

MATERIALS OF A GEOGRAPHICAL NATURE IN A
SELECTED PRIMARY READING PROGRAM
DES MOINES, IOWA

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by
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CHAPTER I

INTRODUCTION

The lack of geographic education in the nation's schools has become a matter of growing concern. Recent studies published in The Journal of Geography have indicated that young children often do not receive the intellectual and educational stimulation they need and want concerning their environment. What, then, is the role of the primary teacher in developing concepts which are chiefly geographical in nature?

Dr. John D. McAulay, noted researcher in the geographical understandings of primary children, clearly states the responsibility of the primary teacher:

Primary teachers must devote more of their energies to the effective teaching of geography. They must give more consideration to the enlarged environment of the child and provide a challenging and progressive development of geographical skills and concepts. They must use geographical media effectively to bring the world to the child and help him secure some organized understanding of it.¹

If the primary child is incapable of understanding geographically the community in which he lives and observes, there is little reason to believe he will be capable of understanding any other community.

¹John D. McAulay, "Geographical Understandings of the Primary Child," The Journal of Geography, LXV (April, 1966), 176.

Since the home, the school, and the community are already a part of the content of the traditional primary school curriculum, interesting and meaningful information contained in the reading textbooks can profitably be utilized to strengthen and broaden the foundation skills and knowledge necessary for intelligent orientation and observation of the child's surrounding world.

I. THE PROBLEM

The purpose of this study was to investigate the geographical materials contained in the primary basic reading series in the Des Moines Independent Community Schools (1) to determine the amount of geographical materials and (2) to determine what kind of geographical materials have been included.

II. IMPORTANCE OF THE STUDY

In researching the quality of geographic education from kindergarten to the university level, researchers have found that geography has been most badly abused at the primary level. Geography is widely taught at this level, but the profession has been relatively uninterested in elementary geography because of the belief that it has little or no relation to geography at the university level. According to Schmieder, this is a false assumption. Good geography

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can be translated into understandings at any level and the correlation between key geographic concepts used very early in a child's education and those that are central to graduate research are very close indeed.¹

III. DEFINITION USED IN THE STUDY

The definition of geography selected for this study has been accepted by most critics as a valid working definition. It was formulated by John W. Morris, an expert on the dynamics of geography:

Modern geography is an attempt to develop an understanding of the distribution (where) of the various physical and cultural environments over the face of the earth, the cause (why) of their being where they are and the effect (what) upon the interrelationship between man and his environment.²

To clarify the meaning of the definition, Morris states three questions to be answered in the study of geography, regardless of grade level: "(1) Where is the item or place being discussed located? (2) Why is it there, and why is it as it is? (3) What is its relationship to man?"³

¹Allen A. Schmieder, "Some Trends and Their Implications for Geographic Education," The Journal of Geography, LX (April, 1961), 209.

²John W. Morris, "Geography-Separate Course or Integrated?" The Journal of Geography, LXIV (May, 1965), 202.

³Ibid.

IV. LIMITATIONS OF THE STUDY

The investigator limited the study to the examination and analysis of geographical materials contained in the basic reading program selected for reading instruction in the primary grades in the Des Moines Independent Community Schools.

V. PROCEDURE

The basic reading series used in the study was the Reading for Meaning series published by Houghton Mifflin Company in 1966. The primary series consists of a pre-reading workbook at the kindergarten level, three pre-primers, and two readers each for grades one, two, and three.

Selections in each text were examined and analyzed. The nature of the content was determined by deciding what the selections meant to tell or emphasize. Items having relatively little or no significance to the over-all meaning of the selections were excluded from the findings. Exercises dealing with vocabulary building or the mechanics of reading were also omitted from the study.

Since the classification of materials as geographical or non-geographical is obviously a subjective procedure, terms and concepts were given careful consideration to insure as high a degree of objectivity as possible.

Only by setting definite limits could the investigator be assured that another analysis of the same materials would yield similar results.

Several outlines of proposed geographic concepts designed for all grade levels were reviewed for the purpose of identifying geographical materials. The following list, prepared by Poole, Barton, and Baker, was selected because the topics outlined seemed most suited for singling out terms and concepts that are presented in the primary grades as opposed to outlines assigning geography to an integrative role involving all the social science disciplines: earth and universe, land and landforms, soil, water and water bodies, weather and climate, plant life, animal life, locational and spatial relationships, distribution of population, houses and settlements, production, transportation and communication, conservation, and recreation.¹

VI. DESIGN OF THE STUDY

Chapter I includes the introduction, the statement of the problem, the importance of the study, and the procedures used to complete the study. The definition of terms and limitations of the investigation are discussed. The

¹Rose Sabaroff, "Geographic Concepts for First Graders," The Journal of Geography, LIX (February, 1960), 86.

design of the study contains a resume of what the investigation included.

In Chapter II, the development of the primary child in relation to his interests, needs, and his ability to comprehend geographical understandings will be presented and summarized.

Chapter III will include the findings of the investigation. Significant items in each reader will be presented in contextual sequence. Terms and concepts appearing in the reading content will be underlined for the purpose of identification. Wherever illustration directly contribute to meanings of geographic importance, the illustrations will be explained.

Chapter IV will consist of a summary of the study and the investigator's conclusions and recommendations.

CHAPTER II

REVIEW OF LITERATURE

A significant phase of educational planning which has received considerable attention in recent years is that of relating learning in various areas of the curriculum to the growth and development of children. The purpose of this movement has been to develop programs of instruction that are geared to developmental characteristics, needs, and interests of children, and that contribute to the wholesome growth and development of each child. An impressive body of studies has accumulated, and when analyzed, reveal what can generally be expected of children.

The selected growth characteristics summarized in this section represent the more recent literature in growth and development and relate primarily to the acquisition of geographical concepts, skills, and understandings of the primary child.

I. GROWTH AND DEVELOPMENT OF THE PRIMARY CHILD

Upon entering school, the child has developed in a variety of ways as a result of his experiences in his home and neighborhood.

Young children are avid explorers of their environment—ceaseless collectors of sensory experiences, eager questioners of what, why, and how

things happen, insistent probers of physical phenomena, life processes, technical procedures, and social relationships. They see their world whole. Any situation or phenomenon that captures their attention provides a likely occasion for observing, manipulating, and questioning. They are learning the basic relationships of matter, energy, life, and people.¹

The quality of the meanings derived from these explorations depends upon the richness of the experiences and upon the child's maturity. Meanings may vary from no meaning on the one hand to rather full and rich meaning on the other.

The five-year-old is eager to learn whatever helps to clarify his understanding of his own world. One way in which he seeks to interpret his world is through questioning. Questions indicate something of his mental maturity--his readiness to think about relationships. The answers to these questions often involve geographic concepts and relationships. The immediacy of the child's desire to know makes it important that answers come soon--before interest shifts to other things.² By the age of six, the child may have begun to inhibit his questioning because the answers have been too meager to make asking worthwhile.³

¹J. Frances Huey, Teaching Primary Children (Chicago: Holt, Rinehart and Winston, Inc., 1965), p. 53.

²Ibid., p. 64.

³Ibid., p. 63.

The attention span of the child entering school is relatively short, varying with interest and ability. Interests are learned and center on the here-and-now, and in matters related directly to the child's own activities and skills; thus, interpretations are frequently given from a personal point of view rather than a view of society in general. Hanna and his colleagues present the five-year-old in this manner: "He tends to be realistic; he depends on concrete experience; he is first-personal."¹

"Even the five-year-old is oriented with his space range."² Satisfying his curiosity might include excursions around the neighborhood, crossing streets, finding the way to nearby shops, examining the route to school, playing along a creek, or climbing around the buildings on a farmstead. Different locales stimulate different interests, hence, requiring varied needs for information. Some children at this age have become fairly accurate in tracing vacation trips on maps and indicating specific landmarks. While a limited knowledge of space is present, the sequential development of these concepts and skills needs to be encouraged if the child's interests are to be sustained.

¹Paul R. Hanna and others, Geography in the Teaching of Social Studies Concepts and Skills (Boston: Houghton Mifflin Company, 1966), p. 107.

²Ibid.

Language patterns tend to follow those of the family and playmates. "Vocabulary is factual, specific, and related to real experiences, not to generalities."¹ Communication with others which involves careful listening and related responses develops gradually and is the spontaneous expression of those things in which the child is interested. Confusions and misconceptions relating to various aspects of home and neighborhood life are commonly found among this age group, but tend to decrease as the child gains experience and attention is given to them in school.

The six to seven-year-old, or first grader, views an expanded environment, opening new frontiers for his explorations. Relationships between home, school, the neighborhood, and the community become more important. He is usually able to get to and from school without assistance from parents. He may be sent on errands around the neighborhood. These explorations frequently bring him in touch with people at work. He may discover men unloading trucks, carpenters at work, crews repairing streets, service trucks making deliveries, or trades people serving customers. Children of this age are frequent and intent observers of these processes, and they even venture to ask questions of the workmen as they watch.²

¹Huey, op. cit., p. 155.

²Ibid., p. 64.

The child has become oriented to the classroom; to the room as a whole, and to his position in it. A realization of what the rest of the school is like and how it functions becomes increasingly evident.¹

Visiting the homes of friends is an intriguing and enlightening experience for the first grader. In these visits he is likely to experience a growing awareness that some people do things quite differently from the way his family does them. He may discover that his friends live in a different style or kind of home, eat different foods, use different tools, and enjoy different activities. Such variations in family living tends to sharpen observations and often give rise to a variety of questions as he tries to justify the likenesses and differences between his own family life and the family life of others. When this occurs, the child is asking for a clarification of the factors involved that explains these variations. In the out of school experiences, which also include visiting places, television programs with realistic content, books, and films, the concept of culture begins to develop. All of these experiences stimulate interest in this direction.

Dramatic play characterizes the child as evidenced in play, story-telling, and discussions. Reality and make-believe

¹Ibid.

often become interwoven in the child's mind. "As the child gains sufficient experiences with his environment and is able to differentiate the real world from the creations of his own fantasy, his play becomes more realistic."¹ Dramatic play, then, is a kind of rethinking and re-enacting the relations of people and things the child has observed in his environment.

"Construction activities develop concurrently with dramatic play and usually support or are stimulated by it."² The materials of construction are determined by the materials available--stones, clay, snow, blocks, boxes, bricks, discarded items. The structures the child produces are symbolic of the adult behavior and social processes he sees.³ As play becomes more realistic, construction likewise becomes more realistic. All forms of play are satisfying "when the real task is too complex for the child to handle, for example, driving a bulldozer or loading a truck."⁴ The child wants to operate or manipulate toys and gadgets similar to those used by adults. This stage of development is usually interrupted by a desire to participate in the real task. If the immediate needs are to be fully satisfied, he must be allowed to

¹Huey, op. cit., p. 108.

²Ibid.

³Ibid.

⁴Ibid.

"stir the cake" or "plant the seeds". His growing status as a worker is developmentally important at this time.

Spatial relations broaden, but remain largely within the child's environment. The names of streets and places are more familiar. A sense of direction has developed to some extent; the child usually travels on a specific route because of the possibility of getting lost. Outer space captures the child's imagination as fascination for the sun, moon, and the whole world begins to appear.¹

The child continues to be active, eager to handle objects and materials, to make simple objects, and to participate in individual and group action. Personal needs are still given first priority; however, there is some shifting from self-centeredness to group concerns as cooperative experiences are provided.

Reasoning ability is present in varying degrees, manifesting itself in questions, comments, play, manipulation of materials, construction, problem-solving, and discussion.

The second grader, consisting of the seven and eight-year-olds, has a still greater interest in and understanding of the relationships within the community. He is curious about the earth's crust, stones, fire, the sun, and other

¹Hanna, op. cit., p. 108.

planets. Spatial orientation is still within his own space experience and range.

As verbal processes grow, the child develops an increasing ability to symbolize and reason if the problems are within his experiences. "Though symbols of general ideas are taking form, they are still closely tied up with direct images."¹ The trend is toward realism and objectivity.

Hanna refers to Gesell's description of the second grader as being "earnest, assiduous, and somewhat channelized."² He has a greater capacity for becoming absorbed in whatever he is doing. He likes to be drilled on what he knows, both individually and in small groups. He is apt to be more conscious of his performance and wants to be correct. He prefers learning through direct experiences, such as projects and excursions.

In relation to space, Gesell notes that a number of similarities exist between seven-year-olds and six-year-olds. In seven-year-olds, geographical understandings are more accurate, deeper meanings are developed, and relationships within the neighborhood community are better understood.

At eight or nine years of age there is a "definite expansion in understanding of space and in freedom to move about in it."³ There is a gradual extension of the child's

¹Ibid., p. 146.

²Ibid.

³Ibid.

interests from those that are immediate and personal to those that range beyond direct experience. Individual differences increase. Attention and interest span are longer, energy output is greater, and more attention is given to detail in construction work. Group action skills are improving, and identification with group planning and evaluating is more complete than in former years. Important growth trends include increasing ability to differentiate between reality and fantasy, growing language skills, more effective use of past experience and increasing interest that extends outward from the immediate community to wider areas of experience.¹

II. RELATED STUDIES ON GEOGRAPHICAL UNDERSTANDINGS OF THE PRIMARY CHILD

The current interest in updating the social studies curriculum has led researchers into various areas of inquiry. One area in which researchers have focused attention deals with the primary child's understanding of geographical concepts and skills. While studies of the acquisition of these concepts and skills are by no means conclusive, educators agree that the process involves both discrimination and abstraction of an essential characteristic

¹Ibid., pp. 191-92.

on one set of experiences and generalization as similar instances occur.

In this section of Chapter II, the investigator will report research findings dealing with geographical understandings the normal primary child is able to comprehend. In so far as possible, an attempt has been made to avoid repetition of findings at each of the grade levels. Professional literature from periodicals available in the Drake University Library dating from 1960 was reviewed. All significant findings have been included in this study.

A research project at the Agnes Russell Center, a service school of Teacher's College, Columbia University, was designed on the basis of class interest to determine if nineteen kindergarten children could begin to attain significant concepts in the area of history and geography that could become the foundation for later learning at succeeding grade levels. Concepts dealing with "New York as a Harbor" were defined and became the basis of an intermittent two and one-half month program. Broad concepts, which were broken down into specific concepts that the kindergarten child could be expected to understand, included: site, situation, facilities, functions, representation of real objects by maps and symbols, and causal factors involving change.¹

¹Bernard Spodek, "Developing Social Science Concepts in the Kindergarten," Social Education, XXVII (May, 1963), 253-43.

The program was integrated with the regular kindergarten work in which many of the materials and techniques were already familiar. New materials were added and trips were planned.

Using the results of tests and observations, the researchers concluded that the "here-and-now" concept did not seem to hold true; that the ability to attain significant concepts was not determined by the proximity or remoteness of the phenomena studied. More important to the children was being able to deal with concrete objects, real or representational. The class recognized a picture map of the harbor and had some knowledge of map symbols; however, some misconceptions appeared and required additional instruction for clarification. The class was able to gather information from various sources; pictures, books, films, discussions, trips, and concrete materials in the form of blocks and three-dimensional maps built to scale. Extending the program over a long period of time did not detract from its effectiveness, but seemed to enhance it. The investigators also found that the children were able to transfer understandings developed during the course of this program to learning about new phenomena.¹

¹Ibid., 255.

After reviewing research studies on map-reading skills of elementary children, Rushdoony formulated an outline of sequential map-reading skills for the primary grades based on the findings of the various studies. The nature of the studies was not available to this investigator. The skills outlined for the kindergarten level include: (1) use of the globe as representative of the earth, (2) recognition of land and water forms on the globe as well as places of particular interest, (3) orientation and direction by using self as a point of reference to the immediate environment and expanding to known places around the world, (4) location with regard to nearby objects and to places located on neighborhood maps, (5) relative distance of known areas, (6) symbols; as represented by land and water on maps and globes, on three-dimensional maps, as letters for directions, as drawn pictures of the globe or earth, and as strips of paper for streets on neighborhood maps, and (7) map inferences in referring to bodies of land and water.¹

In the same vein as Rushdoony, Abraham Resnick, noted geographer from Jersey City State College, lists the following learnings appropriate for the kindergarten level: (1) orientation of self to the classroom and to other areas of the school through tours and through discussion of the

¹Haig A. Rushdoony, "A Child's Ability to Read Maps: Summary of the Research," Social Education, LXVII (April, 1968), 215.

functions of various helpers in the school, (2) understanding of relative position of objects in the home and schoolroom through construction of three-dimensional floor plans, and (3) awareness of daily weather and seasonal changes in landscape, including knowledge of simple weather terms and use of symbols to represent weather conditions on a chart.¹

Dr. John D. McAulay, having investigated the geographical understandings of the primary child, describes skills and understandings for the five-year-old. In addition to the foregoing skills and understandings, Dr. McAulay discovered that kindergarteners can (1) make drawings of the moon at different phases, (2) recognize the difference between the sun and the moon, (3) locate the North and South Pole on the globe, (4) build rivers, mountains, lakes, and other land features in sand or similar material, (5) understand that some places on earth are colder, hotter, wetter, or drier than others, and (6) understand what is high, low, deep, up, down, big, and small.²

The first grader, according to Dr. McAulay, continues to develop geographically so that he is able to understand

¹Abraham Resnick, "Merging Map, Man and Media in the Elementary Social Studies Program," The Journal of Geography, LXII (April, 1963), 171.

²John D. McAulay, "Geography Understandings of the Primary Child," The Journal of Geography, LXVII (April, 1966), 171-72.

(1) shadow changes at different times during the day, (2) geographical terms as city, town, village, and farm, (3) distance in terms of near and far, (4) time in relation to long ago, now, morning, noon, night, and seasons, (5) location in relation to hill, river, railroad, etc., (6) that different people do different kinds of work, (7) that some people use machinery in their work, and (8) that the sun rises and sets. The child can also recognize common kinds of transportation and communication.¹

Resnick cites other understandings compatible with the first grade child's abilities. First graders can understand the function of a zoo or farm and can relate certain animal areas to habitat and environment.²

Rushdoony developed a unit on population growth with first graders based on the concepts of change and growth. Various evaluative devices indicated that first graders can begin to understand location; the "where" of arrangements and the analysis of arrangements by mapping where boys and girls in the class lived and by determining the distribution of class population on the maps. From the same study, the class had begun to grasp the concepts

¹Ibid., 172.

²Resnick, loc. cit.

of regionalization and interaction through studying various locations of shops, houses, and other known places in relation to one another.¹

Map-making skills for first grade, as outlined by Rushdoony, consists of refining learnings at the kindergarten level and extending beyond to include drawing inferences from simple aerial views or from neighborhood maps and learning cardinal and immediate directions.²

Bathurst also developed map-reading skills for first grade. The geographical understandings are developed through drawing a large map of the immediate area on the floor of the classroom, with appropriate symbols to represent streets, houses, traffic signals, and other important features; the activity having been preceded by a carefully planned tour of the area. From the large floor map constructed as nearly as possible to scale, the map is reproduced in a sandbox or other suitable container. After "walking" through the area with fingers, discussions, and play acting, the class is able to again reproduce the map in a vertical position with appropriate symbols.³

¹Haig A. Rushdoony, "Population Growth and the Six Year Old," Social Education, LXVII(September, 1968), 373.

²Rushdoony, "A Child's Ability to Read Maps" op. cit., 216.

³Leonard H. Bathurst, "Developing Map Reading Skills," The Journal of Geography, LX (January, 1961), 28-29.

Rose Sabaroff stressed the importance of observing the out-of-doors in developing understandings concerning daily weather, effects of climate, and seasonal changes. The child, Sabaroff contends, comes to first grade with an awareness of the effect of daily weather changes and seasonal changes on dress, activities and play.

Another area of learning discussed by Sabaroff dealt with growing plants in the classroom. The child is able to understand (1) the effect of growth on plants in different kinds of soil, (2) the effect of watering or neglect to do so, and (3) the effect of sun or lack of it.

The child's interest in pets can lead to greater understanding of animals and their relationship to man by observing pets in the classroom to learn of their eating, resting, and other habits.

Sabaroff introduced beginning concepts related to conservation to first graders. For example, the ground can be observed before and after a rain to determine the relation of slope to the flow of water. Experiments can be conducted to learn more about water drainage and the causes of erosion.

Other important concepts introduced by Sabaroff include understandings related to (1) production of food, (2) what happens to precipitation, (3) plants in cultivated and natural environments, (4) domestication of animals,

(5) transportation and communication as a means of overcoming distance, (6) rural and urban environments, (7) distribution of goods, (8) conservation practices, and (9) using nature for recreational purposes.¹

Dr. Jack M. Sheridan, coordinator of research at the University of Washington, gave oral and picture tests to fifty-five beginning first grade children to determine concepts first grade children can identify and tell regarding certain concepts of physical geography. Thirty concepts were selected from four categories: weather and climate concepts, lands of the earth concepts, waters of the earth concepts, and vegetation concepts.

Test results revealed (1) the children had a partial awareness of most of the concepts; (2) attention was often centered on a striking single feature with other important aspects being ignored, thus, leading to distortion of reasoning; (3) awareness of concepts extended beyond their present environment, while some concepts of the immediate environment were inadequate; (4) boys scored higher than girls; (5) awareness of the concepts varied, with the greatest stated source of awareness attributed to direct contact with television and parents as second and third sources respectively;

¹Rose Sabaroff, "Geographic Concepts for First Graders," The Journal of Geography, LIX (February, 1960), 85-86.

and (6) the higher a child scored on the oral test, the higher the misconceptions.¹

After three years of experimentation with social studies at the first grade level, Mary Rusnak found that first graders can apply research methods, report findings, engage in committee work and organize information within certain limitations. Such limitations as inability to read social studies texts, dealing with no more than two facts at a time, short attention span, and the need for close direction and guidance did not interfere to any great extent with the learning of concepts and skills.²

During the school year 1963-64, a study was directed by Dr. McAulay to determine the growth of thirty-four second grade children in comprehension of geographical understandings. The children came from families of high socio-economic status located in a suburb of Pittsburgh. Specifically, the investigation was to determine whether or not second grade children can develop a pattern of geographical understandings which they can express verbally and picture

¹Jack M. Sheridan, "Children's Awareness of Physical Geography," The Journal of Geography, LXVII (February, 1968), 83-84.

²Mary Rusnak, "Introducing Social Studies in First grade," Social Education, XXV (October, 1961), 291-92.

with illustrations and whether they can give pertinent meanings to geographical terms, maps, and cardinal directions.¹

In reporting the findings, Dr. McAulay stated that the children at the end of second grade had a remarkable familiarity with the world in which they lived. They had developed sufficiently to transfer the immediate, observed environment to an illustrated map representation and to the solving of particular problems with the use of the globe. Growth in expressing geographical terms, both verbally and by illustration, was apparent. As in Sheridan's study of first graders, the children had learned to illustrate the larger, more expanded environment better than the immediate surroundings. Spatial concepts improved in terms of judging and comparing map distances and in relationships of distance and time.²

In McAulay's sequential outline of geographical understandings for the primary child, additions at the second grade level extends map skills to tracing travel routes on simple maps of the community and mapping the classroom and playground. Observations defined in the outline become more detailed and accurate and include more causal relationships.

¹J. D. McAulay, "Second Grade Children's Growth in Comprehension of Geographic Understandings," The Journal of Geography, LXV (January, 1966), 33.

²Ibid., 37.

The observations include: (1) how man changes landscape, (2) differences in common land and water forms, (3) relationship of farm area to city area in land use, (4) how man and animals adjust to climate, (5) how man provides basic needs, (6) importance of work, and (7) the effect of weather on different kinds of work. McAulay adds more learnings about the sun. The sun helps us find directions; the earth revolves around the sun. Second graders can also read and record temperatures on weather charts.¹

Resnick capitalizes on the second grader's interest in workers by introducing units on the post office and the dairy. Conceivably, a great number of geographical understandings could develop from units on neighborhood workers. Production and distribution of food, importance of work, interdependence, public services, transportation, and communication within the neighborhood all fall within the capabilities of the second grader.²

Like McAulay, Rushdoony enlarges map-reading skills for second grade. The second grader can understand (1) land elevation in relation to flow of water, (2) distance in terms of blocks, and (3) picture and symbolic maps. Known places

¹McAulay, "Geographic Understandings of the Primary Child," op. cit., 172-73.

²Resnick, op. cit., 172.

on maps can be located, and comparison of two distances can be made, as travel by ship or jet.¹

During May, 1961, 214 second grade children from five classrooms in Eastern Pennsylvania were tested on their ability to use maps to locate places in space. The children studied maps of four types: maps of the local community projecting only a few known locations, maps concerning the relationship of one land mass to another, separated by a large expanse of water, maps of local terrain, and maps concerned with the relationship of the earth to other bodies in space.

The children's responses to questions indicated they were not only able to use maps to secure information concerning the local community, but were as adaptable, if not more so, in extending learning to the more removed environment.²

A study often cited by geographers was made at Iowa State Teachers College, Cedar Falls, by Marian Dekkar and Winnifred Siamis. A teacher's guide was developed from this study. Since the guide was published in considerable detail, the investigator has included only the concepts and

¹Rushdoony, loc. cit.

²J. D. McAulay, "Some Map Abilities of Second Grade Children," The Journal of Geography, LXI (January, 1962), 3-9.

understandings not previously mentioned at the second grade level.

Sun concepts and skills include: (1) relationship to temperature, (2) as a source of heat and light, and (3) as a cause of evaporation. Season and weather concepts and skills include: (1) man's control of temperature, (2) temperature and weather prediction, (3) use of a rain gauge, (4) cloud types, and (5) variability of weather combinations. Wind and air concepts and skills include: (1) wind as a force, (2) uses of wind, (3) relation of wind to evaporation, (4) determining wind direction, and (5) comparing weight of warm and cool air. Earth concepts and skills include: (1) earth's rotation in relation to day and night, (2) earth's source of light, (3) the time involved in the earth's revolution around the sun, and (4) composition of the earth in terms of soil, water, minerals, and rocks. Map and globe concepts and skills include: (1) mapping stories, (2) maps and globes as useful tools, (3) the earth as a sphere, and (4) location of the equator. Soil, water, and wildlife conservation concepts and skills include: (1) importance of each for life, (2) wise use of natural resources, (3) prevention of erosion, and (4) man's part in beautifying the landscape.¹

¹Marian Dekker and Winnifred Siamis, "Developing geographical Concepts in the Primary Grades," The Journal of Geography, LX (February, 1961), 82-86.

The expanded environment of the third grader provides a broader base for the acquisition of geographical understandings. In the study of clothing, Resnick notes the ability of the third grader to relate clothing materials to various geographical features and sources. This also extends to the study of food and shelter, two other basic needs often studied at this level.

In extending map work, Resnick suggests that aerial maps be drawn from three-dimensional models, and that in studying the history of the community, maps of the "then" and "now" be compared to make important inferences.¹

Map-reading skills proposed by Rushdoony reinforce the foregoing idea of the expanded environment. Map study also includes the use of commercial, relief, political, and physical maps. Distance in miles extends from the block concept. The ability to construct and read map keys is also included. Map inferences consists of relating to political units: street, city, town, country, and continent, to ways of living, and to density of population, rainfall, crops, livestock, and resources.²

McAulay, in his investigations of the geographical understandings of the primary child, lists the following

¹Resnick, op. cit., 172-73.

²Rushdoony, op. cit., 217.

skills and concepts for third grade: (1) mapping the community in relation to local water bodies, (2) locating the noon-day sun at different times of the year, (3) observing height from the earth's surface of birds, planes, and clouds, (4) locating capitols of states and nations on the globe, (5) effective use of the calendar, (6) reading and writing the names of the days of the week and months, (7) understanding differences in length of day and night in winter and summer, (8) connecting events with dates, (9) amount of water as an influence on community size and ways of living, (10) rain, hail, sleet, and snow as precipitation, (11) seasons determined by the position of the earth in relation to the sun, (12) comparison of water to land on the earth's surface, and (13) the heaviest layer of air in relation to the earth's surface.¹

III. SUMMARY

An analysis of the more recent literature from the field of child growth and development and from research studies on the geographical understandings of the primary child has revealed that young children are capable of understanding a great deal more, and at an earlier age, than previous research findings have indicated. The range of

¹McAulay, "Geographical Understandings of the Primary Child," op. cit., 173.

interests and the extent of understandings has not been adequately researched, but current findings suggest that schools need to provide for a broader range of interests at this level and should provide for a flexible conceptual program more consistent with the child's abilities.

Some possible misconceptions may need to be clarified concerning the interests of the primary child:

(1) interests are not necessarily focused on the "here-and-now"; (2) interests do not logically follow a sequential pattern; and (3) interests vary widely and may extend beyond direct experience.

Misconceptions relating to understanding geographical materials also need careful reshaping in planning learning activities for the primary child: (1) the ability to reason and deal with concepts is present in varying degrees; (2) symbols representing real things can be understood; (3) the expanded environment may be understood better than the immediate environment; and (4) within certain limitations, research methods can be applied, findings reported, and committee work engaged in effectively.

Since research studies in this discipline are relatively new at the primary level and involve comparatively few children, findings at this time are not conclusive enough to furnish any clear-cut guidelines for organizing materials for instruction. Indeed, the sequence appears

relatively unimportant in view of the wide range of interests and abilities the research has recently uncovered. The important point is to develop, expand, and apply the essential concepts when they are needed to make learning more meaningful, regardless of the so-called "sequence" or "grade level". The program, however, should understandably have some unity and should, above all, make sense to the child.

CHAPTER III

FINDINGS OF THE INVESTIGATION

The procedure for determining materials of a geographical nature by setting limitations on the reading content has been described in Chapter I.

Since scientific studies show that many programs of instruction are deficient in important phases of geography, an attempt was made to single out the geographical materials by underlining the terms and concepts in the context in which the materials appeared. By following the sequence as it was presented to the child, the reader can better understand the conceptual development as the series progresses. For example: A child who uses the word, across, to refer to the distance to the other side of the street will later refer to "across" to mean across town, across the country, or across the ocean.

Getting Ready to Read. Instructional content at the kindergarten level consists primarily of illustrations which are used to teach beginning consonant and beginning digraph sounds. Since there are no printed words in the pre-reader, the content would not be considered geographical in nature.

Tip. The importance of laying broad foundations for concept building began in this first pre-primer. When the family pet became troublesome, orders were given to go home. Here was assigned to various locations on the family premises and extended beyond to a neighbor's yard and to a moving van parked across the street.

Summer changed to autumn by way of illustration and story when the family pet scattered a pile of leaves a neighbor was raking. After being chased away, a policeman recovered the pet.

Tip and Mitten. The terms, home and here have been repeated a number of times in situations similar to the situations in the previous pre-primer.

A kitten was delivered to the home in a mail truck. The children wanted to give the kitten a good home. Mother stressed the importance of caring for pets when she told the children that kittens must have milk.

The Big Show. In addition to an emphasis on here and home, down was used in different situations; such as, getting down and looking down.

A trip to get milk at the store down the street involved a new experience for the youngest member of the family.

When Father took the children to a circus show, the children saw wild animals in cages, animal performances in the ring, and skilled performers. A concessions worker sold toys to the father for each of the children.

Jack and Janet. In the first reader, a series of illustrations showed children reading a simple picture map which gave directions to a park where the family enjoyed a picnic.

Attention was given to expanding simple locational and spatial concepts. The children went into or out of the house. If something was not here, perhaps it was there. Away, back, by and around also represented distances in the immediate home environment. Down was strengthened and up was introduced in a kite-flying experience. This way and that way were terms to teach more definite directions; the way daddy comes home, or the way the kite went.

Water represented a pool in the park, rain that was dripping through the roof into the kitchen, a rainy night, and a stream or brook containing fish.

Dark, wet, and cold were used as nouns to describe a kitten's feelings when the kitten was out on a cold, rainy night.

The story of a fish searching for food brought out the difficulty that animals sometimes have in getting food from the natural environment.

The importance of milk as a food product again suggested its importance. This time, the father brought milk home for family use, picking it up at the store on the way home from work.

Illustrations pictured the children's play area extending beyond the yard to other places in the neighborhood, in neighbor's yards, and on the sidewalks. A trip to a variety store resulted in some purchases by the girls in the family.

Up and Away. The first reader introduced the first farm setting in the series. Billy and Johnny decided to sleep in a tent in the woods on a hot summer night. Noises made by prowling woodland animals and one of the cows convinced the boys that the woods was not a good place for boys to sleep.

A mother and her children had difficulty getting a boat back on the sand when it filled with water from the lake.

A birthday party, with emphasis on gifts and fun, told through story and illustration, appeared for the first time as a neighborhood party, rather than the usual family affair.

Three boys raced to First Street to get a glimpse of a big circus parade as it passed them on the street and then continued on up Green Street and down High Street. Circus wagons and elephants highlighted the parade.

In discussing the possibility of buying a pet dog with her father in front of the pet store, Ann's father reminded her that she did not have enough money. Later, a dog was found out in the country when she accompanied her father in the truck to the farm where he had gone to gather apples. The dog belonged to the man on the next farm who was going away and could not care for it. The story and illustrations suggested later summer or early autumn, the only change of season contained in this reader.

Locational and spatial concepts added to those previously introduced included: off, out there, a little way, near, and behind, all referring to relatively short distances, although sometimes out of sight.

Come Along. In the first reader for second grade, only one story featuring pets appeared. In the story, a stray cat in the neighborhood eventually found a home. Through illustration, the reader was taken inside a bakery, inside a store, and watched firemen beside a fire truck turn the water hoses on a burning house.

The first wintertime story in the series tells the experiences of a tractor in the city that had a very important job of clearing snow after a big snowstorm. Transportation and communications were tied up all around. The fire truck could not leave the fire station; children could not

go to school; telephone men could not work on the lines; men at the waterworks needed to get the water pipes working; police could not leave the station; mail could not be hauled from the post office to the railroad station; and an air-plane could not land on the landing field. After all that work, the tractor went over to a little town and cleared the streets there.

A monkey in a jungle scene got a boat ride across the water to a big city. Before being placed in a zoo, the monkey happened to dial the fire station on the telephone. When no fire was found at Number Five High Street, a monkey chase led to a jail where the monkey escaped from a watchman, climbed out over some lines and finally was sighted high up above the city with a handful of balloons that had been snatched from a balloon man. The aerial view of the city was the first of its kind presented in the series.

A one-page lesson on owls as night birds told how owls are useful to farmers. Included on the page are pictures of five different kinds of owls.

Downtown on Front Street, Freddie assisted a traffic policeman in directing cars, street cars, and trucks through a busy intersection.

The contents of a package and a letter received through the mail prompted Jack and Penny to work all summer to save their earnings. By depositing their money in the

big bank downtown all summer, the children were able to buy something at the store. Illustrations showed a deposit being made at the bank and shopping in the store.

In still another story, the postman delivered a letter, an invitation to a neighborhood birthday party. A plan to conceal identity in rabbit costumes was straightened out by a telephone call.

A lemonade stand sheltered by a tent was set up along a road as a money-making project for three youngsters. Upon the suggestion of a man who came by in a truck, the children spent their own savings to buy lemonade and eventually drank all the lemonade, realizing too late that their business venture was not very sound.

Explorations farther away from the home site challenged the reader to understand such concepts as not far, far away, all the way, and a turn to the left.

On We Go. A winter circus gave some insight into the work that must go on during the time of year when the animals are in winter quarters. The chief keeper cared for the animals and provided a home for shelter. When the school bus broke down, an old circus wagon transported the teacher and her class to the winter quarters to see the animals perform.

Another one-page lesson told about the speed at which an ostrich can travel. Sometimes ostriches are raised on ostrich farms.

When Katy had too many kittens on the farm, her father hitched the horse to the wagon and hauled them off down the hill to give them away to the neighbors. When Katy and her father visited a lighthouse the next day, all the kittens had come back to the farm.

An old-time hurdy-gurdy man and his pet monkey walked into a town on a spring morning. After visiting a store and a bakery for something to eat, the hurdy-gurdy man walked to the park and began to play music. The mayor and a policeman came to listen and attend to the crowd, for people were coming from near and far.

Bob made friends with the zoo keeper to learn more about elephants and their ways. One thing the boy learned was that the zoo and the animals in it belong to all the people of the city.

A two-page section on catbirds shared interesting facts about the bird, how the young are cared for, and why the catbird should be protected. Illustrations helped the reader to identify the bird.

Long summer days and short winter nights expressed in poetic form how the seasons affect the sleeping habits of children.

Another poem pointed out that the sun comes up in the morning and goes away in the evening.

The influence of wind on autumn leaves was the theme of another poem.

One poet equated spring with robins and nest building.

In keeping with the spring season, another poet expressed feelings about storms bring rain.

In summer, the dandelion grows, blooms, and seeds are blown many miles away.

Looking Ahead. Not being allowed to follow his older brothers around, Eddie solved the problem by collecting items as a hobby. The best item of all was a post some telephone men were removing on the other side of the street.

Riding a train to school in town each day turned out to be an exciting experience for Elmer who had just moved to the mountains where his father worked for the railroad. Each day, a little horse, left behind from the rancher's summer round-up, raced the train to the top of the mountain.

A heavy snowstorm marooned the horse on the mountain-side without food or shelter. With the cooperation of the teacher, the fireman and engineer, radio and television stations, the newspaper office, and a helicopter, the horse was rescued after having been fed grain dropped by the helicopter until the spring thaw. After that, on snowy days

the horse remained in the barn Elmer and his father had built for her.

Raising peaches to sell proved to be a profitable business for Jody, even though his sister mistakenly picked all the green peaches from the lower branches of his tree. The weeks from early spring to late summer were important to peach growers. At the end of the season, Jody found the peaches at the very top of his tree to be unusually large. A special order of his peaches were shipped by plane to a ranch many miles away.

Buying chickens from a farmhouse up the road involved time payments and considerable difficulty carrying them home for three children. The chickens were a birthday present for their mother whose birthday happened to fall on Thanks-giving. As the children started toward home, a car, yet a long way off, forced them to hide behind trees beside the road. Luckily the parents were still in town buying groceries for Thanksgiving dinner.

A pastoral scene accompanied a poem about the cow that furnished cream and wandered here and there in the open air, blown by the wind, wet by the rain, and eating the plants from the meadow.

People traveled from all over the state to the state fair. Late in summer, Jeremiah and his granny rode the train to the state fair, hoping the judges would award each

of them a prize--one for his spring lamb, and one for granny's home-made grape jelly.

Young Tennessee lived in a log cabin away out beyond the town where there were miles and miles of woods behind the open fields and very few people. Though it was nice living out there, Tennessee thought traveling around the country for awhile would be a good way to find out what the rest of the world was like.

One of the most thrilling experiences for children of long ago in America was a visit from the peddler who traveled around the country with many kinds of goods to sell. In those days, people lived a long way from a town or a city, and didn't get to a store very often. Peddlers traveled hundreds of miles each year from one part of the country to another.

Hoping some day to see Boston and the ocean, Nathan traveled in that direction with the peddler. As summer slipped into fall, fall brought shorter days, longer nights, and icy mornings. Stormy days brought rain and snow. More than halfway on their journey east, Nathan and the peddler were invited to a house-raising where people for miles around had gathered in a clearing.

When ships come near land, rocks and shallow water can be dangerous. Lighthouses along shores of oceans, seas, and lakes in all parts of the world mark places of great

danger for boats and ships. Some are built on rocky islands, on hills near shore, or on points of land that stick out into the water, but always where they can be seen from miles away. All day and all night, in summer and in winter, through rain, snow, wind, and fog, the keepers are on the job.

When a storm came up, Sally manned the fog bell to warn the sailors on the Boston boat of the dangerous rocks until her father could get back across the harbor to help. Her reward was a ride on the boat to spend a day in Boston.

For Tony, working in the garden on the farm and ringing the dinner bell was tiresome. Not only did ringing the bell call the men in from the hayfield, the ringing bell called the neighbors from all around when a fire broke out in the house.

An Uncle Remus story forced the reader to take a complicated route when two barbecues were given on the same day. Brother Wolf lived near the river; Brother Bear lived right by the river, a mile or two beyond Brother Wolf's. About three miles beyond Brother Rabbit's house, the big road forked. One road led to Brother Bear's house, and the other led to Brother Wolf's house. A short cut across a low marsh shortened the route considerably between Brother Bear's and Brother Wolf's.

Along with a poem describing the usefulness of lighthouses, an illustration pictured a lighthouse built on a rocky shore, beaming its light out to sea.

Another poem emphasized that Jack Frost painted the trees in fall. Fall colors were illustrated.

Climbing Higher. A small mountainside farm set the scene for the first story. Daylight came suddenly when the sun appeared over the mountain. Chalets can be seen dotting the mountainsides as a stream winds through a little town down in the valley. Cows in pastures looked like toys in the distance. In winter, the cows remained in the barn. When the snow melted and the sun became warmer, spring came, and the cows returned to the pasture.

The first big snow of winter meant clearing paths around the farm for Tim. For the other children of the village, the snow meant sliding down the hill near the lake. Tim preferred the woods and planned to go snowshoeing there.

When Tim's father came home from town in the truck, he reported a little girl lost in the woods. When Tim and his father set out to search for the lost child, the wind came up, blowing the snow so badly that vision was difficult. Cutting across a logger's road, the searchers found an empty cabin. Finally, in a clearing where the loggers had cut some timber, the child was found.

Tim's experience led him to discover that winter woods were not like summer woods, and night woods were not like daytime woods. Woods were friendly in summer, but hostile in winter.

The Indians did not want the white men to settle on their lands, cut down their forests, and drive off the wild animals needed so badly for food and clothing.

Because of the danger of Indian attacks, several families placed their cabins close together and built a stockade around them, leaving the fields and gardens outside the stockade. When a messenger from an army fort brought news of an attack, the lookouts in the blockhouses called in the men and boys from the fields. When the spring inside the stockade no longer furnished water, Jemima Johnson, along with a group of women and children, walked outside the stockade and across the clearing to the big spring, even though the Indians were only a hundred yards away.

Three sketches of a stockade were presented for study.

Owning property in the form of a pet shop was a frustrating experience for Miss Peasley when, even though the best supplies in town were sold there, business was poor. After Tandy and the policeman convinced her that children were the best customers, business improved.

Before the great world's fair in Saint Louis, hundreds of workers prepared the grounds for opening day. Buildings were erected, streets and roads were laid out, and trees and flowers were planted to make the grounds beautiful.

Charles Menches had prospects of a good business selling ice cream sandwiches. Opening a stand outside the main gate to the fairgrounds offered a convenience to people who would be coming from all parts of the world.

A showy new building across the way proved to be too much competition, and Charles' customers dwindled away. An incident at the stand gave Charles an idea for making ice cream cones to sell. Customers were pleased with the cones, the first to be sold anywhere.

Why the good will of the community was important to a Roadmaster was brought out in a tall tale about a railroad man who walked into the Roadmaster's office to inquire about a job on the line. Traveling from one railroad to another, the Rock Island, Katy, and the Seaboard lines, convinced the Roadmaster that the fireman was well qualified for the job.

The Roadmaster, always concerned about the competition from trucks, boasted the fastest freights in America. In the course of the story, the fireman shoveled coal on the local freight, the local passenger, the fast passenger, and the Cannon Ball Express.

A poem, calling attention to railroad engines and the cargo behind, reinforces some of the ideas presented in the preceding story. Pictured are different kinds of railroad cars, all dependent on the fireman, the engineer, and the switchman.

A good way to capitalize on owning a trick dog was to have a dog show in the back yard. Money from ticket sales was to be given to the Red Cross. A ringmaster from a circus happened to attend the show, and seeing the possibilities of using the dog in the circus, offered to buy the dog. When Tommy refused to sell, the dog was stolen. The dog was found, performing at the circus.

The first story dealing with plant life envisioned how an oak tree might have come to grow beside the road. Having been dropped by a squirrel, the acorn was pushed into the soft ground. The warm sun and the rain caused a tiny rootlet to poke down into the soil. The stem reached up into the sunshine. Autumn, winter, and spring came and passed, year after year. Fire, insects, and rabbits threatened the life of the tree. Eventually the tree was cut up into lumber at the sawmill. A shipbuilder used some of the lumber for a ship; a bridgebuilder used some for a bridge; and a housebuilder used some for a house.

Another true story tells what happened when a group of animal hunters went to the African jungle to find animals

for the circus. An orphaned chimpanzee was brought home to America and was presented to the daughter of a circus manager. When the circus left winter quarters to travel around the country, the girl returned to her home in California with the chimp. Later the chimp became a famous star of the circus and in moving pictures.

The only story referring to the source of clothing dated back to the early settlers in America when a kind of soft leather, called buckskin, was used for clothing. Neighbors lived far apart in those days and messages were delivered in person. Jonathan was given the honor of inviting everyone in the neighborhood to his sister's wedding. About three miles from home, Jonathan fell into a spring while attempting to get a cool drink. What happened to the buckskin suit was best revealed in the illustration.

Of all the circus animals, elephants are the most useful. The writer of this story, familiar with the circus, referred to real life experiences in which elephants became useful. One incident described how forty elephants escaped a burning elephant barn. One elephant awakened the keeper. Another elephant saved the life of her keeper when a strong wind blew down the big circus tent.

Wind and its destructiveness was described in a poem illustrating a sailing ship tossed about by the windy sea.

The theme of another poem concerned people walking along the sand on the seashore. Even though there was much to see on the land behind them, they tended to stand with backs to the land and looked out at the sea all day.

The possibility of a toy boat going down the river past a mill, down hill and valley a hundred miles or more, fascinated its owner standing on the golden sand by the river.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATION

The purpose of this study was to investigate the geographical materials contained in the primary basic reading series in the Des Moines Independent Community Schools (1) to determine the amount of geographical materials and (2) to determine what kinds of geographical materials have been included.

What the primary child is able to learn geographically, and what the child's needs and interests are in the area of geography were reviewed in Chapter II. In Chapter III, geographical materials in the readers were identified. On the basis of these findings, conclusions will be drawn and a recommendation submitted.

I. SUMMARY

Beginning with the pre-primers, foundations for meaningful conceptual development were evidenced in the reading experiences presented to the learner. Geographically, the child's urban surroundings were explored in relation to distances and locations in and around the home. Family life centered on play, family activities, and pets.

As the learner progressed through the first year readers, the environmental range extended beyond the home

to neighborhood homes and stores. Children played with neighbors and interests broadened. Through the year pets were important, but more attention was given to pet care.

In addition to play, the circus and the zoo were popular forms of entertainment for children.

First graders were also exposed to rural settings--the farm, farm animals, the woods, and woodland animals.

Second year readers contained more information on people and occupations. Neighborhood workers included the policeman, postman, and the fireman. Others were city workers and workers at the zoo and the circus.

More content was given to animals unfamiliar to the local environment, while less attention was given to pets and their care.

Seasonal changes were more apparent; however, most seasonal concepts were presented through illustration.

Concepts of dependence and interdependence in connection with transportation and communication were introduced to second year readers.

The inclusion of economics as reflected in the more recent directions in curriculum planning, featured children buying, selling, earning, and saving.

Third graders had more contact with the world outside the local environment, in both past and present selections. Story settings featured mountains, woods, fairs, and early

American settlements. True stories and stories true-to-life dominated the content. Stories of America's past, Indians, fairs, and railroads challenged eight and nine-year-old's interests. Capitalizing on interests previously encouraged concerning zoos and circuses, true stories featured a chimp and famous elephants of the circus.

Items given the most attention in the series dealt with locational and spatial relationships, distribution of population, houses and settlements, transportation and communication, and weather and climate.

Items receiving lesser attention, although still having significance to the study, related to animal life, land and landforms, products, water and water bodies, earth and universe, and recreation.

Very little material of value concerned plant life, soil, and conservation.

II. CONCLUSIONS

The investigator concluded that the readers contained significant materials in some phases of geography which could be utilized (1) in strengthening and broadening geographical concepts, and (2) in developing certain geographical understandings preparatory to systematic instruction.

III. RECOMMENDATION

The following geographical understandings are recommended for development as a result of this study:

1. The sun shines on the earth.
2. The sun seems to rise and set.
3. Plants need sunshine to grow.
4. Heat comes from the sun.
5. The sun gives more heat in summer than in winter.
6. The sun melts ice and snow.
7. There is soil on the surface of the land.
8. Plants grow on the land.
9. There are lakes, streams, and rivers on the land.
10. People travel across the land.
11. Some land is covered with woods and forests.
12. A mountain is a part of the land which stands out high above the rest of the land and has a small top.
13. Hills are not as high as mountains.
14. Man sometimes changes the land by clearing trees, building roads, erecting buildings, and planting crops.
15. A clearing is land which has had the trees cleared away.
16. Soil is found in yards, gardens, and on farms.

17. Plants grow from soil.
18. Food comes from soil.
19. Sandy beaches provide recreation areas.
20. Water falls as rain or snow.
21. Rain and snow falls from clouds.
22. Man cannot live in places where there is no water.
23. Water bodies provide recreation.
24. Water sometimes springs from underground.
25. Snow comes during the cold months.
26. Wind can be strong and destructive.
27. A strong wind makes cold more intense.
28. Many lands have four seasons.
29. Weather changes with the seasons.
30. Seasons influence man's activities.
31. Weather and climate influence kinds of clothing worn.
32. The appearance of the landscape changes with the
seasons.
33. Frost causes plants to change color.
34. Some plants grow naturally in the environment.
35. Plants provide food and shelter.
36. Trees are used for lumber.
37. Some animals are pets.
38. Some animals provide interesting environments.
39. Some animals live in their natural environment.
40. Some animals carry on work for men.

41. Some animals are domesticated.
42. People use transportation to overcome distance.
43. People use communication to overcome distance.
44. Landmarks help to locate places.
45. Some places can be located on maps, some cannot.
46. Distance can be expressed in many ways.
47. Some measurements of distance are exact, some are not.
48. Some expressions of distance get their meaning from context.
49. Some distances are expressed by making comparisons.
50. In towns and cities, homes and stores face the street.
51. Most people live in family groups.
52. Some people live in rural environments.
53. Some people live in urban environments.
54. People live close together in towns and cities.
55. People live farther apart in mountains than in most other areas.
56. In the early days in America, most of the people lived far apart.
57. Sometimes early settlers lived close together for safety.
58. Some people wear special kinds of clothing in their work.

59. Some workers provide services.
60. People need houses and other kinds of buildings
for shelter.
61. Animals need shelter.
62. Man builds his shelter from many of the natural
resources around him.
63. Most workers need shelter in which to work.
64. Some kinds of shelter are built to give protection.
65. Tents make temporary shelters.
66. House-raisings were common in early America.
67. Houses are of different styles.
68. Different members of a family carry on work.
69. Man uses vehicles, machines, and tools to carry
on his work.
70. Farmers raise plants and animals.
71. Some people help carry on transportation.
72. Some people help carry on communication.
73. Some people sell things in stores, markets, and
stands.
74. People make or prepare things to display at fairs.
75. In the early days of America peddlers carried
goods to customers.
76. Some leather is made into clothing.
77. People haul goods from place to place.

78. People carry on transportation by car, bus, truck, train, boat, airplane, and horse-drawn wagons.
79. People communicate by letter, telephone, radio, newspaper, and television.
80. Changes have taken place in transportation and communication since early times.
81. Some people like to play with pets.
82. Some people like to look at animals.
83. People have fun in their homes.
84. People have fun out of doors.

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