discard the antiquated book report which is still being used in many classrooms and use more creative approaches to reacting to a book or sharing it with a class" (p. 197).

Exploring Children's Books by Reading Aloud

The classroom teacher can provide the stimulus which is needed to introduce children to good books. In this respect, Cramer (1975) claims that "teachers can teach children to love books, and by reading to them every day they can create an atmosphere that will help children appreciate the gift of literature" (p. 460). In 1967, Pfau pointed out that "overly narrow reading programs, often lacking enthusiastic endorsement of the teacher, deprive children of the enriching activities and materials which could foster personal enjoyment of reading" (p. 35). Reading aloud is one of the most effective techniques to bring children and books together. In his discussion of such techniques, Whitehead (1968) states:

For boys and girls in the elementary school a good book needs more than just a sound plot and interesting characters. It requires a teacher's voice--vital, warm, expressive--to transport the child-listener into the book, story, or poem itself, stir his emotions, stimulate his mind, and make the characters and scenes as real as the people and places he knows in real life. (p. 88)

The values of reading children's literature are endless, according to Brown (1973). The children, she contends, "are introduced to different literary styles, gain moral values, and learn to enjoy reading on their own" (p. 635). Referring to the value of reading aloud, Huck (1979) claims that "reading aloud . . . generates further

interest in books. Good oral reading should develop a taste for finer literature" (p. 709). Goldberg (1964), also commenting on the importance of reading aloud, points out that a teacher can read orally in order to stimulate and arouse the enjoyment of books. Similarly, Kemper (1969) agrees that "reading in the classroom can come in the form of oral reading by the teacher or silent recreational reading by the teacher. Reading by the teacher reveals to the child that this is an activity valued by his teacher" (p. 104).

Teachers must read books with children and to children. A Horn Book (1971) editorial claims that:

The reading aloud of stories by the teacher should form a regular part of work in English for all children until they are at least thirteen. A class absorbed in a good story that the teacher is sharing with them are being helped towards an attitude that sees books as enjoyable and valuable, and, in their absorption, are open in an especially receptive way to language and the insights that language carries with it. (p. 447)

Cramer (1975) says that "reading to children helps them learn to read; helps them learn to write; enriches their language; develops their concepts, knowledge, and experiences; develops a love and appreciation for books; and establishes a mutual bond between listeners" (pp. 460-461). In recognition of the values of reading to children in school, McCormick (1977) cites studies which enable her to state that "research now provides evidence of the direct relationship between reading

aloud to children and reading performance, language development, and the development of reading interests" (p. 143).

According to Whitehead (1968), "Reading aloud is an art which every teacher can master if she truly believes in the value of the activity" (p. 90). In order to master this art, Whitehead suggests that the teacher choose appropriate selections, properly interpret them, and be considerate of her audience's interests and needs. Sebasta and Iverson (1975) believe that the teacher must be concerned with useful read-aloud techniques if she wishes to impart a literary experience to the children.

In this section, particular attention is given to setting, when to read, how long to read, voice, introducing books, genres to read, practices to avoid, and creating a stimulating classroom for reading.

Setting

Cramer (1975) encourages informality when preparing to read aloud to children. He suggests that "the reading-listening period should be a time for enjoyment and relaxation. Textbooks and working materials should be put in the desks so they will not distract from reading. If the children are more comfortable reading with their heads on the desks they should be allowed to do so" (p. 461). With reference to the informal setting, Butler (1980) suggests

that teachers ask their students to gather round informally, making sure all students are comfortable and can hear properly. The little ones should be seated where they can see the illustrations. Huck also believes that "generally children like to be seated close to the teacher so that all can see the pictures easily" (p. 712).

Maintaining eye contact with the children is an effective technique when reading orally. Whitehead (1968) maintains that "every good teacher keeps eye contact with her youngsters when reading aloud to them. She does this for two reasons: (1) it steadies restless children, and (2) it personalizes the reading" (p. 100). Lamme (1976) and Butler (1980) also comment on the importance of eye contact. Butler suggests that teachers know the book well enough "to glance up frequently, maintaining eye contact with listeners" (p. 884).

When to Read

The consensus of the authors whose studies were reviewed is that teachers should read to their classes every day. In this regard, Whitehead (1968) contends that "a teacher should provide at least a daily read-aloud period" (p. 97). According to Huck (1963), teachers committed to the goal of encouraging lifetime reading habits in their boys and girls will realize that "the daily story hour is

important at all grade levels" (p. 59). Similarly, Brown (1973) agrees that the time spent each day reading aloud is very rewarding to both children and teacher (p. 635).

Regarding the optimal time during the day for reading aloud, Cramer (1975) suggests that the last twenty minutes of the day is a good choice because it sends children home with a pleasant conclusion to the day's activities. The beginning of the day is also a good choice because it gets the children off to a good start" (p. 461). In this respect, Whitehead (1968) maintains that "these reading periods may come about during opening exercises, after recess, before dismissal, and at other quiet times when relaxation is called for" (p. 97). While Huck (1979) points out that teachers should "read a story once a day", she gives no particular time for doing so (p. 708).

How Long to Read

Reading aloud, according to Arbuthnot and Sutherland (1972), is one of the most powerful charms a teacher has to lure children to books, but it must not be overdone. The length of the reading period is of prime importance so that the children will not be bored with lengthy reading sessions. Willems and Willems (1979) warn teachers to "plan precisely how much will be read in each read-aloud session" (p. 92) but make no reference to the number of

minutes allotted for it.

With regard to the actual amount of time teachers should spend daily reading orally, Chambers (1977) claims that "obviously, the younger the child the less he can take. Infant children may be satisfied by a few minutes of listening; by the age of ten, twenty to thirty minutes should be about right for all" (p. 57). Brown (1973) spends fifteen to twenty minutes each day reading aloud to children. Similarly, Arbuthnot and Sutherland (1977) contend that "when teachers are reading to a class, they should never try to read a long selection when they know the attention span of the children is likely to be no more than twenty minutes" (p. 525). Cramer (1975) holds the same view as Arbuthnot and Sutherland, but states further that "the time spent may vary depending on the mood of the children and teacher, the passage being read, the amount of time available, the children's interest in the material, and other unpredictable factors" (p. 461).

Related to the length of the reading session is the number of books the teacher should read in their entirety throughout the school year. Huck (1979) believes that "an educated guess might be that starting with 8-year-olds--when teachers begin to read longer, continuous stories to boys and girls--an average of some four to five books are read aloud during the year" (p. 709). As well as the books that are read in their entirety, Arbuthnot points out that

"middle grade teachers may present parts of many books to their students during book talks or as teasers to interest the children in reading the books" (p. 709). Fenner (1957) writes that a teacher who knows books will read aloud a great deal to her class. If she cannot read the entire book, she carefully chooses the passages and "without fail, the majority of her class comes to the library for the book" (p. 29).

Voice

Since distinct articulation is one essential for effective oral reading, Huck (1979) contends that an "important element is the voice tone and pitch. Conversation should be read naturally and volume should be varied with the content of the story" (p. 712). In this regard, Cramer (1975) claims that teachers should interpret the mood, tone, and action of the passage being read without fear of being dramatic, for children will appreciate Mark Twain's Huckleberry Finn more if the teacher renders the dialogue accurately.

The effectiveness of the oral reading session will be enhanced, Butler (1980) believes, "by creating the mood with the pitch, tone, and pace of the voice and enunciating clearly" (p. 884). Lamme (1976) found that "good oral readers tended to put variety in their voices and not read

at too high or low a pitch, or too loud or soft a volume" (p. 887).

Introducing Books

It is the consensus of some authors in the field of children's literature (Huck, 1963; Goldberg, 1964; Farrell, 1966, and Durkin, 1974) that teachers should provide some introduction for the books they read. One effective method is to provide students with knowledge of the author and illustrator. On this subject, Huck (1963) maintains that "a knowledge and understanding of authors and illustrators will enhance the reading of a book or lead a child to a new book by a favorite author" (p. 60). Goldberg (1964) agrees with Huck. She claims that "teachers should take time to provide a little background about the lives of the authors of the books they read" (p. 395). The teacher has to bring the books and children together, and in this regard Durkin (1974) asserts, "I can think of no more effective device for accomplishing this than the teacher who reads to children; who offers enticing introductions to other books" (p. 231).

Farrell (1966) states that "unless we first motivate a student's interest in a selection or book and establish the purposes for his listening, we teach almost nothing" (p. 43). When establishing such purposes, Farrell (1966)

further believes that "if one intends to do more than orally share with a class a poem or story for enjoyment alone, then he must structure his lesson carefully" (p. 43).

Successful oral reading may be dependent upon preparing the child to listen to the book, and on this subject, Cramer (1975) recommends that "the thoughtful teacher establish and maintain a climate of receptivity among the children" (p. 461).

Arbuthnot (1972) suggests using a candle lighting technique which will signify that something special is about to happen or making a simple announcement of story-time which will settle even the most rambunctious of children. Another method of drawing attention to the book is to present the book jacket which, Whitehead (1968) believes, "may present information about the author and illustrator" (p. 98).

A few words of caution regarding lengthy introductions is added by Huck (1979). While agreeing that "an introduction to the selection will set the stage for enjoyment and appreciation", she cautions that "it is wise to keep introductions as brief as possible and move quickly into reading the selection itself" (p. 712).

Genres of Children's Literature to Read

The teacher's plan to read children's literature to a class must include various genres. In this regard, Huck

(1963) believes that "the daily story hour is . . . a way of introducing children to a wide variety of quality literature" (p. 59). Oral reading is a time, as Brown (1973) contends, to introduce children to different literary styles. Similarly, Goldberg (1964) suggests that "the teacher may be able to introduce a wide variety of books, beginning with the children's interests, and encouraging the children to reach out for more" (p. 395), while Butler (1980) recommends that "teachers broaden children's basis of appreciation by introducing them to a wide variety of books" (p. 884).

A comprehensive program of reading to children must be carefully planned. To provide a wide variety of books, Cramer (1975) suggests the following guidelines for selecting materials to read to children:

1. Provide both modern and traditional literature.
2. Provide both fiction and non-fiction.
For the most part, selections to be read aloud should be fiction.
3. Provide both prose and poetry.
4. Provide books which contain elements of surprise, suspense, action, and universal characters with whom children can identify. (pp. 462-463)

Since it is typical of children of a certain age group to go on reading "jags" reading only one type of book, Huck (1963) maintains that the daily story hour can introduce "children to fantasy . . . exciting historical fiction . . . legends . . . and biography" (p. 59). In her

suggestions of genres to read aloud, Larrick (1962) recommends that teachers select "books about prime interests in their group, including fairy tales" (p. 65). The fairy tales, she says, may have to be read aloud to let the reader's enthusiasm weave its spell. As well as fairy tales, Whitehead (1968) suggests that "fiction, biography, history, poetry, and non-fiction" should all have their place in the read-aloud session (p. 91).

Selecting various genres from modern children's literature, however, is not without its problems. Egoff (1979) claims that she "can't imagine a really literate adult wanting to read one of the modern day problem novels to a child. Many of the books are highly symbolic and experimental in style and action is carried out through dialogue alone. Contemporary children's stories just aren't written for easy reading aloud" (p. 13). However, she believes that there is still some lightweight reading for children available on the market.

There is a danger, if careful selection is not made, that middle-grade teachers will choose to read aloud only those books which will support the social studies program. Tom (1969) found in a national study that some 70 percent who did read aloud reported that they chose titles that would correlate with social studies. This practice, according to Huck (1979), "can destroy the whole notion of

broadening children's interests in a variety of types of literature and providing a kind of balance in the selection of materials shared with children" (p. 709).

Practices to Avoid

Practices that tend to mitigate against the development of a love of reading should be avoided. Huck (1963) claims that "required book lists or making a balanced wheel of books read or heard does not allow the child freedom of range" (p. 62). She maintains that giving rewards to a child for reading is a questionable practice, and also believes that "requiring a book report for every book read is to penalize a child for completing the book and may be a deterrent to promoting an enjoyment of reading" (p. 62). Grambs (1959), as well, reports that "book lists or reports kill reading interests" (p. 220).

Arbuthnot (1972) suggests that time spent by teachers in trying to engage the student in speculating or predicting what is to come is effective, but she continues "it should not go on too long and must be kept within the limits of the book. Aimless speculating is time-consuming and rarely accurate" (p. 559). In this regard, Grambs (1959) notes that "one lethal cause of stifled interest was the teacher who spent half a semester dredging for elusive morals or principles in children's literature" (p. 220). Enjoyment of

books should be the teacher's main concern; questions and activities following the reading of a book should not be so rigid and demanding that the child will lose interest in reading or listening to good literature. In respect to promoting a love of reading, Butler (1980) asserts that "teachers should establish an atmosphere of enjoyment, not of teaching" (p. 884).

The teacher should avoid withdrawal of the read-aloud session as a form of punishment. In referring to such a practice, Cramer (1975) states that "it would never occur to a teacher to withdraw the day's work in mathematics as an appropriate punishment for misbehavior. It makes less sense to withdraw the reading-listening time. It is every bit as important as mathematics" (p. 461).

Creating a Stimulating Classroom for Reading

An essential of a good literature and oral reading program, according to Whitehead (1968), is the provision in the classroom of stimulating, attractive surroundings conducive to enjoyable reading. He also believes that "there should be a library corner or reading center in every classroom" (p. 28). This view is supported by Coody (1973), who points out that "any effort that goes into making the classroom library an inviting spot will pay rich dividends in reading achievement and in reading interest" (p. 7).

An inviting, stimulating reading classroom is described by Scrivner and Scrivner (1972) as:

a room of simple, free-flowing lines with natural materials and an absence of ostentation . . . the room must talk to children. It must be challenging and enchanting, and simultaneously provide freedom of movement for the restless, active child and permit the solitary child to work uninterrupted. (p. 38)

This idea of a stimulating, interesting environment is supported by Huck (1963), who maintains that "bulletin board displays of one particular book, types of books, or the books by one author have been used in motivating children to read" (p. 60). She also refers to shadow box displays, wall hangings, dioramas, felt and flannelboard stories, and book reviews as possible methods of stimulating interest in books and reading.

Summary

Introducing good children's literature to students requires a teacher to plan carefully the reading session. Enjoyment of books in the read-aloud session can be enhanced by giving attention to setting, the length of the read-aloud session, when to read, voice, genre to read, and the creation of a stimulating classroom for reading.

Reading Interests of the
Elementary Pupil

Knowledge of elementary children's reading interests assists the teacher in determining particular children's preferences in books. These reading interests will vary somewhat across the elementary grades, and although children are individuals and differ as to sex, age, intelligence, environmental background, and reading ability, there is, as Hurley (cited in Kugoth, 1970) notes, "an amazing consistency in patterns of reading interests" (p. 96).

As far back as 1924, Garnett (cited in Crawley, 1977) summarized the reading interests of intermediate boys and girls and found that both groups were interested in action and adventure stories, animals, sports, science, and mystery. Throughout the intervening years, various researchers (Whitty et al., 1946, cited in Strong, 1978; Norvell, 1958; Stanchfield, 1962; Langer, 1970; Moray, 1977) have identified children's reading interests through interest inventories and surveys and the findings of each tend to concur with Garnett's.

In her review of reading interests, King (1967) found that in the intermediate grades, pupils preferred mystery, adventure, animal stories, family life stories, biographies, sports, science, and social studies. Fourth, fifth, and sixth grade boys, Schulte (cited in Porter, 1972) found,

were interested in "historical fiction, history, social studies, science and health". Girls of that age showed a preference for "realistic fiction, fanciful tales, biography, recreational interests, and poetry" (p. 1029). In a study conducted on the reading likes and dislikes of 900 boys and girls in grades four through seven Ashley (cited in Weintraub et al. 1972) found that the first choices of the entire group were: mysteries, adventure, ghost stories, comics, and science fiction. Love stories were disliked by a little more than half the children and this dislike reached a peak at grade five among boys. According to an editorial in The Reading Teacher in 1974 which classified children's reading interests by age level, "when children in the elementary grades expressed their reading interests by completing 'I like to read about _____', animals were the most favored and mysteries grew in this age group" (p. 694).

Studies reveal a trend among children of younger ages toward maturing faster in their reading interests. In this respect, King (1967) reports that in 1962 McAulay "identified more mature interests in social studies materials among younger children as being due to the influence of television, radio, movies, and travel" (p. 316). More recently, an informal survey, according to Barnes (1980), was carried out in Kirkland Lake, Ontario in grades four through eight to determine children's

reading interests. The results of the survey showed that mystery was the top choice for each grade, while adventure enjoyed second place in each of the five grades. Romance and westerns, the least favoured, were both placed last in all five grades.

In 1962, McKenzie (cited in King 1967) studied the reading interests of pupils in Medicine Hat, Alberta. He found that:

Sex differences in reading interests appeared in Grade 4, and increased appreciably in Grades 5 and 6. In the latter grade the girls outnumbered the boys two to one in their choice of mystery books and children's stories, whereas the boys nearly reversed the score in preferences for non-fiction. (p. 317)

The third, fourth, and fifth grades are crucial years for stimulating children's interest in books. These are the years, according to Bard (1976), "to take advantage of the child's lingering interest in imaginative literature by reading aloud fantasies that are beyond the child's reading level but are of intrinsic interest to boys and girls of their age" (p. 8). Later, Bard continues, as part of this transitional period of grades five and six, is the appropriate time "to read aloud the 'high fantasies', adventure stories, and heroic legends . . ." (p. 8).

While most of the interest surveys that the writer reviewed tended to survey fiction, some researchers report

findings based on non-fiction books exclusively. Bissett and Moline (1974) maintain that "often . . . young children are drawn to a book because of its subject matter. They see a book about worms or gerbils and they are immediately entranced" (p. 1015). In this regard, Bissett and Moline (1974) contend that "older children are not much different, except that their broader experience opens the possibility for an even wider range of books the range of informational books that appeal to older children is nearly limitless" (p. 1015). In reference to children's choices of informational books, Gans (1965) reports:

In fifth and sixth grades, deep interests in the field of science, history, or crafts arise. Some children of this age spend most of their time reading with books and other publications related to those interests. Factual rather than story books are often mentioned as their favourites. (p. 125)

King (1967) reports that in 1955 Young, "in analyzing the science interests of intermediate grade children, found that the universe, animals, earth, human growth, and weather ranked high" (p. 314). King (1967) also reports that Shores who, in a survey related to informational needs and reading interests of grades four through eight, found that "boys asked questions more in the field of science, particularly about geology, geography, and rockets. Girls, on the other hand, wanted information on foreign countries,

history, authors, and artists" (p. 314).

Since recent reading interest surveys were difficult to find, many of those reviewed in this section do not reflect the impact of television on children's reading interests. A natural limitation of such surveys, as well, is that they tend to reflect what children have been exposed to, not their potential reading interests.

Summary

Most researchers report that, in fiction, boys and girls in the intermediate grades are generally more interested in reading animal stories, mysteries, adventures, historical fiction, realistic fiction, and science fiction. Love stories and westerns are generally disliked by children in the intermediate grades. Though the reading interest studies related to non-fiction or information books tend to be fewer, it appears that science, crafts, social studies, and biographies are popular.

The Need for Book Selection Aids

The teacher who selects books for a classroom or library may find a tremendous number of titles from which to select. Ohanian (1970) writes that "close to 1410 books were published for children in 1969" (p. 946). Egoff (1979),

in referring to the tremendous number of books being published in the field of children's literature, comments upon the impossibility of keeping up with some 6,000 new books for children that are published each year. In the United States, she notes, there are more than 50,000 books in print at any one time.

Despite favourable reviews, a book may not be suitable for a particular class or school and not all books are good; some may be entirely unsuitable or inappropriate. In this regard, Ashley (1972) claims that:

As recently as 1964 Wallace caustically drew attention to the sad fact that out of 3,100 titles of children's books only forty to fifty would turn out to prove of excellent to superb quality. (Another way of looking at the figures is that out of every sixty-two books, sixty-one would be of less than superb standard.) (pp. 3-4)

Ohanian (1970) maintains that "the exploding book population complicates the problem of separating the literary gem from the chaff" (p. 946).

It can be inferred from the evidence already presented that most teachers need help when selecting children's books for a classroom or library. In order to select quality books for children, De Angelo (1968) contends that "a knowledge of selection aids is critical" (p. 110). Arbuthnot et al. (1966) ask, "Who has the time to scan critically the masses of new books and to watch over a period of time, the

children's responses to them?" (p. viii).

Although Morris (1973) believes that "many people are involved in the selection of books for children: authors, book editors, public librarians, school librarians, teachers, parents, and children" (p. 7), other authors in the field of children's literature (Whitehead, 1968; Tiedt, 1970; Alexander and Filler, 1976; and Huck, 1979) contend that teachers and librarians, and to some extent, the students, are basically responsible for book selection. Huck (1979) maintains that "teachers and students may recommend particular titles, but the final selection for the school library media center should be determined by professionally trained personnel. Frequently, librarians will appoint interested teachers and, occasionally, a parent to serve on a book selection committee . . ." (p. 38). With reference to the question of who should select books, Arbuthnot et al. (1966) report that "teachers and children's librarians are in a strategic position to perform these services" (p. viii). Similarly, Peterson (1962) points out that "teachers may be assigned to check reviews in specific sources, or subject area specialists may be expected to check their subject fields in a number of selection tools" (p. 68).

Whereas the sources reviewed above suggest that the teacher and the school librarian usually determine what

books to include in a collection, Whitehead (1968) maintains that children also help. He points out that "experience has shown that when the children have a voice in the selection of books, they are more apt to read them and to take care of them" (p. 31). Tiedt (1970) considers that children, as well as teachers and librarians, should be involved in book selection. She believes that:

It is common for teachers and librarians to share the responsibility for ordering trade books for school libraries . . . another group, however, that should have something to contribute to this selection process consists of the children themselves. We don't always take full advantage of utilizing the opinions of children which in many cases would assist us in avoiding poor choices.

Quite often, neither teacher, librarian, nor children may have the time to peruse and judge many children's books throughout the school term. With reference to this point, McManus (1967) maintains that "no one expects a teacher to become an authority on children's literature in a short period of time" (p. 32). Perhaps, according to McManus, the most profitable way to build a respectable collection of children's books is to read one of the excellent surveys of children's literature" (p. 32).

There are many excellent surveys of children's literature, and De Angelo (1968) points out that each selection aid has its "own distinct values and unique

contributions" (p. 111). Freeman (1975) recommends that teachers and librarians should avoid using only one selection aid to choose books. She suggests that "at least three be consulted" (p. 69).

When choosing from among the many book selection aids available, De Angelo (1968) contends that a teacher or librarian use an aid which includes the following information about a particular book:

1. A precis of the content, the scope of the book.
2. The author's aim and, in the reviewer's judgment, how well he succeeded in achieving it.
3. The format (quality of design, make-up, and binding) and illustrations (type, quality, use, placement).
4. The accuracy, up-to-dateness, clarity, organization, and practical aids of information books.
5. The strength of theme and plot, characterization, style and quality of writing in books of fiction.
6. Some comparison with similar books or other books by the same author, when appropriate.
7. An approximation of the grade-and/or age-level range.
8. The weaknesses or limitations, the strengths, and an overall evaluation (p. 112).

A listing of selection aids is found in Appendix A.

Summary

It seems obvious from the research presented in this section that teachers, librarians, and often students are responsible for selecting good children's books for a classroom or school collection. Since it is difficult for selectors to read or peruse all children's books published annually, they should make use of reliable book selection aids.

CHAPTER THREE

METHODOLOGY

Introduction

In order to fulfill the purposes of the study it was necessary to become familiar with the program of studies for elementary social studies and science, to select many children's books through use of reputable selection aids, to review the selected books to determine their suitability for enrichment purposes in elementary social studies and science, to prepare an annotated list of books with potential for enriching the social studies and science content, and to develop examples of related activities and discussion questions for a sample of those books at each grade level.

The Program of Study for Elementary Social Studies and Science

This study was confined to the social studies and science courses presently being taught in Newfoundland elementary schools. (See Appendix B). These courses were outlined in Program of Studies 1980-81, distributed by the

Department of Education of the province of Newfoundland and Labrador. While the Program of Studies recommended the textbooks for each grade, it also listed two curriculum guides developed by the Department of Education. Design for Social Studies K-VI in Newfoundland and Labrador outlined core units in social studies, and The Elementary School Science Course Description outlined and described the units of study in science. Both of these course guides were studied by the writer to determine the specifics of the content and the objectives for each course.

Since teacher guidebooks for each course frequently have lists of recommended children's books which are intended as enrichment materials, each guidebook was read.

The Selection of Children's Books
to Enrich Elementary Social
Studies and Science
Programs

To select children's books effectively, it was necessary to make wide use of selection aids. Since the core selection aids usually have books listed by subject areas, the following were consulted: The Elementary School Library Collection, Twelfth Edition, Winkel, L. (ed.); Books for Elementary School Libraries: An Initial Collection,

Hodges, E. D. (ed.); Basic Book List for Canadian Schools Elementary Division: Rev. Edition; Children's Books to Enrich the Social Studies in the Elementary Grades, Huus, H. (ed.); and Subject Index to Books for the Intermediate Grades, Eakin, M. K. (comp.). Although the Basic Book List for Canadian Schools has a copyright date of 1968, no more recent Canadian core is available. For each unit of study in both social studies and science in grades four, five, and six, titles were identified and listed as books to be reviewed later by the writer.

The teacher's guidebooks for each course of study in the three elementary grades were studied to ascertain if any lists of annotated books were included. If books so recommended were still in print and available for personal reading by the writer, these were also included on the writer's list for reviewing.

Despite the use of recent selection aids, it is possible that some of the books selected are out of print. Current editions of Books in Print, Canadian, American and British, were consulted. In general, only books still in print and therefore available from publishers were included on the tentative list.

Each book which could be located in local libraries and schools was read in its entirety by the investigator. Because a few recently published books could not be located

in libraries, they were dropped from the original list. As each book was read its potential for enriching elementary social studies or science was assessed. All those books which were considered suitable were summarized.

The Review of Children's Books

After the initial examination of books, the writer made a tentative list of children's books with potential for enriching elementary social studies or science. One of the criteria for each book's final inclusion was a favorable review in one or more reputable selection aids or book review journals.

The current sources which were most useful for reviews on science information books were: Appraisal, Children's Science Books and Films, and Science and Children. The Horn Book, The School Library Journal, Bookbird, and Junior Book Shelf were searched primarily for reviews of books related to social studies. To insure coverage of books published and reviewed mainly in Canada, Canadian Children's Literature, In Review, and Canadian Materials were examined. For Newfoundland publications the NTA Bulletin and Media Newfoundland were searched. The writer found that the Children's Book Review Digest and Book Review Digest contained reviews for some of the titles which could not be located in the above sources.

In addition to the current book review periodicals, core sources were examined. These were: The Elementary School Library Collection, Children's Catalogue, Best Books for Children, Adventuring with Books, The Elementary School Library Collection, Basic Book List for Canadian Schools: Elementary Division, Children's Choices of Canadian Books, and Canadian Fiction: An Annotated Bibliography. All sources which were used in selecting and reviewing books are found in the appendix to the booklet.

Although no book can be realistically assigned to one grade, the books included in the final list were put in specific grade lists on the basis of content. If, for example, the book could enrich a unit in grade four social studies, it was placed in the grade four list.

Books of varying levels of readability were placed in all three elementary grades to provide for pupils of varying abilities and interests. Reading difficulty levels were taken from the selection aids which usually give a reading grade range for each book reviewed. A balance was sought, as well, to insure that the final book list contained both fiction and non-fiction.

Preparation of an Annotated List of Books

Suitable for Enriching Elementary

Social Studies and Science

Nature of the Annotated List of Children's Books

The annotated list is arranged by units in social studies and science for each grade. An alphabetized author/title listing of all recommended books is presented in Appendix C. The list begins with grade four social studies and science and ends with grade six social studies and science. Within each unit, the books are arranged alphabetically by author.

For each book the following information is provided: author, title, illustrator (if any); place of publication; publishing company; date of publication; an indication as to whether the book is fiction, informational, biography, legend, or poetry; the readability level by grade range shown in parentheses; and OUT OF PRINT for those books known to be out of print.

After the bibliographical data, a brief summary of the book is given. Below the summary, the recommending source is indicated in a code which is explained on the first page of the annotated list.

Each book has potential for enriching a unit or units of elementary social studies or science, and those

units of study are indicated at the conclusion of the annotation of each book.

Development of Related Activities

Centered Around Children's

Books

Several sample books were selected from the list at each grade level, and for each of these examples discussion questions and related activities were developed. These discussion questions and related activities are suggestions that might act as guides for teachers in developing their own for those or other books. During the process of developing the related activities and discussion questions, the writer examined and analyzed similar exercises developed by other educators and researchers. The techniques and activities of the following authors were particularly useful: Chambers (1971), Huck (1979), Somers and Worthington (1979), and Whitehead (1968). Drawing upon these and other sources, the writer devised his own questions and art, dramatization, and composition activities for books selected from his annotated list.

CHAPTER 4

SUMMARY AND RECOMMENDATIONS

Summary

Many teachers in the elementary grades are not familiar with a large number of good books appropriate for the enriching of the curriculum in social studies and science. Even where many books are available to them, most teachers do not have the time needed to develop suitable activities for use with each book.

The primary purpose of this study was to select appropriate children's books which could effectively enrich units presented in the elementary social studies and science programs, and to provide for each book an annotation, complete bibliographical information, and an indication of the level of reading difficulty. A secondary purpose was to develop, at each grade level, discussion questions and activities for a sample of several books.

Through a study of the prescribed textbooks, teachers' manuals, guidebooks, and programs of study, the units of study contained in the social studies and science programs in the elementary grades were identified. The subject

indexes of reputable selection aids were used to determine the titles of children's books which were related to these units of study. A listing was made of the titles, and each available book was read to determine its suitability for enrichment purposes in elementary social studies and science. An annotated list of books for each grade was prepared. Complete bibliographic information, a summary, an indication of the level of reading difficulty, and at least one recommending source were prepared for each book. For a sample of books at each grade level, examples of related activities and discussion questions were developed to serve as guides for teachers when developing their own activities for these or other children's books.

On the basis of this study, the following observations are made:

With the assistance of reputable selection aids, books can be chosen to enrich elementary social studies and science programs in Newfoundland schools.

Many such books are available.

Related activities and discussion questions can be developed to enable teachers to use children's books to enrich, extend, broaden, and enhance social studies and science in the elementary grades.

Children's books can be used effectively to enrich and extend the content of elementary social studies and science.

Recommendations

Based on the above observations, the following recommendations are made:

A list of children's books of the type developed in this study should be revised regularly and new titles added annually.

Lists developed by students, teachers, and school boards should be collated and edited by one or more of the following groups: Department of Education, Newfoundland Teachers Association Special Interest Councils, and provincial Curriculum Councils. Recommended book lists for Newfoundland curricula should be distributed by the Department of Education or Special Interest Councils to all school boards and teachers throughout the province.

A study similar to this one should be developed to identify children's books which have potential for enriching art, mathematics, family life, and language programs in the elementary grades. A list of appropriate children's books to enrich and extend social studies and science in the primary grades should also be developed.

It is further recommended that elementary teachers in either their pre-service or in-service preparation should be exposed to a course in children's literature and in selection aids and selection processes.

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PART B

USING CHILDREN'S LITERATURE IN THE SOCIAL
STUDIES AND SCIENCE PROGRAMS
IN THE ELEMENTARY GRADES

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SECTION I

ANNOTATED LIST OF CHILDREN'S BOOKS TO USE IN ELEMENTARY SOCIAL STUDIES AND SCIENCE PROGRAMS

Introduction

Children's books which have potential for enriching social studies and science programs are a useful teaching tool for teachers in the elementary grades. While teachers do have book lists available to them, generally they are designed with other Canadian or American curricula in mind.

This annotated list is designed to provide Newfoundland teachers with titles of high quality books which they may use to enrich, extend, broaden, or enhance the social studies and science programs in grades four, five, and six. It is specifically designed to provide school librarians, instructional materials specialists, and teachers with a selective list from which to choose books. It is not intended to be a complete collection--most teachers and librarians will know or discover other excellent books to add to the list. Some books had to be excluded from the annotated list since it was impossible to examine personally

all books dealing with a specific topic, and others included in the selection aids were not available. The list is not intended to be exhaustive. It is virtually impossible to examine all books on all topics, even if they were readily available. In any case new books are being published monthly. There are, however, some topics--particularly in recent space technology, and Newfoundland geography and history--in which appropriate books were difficult to find.

Nature of the Annotated List

This list provides summaries of a selection of both fictional and non-fictional books, with complete bibliographical information. On the basis of content, books are assigned to a specific grade as well as to a particular topic within that grade. While most of the books contained in the list are still in print, a few particularly relevant but out of print books are included since it is possible that they are available in some schools. The listing for each grade contains books of varying levels of readability to provide for pupils with varying abilities and interests. All books listed have been reviewed in one or more reputable selection aids.

The Code Used for Sources of Reviews

Each book contained in the annotated list has been recommended in at least one review. The sources of the reviews are coded by initials:

A	-	Appraisal
AAAS	-	AAAS Science Book List for Children
AB(C)	-	Adventuring with Books - Cianciolo (ed.)
ABNM	-	Annotated Bibliography of Newfoundland Materials
AB(R)	-	Adventuring with Books - Root (ed.)
BBC	-	Best Books for Children
BBLCS	-	Basic Book List for Canadian Schools
BCB	-	Best in Children's Books
BESL	-	Books for Elementary School Libraries
BL	-	Booklist
CBESS	-	Children's Books to Enrich the Social Studies for Elementary Grades
CBYP	-	Canadian Books for Young People
CC	-	Children's Catalogue
CCCB	-	Children's Choices of Canadian Books
CCL	-	Canadian Children's Literature
CF	-	Canadian Fiction: An Annotated Bibliography
CM	-	Canadian Materials
ESLC	-	Elementary School Library Collection
HB	-	Horn Book

IR	-	In Review
KR	-	Kirkus Reviews
LJ	-	Library Journal
MN	-	Media Newfoundland
NS	-	New Statesman
NTAB	-	NTA Bulletin
NYTBR	-	New York Times Book Review
O	-	Observer
PW	-	Publisher's Weekly
SB	-	Science Books
SBF	-	Science Books and Films
SC	-	Science and Children
SLCES	-	School Library Collection for Elementary Schools
SLJ	-	School Library Journal
T	-	Teacher
TLS	-	Times Literary Supplement
WLB	-	Wilson Library Bulletin

Appendix A contains bibliographic information for each of the above sources.

Sample Bibliographic Entry

For each book the following information is provided: author; title; illustrator (if any); place of publication; publishing company; date of publication; an indication as to whether the book is fiction, informational, biography, legend, or poetry; the readability level by grade range shown in parentheses; and OUT OF PRINT for those books known to be out of print. An example entry follows:

Harris, Christie. Raven's Cry. Illustrated by Bill Reid.
New York: Atheneum, 1969. Fiction (6-9).

Summary. Harris vividly tells the tragic story of the Haida Indians of the Queen Charlotte Islands whose culture and peoples were quickly destroyed by greedy furtraders and zealous missionaries. The author has traced the history of these highly cultured Indians in a series of interrelated stories which begin with Yatza's life in 1775 and conclude with Bill Reid's (the illustrator) life in 1969.

CCCB

IR

Suggested use: Unit on Native People, grade 6 history pamphlets

Books for Grade Four Social Studies

Enright, Elizabeth. Thimble Summer. Illustrated by Elizabeth Enright. New York: Holt Rinehart & Winston, 1938. Fiction (4-6).

Summary. It promises to be a dull, dry summer for Garnet, but then she finds a silver thimble and everything seems to go right. The rain comes, her father's fortunes take a turn for the better, and her pig wins at the county fair.

This book, a Newbery award winner, follows the adventures of a nine-year-old girl on her father's farm. Farm life and its chores are vividly described by Enright.

ESLC

BESL

Suggested use: Unit 1, geography text

Manley, Deborah. Maps and Map Games. Illustrated by Ray Martin. London: Pan Books, 1976. Information (4-7).

Summary. An informational book in paperback on how to make maps, shape them, and draw them. It explains with simple games how to read maps and what the symbols on a map mean. The book concludes with a simple map quiz.

O

Suggested use: Unit 1, geography text

Polgreen, John and Cathleen. Sunlight and Shadows.
Illustrated by John and Cathleen Polgreen. New
York: Doubleday, 1967. Information (1-3).

Summary. Changing shadows are explained in terms of the changing location of the sun, and the changing locations are related to rotation and revolution of the earth. This book explains why the seasons change, how day changes to night, and where sunlight comes from.

ESLC

SBLC

Suggested use: Unit 1, geography text

Rinkoff, Barbara. A Map is a Picture. Illustrated by Robert Galster. New York: Thomas Y. Crowell, 1965. Information (1-3).

Summary. Rinkoff has written this book especially for students who are just beginning to experience map reading. The text and diagrams present a variety of maps which progress from simple treasure maps to more complicated star maps. The book encourages children to make their own maps.

LJ

Suggested use: Unit 1, geography text

Simon, Seymour. Weather and Climate. Illustrated by John Polgreen. New York: Random House, 1969.
Information (3-6).

Summary. The elements that produce weather--air, heat from the sun, water in the air--are shown combining to produce wind, rain, and snow. Simon also discusses the instruments used to measure weather and climate.

LJ

Suggested use: Unit 1, geography text

Unstead, R. J. Living in a Medieval Village. Illustrated by Ron Stenberg. New York: Addison-Wesley, 1973.
Information (4-up).

Summary. This book takes the reader back to 500 years ago when the lord could own the whole village and the people in it. The text shows how most people in the village worked and lived. The line drawings and diagrams are supplemented with coloured illustrations.

ESLC

BBC

Suggested use: Unit 1, geography text

Bringle, Mary. The Eskimos. Illustrated. New York: Franklin Watts, 1973. Information (4-7).

Summary. This attractive book is filled with information and photographs which focus on the Eskimos' life in the North--dwellings, clothing, hunting, food, customs, art, and religion.

It includes a bibliography of other books about Eskimos.

CC

ESLC

Suggested use: Unit 2, geography text

Houston, James. Akavak. Illustrated by James Houston. New York: Harcourt, Brace & World, 1968. Fiction (3-6).

Summary. Akavak and his grandfather set off on a long journey to see relatives. Seven days away from home, in harsh winter conditions, their troubles begin. A bear has eaten their food cache, grandfather falls through the ice, and Akavak loses the sled and three of the four sled dogs. Nearly dead from hunger, Akavak kills a muskox. After retrieving his sled, the boy and his dog drag the grandfather

into their relatives' village. But Akavak realizes his grandfather is dead, just as the difficult journey is completed.

ESLC

HB

IR

Suggested use: Unit 2, geography text

Houston, James. Kiviok's Magic Journey. Illustrated by James Houston. New York: Atheneum, 1973. Fiction (1-4).

Summary. The Eskimo Kiviok lived in the time when animals could easily change into human form. After he helps a goose girl, they marry. But Kungo, his goose girl wife, leaves to join the geese flying south. With the help of magic, Kiviok finds his wife and children and brings them back home. This tale of Eskimo life is by the author of Wolf Run, Tikta' liktak, and Frozen Fire.

ESLC

BBC

Suggested use: Unit 2, geography text

Carpenter, John Allen and Maginnis, Matthew. Enchantment of Africa: Zaire. Illustrated. Chicago: Children's Press, 1973. Information (4-6).

Summary. After introducing Zaire with a brief folktale, the authors describe the country's physical features. The three geographical sections of Zaire are described through the eyes of three children. Animals, the national treasure of Zaire, are discussed at length and the people and their work are described.

The text is supplemented with many black-and-white photographs.

ESLC

Suggested use: Unit 3, geography text

Elisofo, Eliot. Zaire: A Week in Joseph's World. Illustrated by Eliot Elisofo. New York: Crowell-Collier Press, 1973. Information (4-7).

Summary. Through the eyes of Joseph, a young boy of Zaire, this beautiful African country is described. The combination of text and large photographs gives a clear picture of a week's activities.

AB(C)

Suggested use: Unit 3, geography text

Markhanall, David P. The Best of Brer Anansi. Illustrated by Michael Jackson. Glasgow: Robert Maclehose, 1973. Fiction (2-5).

Summary. Here are ten folktales about Brer Anansi and his African jungle friends. Brer Anansi, the spider, comes out on top in seemingly impossible situations, outwitting his victims and saving his own life.

These folktales, similar to the Brer Rabbit tales of North America, originate in West Africa.

TLS

Suggested use: Unit 3, geography text

Musgrove, Margaret. Ashanti to Zulu: African Traditions. Pictures by Leo and Diane Dillon. New York: Dial Press, 1976. Information (K-4).

Summary. Twenty-six tribes of Africa, one for each letter of the alphabet, are presented in large, highly-detailed pictures. Below each picture the author describes a tradition or custom of the tribe. A pronunciation guide is provided as well as a map of Africa. This book won the Caldecott Medal Award.

NYTBR

ESLC

Suggested use: Unit 3, geography text

Gidal, Sonia and Tim. Sons of the Desert. Illustrated.
New York: Pantheon Books, 1960. Fiction (4-7).

Summary. The story of Fayez, a young Syrian boy and his family, progresses through a series of troubles--a sand storm, the theft of a camel, and a swarm of locusts. Later the Bedouin family find a new grazing ground for their flocks and all is well.

The work, education, transportation, clothing, and recreation of a typical Bedouin family are shown in Fayez's story.

BBLCS

BESL

Suggested use: Unit 4, geography text

Gilfond, Henry. Syria. Illustrated. New York: Franklin Watts, 1978. Information (4-5).

Summary. Gilfond examines the old and new cities of Syria, Syria's people, and the geography of the Syrian Arab Republic. As well, the educational system and religions of Syria are examined.

BL

Suggested use: Unit 4, geography text

Clark, Ann Nolan. Secret of the Andes. Illustrated by Jean Charlot. New York: Viking, 1972. Fiction (3-7).

Summary. Cusi, the young Inca boy, and Chuto, the old one, herd llamas into a secret valley. While travelling with Chuto, Cusi hears strange tales of the lost Inca leader. Later an old teacher instructs Cusi in the wisdom of the ancient Indians, and the boy learns he is special. He is the son of the last Inca and has been chosen to be a keeper of a secret herd of llamas and the hidden gold dust, both of which have been hidden in a secret valley for four hundred years.

HB

CC

ESLC

Suggested use: Unit 5, geography text

Kiddell, John. Choogoowarra: Australian Sheep Station. Photographs by Joe Molnar. New York: MacMillan, 1972. Information (3-6).

Summary. Brett, who lives on an Australian sheep station, has just begun his summer holidays. His work and adventures on his father's farm comprize the content of this informational book. Large black-and-white photographs supplement the text.

KR

Suggested use: Unit 6, geography text

Roland, Betty. Jamie's Other Grandmother. Illustrated by Prudence Seward. London: Bodley Head, 1970. Fiction (2-5).

Summary. Nine-year-old Jamie leaves his family and friends at Christmas time to visit his grandmother on her sheep farm in New South Wales. Jamie reluctantly tours the vast farm, learning about the dangers of the Australian outback. Just after the rainy season, Jamie gets lost taking pictures of kangaroos, but farmer Henderson, the grandmother's neighbour and rival, rescues Jamie. The enmity between Mr. Henderson and Jamie's grandmother is resolved when the neighbour takes the grandmother to the hospital.

NS

Suggested use: Unit 6, geography text

Wrightson, Patricia. The Nargun and the Stars. Illustrated by Victor Mays. New York: Atheneum, 1974. Fiction (4-7).

Summary. When Simon Brent's parents are killed, he goes to live with his relatives on an Australian sheep farm. He learns about the harmless mythical creatures of the wild-- the Potkoorok of the swamp and the Turongs in the trees. But there is an old and dangerous rock creature which haunts the ranch and keeps to itself until it kills a sheep. When

the threatening Nargun comes near the ranch house, Simon and his cousins, with the help of the friendly spirits, set out to drive the Nargun away. In a life and death struggle they trap and bury the Nargun inside a cave forever.

ESLC

BBC

Suggested use: Unit 6, geography text

Lindgren, Astrid. The Tomten. Illustrated by Harold Wiberg. New York: Coward-McCann, 1961. Fiction (1-3).

Summary. This beautiful story of a little troll who walks on silent feet around the lonely farmhouse on a winter's night is set in a Scandinavian country. He talks to the animals of the promise of spring. Lindgren is also well known as the author of Pippi Longstocking, Pippi in the South Seas, and Christmas in Noisy Town.

ESLC

BBLCS

Suggested use: Unit 7, geography text

McSwigan, Marie. Snow Treasure. Illustrated by Mary Reardon. New York: E. P. Dutton, 1942. Fiction (3-7).

Summary. A group of young children help smuggle Norway's gold out of the country when it is occupied by the Germans during the World War II. Using sleds, they transport the gold under the Germans' noses. Peter, the hero, saves the day when he snowballs an officer about to discover their secret. This is based on a true story and shows the patriotism of the Norwegian people.

BL

BBLCS

Suggested use: Unit 7, geography text

Bothwell, Jean. The First Book of India. Revised Edition. Illustrated. New York: Franklin Watts, c1966, 1971. Information (4-7).

Summary. This book introduces India to the elementary student. The topics discussed and illustrated with black-and-white photographs are: geography and climate, history and government, economy, and village life.

SLJ

Suggested use: Unit 8, geography text

Sharma, Partap. The Surangini Tales. Illustrated by Demi Hitz. New York: Harcourt World & Brace, 1973. Fiction (4-7).

Summary. Surangini, the daughter of a rich and powerful man, was the most beautiful girl in her village in India. When the girl disappeared into the tapestry of a carpet woven by her husband-to-be, the wise father held a story-telling contest to free her.

This book shows Indian village life and customs.

BBC

Suggested use: Unit 8, geography text

Shaw, Ray and Zoltow, Charlotte. A Week in Lateef's World. Photographs by Ray Shaw. London: Crowell-Collier Press, 1970. Information (K-3).

Summary. Lateef lives on a houseboat in a beautiful region of India called Kashmir. The authors, using large photographs and some brief text, show Lateef's daily routine of rowing to school, buying vegetables, and living with his family on the lake.

ESLC

BBC

Suggested use: Unit 8, geography text

Sucksdorff, Astrid Bergman. Chendru: The Boy and the Tiger.
 Illustrated with photographs. New York: Harcourt
 World & Brace, 1960. Information (3-up).

Summary. The friendship of a boy and a tiger in an Indian
 village is portrayed through excellent colour photographs.

BBC

LJ

Suggested use: Unit 8, geography text

Sucksdorff, Astrid Bergman. Tooni: The Elephant Boy.
 Illustrated. New York: Harcourt Brace Jovanovich,
 1971. Information (1-5).

Summary. Tooni lives in the jungle village of Assam in
 India. Since he lives near a government game sanctuary, he
 dreams of when he will be an elephant driver. One day as he
 rides through the reserve watching the hiding animals, he
 makes a great find in the grass--a precious rhinoceros
 horn.

Through the use of large, beautifully coloured
 photographs, this book examines the animals which live near
 a small Indian village.

CC

BBC

Suggested use: Unit 8, geography text

Cohn, Angelo. The First Book of the Netherlands. Revised Edition. Illustrated with photographs. New York: Franklin Watts, 1971. Information (4-6).

Summary. This book begins with the reclaiming of land from the sea in the Netherlands. It presents a brief history of the land and describes the major cities, industries, education, art, food, homes, and religion.

The First Book of the Netherlands includes a bibliography of other children's books on the Netherlands.

CC

Suggested use: Unit 9, geography text

DeJong, Meindert. The Wheel on the School. Illustrated by Maurice Sendak. New York: Harper & Row, 1956. Fiction (4-7).

Summary. Six children in a Dutch school decide to attract the storks back to their village to nest. After they decide to put a wheel on a school, their exciting adventures begin. Each child sets off along the Dutch byroads and farms to find a wheel and each has mishaps in his search. After a raging storm sweeps the village of Shora, the storks appear and then the children, the villagers and the school teacher makes the project a success.

ESLC

Suggested use: Unit 9, geography text

Books for Grade Four Science

Bartlett, Margaret F. Where Does All the Rain Go?
Illustrated by Patricia Collins. New York:
Coward-McCann, 1974. Information (K-3).

Summary. This book describes through pictures and easy reading what happens to rain after it falls. Water is traced from a puddle outside the child's door to the mighty ocean.

KR

Suggested use: Unit 1, science text

Gans, Roma. Water for Dinosaurs and You. Illustrated by
Richard Cuffari. New York: Thomas Crowell, 1972.
Information (K-3).

Summary. The water the dinosaurs drank millions of years ago may be the same water we drink today. This book explains the sources of water on earth: lakes, rivers, underground water, clouds, and water vapour. The difference between the large, salty oceans and the smaller, fresh rivers is shown.

This is an easy-to-read book with large, colourful illustrations.

ESLC

CC

SB

Suggested use: Unit 1, science text

Iverson, Genie. Jacques Cousteau. Illustrated by Hal Ashmead. New York: G. P. Putnam, 1976. Biography (4-6).

Summary. Cousteau's early interests, when he learns to swim and use a camera, later become his life's work. His imagination and hard work lead him to many inventions including the aqualung. The last section of the book deals with his efforts to stop pollution.

ESLC

KR

SLJ

Suggested use: Unit 1, science text

Adler, Irving. Food. Illustrated by Peggy Adler. New York: Crowell, 1977. Information (3-5).

Summary. The author describes food under a number of interesting headings. He examines the history, uses, and production of food, the foods of various countries, and information on agriculture.

BBC

SLJ

Suggested use: Unit 2, science text

Asimov, Isaac. How Did We Find Out About Vitamins?
Illustrated by David Wool. New York: Walker,
1974. Information (4-7).

Summary. The author traces the importance of vitamins in the diet from the times of the early explorers to the present day. Asimov also describes several types of vitamins and identifies the diseases caused by the lack of certain vitamins.

CC

ESLC

SLJ

Suggested use: Unit 2, science text

Berger, Melvin. The New Food Book. Illustrated by Byron Barton. New York: Crowell, 1978. Information (4-7).

Summary. All standard information about food--nutrition, digestion, and food buying, production, and marketing--are included here. A number of experiments using food are included throughout the book.

CC

SLJ

Suggested use: Unit 2, science text

Asimov, Isaac. How Did We Find Out About Electricity?
Illustrated by Matthew Kalmenoff. New York:
Walker, 1973. Information (5-8).

Summary. The history of electricity and the men who made the scientific breakthroughs are discussed. Asimov reviews inventions such as: Franklin's kite, Edison's bulb, and Volta's battery.

ESLC

Suggested use: Unit 3, science text

Freeman, Mae and Freeman, Ira M. The Story of Electricity.
Illustrated by Rene Martin. New York: Random
House, 1961. Information (4-6).

Summary. The sections explain electrical charges, movement of electricity, electricity in practical use at power stations, electric motors, and how electricity works in the home.

Some simple experiments are given. A glossary of difficult terms is included.

AB(R)

BBLCS

Suggested use: Unit 3, science text

Kaufman, Mervyn D. Thomas Alva Edison: Miracle Maker.
Illustrated by Cary. Champaign, Illinois:
Garrard Publishing, 1962. Biography (2-8).

Summary. Edison as a boy scientist showed the makings of an inventor for he was always experimenting in his parents' basement. A series of jobs and special interests led him to invent a special sort of telegraph--the stock ticker. He went on to invent the electric light, the phonograph, and motion pictures. With more than 1,000 inventions to his credit, he became known as the miracle maker.

BBLCS

Suggested use: Unit 3, science text

Zappler, Georg. From One Cell to Many Cells. Illustrated by Elise Piquet. New York: Center for Media Development, 1970. Information (2-4).

Summary. This information book explains how life begins as an egg cell and how the baby grows into an organized unit. Instructions for examining simple cells--onion cells and ameba--under a microscope are clearly explained. Cell reproduction in eggs, germ layers, and embryos is explained and diagrammed, and, as well, the book sets up a long term

practical experiment with developing frog's eggs. The final section of the book views the cells as they function as a whole within the human body.

CC

ESLC

Suggested use: Unit 4, science text

Benedict, Jeanne. Motion and Gravity. Illustrated by Jeanne Benedict. New York: Franklin Watts, 1972. Information (3-5).

Summary. An informational book which explains forces pushing and pulling, effects of gravity, streamlining, causes and changes of motion, and the effects of friction on moving and non-moving objects.

This well-illustrated book contains index and think-for-yourself problems.

ESLC

LJ

Suggested use: Unit 5, science text

Selsam, Millicent. Up, Down, and Around: The Force of Gravity. Illustrated by Kenneth Dewey. New York: Doubleday, 1977. Information (3-6).

Summary. Selsam explains with diagrams how gravity affects the earth. Gravity, as it functions on the moon and planets, is also clearly examined.

ESLC

Suggested use: Unit 5, science text

Lauber, Patricia. Your Body and How It Works. Drawings by Stephen Rogers Peck. New York: Random House, 1962. Information (3-5).

Summary. This information book begins with the building blocks--the cells--and proceeds to the larger body organs--the brain, the heart, the lungs, the liver, and the stomach. The nervous system, the respiratory system, the circulatory system, and the digestive system are clearly illustrated and described.

BESL

Suggested use: Unit 6, science text

Freeman, Mae. Fun With Astronomy. Illustrated by Rene Martin. New York: Random House, 1953.
Information (4-6).

Summary. This well-illustrated informational book has easy experiments and projects for the beginning astronomer.

BESL

BBLCS

Suggested use: Unit 7, science text

Gregor, Arthur S. Galileo Galilei: Space Pioneer.
Illustrated by J. W. Williamson. New York:
MacMillan, 1965. Biography (2-5).

Summary. Even at a very early age, Galileo showed he had a scientific mind full of curiosity. As a young student his interest grew, not in medicine as his father wished, but in astronomy. In his later life as a student and experimenter at Pisa, he obtained a telescope and became one of the greatest pioneers of astronomy.

LJ

Suggested use: Unit 7, science text

Simon, Seymour. Look To The Night Sky. Illustrated by Paul Mina Mora, James Ponter, and Denny McManis. New York: Viking, 1977. Information (4-6).

Summary. Simon has designed this book for the younger beginner or hobbyist interested in observing the stars with or without a telescope. Explicit diagrams and text instruct readers on how to find the planets, stars, comets, and meteors. Tips are provided for those interested in purchasing their first telescope. An appendix is included for easy reference.

ESLC

KR

SLJ

Suggested use: Unit 7, science text

Alexenburg, Melvin. Sound Science. Illustrated by Tomie de Paola. Englewood Cliffs, N. J.: Prentice-Hall, 1968. Information (2-4).

Summary. The reader is invited to explore sounds by investigating loud and soft sounds, high and low sounds, and how sounds are heard from far away. Simple materials obtainable from home are used in the experiments.

LJ

Suggested use: Unit 8, science text

Desouter, D. M. Your Book of Sound. Illustrated by D. L. Jenkins. London: Faber and Faber, 1971.
Information (4-7).

Summary. This book provides an in-depth look at sound, progressing from simple concepts for the younger reader and advancing to more difficult topics. The text is well supplemented with diagrams and illustrations to aid the student.

NS

Suggested use: Unit 8, science text

Adams, Florence. Catch A Sunbeam: A Book of Solar Study and Experiments. Illustrated by Kiyo Komoda. New York: Harcourt Brace Jovanovich, 1978.
Information (4-7).

Summary. The topics in this book range from the ancient theory of the sun's heat to modern technology in solar heating and cooking. With the help of clearly labelled diagrams and step-by-step directions, the young scientist is able to conduct 16 experiments such as: finding the effects of the tilt of the earth's axis, examining the spectrum, and finding direction.

ESLC

Suggested use: Unit 9, science text

Adler, Irving. Hot and Cold. Revised Edition. Illustrated by Peggy Adler. New York: Day, c1959, 1975. Information (4-6).

Summary. The story of temperature and how to produce and measure hot and cold are presented in this book. Adler also examines some theories of heat and its behavior.

ESLC

BL

CC

Suggested use: Unit 9, science text

Books for Grade Five Social Studies--History

Marshall, Ingeborg. The Red Ochre People. Illustrated by Martin Springett. Vancouver: J. J. Douglas, 1977. Information (4-6).

Summary. This book is packed with information about the extinct Beothucks of Newfoundland. The text, which is well-illustrated with clear black-and-white line drawings, shows how the Beothucks hunted caribou, harpooned seal, made birchbark wigwams, and lived together in peace.

CBYP

Suggested use: Units 1, 19, history text

Stephen, Sid. Beothuck Poems. Illustrated. Ottawa: Oberon Press, 1976. Poetry (5-10).

Summary. A series of short poems about the Beothucks of Newfoundland. The poems include: White Settlements, Between Deer Fences, Mary March 1, Shawnadithit, She Dies in St. John's.

The drawings are Mary March's, done while she was in captivity in St. John's.

ABNM

Suggested use: Units 1, 19, history text

Bulla, Clyde Robert. Viking Adventure. Illustrated by Douglas Gorsline. New York: Crowell, 1963. Fiction (3-6).

Summary. This is the story of young Sigurd who endures vigorous training in strength and courage under the firm but affectionate guidance of his father. He joins a Viking ship travelling to Wineland to verify the discoveries of Leif Ericson. After enduring the hardships of the voyage and the treacherous murder of the captain, Sigurd escapes the ill-fated ship and is the only survivor of the voyage. He later asks the old bard to teach him to read and write so that he can record what he has seen on his voyage.

ESLC

AB(R)

HB

Suggested use: Unit 2, history text

D'Aulaire, Ingri and Edgar Parin. Columbus. Illustrated by Ingri and Edgar Parin D'Aulaire. New York; Doubleday, 1955. Biography (1-4).

Summary. An outstanding picture book about Columbus which depicts him as a boy and as the explorer who discovered America. Each page has well-documented information with a

large colourful illustration opposite.

CC

NYTBR

ESLC

Suggested use: Unit 4, history text

Grant, Matthew G. Leif Ericson - Explorer of Vinland.
Illustrated by Dick Brude. Minnesota: Creative
Education, 1974. Biography (2-4).

Summary. Leif Ericson's life is divided into four phases by Grant: Viking boy of Iceland, the Greenland colony, Leif the Lucky, and Vikings in Vinland. Grant has written this biography for upper primary-lower elementary grades, and it has plenty of action and colourful illustrations.

SLJ

Suggested use: Unit 2, history text

Treece, Henry. The Last Viking. Illustrated by Charles Keeping. New York: Pantheon Books, 1966. Fiction (5-9).

Summary. Treece retells the exciting life of Harald Harrada, the last of the Vikings, before he is killed in battle in England in 1066 while fighting King Harold.

Treece has also written Westward to Vinland, which tells of the adventures of Eric the Red and his son Leif the Lucky. Viking Sunset, by Treece, is the story of a Viking boy who travels from Iceland to Markland and Vinland where he meets the Beothucks.

All three titles are recommended for this unit.

Suggested use: Unit 2, history text AB(C)

Suggested use: Unit 2, history text

Syme, Ronald. John Cabot and His Son Sebastian. Illustrated by William Stobbs. New York: William Morrow, 1972. Biography (3-5).

Summary. This beautifully illustrated biography of the discoverer of Newfoundland describes Cabot first as a young student navigator. Cabot eventually seeks aid from the Bristol merchants, and the author gives a detailed account of his first voyage, complete with maps and diagrams. The

last section of the book describes Sebastian Cabot who tried to take much of the credit of discovery from his father.

CC

BL

Suggested use: Unit 5, history text

Averill, Esther. Cartier Sails the St. Lawrence. Illustrated by Feador Rojankovsky. New York: Harper Row, 1956. Biography (5-up).

Summary. This account of Cartier begins with a resume of other voyages of exploration before Cartier's time. Cartier, after a difficult voyage across the ocean, explores Newfoundland, sails up the St. Lawrence, sails around Newfoundland, and journeys back to France. Much of the remainder of the book describes his later voyages and gives Cartier's account of the Indians of North America.

BBLCS

AB(C)

Suggested use: Unit 7, history text

Gorden, Esther and Bernard. If An Auk Could Talk.

Illustrated by Pamela B. Ford. New York: David Mckay, 1977. Information (3-5).

Summary. Based on the accounts of the early fishermen and Jacques Cartier, the Gordens examine the three reasons for the extinction of Great Auk in 1844. They describe the early hunting of the Auk for food, feathers, fat, and eggs.

KR

Suggested use: Unit 7, history text

Toye, William. Cartier Discovers the St. Lawrence.

Illustrated by Laszla Gal. Don Mills, Ontario: Oxford Press, 1970. Information (3-6).

Summary. A simple account of Cartier's three voyages to the New World emphasizing the hardships of the journeys and the reactions of the Indians. Toye and Gal use maps and large, colourful illustrations effectively to enhance the text.

IR

Suggested use: Unit 7, history text

Barnhouse, Dorothy. Quest of the Golden Gannett.
Illustrated. St. John's: Breakwater Books,
1979. Fiction (5-8).

Summary. Tad Evans, a 13-year-old, searches for clues for his missing father as the boy sails to Newfoundland in 1696 on a sailing ship out of Devon, England. He befriends the captain's daughter, Angel, and the two of them with the help of old Darby solve the mystery of Tad's missing father who has been taken by the French soldiers to St. Pierre. He is reunited with his father upon the ship's arrival in Newfoundland.

It should be noted that this book has not been well edited.

IR

Suggested use: Unit 8, history text

Stockton, Frank R. Buccaneers and Pirates of Our Coasts.
Illustrated. New York: MacMillan, 1967.
Information (5-7).

Summary. Here are true stories of famous pirates who robbed and plundered the North American coasts from the sixteenth to the nineteenth century. Some pirates included are: Jean Lafitte, Henry Morgan, Blackbeard, and Captain Kidd.

CC

BBC

Suggested use: Unit 11, history text

Hayes, John F. The Dangerous Cove. Illustrated by Fred Finley. Toronto: Copp-Clark, c1975. Fiction (5-9). OUT OF PRINT.

Summary. Treshaven's Cove, Newfoundland, in the year 1676, is unwillingly under the Rule of the Fishing Admirals. The first English admiral in the cove each year becomes its ruler. Besides this hardship, the settlers are being expelled from the cove. Peter and Tom are heroes in the defense of Treshaven's Cove against oppression and tyranny. They also become involved in a treasure hunt.

IR

Suggested use: Unit 13, history text

Freeman, Bill. First Spring on the Grand Banks. Illustrated with photographs. Toronto: Lorimer, 1978. Fiction (4-8).

Summary. Meg and John Baines along with a sailor friend, Canso, take their repossessed fishing schooner illegally and flee to a Newfoundland outport. They find a crew and fish that spring on the Grand Banks. Their fishing catch is not large enough to pay off their debts, but they become involved in a successful inshore fishery.

Freeman shows the life of the Newfoundland fisherman in the 1870's. There are some interesting pictures of early fishing activity.

CM

Suggested use: Units 24, 36, history text

Feather, Jean Hayes. Sawtooth Harbour Boy. Don Mills, Ontario: Nelson, 1973. Fiction (4-6).

Summary. Billy Harding, not deterred by the fact that he is the son of a poor Newfoundland fisherman, is determined to become a doctor like Sir Wilfred Grenfell, whom he knows. Billy's summer is filled with adventure. At the end of the summer his uncle Mike dies, leaving Billy enough money to realize his ambition.

This book vividly describes fishing, education, and life in a small Newfoundland outport.

ESLC

CCCCB

IR

Suggested use: Units 24, 25, 26, 28, and 29, history text

Carlson, Natalie Savage. Sailor's Choice. Illustrated by George Lok. New York: Harper Row, 1966. Fiction (4-7). OUT OF PRINT

Summary. Sailor, a Newfoundland dog, and Jamie, a young stowaway on a Newfoundland sealing ship, are the heroes of this book. At the sealing front, Jamie begins to learn the chores of "swiling", and Captain Wight offers to adopt the likeable orphan, Jamie. However, Jamie dislikes killing seals and realizes he cannot live with Captain Wight, yet he cannot bear leaving Sailor, the Captain's dog. The captain resolves the problem in the end, and the captain, Jamie, and Sailor begin a new life in a small Newfoundland outport.

This book combines adventure and humour with an exciting animal story. Some fine black and white line drawings illustrate the book.

BBC

CCCB

IR

Suggested use: Units 27, 28, history text; Units 6, 7, geography text

Leitch, Adelaide. Lukey Paul from Labrador. Illustrated by Joe Rosenthal. Toronto: MacMillian, 1964. Fiction (3-6). OUT OF PRINT

Summary. The story of Lukey Paul, a young boy who is given a man's job to obtain food and supplies for the village of Rattling Tickle. The setting is the Labrador coast in 1893, and Lukey chases a cheating trader who has stolen his silver fox skin. He doesn't find the trader, but sells his whale tooth doll to buy food for Rattling Tickle.

CCCB

Suggested use: Units 29, 38, history text

Moore, Tom. Wilfred Grenfell. Illustrated with photographs from the CBC collection. Don Mills, Ontario: Fitzhenry & Whiteside, 1980. Biography (4-7).

Summary. This biography of Sir Wilfred Grenfell is part of a series on Canadian history and includes such people as Champlain, Mackenzie King, and Cabot. Moore writes of Grenfell's early life as a student in England and follows his work in Labrador until Grenfell's death. This small, attractive book has dozens of authentic photographs of Grenfell and his life in Labrador.

IR

Suggested use: Units 29, 38, history text

Mowat, Farley. The Black Joke. Illustrated by Victor Mays.
Toronto: McClelland & Stewart, 1962. Fiction
(6-8).

Summary. An adventure story, set on the South Coast of Newfoundland during the depression, pits two boys and their boat, The Black Joke, against a merchant rum runner. When the boys set out for Miquelon to stop the merchant, many exciting adventures follow, including a storm, a shipwreck, a high-jacking, and piracy.

ESLC

CCCB

Suggested use: Units 35, 36, history text

Moore, Tom. Tomcods, Kids And Confederation. Illustrated by Rosemary Savory. St. John's, Newfoundland: Jespersen Press, 1979. Fiction (4-up).

Summary. Joey Smallwood comes to the small Newfoundland town of Petley to argue for Confederation, and "Fleet" Russell, a young boy, sides with his father in favour of union with Canada. However, most people of the village are against confederation and against the Russells. Matters come to a head after Joey, "the little man with funny glasses," leaves and the town votes on the confederation referendum.

CM

Suggested use: Units 43, 44, history text

Books for Grade Five Social Studies--Geography

Hocking, Anthony. Newfoundland. Illustrated. Toronto: McGraw-Hill, Ryerson, 1978. Information (4-8).

Summary. This information book on Newfoundland is packed with maps, colourful pictures, diagrams, and information. The topics range from Newfoundland's discovery and early history to industry, recreation, government, education, and transportation systems.

IR

Suggested use: All units, geography text

Simon, Seymour. The Rock Hound's Book. Illustrated by Tony Chen. New York: Viking Press, 1973. Information (3-7).

Summary. Simon writes this book especially for those interested in collecting and identifying rocks. Rocks are identified by Moh's scale, and identification is made easier through clear diagrams and pictures. Sedimentary rocks, sandstone, chert, conglomerate, gypsum, shale, and fossils are identified. The final section shows the child how to set up a collection.

ESLC

SLJ

CC

Suggested use: Unit 2, geography text

Milgrom, Harry. Understanding Weather. Revised Edition. Illustrated by Lloyd Birmingham. New York: Crowell-Collier Press, 1970. Information (5-7).

Summary. This book provides excellent background information on the how and why of the weather, the water cycle, the classification of clouds, and the use of meteorological instruments. The concluding section shows the elementary student how to keep his own weather records.

Black-and-white illustrations help clarify many details.

SB

CC

Suggested use: Unit 3, geography text

Simon, Seymour. Weather and Climate. Illustrated by John Polgreen. New York: Random House, 1969. Information (3-6).

Summary. Simon explains the elements that produce weather--air, heat from the sun, water in the air--and then shows how they combine to form weather. Although some attention is given to climate, weather and the ways to measure it make up the bulk of this book.

LJ

Suggested use: Unit 3, geography text

Hosie, R. C. Native Trees of Canada. Illustrated with photographs and diagrams. Ottawa: Queen's Printer, 1969. Information (5-12).

Summary. Hosie's book includes information on the identification of deciduous and coniferous trees and the regions of each Canadian province where various trees grow. It is especially useful for young hobbyists who are beginning a collection of leaves, bark, flowers, or seeds.

IR

Suggested use: Unit 5, geography text

List, Albert and List, Ilka. A Walk in the Forest. Illustrated. New York: Crowell, 1977. Information (5-7).

Summary. Here is a detailed guide to the sights, sounds, and smells of the temperate forests. The authors answer questions which children frequently ask about forests. They include information on the identification of trees, soil layers and composition, and the animals of the temperate forests.

CC

HB

Suggested use: Unit 5, geography text

Johnson, Sylvia A. Animals of the Temperate Forests.
Illustrated by Alvin C. Dornish. Minneapolis,
Minnesota: Lerner Publications, 1976. Information (4-7).

Summary. An explanation and description of what a temperate forest is and looks like is presented in the beginning chapters of Johnson's book. Then several species of animals are described including the porcupine, red fox, beaver, and moose.

SLJ

Suggested use: Unit 6, geography text

Matteson, George. Draggermen: Fishing on Georges Bank.
Illustrated by George Matteson. New York: Four
Winds, 1979. Information (4-6).

Summary. The Elsie G, a modern stern trawler, fishes off Nova Scotia and Newfoundland. The book shows a typical voyage. All aspects of commercial fishing are explained: species of fish caught, mending nets, foreign fishing vessels, and marketing.

Attractive diagrams and maps head each section, and black-and-white photographs supplement the text.

HB

Suggested use: Unit 8, geography text

Manuel, Ella. That Fine Summer. Illustrated by Lise Sorenson. St. John's: Jespersen Press, 1980. Fiction (4-7).

Summary. Eleven-year-old Mahala Jacobs decide to stay with her grandfather in Fox Cove instead of going to St. John's for the summer with her parents. She reluctantly befriends an Eskimo boy, Obie, who is her own age. The two spend the summer in the small settlement sharing exciting adventures and reconciling their initial differences.

NTAB

Suggested use: Units 13, 14, geography text

Mowat, Farley. The Boat Who Wouldn't Float. Toronto: McClland and Stewart, 1969. Fiction (u-up).

Summary. Mowat, the author, takes a small wooden boat, which fills with water eight times, from the Avalon Peninsula in Newfoundland around the South Coast and St. Pierre to the Canadian mainland. Mowat recounts these travels humourously while providing commentary on the character of the Newfoundland people and a description of some sections of the island.

CF

Suggested use: Units 13, 14, 15, geography text

Wees, Frances Shelley. Mystery in Newfoundland. Illustrated by Douglas Bissett. Don Mills, Ontario: Abelard-Schuman, 1965. Fiction (4-8).

Summary. Three children on a berry-picking expedition on the fog-bound Avalon Peninsula in Newfoundland become lost. They stumble upon a cave where a pirate of long ago has buried treasure. The problem is someone else has found it too and is attempting to smuggle it out of Newfoundland. The children, their parents, and the police are then involved in a chase.

CM

IR

Suggested use: Units 14, 15, geography text

Books for Grade Five Science

Schwalberg, Carol. Light and Shadow. Illustrated by Lawrence Di Fiore. New York: Parents' Magazine Press, 1972. Information (3-6).

Summary. What is light? How does it move? How does light get into a mirror and how does it get out? Does light bend? These are some of the basic questions about light that are answered in this book. This informational book is illustrated with precise line drawings.

ESLC

Suggested use: Unit 1, science text

Simon, Seymour. The Optical Illusion Book. Illustrated by Constance Ptera. New York: Four Winds, 1976. Information (4-6).

Summary. The author shows that there are many ways we can be fooled by what we see. He explains several optical illusions and shows how they are used in art. Some experiments to try are also included.

SC

Suggested use: Unit 1, science text

List, Albert and List, Ilka. A Walk in the Forest.
 Illustrated. New York: Crowell, 1977.
 Information (5-7).

Summary. The Lists answer questions about forests, the forest soil, insects, and animals in it. These questions frequently asked by children include: What are the layers in the forest soil? What animals are found in the temperate forests?

CC

HB

Suggested use: Unit 2, science text

Selsam, Millicent. Benny's Animals and How He Put Them in Order. Pictures by Arnold Lobel. New York: Harper & Row, 1966. Information (K-3).

Summary. Benny is very neat and likes to put things in order. When he tries to classify his animals he has trouble, so his father takes him to Professor Wood. The scientist explains the five divisions of vertebrates and some classifications of invertebrates. A science I-Can-Read book by the author of Greg's Microscope and Hidden Animals.

CC

SB

ESLC

Suggested use: Unit 2, science text

Selsam, Millicent and Hunt, Joyce. First Look at Animals without Backbones. Illustrated by Harriet Springer. New York: Walker, 1976. Information (2-4).

Summary. Selsam and Hunt classify the large group of organisms known as invertebrates. Many of these animals may be new and strange to the child, and the book teaches the child how to observe each type carefully.

ESLC

A

Suggested use: Unit 2, science text

Feravolo, Rocco. Junior Science Book of Magnets. Illustrated by Evelyn Urbanowich. Champaign, Illinois: Garrard Press, 1960. Information (3-5).

Summary. Feravolo extends the basic information on magnets and compasses. He clearly explains for the elementary child the meaning of magnetic fields, magnetite, magnetic attraction, poles, electromagnets, the earth as a magnet, and the making of a homemade compass.

CC

LJ

AAAS

Suggested use: Unit 3, science text

Yates, Raymond. The Boy's Book of Magnetism. Illustrated with photographs and diagrams. New York: Harper & Row, 1959. Information (5-9).

Summary. The author attempts to make the scientific principles connected with magnetism clear for upper elementary students. Some of the principles explained are: compasses, magnetic attraction, poles, uses and advantages of electro-magnets, and natural magnets. Some simple experiments with magnets are described.

BBLCS

Suggested use: Unit 3, science text

Berger, Melvin. The New Air Book. Illustrated by Giulio Maestro. New York: Crowell, 1974. Information (3-8).

Summary. Berger first introduces the child to some amazing facts and tricks associated with air. After explaining the chemistry of air to the young scientist, the author shows the relationship of air to living things, air as it affects weather, and air at work. The final section is devoted to air pollution and how to control it.

The New Air Book is well-illustrated with black-and-white pictures and diagrams.

A

KR

Suggested use: Unit 4, science text

Hays, James D. Our Changing Climate. Illustrated. New York: Atheneum, 1977. Information (5-7).

Summary. This explanation of climate shaping forces concentrates on making processes and mechanisms clear. There are sections on the effects of the tilt of the earth's axis, heat capacities of land and water, and the movement of air.

CC

SLJ

Suggested use: Unit 4, science text

Andrews, Roy Chapman. All About Strange Beasts of the Past. Illustrated by Matthew Kalmenoff. New York: Random, 1956. Information (4-6).

Summary. In these stories of dinosaurs and strange beasts of the past, Andrews shows how they were entrapped in tar pits, mud, and ice. He shows the reader how to look for fossils. Andrews relates in easy-to-understand text and clear diagrams the story of the early horses, rhinoceros, mammoths, and mastodons.

BBLCS

Suggested use: Unit 5, science text

Cohen, Daniel. What Really Happened to the Dinosaurs.
Illustrated by Harv Wells. New York: E. P.
Dutton, 1977. Information (4-8).

Summary. Cohen first examines the myths about dinosaurs--whether they are reptiles or mammals, their size--and then he briefly describes the different types of dinosaurs. The main sections of his book present several theories to explain why the dinosaurs disappeared. Although there are few illustrations, the author presents his material believably and suitably for ten to twelve year olds.

ESLC

KR

Suggested use: Unit 5, science text

Shuttlesworth, Dorothy. The Story of Rocks. Illustrated
by Susan N. Swain. New York: Doubleday, 1966.
Information (4-7).

Summary. A beautifully illustrated book written for those interested in rocks. It shows how rocks were formed and how to identify them. Shuttlesworth also discusses beautiful and practical minerals and rock oddities.

CC

Suggested use: Unit 5, science text

Barkin, Carol and James, Elizabeth. Simple Facts of Simple Machines. Photographs by Daniel Dorn, Jr. New York: Lothrop, Lee & Shepherd, 1975. Information (4-6).

Summary. The author explains, with the help of large, clear photographs, how six simple machines work: lever, inclined plane, wedge, wheel and axle, pulley, and screw.

ESLC

Suggested use: Unit 6, science text

Benedict, Jeanne. Motion and Gravity. Illustrated by Jeanne Benedict. New York: Franklin Watts, 1972. Information (3-5).

Summary. Using the question and answer technique, the author explains aspects of motion and gravity. She answers such questions as: What makes things move? How can motion be measured? What is the effect of motion?

LJ

Suggested use: Unit 6, science text

Lefkowitz, R. J. Push! Pull! Stop! Go! A Book about Forces and Motion. Illustrated by June Goldsborough. New York: Parents' Magazine Press, 1975. Information (4-6).

Summary. Energy and motion which make objects go and stop are examined in this book. The author explains forces around us, direction and strength of forces, gravity, and friction. The book is indexed for easy reference.

ESLC

Suggested use: Unit 6, science text

Selsam, Millicent. Up, Down, and Around: The Force of Gravity. Illustrated by Kenneth Dewey. New York: Doubleday, 1977. Information (4-6).

Summary. Selsam explains the meaning of gravity as it affects a person and as it affects the earth and planets. Gravity as a force on the moon is compared to gravity on earth.

ESLC

Suggested use: Unit 6, 8, science text

Freeman, Mae and Freeman, Ira. Fun with Chemistry.
Illustrated. New York: Random House, 1962.
Information (4-6).

Summary. Simple chemical experiments using common household materials show the effects of chemical change.

ESLC

Suggested use: Unit 7, science text

Bova, Ben. Workshops in Space. Photographs courtesy of
NASA. New York: Dutton, 1974. Information
(6-10).

Summary. Brief profiles of four workshops in space--Skylab, Space Shuttle, Appolo-Soyuz Mission, and Earth Resources Technology Services--are explored in this informational book. Bova also shows how each workshop will help solve problems on earth.

ESLC

HB

Branley, Franklyn M. A Book of Moon Rockets for You.
 Illustrated by Leonard Kessler. New York:
 Thomas Crowell, 1964. Information (1-3).

Summary. This book begins by explaining the distance to the moon and how a rocket will need several stages to reach it. Manned flights are examined and diagrammed, while the final section discusses the things scientists would like to learn about the moon.

HB

Suggested use: Unit 8, science text

Shuttlesworth, Dorothy E. and Williams, Lee Ann. The Moon: Steppingstone to Outer Space. Illustrated with photographs. New York: Doubleday, 1977.
 Information (5-7).

Summary. Shuttlesworth and Williams summarize information and ideas from many points of view. After defining a moon, the authors discuss myths, legends, and hoaxes relating to the earth's moon. After they deal with recent space exploration, they present information related to phases, eclipses, tides, and moons of other planets.

SBF

SC

Suggested use: Unit 8, science text

Worden, Col. Alfred M. I Want to Know about a Trip to the Moon. Illustrated with photographs. New York: Doubleday, 1974. Information (4-6).

Summary. Colonel Worden was the command module pilot on Apollo 15 Lunar Landing Mission in July, 1971. Since his return to earth, Worden has made many appearances before children, and this book was written to answer their most frequently asked questions. Worden tells of his training for the flight and about the flight itself through the text and many black-and-white photographs.

ESLC

NYTBR

SB

Suggested use: Unit 8, science text

Blough, Glenn O. Discovering Cycles. Illustrated by Jeanne Benedict. New York: McGraw Hill, 1973. Information (2-4).

Summary. This book describes the most important cycles in our life: life cycles of plants and animals, cycle of seasons, water cycle, oxygen and carbon dioxide cycle. There are projects for the reader to carry out ranging from the simple to the more difficult.

Each page is illustrated and difficult terms are italicized, defined, and diagrammed.

SC

Suggested use: Unit 9, science text

Earle, Olive L. Scavengers. Illustrated by Olive L. Earle.
New York: Morrow, 1973. Information (3-7).

Summary. Animals that clean up the countryside by eating the garbage and dead animals are featured in this book. Some of the scavengers identified and discussed are: ants, beetles, opossums, wolves, jackals, vultures, and gulls. Illustrations show each scavenger in its habitat.

SC

Suggested use: Unit 9, science text

Sturges, Patricia Patterson. The Endless Chain of Nature.
Illustrated with photographs. Philadelphia:
Westminster Press, 1976. Information (4-7).

Summary. At an old farmhouse at Hubbard Brook, New Hampshire, students and professionals study the ecology. The chain of nature is explored through capturing and observing fish,

birds, insects, animals, and plants. Each chapter provides a surprise for the amateur ecologist.

SLJ

KR

Suggested use: Unit 9, science text

Books for Grade Six Social Studies--History

Faulknor, Cliff. The White Calf. Illustrated by Gerald Tailfeathers. Toronto: Little, Brown and Company, 1965. Fiction (4-8).

Summary. Eagle Child, a Piegan Indian, captures an albino buffalo calf. The calf becomes a part of the tribe's ritual as the boy himself attains manhood. Eventually, the boy realizes his sense of duty to the tribe and to nature and sets the calf free.

CCL

CCCB

Suggested use: Unit Native People, history pamphlets

Harris, Christie. Raven's Cry. Illustrated by Bill Reid. New York: Atheneum, 1969. Fiction (6-9).

Summary. Harris vividly tells the tragic story of the Haida Indians of the Queen Charlotte Islands whose culture and people were quickly destroyed by greedy fur traders and zealous missionaries. The author has traced the history of these highly cultured Indians in a series of interrelated

stories which begin with Yatza's life in 1775 and conclude with Bill Reid's (the illustrator) life in 1969.

CCCB

IR

Suggested use: Unit Native People, history pamphlets

Hill, Kay. Glooscap and his Magic. New York: Dodd, 1963. Legend (3-5).

Summary. Hill retells the legends of the Wabanaki Indians whose Glooscap, Lord of Men and Beasts, can take on many forms to help his people out of trouble. Many of these stories are humorous and often depend upon magic to achieve their climax.

SLCES

BBLCS

Suggested use: Unit Native People, history pamphlets

Johnson, Pauline E. Flint and Feather. Toronto: Hodder and Stoughton, 1931. Poetry (6-8).

Summary. Pauline Johnson's poems in this short volume are divided into two sections. White Wampum centers around Johnson's life as an Indian and Canadian Born centers around her life in the white man's society. Some poems in this collection have been used in literature anthologies.

The introductory section of the book includes a biographical sketch of the poet's life.

SLCES

Suggested use: Unit Native People, history pamphlets

Schwarz, Herbert T. Windigo and Other Tales of the Ojibways. Illustrated by Norval Morrisseau. Toronto: McClelland and Stewart, 1969. Legend (4-7).

Summary. Windigo, Whiskey Jack, and Medicine Turtle are included in this selection of Ojibway legends. This interesting, informative text is supplemented by richly-coloured illustrations. Some of the illustrations have been used in recent social studies textbooks.

IR

Suggested use: Unit Native People, history pamphlets

Sharp, Edith Lambert. Nkwala. Toronto: McClland and Stewart, 1974. Fiction (5-7).

Summary. An Indian boy of the Salish tribe at the age of twelve struggles to fulfill the rites of manhood. At the same time his tribe is migrating from what is now the state of Washington to southern British Columbia.

Nkwala was awarded the Little Brown Canadian Children's Literature Award and the Canadian Governor General's Award.

CM

IR

Suggested use: Unit Native People, history pamphlets

Toye, William. The Loon's Necklace. Illustrated by Elizabeth Cleaver. Toronto: Oxford, 1977. Legend (3-6).

Summary. In this retelling of an Indian legend, a blind man asks the loon to help him. He clings to the loon's back, regains his sight, and repays the loon with a shell necklace which the loon still wears today.

Cleaver's illustrations are richly-coloured collages and linocuts.

CM

Suggested use: Unit Native People, history pamphlets

Brink, Carol Ryrie. Caddie Woodlawn. Illustrated by Trina Schart Hyman. New York: MacMillian, 1973, cl936. Fiction (4-6).

Summary. Caddie, who is always frail and sickly, is allowed to grow up a tomboy. She has plenty of adventure and excitement on the American frontier. The story of eleven-year-old Caddie Woodlawn covers one year of pioneer farm life. The book was awarded the Newbery medal in 1936.

WLB

AB(C)

BBC

Suggested use: Unit Settlement, history pamphlets

Dalglish, Alice. The Courage of Sarah Noble. Illustrated by Leonard Weisgard. New York: Scribner, 1954. Fiction (2-4).

Summary. Sarah, at eight, was her father's companion on a gruelling and dangerous journey to build a new home in the Connecticut wilderness in 1707. When her father leaves her alone with the cabin and the Indians, her courage is really tested.

CC

HB

BBC

Suggested use: Unit Settlement, history pamphlets

Downie, Mary Alice. The Last Ship. Illustrated by Lissa Calvert. Toronto: Peter Martin Associates, 1980. Fiction (3-6).

Summary. As Madeline watches the last ship leave the new world for France, she realizes she'll have seven months of hardship in Quebec City. However, her mischievous spirit soon gets her and her brother into adventure.

Life in New France (Quebec City) is vividly described in Madeline's story. The brightly-coloured illustrations, attractive format, and small size of this book will appeal to boys and girls in the elementary grades. This is one in a series of Canadian history books in the Northern Lights Series.

NTAB

Suggested use: Unit Settlement, history pamphlets

Downie, Mary Alice and John. Honor Bound. Illustrated by Joan Huffman. Toronto: Oxford, 1971. Fiction (6-10).

Summary. In 1784, a Loyalist family, the Averys, escaped from Philadelphia and left for their new home in wilderness Canada. The surprises of their trip north bring happiness and despair.

With early Ontario as its setting, Honor Bound provides the reader with adventure and suspense.

IR

CM

Suggested use: Unit Settlement, history pamphlets

Duncan, Frances. Caribou Runaway. Don Mills, Ontario: Burns & MacEachern, 1976. Fiction (4-6).

Summary. An adventure story set in the 1860's which relates how 13 year-old Eva and her younger brother run away from home. They search for their father who has been looking for gold on the Caribou River. After surviving many ordeals and adventures, even an attempt on their lives, they eventually find their lost father.

CM

CCCB

Suggested use: Unit Settlement, history pamphlets

Edmonds, Walter D. The Matchlock Gun. Illustrated by Paul Lantz. New York: Dodd, Mead, 1941. Fiction (4-6).

Summary. The warfare of the French and the Indians against the English and Dutch settlers gives 10 year-old Edward a chance to fire a huge Spanish gun.

This book was awarded the Newbery Medal in 1942.

CC

ESLC

AB(C)

Suggested use: Unit Settlement, history pamphlets

German, Tony. Tom Penny. Illustrated by Diana McElroy. Toronto: Peter Martin Associates, 1977. Fiction (6-8).

Summary. As Tom Penny leaves England to settle in colonial Canada, someone murders his father and his mother drowns in a shipwreck. In the new world, Tom becomes involved with rum-smugglers off Newfoundland, takes a terrifying trip down a Canadian river on a log raft, and nearly shoots his uncle Matthew in a hunting accident. He has a final meeting with Dirk Black, who had murdered Tom's father, and in this final climactic fight, Tom is victorious.

ESLC

CCCB

Suggested use: Unit Settlement, history pamphlets

McConnell, Barbara. Sainte-Marie among the Hurons.
Illustrated by Michael Odesse. Toronto: Oxford,
1980. Information (5-8).

Summary. Sainte-Marie among the Hurons was a missionary fortress built in 1639 by the Jesuit missionaries in what is now central Ontario.

The introductory section has several pages of early Canadian history and excellent descriptions of missionary life. The remaining text describes the present-day excavations of the site and the reconstruction of the fort. The colour photographs and maps have a wealth of detail, both geographical and historical.

IR

Suggested use: Units Native People and Settlement, history pamphlets

Reaney, James. The Boy with an R in his Hand. Illustrated by Leo Rampen. Toronto: MacMillan, 1963.
Fiction (4-6).

Summary. Alec and his brother Joey travel to Muddy Little York (Toronto) to live with their Uncle John, a Tory, but the boys learn to dislike their uncle and his political views. After Alec gets a job as a printing apprentice to Lyon Mackenzie, he assists in the capture of rioters who have ruined Mackenzie's printing office.

This book is concise and easy to read with many black and white illustrations.

CM

CCCB

Suggested use: Unit Settlement, history pamphlets

Reekie, Isabel. Journey to Red River. Toronto: Holt, Rinehart and Winston, 1973. Fiction (4-7).

Summary. In the summer of 1815, the Mackay family journey to The Forks on the Red River. The journey has many hardships, some exciting and others near-tragic, but in the end the heroine, 15 year-old Chrissy, learns to accept the changes both within herself and in her new environment.

This story describes the Indians and pioneers of the prairies, the struggle of the Metis, and the interdependence of trader, Indian, and settler.

IR

Suggested use: Unit Settlement, history pamphlets

Young, Chip. The Boy Who Came with Cartier. Illustrated by John Mardon. Toronto: Clarke, Irwin, 1974. Fiction (3-5).

Summary. A boy who came to the New World with Cartier looks back, as an old man in the present time, over the centuries of Canadian history he has witnessed in his "lifetime".

This book presents a fictionalized overview of Canadian history. Some of the historical events covered are: the battle of Quebec, Canadian National Railway, and the formation of the RCMP.

CCCB

IR

Suggested use: Units Settlement and War, history pamphlets

Forbes, Hester. Johnny Tremain. Illustrated by Lynd Ward. Boston: Houghton Mifflin, 1943. Fiction (4-6).

Summary. The story of the American Revolution is told by Johnny Tremain who has an accident which ends his career as a silversmith. He becomes involved in the adventures and politics of his time.

ESLC

AB(C)

BBC

Suggested use: Unit War, history pamphlets

Rawlyk, George. Streets of Gold. Illustrated by Leoung O'Young. Toronto: Peter Martin Associates, 1980. Fiction (3-6).

Summary. Jonathan Barble slips away from his parents to join the English army which is about to attack the French in Fort Louisburg. Jonathan and the English are victorious but he is disappointed since the streets of Louisburg are not paved with gold. Later, after the boy befriends a young French settler, Jonathan returns home vowing never to go to war again.

This is one of the Northern Lights series which are historical fiction books designed to enrich Canadian history courses in the elementary grades.

MN

Suggested use: Unit War, history pamphlets

Smith, James K. David Thompson. Illustrated. Don Mills: Ontario: Fitzhenry & Whiteside, 1975. Biography (6-up).

Summary. This biography of David Thompson, trader and surveyor for the Hudson's Bay Company, is attractive and well-illustrated with maps, diagrams, and photographs. As part

of the series entitled "The Canadians", designed for use in school, this book includes questions to encourage the student to think as he reads.

CM

Suggested use: Unit Trade and Transportation, history pamphlets

Carlson, Natalie Savage. The Talking Cat and Other Stories of French Canada. Illustrated by Roger Duvoisin. New York: Harper and Row, 1952. Fiction (4-7).

Summary. The author retells seven tales which were handed down to her from her French Canadian ancestry. While some tales reflect the early pioneer life in Quebec, others are funny exaggerations of ghost tales.

ESLC

BBLCS

Suggested use: Unit Cultural Transfer, history pamphlets

Cook, Lyn. The Bells of Finland Street. Illustrated by Stanley Wyatt. Toronto: MacMillan, 1950. Fiction (5-9).

Summary. A little Finnish girl living in Sudbury, Ontario wishes to be a figure skater but is sadly disappointed when

her father is hurt in the silver mines and she has to use her savings for skates to help pay the bills. Her ambition is realized, however, when her grandfather, a champion figure skater, arrives from Finland. He not only teaches her to figure skate but also brings her a Finnish costume to wear for a local carnival.

IR

CCCB

Suggested use: Unit Cultural Transfer, history pamphlets

MacMillian, Cyrus (collector). Canadian Wonder Tales.
 Illustrated by Elizabeth Cleaver. Toronto:
 Clark, Irwin, 1974. Fiction (3 and up).

Summary. Represented among the 58 tales collected by the author are legends of Glooscap of the Micmac Indians, animal fables of the prairie and Pacific coast Indians, and other stories similar to fairy tales. All the stories are short and suitable for reading aloud. Elizabeth Cleaver's handsome illustrations complement the stories.

CM

Suggested use: Units Cultural Transfer and Native People, history pamphlets

Pasternak, Carol and Sutterfield, Allen. Stone Soup.
Illustrated by Hedy Campbell. Toronto:
Canadian Women's Educational Press, 1974.
Fiction (4-6).

Summary. Classroom 19 is divided into two parts--Noise and Quiet. Order comes when Susan brings an unusual rock to school. The janitor invites the class to the basement to make stone soup with the rock. While preparing the soup the children learn about the strange foods and dances of various Canadian ethnic groups.

This story is based on Marcia Brown's classical tale.

ESLC

IR

Suggested use: Unit Cultural Transfer, history pamphlets

Sauer, Julie. Fog Magic. Illustrated by Lynd Ward. New York: Viking, 1943. Fiction (4-6).

Summary. A young Nova Scotian girl's love of fog brought her happy adventures in a village lost for a hundred years. On her birthday, Greta makes a trip to a non-existent

village called Blue Cove, yet she brings back evidence of the dream village--a kitten.

CCCB

HB

ESLC

Suggested use: Units Cultural Transfer and Settlement,
history pamphlets

Books for Grade Six Social Studies--Geography

Brown, Lloyd. Map-Making: The Art That Became a Science.
 Boston: Little, Brown and Company, 1960.
 Information (5-7).

Summary. This book deals with the history of maps and map-making from the time of Ptolemy to modern day national maps and includes authentic reproductions of maps of ancient countries. The author answers the question "How did the art of making maps develop into an exact science"?

CC

SB

Suggested use: Unit 1, geography text

Downie, Mary and Robertson, Barbara (comp.). The Wind Has Wings: Poems from Canada. Illustrated by Elizabeth Cleaver. Toronto: Oxford University Press, 1968. Poetry (5-7).

Summary. An anthology which has sections about ideas peculiarly Canadian, some serious and others absurd. Included are folk poems translated from the French and animal poems. Many are well-illustrated.

CC

IR

Suggested use: Unit 1, geography text

Earn, Josephine. Looking at Canada. Illustrated. New York: Lippincott, 1976. Information (3-6).

Summary. A concise look at modern-day Canada, covering homes, education, industry, transportation, history, and government. A chapter has been devoted to each province, and the whole text is supplemented with numerous colour photographs.

IR

Suggested use: Unit 1, geography text

MacLennan, Hugh. The Colour of Canada. Illustrated. Toronto: Little, Brown and Company, 1972. Information (4-6).

Summary. This pictorial tour of Canada moves from the maritime provinces into Quebec, Ontario, the prairies, and British Columbia. The colour photographs, showing the landscape and peoples of Canada, are large and clear.

ESLC

Suggested use: Unit 1, geography text

McEvoy, Bernard L. (ed). Stories from across Canada.
New York: J. B. Lippincott, 1967. Information
(5-8).

Summary. An anthology of 13 stories written by Canadian authors. Excerpts are taken from Starbuck Valley Winter, Owls in the Family, The Incredible Journey, and others which have been previously published in magazines.

IR

Suggested use: Unit 1, geography text

Hosie, R. C. Native Trees of Canada. Illustrated with photographs and diagrams. Ottawa: Queen's Printer, 1969. Information (5-12).

Summary. Hosie helps students identify deciduous and coniferous trees in the various regions of Canada where forests are found. This text is very useful for beginning collectors of leaves, bark, fruit, or flowers.

IR

Suggested use: Unit 3, geography text

Johnson, Sylvia. Animals of the Temperate Forest. Illustrated by Alvin C. Dornish. Minneapolis, Minnesota: Lerner Publications, 1976. Information (4-7).

Summary. The author explains what a temperate forest is and describes several species of animals, including the porcupine, red fox, beaver, and moose.

SLJ

Suggested use: Unit 3, geography text

Burnford, Shelia. The Incredible Journey. Illustrated by Carl Burger. Boston: Little, Brown and Company, 1961. Fiction (6-9).

Summary. A Siamese cat, an old bull terrier, and a young Labrador retriever travel together 250 miles through the wilderness of Canada's north to reach home and their masters.

ESLC

BBLCS

BBC

Suggested use: Unit 4, geography text

Kurelek, William. A Prairie Boy's Summer. Illustrated by William Kurelek. Montreal: Tundra Books, 1975. Fiction (3-5).

Summary. A story of a young boy's life on the prairie, beginning with the last day of school in June. It is then the farm chores begin but also the fun and joys of haying, burning quack grass, swimming at the hole, plowing, and stooking grain. Each page has a large, coloured illustration accompanying the text.

Kurelek has also written A Prairie Boy's Winter, a companion book to A Prairie Boy's Summer.

HB

IR

Suggested use: Unit 5, geography text

Blades, Ann. Mary of Mile 18. Illustrated by Ann Blades. Montreal: Tundra Books, 1971. Fiction (3-5).

Summary. Mary lives in a tiny isolated village in northern British Columbia and wishes for something special to make her life happy. Her wishes come true when she finds a pup--part dog, part wolf. After the animal proves his usefulness, she keeps him. Large paintings illustrate Mary's life.

ESLC

IR

Suggested use: Unit 6, geography text

Harris, Christie. Secret in the Stlalakum Wild. Illustrated by Douglas Tait. Toronto: McClland & Stewart, 1972. Fiction (4-6).

Summary. Morann, a troublesome younger sister in a family of girls, encounters and learns of some Indian spirits in the wilds of British Columbia.

ESLC

IR

CCCB

Suggested use: Unit 6, geography text

Walker, David. Pirate Rock. Illustrated by Victor Mays. Richmond Hill, Ontario: Scholastic-Tab Publications, 1969. Fiction (5-7).

Summary. This adventure story is set in the Maritimes where Keith and Nelson Kelly are employed as crew on the best speedboat on the Bay of Fundy. The boys become involved in a spy and kidnapping ring.

The atmosphere and scenery of Nova Scotia are combined with fast action and suspense.

IR

CCCB

Suggested use: Unit 7, geography text

Cook, Lyn. The Road to Kip's Cove. Illustrated by William Wheeler. Toronto: MacMillian Company, 1973. Fiction (5-9).

Summary. The friendship between a white boy, Chris, and an Indian boy in the Bay of Quinte area takes them on an adventurous trip down the Trent Canal during the summer holidays.

IR

CCCB

Suggested use: Unit 8, geography text

Stevenson, William. The Great River Hunt. Illustrated by Louise Shepherd and Maria Jursie. Toronto: Burns & MacEachern, 1967. Fiction (4-6).

Summary. A message written in blood and sealed in a floating bottle leads two twelve-year-olds into a kidnapping adventure. They are joined in a chase down the Ottawa River by a gang of excited and resourceful children from the foreign embassies in Ottawa. The chase and capture of the three armed kidnappers is humourously told. Black-and-white line drawings illustrate the text.

IR

Suggested use: Unit 8, geography text

Holling, C. Holling. Paddle-to-the-Sea. Illustrated by Holling C. Holling. Boston: Houghton-Mifflin, 1941. Information (4-6).

Summary. A carved canoe has twenty-seven adventures as it floats down through Lake Superior's watershed, through the Great Lakes and St. Lawrence Seaway, and finally to the Atlantic Ocean.

Paddle-to-the-Sea is packed with geographical information on Canada's Great Lakes. The text is richly complemented with brightly-coloured illustrations and diagrams.

ESLC

Suggested use: Unit 9, geography text

Books for Grade Six Science

Branley, Franklyn M. Color from Rainbows to Lasers.
Illustrated by Henry Roth. New York: Thomas Y.
Crowell, 1978. Information (6-up).

Summary. This book is concerned with all aspects of color, including light waves and energy, colour and light, basic colours, and the use of colour. It is well written and has clear, well placed diagrams.

SC

Suggested use: Unit 1, science text

Arnov, Boris. Water Experiments to Understand It.
Illustrated by Giulio Maestro. New York:
Lothrop, 1980. Information (4-6).

Summary. Thirteen simple experiments utilizing home materials are designed to help the student understand water in its three states. This information book is well diagrammed and has many detailed illustrations.

HB

Suggested use: Unit 2, science text

Asimov, Isaac. The Solar System. Illustrated by David Cunningham. Chicago: Follett, 1975. Information (5-6).

Summary. A simple introduction to the nine planets which make up our solar system. Also included are activities and easy experiments related to solar observations.

A

Suggested use: Unit 2, science text

Branley, Franklyn M. The Nine Planets. Illustrated by Helmut K. Wimmer. New York: Thomas Y. Crowell, 1978. Information (6-7).

Summary. Branley, using diagrams and photos, presents a variety of information on the family of nine planets which circle the sun. He discusses mass, distance, temperature, and orbital speed, and explains how each planet was discovered and named and the prospects of life on each planet.

A

SB

Suggested use: Unit 3, science text

Cobb, Vicki. Truth on Trial: The Story of Galileo.
Illustrated by George Ulrich. New York:
Coward, McCann & Geoghegan, 1979. Biography
(5-7).

Summary. Galileo's life and discoveries are introduced briefly, but the main theme of the book is the resistance of the early church to scientific thought. The Italian church in the 1600's upheld the traditional view that the sun circled the earth and put Galileo on trial for refuting the church's view.

SLJ

A

KR

Suggested use: Unit 3, science text

Simon, Seymour. Look to the Night Sky. Illustrated by
Paul Mina Mora, James Ponter, and Denny McMains.
New York: Viking, 1977. Information (5-up).

Summary. An invitation to beginning astronomers to observe the night sky to locate the constellations, find the planets, and observe eclipses is presented in this information book. It also includes advice on buying and using telescopes. There are suggestions for further reading and an index.

KR

SLJ

Suggested use: Unit 3, science text

Stone, A. Harris and Siegal, Bertram M. Turned On: A Look at Electricity. Illustrated by Peter Plasencia. Englewood Cliffs, N. J.: Prentice-Hall, 1970. Information (4-7).

Summary. Through a combination of brief factual information and imaginative diagrams, the authors present open-ended experiments which demonstrate scientific principles or laws. These laws were discovered by Gilbert, Volta, Faraday, Einstein, and others. The materials needed for the experiments are easy to obtain but require care in handling.

CC

BL

Suggested use: Unit 5, science text

Veglahn, Nancy. Coils, Magnets and Rings: Michael Faraday's World. Illustrated by Christopher Spollen. New York: Coward, McCann & Geoghegan, 1976. Biography (6-7).

Summary. Michael Faraday was always asking questions as a boy. From an inquisitive childhood, Faraday set the foundation for his later life when he read voraciously. His scientific thirst for knowledge led him to college where he worked for Sir Humphrey Davy, a famous scientist.

Both of them discover the connection between magnetism and electricity, which paved the way for the invention of the dynamo.

ESLC

A

KR

Suggested use: Unit 5, science text

Grossman, Shelly. Understanding Ecology. Photographs by Shelly Grossman. New York: Grosset & Dunlap, 1970. Information (5-7).

Summary. Grossman examines the living animal communities of coastlines, forests, grasslands, and deserts. Their habitats and territories are explained in great detail and generously supplemented with large, coloured photographs. A glossary and an index are included.

PW

Suggested use: Unit 6, science text

Pringle, Lawrence. Animals and Their Niches: How Species Share Resources. Illustrated by Leslie Morrill. New York: William Morrow and Company, 1977. Information (3-up).

Summary. This is the story of survival and sharing. Snakes, warblers, minnows, and desert rodents are examined in detail and illustrated with full page black-and-white line drawings. Also included is a glossary of scientific terms and a bibliography for further reading in ecology and animal populations.

KR

CC

Suggested use: Unit 6, science text

Shapiro, Irwin. Darwin and the Enchanted Isles. Illustrated by Christopher Spollen. New York: Coward, McCann & Geoghegan, 1977. Biography (4-6).

Summary. This book is a fictionalized biography which gives an insight into the early life of Charles Darwin who turned a hobby into a profession after his trip to the Galapagos Islands. Appropriate illustrations supplement the text.

SLJ

HB

KR

Suggested use: Unit 6, science text

Wood, Francis and Dorothy. At Home in the Wild.
 Illustrated with photographs. New York: Dodd,
 Mead & Company, 1977. Information (5-up).

Summary. At Home in the Wild emphasizes animals' adaptation to environments and what happens when these environments change. This book has an attractive format using large, clear photographs which enhance the printed text.

SC

KR

Suggested use: Unit 6, science text

Gregor, Arthur S. Man's Mark on the Land: The Changing Environment. New York: Charles Scribner's Sons, 1974. Information (4-7).

Summary. Ecology is viewed from a historical viewpoint. The author documents the changes in the land from the pre-historic nomads to modern man. The final three chapters examine how man is altering and slowly destroying the environment. A bibliography lists other books which document man's effects on the environment.

ESLC

CC

Suggested use: Unit 7, science text

Hellman, Hal. Population. Illustrated with photographs.
New York: J. B. Lippincott, 1972. Information
(6-10).

Summary. A growing population on a nongrowing planet is the theme of this information book. Many factors of world population growth are discussed--migration, food, family planning, and population control.

KR

Suggested use: Unit 8, science text

McClung, Robert. Mice, Moose and Men: How Their Populations Rise and Fall. Illustrated by Robert M. McClure.
New York: Morrow, 1973. Information (4-8).

Summary. This survey of animal populations includes fertility rates, life spans, population explosions, and territoriality with specific examples of each. The final section of the book shows man's population rate and how it appears to be out of control.

ESLC

Suggested use: Unit 8, science text

Latham, Jean Lee. Rachel Carson Who Loved the Sea.
 Illustrated by Victor Mays. Champaign, Illinois:
 Garrard Publishing, 1973. Biography (3-5).

Summary. Rachel Carson's early interests in the outdoors, sea life, and ecology led her into a career which combined writing and marine biology. This, in turn, led to her two famous books about the sea and man's increasing use of poisonous chemicals: The Sea Around Us and Silent Spring.

CC

CBC

Suggested use: Unit 9, science text

Miles, Betty. Save the Earth. Illustrated by Claire A. Nivola. New York: Alfred A. Knopf, 1974.
 Information (4-6).

Summary. This is a book of ecology projects. The three sections--air, land, and sea--have background information on pollution followed by simple experiments and projects. These can be completed in short periods of time ranging from ten minutes to twenty-four hours. Each experiment is designed to make the child aware of pollution and its harmful effects.

ESLC

T

Suggested use: Unit 9, science books

Ross, Pat. What Ever Happened to the Baxter Place?
Illustrated by Roger Duvoisin. New York:
Pantheon Books, 1976. Information (2-4).

Summary. The effects of urbanization and farm land division are shown in this book. The Baxters, a typical farm family, slowly sell parts of their farm and soon find themselves in the middle of a housing development, shopping area, and recreational area.

ESLC

KR

Suggested use: Unit 9, science text

SECTION II

RELATED ACTIVITIES FOR CHILDREN'S BOOKS

Introduction

Many teachers provide children with a wide variety of books to read. Yet providing books or even introducing or reading some aloud is often not enough to insure enjoyment of them. Children should be given opportunities to participate in activities such as art, music, dramatization, writing, and discussion which will enliven and enhance their experiences with books. Teachers can share their enthusiasm for particular books by developing activities centered around them. These activities give each child an opportunity to interpret books in ways which are meaningful to him.

Purpose of the Related Activities

The related activities provide teachers with examples of some of the kinds of discussion questions, activities in art, dramatization, and composition skills that may be used with children's books to enrich elementary social studies and science programs. It is hoped that these activities may spark in children an enthusiasm for books and at the same time enrich, extend, broaden, and enhance their

social studies and science concepts. While teachers are encouraged to select only activities that they consider suitable or appropriate, it is possible that some teachers will not wish to use any of them but will choose instead to devise activities of their own. The activities provided are suggestions or guides to show how a selection of children's literature can enrich or extend a particular unit, topic, or concept in elementary social studies or science. Whenever a book is used with a class, total enjoyment of the book as literature comes first. Quizzing children on the details of a book, searching too long for hidden meanings or morals in a book, or any other teaching-learning situation could diminish any positive attitude in the child toward a love of reading and books. A teacher should encourage those activities which will heighten children's interest in books, which will make them want to read more and better books.

Books, such as those provided in this sample, are frequently read aloud to children. Many others are introduced and presented to children in the hope that they will read them. The method of presenting the books is not as important as insuring that each child reads or listens to the teacher reading books and then has opportunities to think about those books.

The examples of activities included in this section are meant to suggest the need for variety to meet individual

needs, abilities, and interests of students. All the activities should not be done by any children. Indeed, at times activities may not be necessary; introducing or reading a book to the class may be sufficient.

Examples of Activities for Grade FourSocial Studies

Houston, James. Akavak. Illustrated by James Houston.
New York: Harcourt, Brace & World, 1968. Fiction
(3-6).

Suggested use: Unit 2, geography text. See page 71,
Section I for summary.

1. Around Our World briefly discusses loading a Komatik. Akavak also describes the Komatik vividly in the passage on pages 16 to 19. Have the children compare these descriptions to extend their information on dogs and dog sleds.

2. Lead the children to discuss which part of Akavak's journey interested them the most and suggest they write a paragraph telling why they enjoyed it.

3. Choose teams to debate or discuss issues which are raised in Akavak. The class may raise an issue, or they may choose from such topics as:

Akavak was too young to make such a journey.

After discovering the loss of their food cache,

Akavak and his grandfather should have turned back.

Since their life in the Far North is harsh, the Eskimos should move south.

4. Using styrofoam, modelling clay, or soap, construct a model igloo. Akavak watches his grandfather build a snow house and his method is detailed on page 21.

5. Many features of the inside of Akavak's igloo are presented on page nine:

skin covered bed of snow	domed ceiling
seal oil lamp	meat porch
parka for a pillow	wide sleeping platform

The author, James Houston, who has illustrated his own book, shows the snow house on pages 8, 46-47, 51. One group may wish to draw the inside of grandfather's igloo using the features found in the book.

6. Lead the children into a discussion of the various customs and beliefs of the Eskimo. Students may comment on the uniqueness of the Eskimo traditions or may compare the customs and beliefs with their own. The following may serve as examples:

- a. number of meals in a day (p. 21)
- b. father's way of saying good-bye (p. 16)
- c. whistling (p. 10)
- d. Eskimos' fear of the mountains (p. 31)

7. Prepare a chart for the students which compares or contrasts the FACTORS of life in Akavak's land with those in your community. They may volunteer information about their own town to complete the chart.

	Akavak's Land	Your Community
F	pp. 9, 15, 21, 28, 48, 62	
A	-----	
C	pp. 9, 13, 15, 16	
T	pp. 12, 16, 19	
O	pp. 10, 12, 31	
R	pp. 10, 20	
S	pp. 9, 22, 35, 45, 75	

8. James Houston has written several other exciting books about Eskimo life. Introduce the class to Tikta'liktak, Eagle Mask, The White Archer, and Wolf Run. If these titles are available from a library, show these books to the class, for the dust jackets are very attractive and enticing with colourful illustrations drawn by the author.

Roland, Betty. Jamie's Other Grandmother. Illustrated by Prudence Seward. London: Bodley Head, 1970. Fiction (2-5).

Suggested use: Unit 6, geography text. See page 77, Section I for summary.

1. Have the children compare, probably in two columns, Jamie's Christmas Day in Australia with theirs. Ask the students to recall or reread chapter six - Christmas on the sheep farm.

2. Around Our World briefly discusses the role of a sheep dog on a sheep station (p. 119). Jamie's Other Grandmother treats the importance of the sheep dog in more depth. Through discussion, use Jamie's story to enrich and extend the information on the care, importance, and chores of a sheep dog.

3. Discuss with the class how rain can be both an advantage and a problem in New South Wales.

4. From the description of Jamie's and Mr. Murdock's inspection of the waterholes on the farm, have the students draw a plan of the Arramagong sheep station.

5. Have students make a scrapbook entitled "My Day on a Sheep Ranch". Suggest they write paragraphs or

stories on the farm animals, the work of the farmer, and the problems and pleasures of farming in Australia. Some may wish to illustrate their writings. Assign four groups of students, one for each season, to write about Australia's farming in the spring, summer, winter, and fall.

6. Australia's unique wildlife lends itself to stimulating class projects. If the school has a reference collection, have the class find pictures of the animals Jamie finds in the countryside--possum, emu, kangaroo, wild pig, platypus, cockatoo, and goanna.

7. Have the children design a poster advertising Arramagong as a place for tourists to visit. Some information should be included on the poster regarding what weather to expect, what clothes to bring, and what transportation routes to follow to get there. Information on the farm may include the foods which are eaten at Arramagong, what wildlife tourists might expect, what work visitors may participate in.

8. After an initial discussion of the black-and-white line drawings on pages 42 and 43 which illustrate old and modern methods of transportation, divide the class into three groups. With the librarian's help, one group can

examine old methods of transportation in Australia, another group modern methods of transportation, while a third group compiles Australia's transportation problems. Jamie's Other Grandmother suggests two transportation problems.

Clark, Ann Nolan. Secret of the Andes. Illustrated by Jean Charlot. New York: Viking, 1972. Fiction (3-7).

Suggested use: Unit 5, geography text. See page 76, Section I for summary.

1. Have the students do a map study of South America, finding the Andes, Peru, Ecuador, the city of Cuzco, Lake Titicaca, and the Pacific Ocean.

2. Suggest that the students, in groups, find pictures of Inca Indians or llamas in magazines such as National Geographic or World. Have the pictures put on several posters with each poster depicting the usefulness and value of the llama to the South American Indians. Secret of the Andes suggests several.

3. Since food is one of the FACTORS of life developed in Around Our World, have the children compare the information and pictures in the text to Clark's descriptions found on page 15, page 29, and page 31. Which foods are in Secret of the Andes but not in the text?

4. Have several children dramatize the ritual and ceremony of Cusi's induction as the King of the Incas.

5. Prepare a diorama of the swinging bridge Cusi feared so much. Paint the inside of the box with the high,

dark mountains and the jungle trees, and line the bottom of the box with blue modelling clay to represent the rushing river. Suspend a miniature rope bridge or a net from each side of the box to represent the slender, swaying bridge Cusi had to cross on the trail with Chuto.

6. Have half the class do a study on the Inca Indians of Peru and how they live and have the other half do a study on the Spanish speaking people of Peru. Let them compare the different ways of life of these two groups of people.

7. On a prepared map, trace the route Cusi takes on his trip to the city from the time he leaves the Hidden Valley, crossing the swinging bridge over the roaring rapids, climbing the ladder on the cliff face, crawling through the narrow, dark tunnel, travelling the jungle trail, visiting Condor Kuncca, the Inca Baths, the Salt Pit, and finally the Holy City, Cuzco.

8. Ann Nolan Clark describes the marketplace at Cuzco through the eyes of Cusi as he wanders from stall to stall, from vendor to vendor. Discuss with the class the goods which were bought and sold at the market, how the Indians trade, and the colours and excitement of market day in Cuzco.

DeJong, Meindert. The Wheel on the School. Illustrated by Maurice Sendak. New York: Harper & Row, 1956. Fiction (4-7).

Suggested use: Unit 9, geography text. See page 82, Section I for summary.

1. Ask the children to compare the village plan of Ens on page 185 of Around Our World to DeJong's description of Shora on page 1, page 7, page 13, and page 49. Is Shora like Ens? Is it different in any way?

2. From the description of Jella, Eelka, Auka, Pier, Dirk, and Lina's home town in the story, have the children draw a village plan of Shora.

3. Ask the children to imagine they could visit the village of Shora in the Netherlands. Ask them to discuss what they would be most interested in seeing, and why.

4. Around Our World discusses and diagrams the ditches and canals of a Dutch polder. The Wheel on the School describes the canal vividly in the passage where Eelka rescues Jella from the canal. Compare the descriptions.

5. Maurice Sendak's line drawings illustrate life inside a Dutch home on page 234, and the school with its

clock tower on page 297. Encourage discussion of the art work and the geographical concepts contained in both.

6. As the book is being read aloud, the class may be prepared in advance to be aware of the FACTORS of life which are found in Chapter 1 of their text Around Our World. The text book develops FACTORS throughout its content and the book The Wheel on the School reinforces these. Parts of the FACTORS can be found throughout the book, and the teacher can note these on the board or ask the children to note them. Some examples are: F (food) p. 23, p. 33, p. 42, p. 232; A (agriculture) p. 41, p. 43, p. 78; and C (clothing) p. 12, p. 16, p. 193.

7. Grandmother Sibble III doesn't believe "that sharp roofs is the whole story why the storks don't come to Shora". What are her other reasons? Why can't the children do anything about these?

8. The two occupations of Shora are fishing and farming. Which of these seems to be the more important? Compare this with the information in Around Our World. Which seems to be the more important in the text?

9. A group of children might compare the differences in transportation as presented in their text with those

presented in The Wheel on the School. Another group might compare old and modern methods of transportation in these sources.

10. Meindert Dejong has written several excellent children's books that have their setting in the Netherlands. Journey from Peppermint Street and Far Out the Long Canal center around the dikes showing how they affect the daily lives of the Dutch. Animal lovers will enjoy Shadrach, the story of a Dutch boy and his pet rabbit.

Examples of Activities for Grade Four

Science

Zappler, Georg. From One Cell to Many Cells. Illustrated by Elise Piquet. New York: Center for Media Development, 1970. Information (2-4).

Suggested use: Unit 4, science text. See page 87, Section I for summary.

1. Like the science text, From One Cell to Many Cells presents the steps for examining an onion cell under a microscope. Since the children's book provides extra information, draw attention to it during class discussion.
2. Discuss with the children the different types of tissue found in the body. The textbook gives several and the list can be extended from pages 21-24 of From One Cell to Many Cells.
3. Since many students may be interested in cell division and how cells grow, From One Cell to Many Cells can enrich the children's knowledge of cell division. Encourage the class to examine the three diagrams in Zappler's book.
4. Select a class member to report on cell and tissue growth in tadpoles. Zappler clearly explains and

diagrams how cell growth can be demonstrated using live tadpoles and frogs. The student may demonstrate with enlarged drawings similar to those in the book or may bring the amphibians into the classroom as part of his report.

5. Have a small group of students reproduce an enlarged version of a single cell changing to an embryo as shown on page 45. The enlarged diagram can then be shown and discussed before the rest of the class.

Kaufman, Mervyn D. Thomas Alva Edison: Miracle Maker.
Illustrated by Cary. Champaign, Illinois:
Garrard Publishing, 1962. Biography (2-8).

Suggested use: Unit 3, science text. See page 87, Section I for summary.

1. Ask the children to imagine they were there in Menlo Park working as assistants with Thomas Edison when he perfected his first light bulb. Have them write their feelings of frustration as many experimental filaments fail, and then their joy and excitement when the first light bulb burns for over 40 hours.

2. The STEM science book shows the students how to make their own electric light bulb. Kaufman, in Thomas Alva Edison, relates how the inventor, Edison, made his first electric light bulb. Have the students note the different materials he experimented with as filaments before he found a suitable material.

3. New York City was the first city lit by electricity after Edison invented the light bulb. Assign one group to report on other American cities that soon afterwards used electric lights to replace gas lamps. Assign another group of students to report on the first Canadian cities to use electricity extensively.

4. On page 75 the STEM science text shows the students how to make an electric tester. Set up a tester on the life of Thomas Alva Edison. Here are some phrases and answers you may use.

Edison's birth place	-----	selling vegetables
Edison's first job	-----	Port Huron, Michigan
Edison's large laboratory	-----	West Orange
Edison's second great invention	-----	New York
The first city lit by electricity	-----	stock ticker
"talking tinfoil"	-----	the first phonograph
Number of inventions Edison patented	-----	over one thousand

5. Bring into the classroom other biographies of inventors who have worked with electricity, for example, Mr. Bell Invents the Telephone by Katherine Shippen, and Coils, Magnets, and Rings: Michael Faraday's World by Nancy Veglahn. Draw attention to those inventors who, like Edison, began to show an inquisitive mind at a very early age.

6. Discuss with the children whether it was Edison's genius, his hard work, or a combination of both which led to the invention of the light bulb in 1879.

Examples of Activities for Grade Five

Social Studies

Bulla, Clyde Robert. Viking Adventure. Illustrated by Douglas Gorsline. New York: Crowell, 1963.

Suggested use: Unit 2, history text. See page 95, Section I for summary.

1. On pages two and three, the illustrations show Olaf's farm with its three houses and three barns. Have some children construct, from modelling clay, a model Viking farm which may be similar to that discovered at L'Anse Aux Meadows.

2. Have the class do a news story on Sigurd's trip to Wineland, writing it as though it were a contemporary event for a current newspaper. Include descriptions of the new and strange creatures they saw.

3. Assign a group to compare a young Viking boy's activities with those of today under such headings as: learning to swim, games of skill and strength, self-protection, and education.

4. The textbook Newfoundland and Labrador: A Brief History shows the chief weapons of a Viking. Using Viking Adventure as enrichment material, have a student

report to the class how a young Viking boy learned to use these weapons.

5. Assign students the characters of Sigurd, Aron, Halfred, and Gorm. Other students may be oarsmen on the Viking ship. The conversation in chapter 12 of Viking Adventure is especially suited to role-playing and Sigurd's voyage through the fogs and storms may be dramatized by some students.

6. Encourage the children to write five entries in a diary that Sigurd might have kept. They may choose consecutive days or select five different periods throughout his life.

7. Introduce the children to several other books of historical fiction by Clyde Robert Bulla. Show Indian Hill and Wigwam in the City, which are stories of Indians' adjustment to city living. Sword in the Tree is a story set in Arthurian England. As well, Bulla describes the early settlement of North America in Squanto, Friend of the White Man and John Billington, Friend of Squanto.

Those interested in other stories of the Vikings by different authors may want to read Erik Haugaard's Hakon of Rogen's Saga, and Henry Treece's Viking's Sunset, Viking's Dawn, and The Last Viking.

Carlson, Natalie Savage. Sailor's Choice. Illustrated by George Lok. New York: Harper Row, 1966. Fiction (4-7). OUT OF PRINT.

Suggested use: Units 27, 28, history text, units 6, 7 geography text. See page 103, Section I for summary.

1. Arrange a program of Newfoundland folk songs which tell of the adventures of the seal hunt.

2. Discuss why Jamie became a stowaway on Captain Wight's sealing ship.

3. Collect newspaper clippings and record news reports on today's seal hunt. After presenting and discussing these with the class, assign groups to compare today's hunt with that described in Sailor's Choice. The groups may be given different headings:

location of the front	selection of the crew
killing the seal pups	disasters
type (species) of seals hunted	dangers on the ice

4. Since Carlson, in Sailor's Choice, develops the arguments for and against the hunting of seals, a debating team can use the opposing opinions of young Jamie and Captain Wight as the basis for a debate. The pros and cons

in the novel can be extended through newspaper readings and TV news reports.

Choose two teams to debate:

The seal hunt should be banned.

5. Have the children pretend they have been to the seal hunt with Jamie on board the "Polar Star". Suggest that they write a letter back home telling of their adventures.

6. The grade 5 text Geography of Newfoundland briefly mentions floating a home across a tickle to a new settlement. Sailor's Choice can enrich this information. Call attention to page 125 where the captain prepares his house for moving and later floats it to a new location.

7. Captain Wight and Jamie discuss how many fish a seal can eat in a year. Invite a fisheries officer into the classroom. Form a panel of class members to ask him questions related to fishing and sealing.

8. The characteristics of the Newfoundland dog are presented in Geography of Newfoundland. Have the students show that these characteristics are exemplified by Sailor throughout Sailor's Choice.

9. Many students in the class may wish to read other books by Natalie Savage Carlson. Introduce the class to some of her more notable books--The Empty Schoolhouse, The Family Under the Bridge, The Happy Orpheline, The Talking Cat, and Carnival in Paris.

Feather, Jean Hayes. Sawtooth Harbour Boy. Don Mills, Ontario: Nelson, 1973. Fiction (4-6).

Suggested use: Units 24, 25, 26, 28, 29, history text.
See page 102, Section I for summary.

1. Billy's dad took Selina, who was sick, to Dr. Grenfell on board the Strathcona. Extend the information found in chapter 29 of Newfoundland and Labrador: A Brief History with the account of Grenfell in Sawtooth Harbour Boy. If the class enjoys Sir Wilfred Grenfell and his life, introduce them to Wilfred Grenfell by Tom Moore.

2. In Sawtooth Harbour Boy, Billy's father, on page 107, mutters "being in the red on the merchant's books". Newfoundland and Labrador: A Brief History (Unit 24) gives information on the credit system which existed in Newfoundland's past. After a discussion of what is meant by the 'credit system', set up two groups to debate or discuss the topic:

The credit system was necessary in its time.

3. Have one group compare the school in Sawtooth Harbour Boy with today's schools. Another group can compare the subjects Billy studied with theirs. A third group can report on the occupations from which Billy could choose after he finished school.

4. Geography of Newfoundland discusses and diagrams farming in the small villages of Newfoundland. Sawtooth Harbour Boy describes farming in Sawtooth Harbour in the passage where Billy talks with uncle Mike throughout part 10. Compare the two descriptions.

5. The illustrations in Sawtooth Harbour Boy show many aspects of the geography and culture of Newfoundland life. Use the illustrations on pages 34, 46, 54, and 88 which show transportation, fishing, farming, clothing, and climate to enrich the information presented in their history and geography texts.

6. The climax of this novel lends itself to dramatization. Have several children act out the scene where the priest reads Uncle Mike's will which includes Billy as a beneficiary. Conversation is also used extensively in part 14. Allow the children to decide what props and properties they will need, and who will play the parts of:

Dad	Uncle Joe
Billy	Aunt Rose
Billy's Mother	Uncle Tom Parsons
Father Donahue	Aunt Jessie French
Aunt Fanny	

7. As a class project, help the students publish a one-page newspaper or pamphlet for the day March 10, 1924. Have them first write stories for the newspaper. One story might tell about the subjects Mr. Mercer teaches in school and another might report on Billy's progress. Other stories might report on the death of Uncle Mike, the work of Dr. MacDonald and Doctor Grenfell in Labrador, and a report on the sealer Arctic Hunter. Then suggest they make drawings for the pamphlet and also draw a plan of Sawtooth Harbour and a fishing schooner, Uncle Mike's house, and the school-house. The class may also write any other stories and make any other drawings that it finds appropriate.

8. Discuss whether or not Billy's decision to be a doctor after he finishes school is a good one. Uncle Tom says on page 100 that he has "never heard of a fisherman's son becoming a doctor".

Examples of Activities for Grade Five

Science

Andrews, Roy Chapman. All About Strange Beasts of the Past.
Illustrated by Matthew Kalmenoff. New York:
Random, 1956. Information (4-6).

Suggested use: Unit 5, science text. See page 1166,
Section I for summary.

1. Discuss with the class Roy Chapman Andrews' explanations of how animals, wood, and leaves are fossilized.

2. The author presents detailed information as well as many illustrations on the La Brea tar pits where remains of many extinct animals have been found. Organize a project to construct a diorama of the tar pits based on Andrews' information. One group of pupils could prepare the box--cut it out, paint it, construct modelling clay mountains and pits, and the black tar of the pits. Another group could make or bring models of the saber-toothed tiger, the woolly mammoth, early camels, and extinct sloths. If there is a reference library in the school, a third group could briefly describe these beasts or suggest reasons for their disappearance from the earth.

3. To supplement their STEM science book, have a group construct a time line tracing the development of the

horse from the early eophippus to today's horse. All About Strange Beasts of the Past gives the dates and pictures on page 102.

4. Have the children imagine they are in Roy Chapman Andrews' shoes. Have them write a composition on how they would have felt if they had discovered evidence of the Beast of Baluchistan.

Worden, Col. Alfred M. I Want to Know About a Trip to the Moon. Illustrated with photographs. New York: Doubleday, 1974. Information (4-6).

Suggested use: Unit 8, science text. See page 122, Section I for summary.

1. The pupils can be led to see that new words and expressions--especially words related to space explorations--are coming into our language. Have them find these words in Worden's book. Some are:

zero G (p. 42)	extravechicular (p. 49)
datalist (p. 30)	splash-down (p. 51)
pre-breathing (p. 34)	cosmonaut (p. 56)
docking (p. 57)	

Assign one group to predict their possible meanings, while another group checks the meanings in a school or personal dictionary. It may be necessary to consult a recent or newly revised dictionary here.

2. Have the students prepare a mural of the stages of a trip to the moon. The STEM science book concentrates mainly on getting to the moon, while the information on getting back to earth can come from I Want to Know About a Trip to the Moon.

The mural can show the blast-off, the trip to the moon, lunar landing, lunar blast-off, the return trip to

earth, and splash-down.

3. Lead the students into a discussion to compare the two diagrams of the spacesuit: the text, page 275, and the information book, page 30.

4. Have the students construct a time-line showing, in days, the length of Worden's trip to the moon from the time he leaves earth until splash down in the Pacific. The line may be colour-coded to show the days to the moon, days orbiting the moon, and the number of days returning to earth.

5. Whereas the text merely lists the things to take on a trip to the moon, I Want to Know About a Trip to the Moon shows how food, water, and air are used by the astronauts. Based on what Worden says about how the food on board a space ship must be eaten, let the children write humorous stories or tall-tales about eating on a space ship. Some possible titles for starters are:

The Food that Flew Away

Whoops! Another Lost Hot Dog

Drinking Pie Through a Straw

6. Worden, in the introduction, explains that he has written this book to answer the many questions children have asked him about space travel. Before introducing the book to the class, assign each student to write three or four questions they would like to ask the Apollo astronaut. After the book is read, students will likely have answers to their questions. Any unanswered questions can be researched in a reference book.

7. Assign students to carry on an imaginary conversation between Worden in the command module and Scott and Irwin who describe the lunar surface as they walk around.

8. Let the students compose a paragraph about splashdown. Worden, on page 53, says, "We were a little concerned about coming down so fast, but we were lucky". Have them describe the recovery of Apollo 15, or let them write about their feelings of anxiety and joy on a safe return to earth.

Examples of Activities for Grade SixSocial Studies

Holling, C. Holling. Paddle-to-the-Sea. Illustrated by Holling C. Holling. Boston: Houghton-Mifflin, 1941. Information (4-6).

Suggested use: Unit 9, geography text. See page 148, Section I for summary.

1. Have the students list all the wild animals Paddle-to-the-Sea met on his journey. With the help of a teacher or librarian let them determine which of those animals Paddle-to-the-Sea met are trapped for furs, which are hunted for food, which are protected as endangered species, and which are dangerous to man.
2. Paddle-to-the-Sea visits many scenic inlets, rivers, and towns during its journey down the Great Lakes. Ask the students to imagine they are there and then write a brief paragraph describing the site.
3. Canada: This Land of Ours describes many of Canada's natural resources, and Paddle-to-the-Sea can reinforce and enrich these descriptions. Have the students note the natural resources and the Canadian industries associated with them as they are described by Holling C. Holling.

4. Using a map found in Canada: This Land of Ours, have the students trace a route to the sea which Paddle-to-the-Sea might have taken if he had been put into:

Red Deer River

Athabaska River

Great Slave Lake

5. Use the diagram and description of canal locks in section 17 of Paddle-to-the-Sea to enrich the information found on page 183 of Canada: This Land of Ours.

6. The large, full-colour illustrations drawn by Holling C. Holling, which are the end papers of his book, can stimulate a teacher-led discussion of the geography of the Great Lakes Lowland region using these headings: resources, transportation, occupations, cities, and agriculture.

7. Introduce Holling C. Holling's other books which have geographic and historic appeal and provide interesting reading: The Tree in the Trail, Minn of the Mississippi, and Pagoo.

Burnford, Sheila. The Incredible Journey. Illustrated by Carl Burger. Boston: Little, Brown and Company, 1961. Fiction (6-9).

Suggested use: Unit 4, geography text. See page 144, Section I for summary.

1. Chapter 3 of the grade six geography text Canada: This Land of Ours states that the Near North seems to say "Come and use my riches". The Incredible Journey on page 7 extends and enriches these riches and resources of Canada's north.

Have the students make a poster to encourage people to settle in Canada's Near North.

2. Assign two groups to debate:

"The three animals could not have made a 300 mile journey through Canada's Far North."

Notes for the debate will be based in part on the information found in Sheila Burnford's The Incredible Journey and from section four, "The Far North", in their text. Students may also use reference books to research the ruggedness of the land in Canada's Arctic regions. As well, many children's books can help the students, for example, Akavak by James Houston, The Day Tuk Became a Hunter by Ronald Melzack, and The Eskimo by Mary Bringle.

3. Assemble a scrapbook of Canada's North with members of the class contributing post-cards, photographs, magazine pictures or other materials which typify the country over which Tao, Luath, and Bodger travelled.

4. Suggest that a student write a letter to the Ontario Tourist Bureau asking for travelogs and brochures on Northern Ontario.

5. Use a road map or atlas of Ontario to find the route of The Incredible Journey. Also try to find the places mentioned in the story--Heron Lake, Ironmouth Range, Deepwater, Archer Creek, Quebec City, Montreal, Strellon Game Reserve, and River Keg.

6. Have the children give a short report on the wildlife of the North. The two dogs and the cat encounter many animals on their journey and each child can be assigned various creatures for either oral or written presentation. The species include: moose, deer, brown bear, black bear, lynx, fox, beaver, muskrat, otter, fisher, mink, marten, porcupine, squirrel, rabbit, weasel, duck, Canada goose, trout, steelheads, pike, pickerel, and whitefish.

7. Conduct a discussion by students on the hardships and loneliness of pioneer life in Canada's north.

Page 62 of The Incredible Journey can help stimulate discussion and ideas, for this part of the novel contains sentences and phrases such as:

- Reino Nurmi and his wife lived here, as sturdy and uncompromising as the cabin they had built with their own hand-hewn logs . . .
- They had tamed the bush . . .
- . . . their scant living from trap-lines and a wood lot.
- Helvin walked the lonely miles to the waiting school bus each day . . .
- . . . wishing she (Helvi) had a companion . . .

8. Other books and novels like The Incredible Journey which tell about animals and animal journeys should be introduced to the children at this time. Little Rascal by Sterling North, A Stranger at Green Knowe by Lucy M. Boston, The Yearling by Marjorie Rawlings, Billy and Blaze by C. W. Anderson, The Black Stallion by Walter Farley, King of the Wind and Misty of Chincoteague by Marguerite Henry and Old Yeller by Fred Gipson are just a few of the many excellent animal stories available for eleven and twelve year olds.

9. Ask the children to compare the camp scene of the Ojibway Indian on page 41 of The Incredible Journey with those scenes and pictures presented in the grade six history pamphlet Nomads of the Shield.

10. Let any child who feels so inclined give a chalk talk about his favourite scene from The Incredible Journey.

11. Assign one group of students to compile their own reference book of facts (or strange-but-true facts) of transportation, occupations, and resources of Canada's Near North. Another group may think of new adventures or incidents involving the three animals and abandoned mines, beaver traps, fights with otters, and logging camps. These may be read as fictional additions to the story.

12. Bush pilots are transportation links in the Northlands. The Incredible Journey refers to one on page 114. If the class wishes more information on Canadian bush pilots, they can be introduced to the biography of Wop May, Bush Pilot, written by Iris C. Allen.

13. Let students vote on whether they would or would not like to live as a pioneer in Canada's Northland. Have them write a composition explaining the reasons for their choices.

Schwarz, Herbert T. Windigo and Other Tales of the Ojibway. Illustrated by Norval Morrisseau. Toronto: McClland and Stewart, 1969. Legend (4-7).

Suggested use: Unit Native People, history pamphlets.
See page 127, Section I for summary.

1. Divide the class into several groups and allow each to construct some portion of an Ojibway village from birch bark. Details of the Ojibway villages are found throughout the many folktales retold by Schwarz.

wigwam (p. 11)

campfires (p. 11)

peace pipe (p. 15)

medicine bag (p. 26)

traditional wigwam of the medicine man (p. 13)

birch bark canoe (p. 14)

buckskin blanket (p. 24)

birch bark baskets (p. 38)

2. In the introduction Norval Morrisseau says of his illustrations, "My paintings depict my impressions of Ojibway beliefs and legends, gods and creatures". Let children who wish to water paint, select any folktale in Windigo and Other Tales of the Ojibway and attempt to produce a simple painting with water colours to represent the tale.

3. Based on the information given in Windigo, have several children describe the Ojibway economy by developing these headings. Some pages where information can be found are given:

Food: p. 11, p. 14, p. 20

Gods and creatures: p. 15, p. 20, p. 25, p. 38

Clothing: p. 22, p. 24

Transportation: p. 11, p. 14, p. 20, p. 33

Shelter: p. 11, p. 12, p. 16, p. 22

4. To enrich the section "Man and the Spirits" in Nomads of the Shield, have the children recount or reread the dreams retold by author Schwarz.

5. Hold a debate resolving that:

The medicine man was an important person in the Ojibway village.

6. Select an Ojibway tale, such as The Forbidden Mountain, that is suitable for dramatization. Assign members to role play the characters Grey Beaver, Stone, Water, Sky, the young Maiden Mishipeshher, and the Turtle. Have the group pantomime the story before the class.

7. Conduct a discussion by students on whether they believe the Indians had a better way of life before or after the white man arrived.

8. Assign a different Indian tribe to each of several groups of three or four students and have them with the help of the librarian and reference material, prepare and present a report on their tribe. They can compare their findings on other tribes with the information given on the Ojibways in both their text and Schwarz's Windigo.

9. If the students wish, they may read other Indian folktales such as Kay Hill's Glooscap and his Magic and Badger the Mischief Maker, William Toye's How Summer Came to Canada, Christie Harris' Once Upon a Totem, Hettie Jones' Longhouse Winter, and Edith Lambert Sharp's Nkwala.

Downie, Mary Alice and John. Honor Bound. Illustrated by Joan Huffman. Toronto: Oxford, 1971. Fiction (6-10).

Suggested use: Unit Settlement, history pamphlets. See page 131, Section I for summary

1. Compare Caleb Seaman's reasons for becoming a Loyalist with those of James Avery in Honor Bound.

2. Ask the children to imagine they are Patience or Miles Avery and then ask them to write a letter to someone they knew in Philadelphia describing their first winter spent in Canada.

3. If students wish to visualize the size or style of Mr. Avery's home, which was typical of many pioneer homes, suggest they make a floor plan of the home Mr. Avery built at Grimble's Plot. The details are found in the chapter entitled Visitors on pages 86-95.

4. Discuss with the students the map of the Averys' journey to Canada. Why did their route follow rivers and lakes? What factors determined which way the Averys' went?

5. The grade six history pamphlet Caleb Seaman: A Loyalist contains the statement:

"For a hot drink Martha made tea by boiling winter-green leaves".

Using Honor Bound as an enrichment source, have each child draw up three columns to show how early settlers made use of herbs, shrubs, and other plants for food and medicinal purposes. The following is a checklist for the teacher.

Plant	Product	Purpose
tansy tea	tea	indigestion
cherry bark	drink	for the blood
wheat	flour & bread	food
pumpkins	wine	drink
parsnips	wine	drink
walnut tree chips	wine	drink
catnip	tea	stomach ache

6. Plan a day's menu using foods which the Avery family would have grown or gathered themselves in Honor Bound.

7. Have the class choose one student to play the part of James Avery. Have Mr. Avery questioned by two panels--one panel would represent men and women of the colonial American government and the other panel would

represent the Canadian government. Each group would question the Loyalist on:

- pros and cons of being loyal to England
- comparison of life in backwoods of Canada to that in Philadelphia
- government of both countries
- hardships of travel in both countries

8. The authors have a map of the story's locale in their book. Using their atlas, have the children compare today's map of the eastern states and Great Lakes with the historical map. Let them point out that the number of towns and cities has increased tremendously since 1784.

Examples of Activities for Grade SixScience

Branley, Franklyn M. The Nine Planets. Illustrated by Helmut K. Wimmer. New York: Thomas Y. Crowell, 1978. Information (6-7).

Suggested use: Unit 3, science text. See page 150, Section I for summary.

1. Franklyn M. Branley in The Nine Planets briefly explains how each planet's name was derived from ancient mythology. As enrichment and background material, introduce the children to books on Greek and Roman mythology such as the D'Aulaires' Book of Greek Myths or White's The Golden Treasury of Myths and Legends.

2. The STEM textbook diagrams the lunar phases. Suggest that the children compare the lunar phases with the phases of Venus as diagrammed in The Nine Planets on page 37.

3. Many children may wish to draw up a table for each of the planets. Using the information given in Branley's book, have them discuss the reasons each planet is unsuitable for human habitation.

4. The Nine Planets has further information on planets, such as Saturn, which is suitable for enriching material. Prepare a clay model of a planet, say Saturn, with paper rings. Display, as well, its ten known satellites.

5. Both the student text and Branley's book refer to two early astronomers, Copernicus and Galileo. Prepare background information on both of these with information and illustrations taken from Truth on Trial: The Story of Galileo by Vicki Cobb and information on Copernicus taken from an encyclopedia such as World Book.

Latham, Jean Lee. Rachel Carson Who Loved the Sea.
Illustrated by Victor Mays. Champaign, Illinois:
Gerrard Publishing, 1973. Biography (3-5).

Suggested use: Unit 9, science text. See page 157, Section I for summary.

1. Both the STEM science text (p. 258) and Rachel Carson refer to the harmful effects of DDT. Have the class, over a period of several weeks, search current newspapers for clippings--such as the one Mrs. Olga Owens Huckins sent Rachel Carson--about how poisons are being sprayed to kill pests. Collect all the clippings and prepare a bulletin board or poster showing the harmful effects of poisonous sprays.

2. Grade 6 STEM science in the section Changing and Preserving Our Environment discusses organisms, specifically bluebirds, which are endangered by man. Discuss how Rachel Carson felt about endangered species. What did she do about it?

3. Have the students refer to the illustrations on pages 59 and 68 and discuss the ecological implications found in both.

4. Have one group of students research and report

back to the class information on "those wonderful, magical pesticides DDT" which Rachel Carson reported on. Another group may be encouraged to think about another pesticide, for example Matacil, and report back to the class on the pros and cons of spraying against the spruce budworm.

5. Rachel Carson became both an author and a scientist. Suggest that one student pretend she is a young Rachel Carson and she will relate how she became a writer. Another student will relate how Carson became a scientist.

6. Introduce Rachel Carson's major books on ecology--Under the Sea Wind, The Sea Around Us, and Silent Spring.

7. Invite a fisheries officer or a wildlife officer to the classroom. Have children develop a series of questions on ecology, endangered species, pesticides, over-population, adaptation, and man's encroachment on the environment, which are topics raised in Jean Lee Latham's book and the three sections of their STEM Science text "Living Things: Continuity and Change", "Changes in the Land", "Changing and Preserving our Environment".

Guide the class into a question and answer period with the wildlife officer.

8. Introduce the children to other biographies of scientists: Benjamin Franklin by Ingri and Edgar D'Aulaire; Michael Faraday: Apprentice to Science by Sam and Beryl Epstein; The Radium Woman by Eleanor Doorly; and The Story of Eli Whitney by Jean Lee Latham.

APPENDIX A

BIBLIOGRAPHY OF SELECTION AIDS

Books

Annotated bibliography of Newfoundland materials for school libraries. St. John's, Newfoundland: Instructional Materials Publication, 1980.

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Children's book review index. Detroit: Gale Research Company, 1975.

Children's Catalogue. New York: H. W. Wilson, 1976.

Cianciolo, P. (ed.). Adventuring with books (New Ed.). Urbana, Illinois: National Council of Teachers of English, 1977.

Fee, M. Canadian fiction: an annotated bibliography. Toronto: P. Martin, 1976.

Gillespie, J. T., & Gilbert, C. B. (eds.). Best books for children. New York: R. R. Bowker Company, 1978.

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New York: Citation Press, 1973.

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Ontario Department of Education, 1966.

Sutherland, Z. (ed.). Best in children's books. Chicago:
University of Chicago Press, 1973.

Winkel, L. (ed.). Elementary school library collection.
Newark, N. J.: Bro-Dart Foundation, 1979.

Periodicals

AAAS Science Book List for Children. Washington, D. C.:
American Association for the Advancement of Science.

Appraisal. Boston: Children's Science Book Review Committee.

Bookbird. Vienna: International Board of Books for Young
People.

Booklist. Chicago: American Library Association.

Canadian Children's Literature. Guelph, Ontario:
Canadian Children's Literature Association.

Canadian Materials. Ottawa: Canadian Library Association.

Horn Book. Boston: The Horn Book.

In Review. Toronto: Ontario Provincial Library Service.

Junior Bookshelf. Huddersfield, England: Woodfield and
Stanley.

Kirkus Reviews. New York: Kirkus Service Inc.

Library Journal. New York: R. R. Bowker Company.

New York Times Book Review. New York: New York Times
Company.

School Library Journal. New York: R. R. Bowker.

Science and Children. Washington, D. C.: National
Science Teachers Association.

Science Books and Films. Washington, D. C.:
American Association for the Advancement of Science.

Times Literary Supplement. London, England: Times
Newspapers Ltd.

Wilson Library Bulletin. Bronx, New York: H. W. Wilson
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APPENDIX B

TEXTBOOKS PRESCRIBED FOR SOCIAL STUDIES AND SCIENCE
IN THE ELEMENTARY GRADES IN NEWFOUNDLAND
SCHOOLS 1980-1981

Grade Four Social Studies

Massey, D. L. (ed.). Around our world: A study of communities. Toronto: Ginn and Company, 1965.

- Unit 1. Community Geography
2. Living in the Tundra
3. Living in the Tropical Rainforest
4. Living in the Desert
5. Living on a High Plateau
6. Living on a Sheep Station
7. Living on a Mountainous Coast
8. Living on a River Delta
9. Living Below Sea Level

Grade Four Science

Rockcastle, V. N., Salamon, F. R., Schmidt, V. E., &
McKnight, B. J. Elementary school science. Don Mills,
Ontario: Addison-Wesley, 1977.

- Unit 1. Water on the Land
2. The Food you Eat
3. Electric Light Circuits
4. Cells, Tissues, and your Body
5. Friction-Rubbing and Rolling
6. Your Body's Needs
7. Stars-Night and Day
8. Vibrations and Sound
9. Heat

Grade Five Social Studies - Geography

Summers, W. F., & Summers, M. E. Geography of Newfoundland. Toronto: Copp Clark Publishing Company, 1972.

- Unit 1. Where in the World are We?
2. The Size and Shape of the Land
 3. Warm and Cold, Wet and Dry
 4. Water, Water Everywhere
 5. The Carpet of Green and Brown
 6. The First Inhabitants
 7. People on the Land
 8. Fishing for a Living
 9. Farming for a Living
 10. Logging for a Living
 11. Mining for a Living
 12. Making Things for a Living
 13. Serving and Living
 14. People and Things Move About
 15. Looking Back and Looking Ahead

Grade Five Social Studies - History

Harris, L. Newfoundland and Labrador: a brief history. Don Mills, Ontario: J. M. Dent & Sons, 1968.

- Unit 1. The Beothucks
2. The Vikings
 3. The Men of Bristol
 4. The Age of Exploration
 5. The Voyage of John Cabot
 6. The Corte-Real Brothers
 7. Jacques Cartier
 8. Fishermen Come from Europe
 9. Newfoundland Is Claimed for England
 10. Fishermen and Settlers
 11. John Guy's Settlement
 12. Other Settlements
 13. The First Western Charter
 14. Sir David Kirke
 15. King William's Act
 16. The French
 17. The Naval Governors
 18. The Seven Years' War
 19. Sir Hugh Palliser
 20. The Surrogates
 21. The Establishment of Courts

- Unit 22. After the War
 23. Newfoundland Becomes a Colony
 24. Village Settlements
 25. St. John's and the Outports
 26. The Spread of Settlement
 27. The Seal Hunt
 28. Churches and Schools
 29. Missionaries in Labrador
 30. Representative Government
 31. Responsible Government
 32. The French Shore
 33. Newfoundland Refuses to Join Canada
 34. The Railway
 35. The Great Fire and the Bank Crash
 36. Coaker and the Fishermen's Protective Union
 37. The First World War
 38. Labrador
 39. The Amulree Report
 40. Commission of Government
 41. The Second World War
 42. The National Convention
 43. Confederation
 44. Since Confederation

Grade Five Science

Rockcastle, V. N., Salamon, F. R., Schmidt, V. E., &
 McKnight, B. J. Elementary school science. Don Mills,
 Ontario: Addison-Wesley, 1977.

- Unit 1. Paths of Light
 2. Classifying Living Things
 3. Magnets and Compasses
 4. Winds and Convection
 5. Rocks in Layers
 6. Forces and Motions
 7. Changes in Matter
 8. Man on the Moon
 9. Interdependence of Living Things

Grade Six Social Studies - Geography

Wiley, W., Welsh, A., King, D., Thomas, G., Fryer, M.,
& McLean, N. Canada: this land of ours. Toronto:
Ginn and Company, 1970.

- Unit 1. This Land of Ours
2. The Local Region
3. The Near North
4. The Far North
5. The Prairies
6. The Western Mountains and Valleys
7. The Atlantic Region
8. The St. Lawrence - Ottawa Lowland
9. The Great Lakes Lowland

Grade Six Social Studies - History

Smith, D. C., Symington, D. F., Wilson, K. et al. Ginn studies in canadian history. Canada: Ginn and Company, 1972.

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Colonists at Port Royal
Nomads of the Shield: Ojibwa Indians
The Fur Fort
Seafaring Warriors of the West: Nootka
Indians
Battle at Quebec: 1759
Caleb Seaman: A Loyalist
Life at Red River: 1830-1860
The Seigneurie of Longueuil
Hunters of the Plains: Assiniboine
Indians
Soldier at Quebec: 1759
Sainte-Marie among the Hurons
Fort York
Spy at Quebec: 1759
The Timber Trade in the Ottawa Valley
Shipbuilding in the Maritimes
Treaties and Promises: Saukteaux Indians
Ellen Elliott: A Pioneer
Early Railroads in Canada

Grade Six Science

Rockcastle, V. N., Salamon, F. R., Schmidt, V. E., &
McKnight, B. J. Elementary school science. Don Mills,
Ontario: Addison-Wesley, 1977.

- Unit
1. Images, Refraction and Color
 2. Water in the Air
 3. The Earth and its Neighbours
 4. Using Forces
 5. Electric Charges and Currents
 6. Living Things - Continuity and Change
 7. Changes in the Land
 8. Populations
 9. Changing and Preserving our Environment

APPENDIX C

AN AUTHOR/TITLE LISTING OF ALL
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