Fellow Americans: source material for a unit on Brazil with emphasis on the region surrounding the Amazon River.

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UNIVERSITY OF LOUISVILLE

FELLOW AMERICANS

SOURCE MATERIAL FOR A UNIT ON BRAZIL

WITH EMPHASIS ON THE REGION

SURROUNDING THE AMAZON RIVER

A Dissertation
Submitted to the Faculty
Of the Graduate School of the University of Louisville
In Partial Fulfillment of the
Requirements for the Degree
Of Master of Arts

Department of Education

By
Henrietta Frances Alpiger

Year
1947
NAME OF STUDENT: ____________________________

TITLE OF THESIS: ____________________________
FELLOW AMERICANS
SOURCE MATERIAL FOR A UNIT ON BRAZIL
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APPROVED BY READING COMMITTEE COMPOSED OF THE
FOLLOWING MEMBERS:

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NAME OF DIRECTOR: ____________________________

DATE: ____________________________
FELLOW AMERICANS

SOURCE MATERIAL FOR A UNIT ON BRAZIL

WITH EMPHASIS ON THE REGION

SURROUNDING THE AMAZON RIVER
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Chapter I

Introduction
Introduction

I. Purpose of Thesis

Teachers are a busy group. Contrary to the belief of many persons who are not in close contact with a teacher, the school day does not end when the children leave the building. No indeed--there are faculty meetings, committee meetings, P.T.A. meetings, educational association meetings and supervisor meetings to mention but a few of the functions every teacher is expected to attend. In the evening there are papers to grade, lessons to prepare, professional books and articles to read, and numerous records of many varieties to keep. Few teachers enjoy the luxury of an eight hour working day. It is the hope of the writer that this thesis will give some aid to the fourth grade teachers of Louisville, Kentucky. It should help to make the teaching of the geography unit "The Hot-Wet Lands of the World" more effective.

II. Reasons for Writing This Thesis

In the summer of 1944, the University of Louisville offered a course entitled "An Inter-American Workshop." The war had made everyone conscious of the fact that in order to preserve our American way
of life, Inter-American solidarity would be an absolute necessity. In order to become friendly with our Southern neighbors, the first step was to become better acquainted with them by understanding their customs, cultures, and physical characteristics of the various countries.

During the course the class was expected to complete a project concerning one of the other American countries. Since the writer was a teacher, it seemed logical to work on a project that could be used in the teaching of her fourth grade.

The fourth grade geography state textbook for Kentucky has as its main theme the various climates of the world and how they affect the lives of the people by determining their food, clothing, shelter, and all the other environmental factors. A section on the Hot-Wet lands of the world is included. One of the topics in this section is the study of the region that surrounds the Amazon River. Unfortunately, however, the rest of the country of Brazil is scarcely mentioned. Because of this, many of the children conclude the study with the impression that Brazil is nothing but a dense jungle populated with ferocious Indians. This topic seems important enough to give them a comprehensive picture of the country as a whole, but in order to conform to the fourth grade course of study to put additional stress on the region that surrounds the Amazon River.
A unit of work was chosen for the project because the writer believes the unit plan of instruction meets the needs of children in a more satisfactory way than some of the other methods of instruction. Although the unit method is not new and has many definitions, undoubtedly it is an integrated method of instructing integrated organisms. After the Curriculum Service Bureau for International Studies requested permission to publish the unit for educational purposes, it seemed worthwhile to pursue both this method of teaching and the subject further and to use the unit as a basis for this thesis.

III. Contents of the Chapters that Follow

The second chapter of this thesis consists of six parts:

I. Definition of a Unit
II. The Types of Units
III. The Need for Planning
IV. Developing a Unit of Work
V. Evaluating the Unit of Work
VI. Conclusion

It is based on readings from books, The Encyclopedia of Modern Education, and periodicals.

The third chapter is a fourth grade unit on Brazil with emphasis on the region surrounding the Amazon River. It is entitled "Fellow Americans." The
introduction to this chapter contains general and specific objectives which may offer a challenge to teachers of the fourth grade. An overview and possible approaches follow the introduction. The outline of subject matter, suggested methods of teaching, correlation with other fourth grade subjects, methods of evaluation, and several suggested culminating activities make up this chapter. Through cooperative planning the pupils needs, purposes, interests, and questions are used as a basis for the study thus bringing the experience unit idea into the subject-matter framework. It is the opinion of the writer that it may best be described as a functional subject-matter unit.

The fourth chapter is designed for the convenience of the teacher. It contains the following source material.

I. The Physical Characteristics of Brazil.
II. The History of Brazil.
III. The Population of Brazil.
IV. The Most Important Cities in Brazil.
V. The Transportation Facilities.
VI. The Chief Industries and Products of Brazil.
VII. The Interdependence of Brazil and the United States.
VIII. Education in Brazil.
IX. The Region Around the Amazon River.
X. Brazilian Music.

The fifth chapter contains two parts: a description of how the writer taught the unit to a fourth grade class and the culminating activity this class planned.

The sixth and final chapter contains three parts. In the first part the personal interview method was used to secure the opinions of the Director of Curriculum and Research, an Intermediate Grade Supervisor, an Elementary School Principal, a member of the Social Studies Curriculum committee, and three fourth grade Louisville teachers. The second part contains an evaluation of the unit by a University of Louisville graduate school class in Curriculum Construction and the third part of the chapter is the evaluation by the writer of the subject matter of the unit and the unit method of instruction.

A bibliography for the teacher, a bibliography for the children, and a list of audio-visual aids and sources concludes this thesis.
Chapter II

The Nature of Units
The Nature of Units

I. Definition of a Unit

The "unit idea" is new neither in theory nor practice. The phrase "unit of work" has come to mean all things to all people. In recent curriculum programs there has been a decided tendency to employ larger centers of organization for course of study materials than individual lessons. These larger centers are currently referred to as "units" or "units of work."

A unit has been defined as consisting of "purposeful (to the learner), related activities so developed as to give insight into, and increased control of some significant aspects of the environment; and to provide opportunities for the socialization of pupils."¹

According to Morrison, a unit of work is "a comprehensive and significant aspect of the environment, or of an organized science, capable of being understood rather than merely being remembered.² Bruner says "a unit is so organized that everything that is included in the way of content, the organization

itself, and the method of presenting it to the
class is for the purpose of making it possible for
the child to grasp the big understanding or theme
that is back of it. ¹ A unit of work as it is conceived
by the staff at the Lincoln School (Teachers College,
Columbia University), is

A series of worthwhile experiences bound
together around some central theme of child
interest. Some incident serves as a starting
point to arouse such an interest. Activities of
a compelling nature further stimulate this inter-
est; information from almost every branch of
knowledge is drawn upon to answer the questions
which arise and individual expression of this
interest is encouraged through various media.²

The writer believes that Rose Schneideman in
Democratic Education in Practice expresses the
definition of a unit in an unusually clear and
forceful manner. She says,

The unit is a series of lessons embracing
many fields of endeavor and developing into a
fusion of all related aspects of the theme so
integrated that academic, cultural, and democratic
gains become blended into the personality of
the pupils.³

A unit of work necessarily involves the use of
textbooks, but it also involves such activities and
experiences as thoughtful questioning, problem-solving,
and the collection and organization of pertinent

¹. Encyclopedia of Modern Education, New York City,
1943, p. 859.
². Loc. cit.
³. Rose Schneideman, Democratic Education in Practice,
information; it even may include construction work, dramatic representation, and pictorial or musical interpretation.\(^1\) The unit seeks to develop a fusion of mental, emotional, and sensory experiences; it proceeds in a physical and social setting that is related to life activities; it is directed toward the accomplishment of a goal that results in some improvement in living.\(^2\) A unit is essentially a record of things to do, and not an outline of information to be imparted. It is an account of a successful experience that serves as a suggested procedure which an average class under an average teacher may adapt, if it so desires.\(^3\)

II. The Types of Units

A. Subject Matter Units

Subject matter units are prepared in advance by adults who select the subject matter which seems important for pupils to learn. They are taught in approximately one months time. The teacher controls the processes which means the purposes, materials, methods, sequence, and final results. The teacher knows the ends to be achieved before beginning the unit. Books are relied upon as the resource for


\(^3\) Loc. cit.
teaching and learning. Subject matter units fail to take into account human and physical resources and a great variety of possible aids such as audio-visual materials, community groups, and the like.

The subject matter unit is divided into weekly and daily assignments. The pupil never sees the total unit so he has no way of knowing how the parts fit together to form a whole. Lessons usually take the form of formal recitations. This helps the poor teacher to mechanize instruction and prevents the good teacher from introducing the flexibility necessary to improve the quality of teaching and learning. The subject matter unit usually closes with a backward look. A review is held before giving a test.¹

1. Topical Unit: This type of unit differs only in degree from the customary topical organization of subject matter. Topics as frequently developed are short and simply cover a larger area than previously. Frequently, the principal difference is that what previously might have been called a chapter or part is renamed a unit.²

2. Problem Unit: There are two groups of problem units: (a) those in which the problems are

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inherent in the subject matter as determined by adults, and (b) those in which the problems are developed from the interests or judgments of the pupils who are studying the subject. If the children are encouraged to construct their own problems, a subject matter unit will become more real than if it is constructed completely by someone in authority. Unfortunately the problem unit has a time limit, definite subject matter is expected to be covered, and fixed tests are taken by the children.1

3. Generalization Unit: The generalization unit is organized to develop understanding of a particular generalization, principle, or law. In developing such units, generalizations that seem to be most widely applicable in explaining contemporary life are usually selected. Content and activity are then chosen to illustrate the application of the generalization. It is an appropriate type of unit for physics, but might be seriously questioned when extended to the fields of history or geography.2

4. Unit Based on Significant Aspect of Environment or Culture: It is readily noted from observation of man's group and individual

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activities that there are certain aspects of the environment that are particularly significant. For example, the need for food, the water supply, and the farm are of great significance to all persons.

The basis of organization is the significance of the material in explaining contemporary life. If well selected it is almost certain that the unit may be brought to have real meaning to a majority of learners. However, it must be emphasized that such units are selected because of their general significance, not because a particular group of children, in a particular school, at a particular time, would profit in the judgment of the teacher, from such a unit. Thus, potential subject matter is the primary point of reference.

This type of unit organization is the most significant and forward looking of the three types classified under the subject matter heading. Reorganization of instruction on this basis has done much to vitalize instruction. Meaningless facts, useless information, and unimportant relationships tend to be eliminated. Learning by memory is thus reduced. However, examination of the way such units are selected, organized, and taught shows that consideration of the learner is a secondary matter even in this unit. "The things-to-be-learned" still receive primary attention.1

5. Survey Unit: The survey unit is used more in secondary schools and colleges than in elementary schools. This type of unit falls into two groups. First those in which the field to be studied is defined, the subject matter is selected, and the materials are assembled in advance of the teaching and those in which the scope is determined by the teacher and pupils and the subject matter and materials are developed in the process although common subject-matter requirements are designated.1

B. Experience Units

An experience unit is forward looking. The teacher faces a new situation just as much as the pupils do. They live through the experience together. It cannot be selected or organized in advance because no one knows what is the experience to be developed and the direction and scope which the experience will take. The experience unit cuts across subject lines and is characterized by a great variety of types of activities. The written account is not a course of study for other teachers to follow however other teachers may improve their insight into the development of experience units by reading written accounts.

1. Unit Based on Center of Interest: The dominating characteristic of this type of unit appears

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to be the relationship of activities or experiences to a central interest of the children. Hopkins suggests three methods of selecting such a unit. First, the experienced teacher of a given grade recognizes certain areas in which the genuine interests of children of that age are usually located. She concludes that any unit of work within these areas will probably be developed wholeheartedly by the children. In the second method the teacher enters the classroom in the fall with no definite idea as to a unit of work for the year. She begins by accepting the interesting immediate and remote experiences of the children. The visit to the seashore during the summer suggests a study of sea life; the trip to Europe calls for water transportation, etc. In the third method the teacher may examine the previous education of a group and decide that a certain unit is necessary to give richness, area, or breadth to their experience, or to fill in what appears to be important gaps. After the unit is selected, the children and the teacher decide what activities will be employed to satisfy their interest. When new points cease to arise and the immediate desire for information is satisfied, a summarizing activity is planned as a conclusion to the unit.¹

¹ Hollis L. Caswell and Doak Campbell, op. cit., pp. 415-419.
2. **Unit Based on Pupil Purpose:** In the unit based on pupil purpose a series of activities are engaged in to achieve an end or outcome which the learner considers worthwhile and wishes to achieve. Activities and subject matter are selected with this end in view.

Units of this type differ with different groups of children and under varying conditions. What may be a significant purpose for one group of fourth grade children will not necessarily be significant for another group. For example, the environmental conditions of certain schools in the tidewater area might make a unit on Coast Guards suitable, while in the mountain region a unit on the Forest Ranger Service would be appropriate. Yet the same generalizations concerning organized provision for protection of life and property would be involved in the two units.¹

3. **Unit Based on Pupil Needs:** Need has been emphasized by some students of instructional organization as a sound basis for unit development. A. Gordon Melvin in *The Technique of Progressive Teaching* says that the root and origin of the unit of life is not to be found in the purpose, but rather in the need.

¹ Hollis L. Caswell and Doak Campbell, *op. cit.*, pp. 421-423.
When the child in school feels the need of a window box for the school, he may carry out in school a unit of conduct which is analogous to a unit of conduct in the world outside the school, an act which is a real unit of living because it is unified by a fundamental need. This does not mean that the teacher sits and waits for the pupils to think of something to do. The teacher should think through the situation and attempt to foresee what needs are likely to arise in a given situation. It is also desirable to cause pupil needs to arise—to "set the stage" so to speak. This is no violation of modern principles. In all probability a unit considered good by those who hold purpose as the unifying element of learning would also be considered good by those who emphasize need. The opposite would likewise be the case.

Many teachers work in schools where the curriculum is composed of subject matter units. In order to bring the experience unit ideas into the fixed subject-matter framework the unit should be planned cooperatively with the pupils. In this way the pupils needs, purposes, interests, questions, or problems may be used as a basis for study rather than the problems or topics given in the unit. Encourage the pupils to use as many resources as possible and help each one to find something in the unit that gives him genuine.
pleasure and satisfaction. In the final analysis, however, the classification of a given unit would depend to a great extent upon the way in which it has been taught. It is better to place emphasis on materials and methods instead of on classification because actually for curriculum development in any system an attempt to classify units has relatively little value.

III. The Need for Planning

All types of units require more extensive planning than does instruction organized by recitations. Each teacher should have planned each unit to the extent of knowing possible approaches, worthwhile experiences and activities, materials which are available and the desired outcomes in terms of abilities, attitudes, appreciations, and understandings.\(^1\) In subject matter units the planning may be done in advance with considerable precision and plans that have once been developed may be employed with different groups. In developing experience units, however, continuous planning is of supreme importance.

Careful initial planning is required for each group that is taught and after a unit is initiated the

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planning must continue throughout the development of the unit. This planning, however, should be a cooperative process on the part of both the teacher and pupils. This is essential because the achievement or failures of each day's work modify what is to be done the next day.

Children cannot be suddenly plunged into a unit of work. They must be exposed to a new idea before they can develop the desire to study and a class that has not been accustomed to unit work should become familiar with the new techniques of study. A good unit of study should be broad enough to provide enough work for every member of the class without any overlapping. The subject must be within the understanding of the pupil. Children are curious about everything, therefore care should be taken that a unit is not selected that is beyond their level of maturity. A unit should also offer sufficient possibilities so that it may be brought up to the present time.

One of the chief functions of the teacher is that of selecting the unit and formulating the objectives to be attained. There is a decided difference between the objectives for unit study posed by the teacher and those of the pupil; however, the objectives which a certain unit may develop in the pupil should be stated in the teacher's unit. She may then set about
planning materials and experiences to bring about pupil activity toward these goals.

After an agreement has been reached on the theme of the unit, the teacher should prepare her outline. She should list possible approaches, experiences, related activities, trips, subject matter, necessary materials, and bibliography. Adequate preparation by the teacher frequently determines the success or failure of the unit.

IV. Developing a Unit of Work

Different outlines for units are nearly as numerous as the school systems in which teachers are required to write units. There is no agreement as to length, content, procedure, or method of termination. Outlines vary from a simple one of several suggested headings to the most complex type that can be imagined. In a recent study of sixty units it was found that the number of headings varied from one to fourteen. Thirty-seven of them used from four to seven headings.¹

Unit outlines vary and doubtless it is preferable for a teacher to use a logical outline for her own guidance and to indicate the psychological developments which will constitute the actual sequence of events within the unit. For example, it seems rather

logical to teach the geography of any country in the following order: location in relation to surrounding countries and waters, the climate, vegetation and products, industries, commerce and trade, transportation, cities, people, and government. But the ordinary youngster would probably be attracted to a study of Brazil, for example, through a discussion of some of the products of the country that helps make our lives more comfortable or enjoyable. The logical organization of subject matter is that of the adult. The child is not concerned with subject matter itself but is motivated to master it as it happens to fit his needs and purposes.  

J. Murray Lee and Dorris May Lee in *The Child and His Curriculum* lists seven characteristics of desirable units. Before initiating a unit, the teacher should consider it with these points in mind.

1. A unit should provide continuity in the development of the child.
2. A series of units should contribute to the total development of the child.
3. A series of units should provide for a variety of activities or experiences for the class and for individual children.
4. A unit should deal with some phase or problem of living sufficiently significant to merit careful study.
5. A unit should deal with material within the comprehension of the child.

6. A unit must be challenging to the child.
7. The data gathered and the activities including construction should be as authentic as possible.

The development of a unit may be divided into five steps. They are:

1. Orientation, approach, or introduction.

Either of these three terms may be used as a beginning. The purposes of this step are to arouse interest, to develop some background, and to create the correct mental attitude in the pupils. This is usually done through pictures, excursions, or extensive reading. One of the best methods of stimulating interest is that of extending an invitation to persons who have had personal contact with the subject to be studied. Sufficient background must be built by some means in order that children may have a basis for recognizing problems and developing guides.

The type of approach depends upon each individual teacher. The alert, imaginative teacher will see many everyday happenings that may offer an opportunity to initiate a unit. Since each approach is unique, it is difficult to give advice about developing them. Each situation will vary and a successful approach for one teacher in one situation may prove unsatisfactory to another teacher in a similar situation.

If possible pupil participation is important during this first step since interest may be stimulated and pupils may become more anxious to begin the study.

2. Formulation of problems, or planning period.

Under the guidance of the teacher, the pupils should have a large share in planning, deciding, and evaluating. It is only in this way that they may learn to select and judge as well as to participate in making group decisions. The teacher should not dominate during this phase of the unit and in order to guide effectively should know the children, their abilities, interests, backgrounds, environment and the other influences affecting the individuals and the group. It is her duty, however, to see that objectives and activities are balanced. No one interest or activity should dominate and none should be neglected.¹

Usually the initial planning technique is group discussion. Pupils and teacher talk over, accept or reject suggestions, and finally list the things that must be found out and the things that must be done. Before the class has exhausted its capacity for asking questions, some individuals will have started suggesting sources of information and methods of securing it. This initiates some typical activities

such as finding and reading sources in the library or elsewhere, preparing reports, organizing committees, planning excursions, interviewing, doing experiments, constructing things, and gathering exhibits.

3. Collection and evaluation of data and research.

This part of the unit is the work part. The materials which contribute to the solution of the problems raised are gathered together and organized. All possible sources, such as excursions, interviews, visual materials, observation, and research in books are utilized.

The working period of a modern unit differs from the traditional recitation period in almost every detail. First there is considerable movement and the subdued hum of activities in progress. There develops the discipline of self-control, which is far better than the discipline of imposed authority. Second, varied activities replaces formal recitations and third, the modern learning experiences are not divided into short periods. The elementary school provides continuous periods of activity up to half a day.  

During the working period all the academic and

cultural subjects of the curriculum can be unified. Indeed this integration should not only include all forms of knowledge but should serve to mold the personality, character, qualities of citizenship, attitudes, behavior, and cultural tastes of each individual pupil. Rose Schneideman defines integration as "the coordination of subject matter and attitudes-the external and the internal, the concrete and the abstract, the mind and the emotions."¹

Subjects will no longer be placed in separate categories but all subjects will revolve around a central theme. It has been demonstrated that more knowledge will be received through the unit than was possible through compartmentalized subjects. Arithmetic is probably the only subject that may be an exception to the preceding statement. It is advisable to treat arithmetic as a tool subject except where it can be related naturally to unit study. The pupils rely upon their reading ability for obtaining most of their information. Creative writing is employed in all fields. The words which occur in the children's speaking and writing vocabulary comprise the spelling list. Nature and science are easily integrated. A Study of the plant and animal life may be utilized.

¹ Rose Schneideman, op. cit., p. 292.
Climatic conditions offer another opportunity and many other topics may be integrated depending upon the particular unit that is under consideration. They may listen to music and learn songs pertaining to the study and they may be encouraged to draw and paint pictures which grow out of contact with the study of the unit. English, however, is the greatest beneficiary of unit integration. The children have purposes in mind that make them want to write instead of being required to write about imaginary topics. Some schools prefer to divide the day into two equal parts, one-half of which is spent on the unit and one-half on the unrelated skills. Where there are two core units in progress, one in the social studies and one in science, the time is then divided into about thirds.

4. Presentation of materials, reports of readings and research.

If the class has been divided into committees during the planning period, each committee needs to have the opportunity to present the final results of their work to the class as a whole. These reports are usually a combination of oral and visual, for often the committee has made something or illustrated a phase of their work. Group reports should not be too close together because if there are too many
reports the audience tires and attention wanders. Inactive children should be given time to relax and to participate in a discussion.

5. Culminating activity.

A culminating activity is not essential, but where it grows out of the work of the course it is most valuable. The dictionary defines a culmination as the attainment of the highest point. There are many different kinds of culminations. The following list is suggestive:

1. Original play
2. Radio program
3. Puppet show
4. Pageant
5. Concert—choric speaking and music
6. Class book
7. Newspaper or magazine
8. Open house
9. Frieze
10. Bazaar

Even though the culmination comes at the conclusion of a unit of study, the teacher cannot wait until the study has been completed before planning the culminating activity. The children should be encouraged to plan the culminating activity under the guidance of the teacher while the study of the unit is in progress. Perfection should not be the goal. The activity may be termed "successful" if the children have done creative thinking, have learned to work

better with each other, and show that they have learned to apply the learning and skills to a greater degree of satisfaction than before the study of the unit.

V. **Evaluating the Unit of Work**

After a unit has been completed, a teacher may evaluate its value by answering this question: "What changes have occurred in the youngsters as a result of the unit?"

The unit should be constantly evaluated from the time it is first initiated until the culminating activity. Old fashioned quizzes and examinations should be replaced by determining how well the learner has acquired and can use behavior controls in the form of understandings, appreciations and skills as the result of having been exposed to the particular unit under consideration.

Analysis of objectives and outcomes is a vital part of unit work. If the teacher studies the outcomes she may decide whether the objectives were realistic, explicit, and possible of attainment. The pupils should also appraise all stages of unit study. Rose Schneideman in *Democratic Education in Practice* suggests two sets of questions—one for the teacher and one for the pupils.

The teacher's questions should cover the following points:
1. Based on the unit theme:
   a. Did it provide a wide variety of experience?
   b. Did it have timely contacts?
   c. Was there opportunity for critical thinking?
2. Based on unit experience:
   a. Was it worth while?
   b. Will it help the pupil outside of school?
   c. Has it a lasting value?
3. Based on social attitudes:
   a. Were the pupils interested?
   b. Did they cooperate wholeheartedly?
   c. Were they able to carry on without supervision?
   d. Was there any gain in democratic behavior?
4. Based on an activity:
   a. Was it good?
   b. How could it have been better?
   c. What did the pupils gain thereby?
   d. Did the results warrant the time spent?
   e. Should it be continued or repeated?

The pupil's questions should cover these points:

1. Based on knowledge learned:
   a. How much did I learn?
   b. Did the knowledge make me wiser?
   c. How can I use this knowledge?
2. Based on an activity:
   a. Was it profitable?
   b. Did I enjoy it?
   c. Was it too long or too short?
   d. How could it have been better?
3. Based on attitudes:
   a. Did I work independently?
   b. Did I cooperate with all the members of my group?
   c. Did I waste any time?
   d. Did I finish everything I began?

The teacher should direct the pupil's evaluation and she may invite the class to assist her in her evaluation.

VI. Conclusion

The fact that dangers exist in unit teaching should not be overlooked. These dangers largely lie in the authority of the teacher. Unit learning should be spontaneous, should consist of many activities and the sense of responsibility and self-reliance should be felt by each pupil. There is danger that "learning" units will be selected from the curricular point of view to the neglect of their probable significance to the individual pupil. A good teacher should never lose sight of the individuals in the class. Activities unsuitable to their level of achievement should not be imposed. The initiative of the pupil should always be respected and he should be allowed to choose his own enterprises. It should not be taken for granted that prescribed or traditional activities will automatically yield the desired learning result. If help is desired it should be in the form of suggestions to help the pupil to help himself.

Through participation in units of work pupils may grow richly in personality and character, in desirable social attitudes, and in ideals and interests. Pupils learn to work with each other. They learn that they have to behave in order to get along with other persons. When children see the others
around them busy and interested they are naturally drawn to the activity. It is often the child who has displayed no initiative or interest who quite unexpectedly brings stories and books from the library or some article for an exhibit from home. Because of a strong purpose and the responsibility each feels to his group pupils work harder, read more widely and thoughtfully, and generally learn more subject matter than when teacher direction is the only motivating force.

The teacher should remember that it is her job to bring out the important points of the unit, to see that the learning is organized and to provide opportunities for pupils to apply the knowledge they have acquired. Of course teachers should not attempt to drag everything into a unit. In some cases teachers have tried to do this and have met so many obstacles and experienced so much strain because of unnatural situations that they have become discouraged with unit teaching and gladly reverted to the old-fashioned textbook method of question and answer recitations.

The present day trend is definitely toward integration and if education is going to prepare pupils for future life effectively, opportunities must be provided so that pupils may obtain practice in meeting
situations similar to the ones which they will meet later. The organism itself is a unit. Any response is a response of the total organism to a total situation. A unit of work offers ample opportunities for mental, physical, cultural, social, and recreational activities. It meets the needs of the complete personality.
Chapter III

"Fellow Americans"

A Fourth Grade Unit on Brazil

With Emphasis on the Region

Surrounding the Amazon River
"Fellow Americans"

A Fourth Grade Unit on Brazil With Emphasis on the Region Surrounding the Amazon River

INTRODUCTION

During the past few years, the people of the United States have become interested in Brazil, partly because she is one of the largest buyers of our goods in this hemisphere; she has always followed a policy of friendship toward the United States; and she is the source of a large variety of materials essential to us in peace and indispensable in war. Probably of still greater importance is her geographic situation from the standpoint of military and naval strategy, particularly because the "bulge" is only about 1800 miles from Africa. Moreover, even before Brazil entered the war in August, 1942, her planes had sunk Nazi submarines that were preying on her shipping and it was her navy and air forces that helped guard our troopships and supply ships to the African coast. Brazil has demonstrated that the Good Neighbor Policy can work both ways.

World War II emphasized the fact that no nation can live entirely unto itself. It is necessary for us to understand the history, beliefs, customs, and viewpoints of other peoples in order to get along
with them. One of the main obstacles in securing cooperation among American nations is a lack of understanding.

Although Brazil and its people differ substantially from the United States and its people, they share many basic interests and ambitions. There are differences in customs, traditions, religion, racial strains, language, standard of living, and economy. Nevertheless, the similarities between the two largest nations in the western hemisphere are noteworthy. These basic characteristics of Brazil are the subject matter with which this unit is concerned. It is the hope of the writer that by learning about Brazil and its people, our youngsters will become more tolerant and friendly toward our southern neighbor.

GENERAL OBJECTIVES

1. To stimulate a feeling of friendliness and cooperation toward the people of the other Americas.
2. To teach tolerance and respect for other individuals.
3. To train the student in organizing materials.
4. To learn how to express ideas in a simple and clear manner, and to support generalizations with facts.
5. To encourage self-reliance and careful workmanship.
6. To develop the ability to exercise judgment.
7. To inspire a willingness to cooperate with fellow classmates, to assist in group planning and to assume responsibility.

8. To train the pupil to apply his learning and skills to the activity in which the class is engaged.

SPECIFIC OBJECTIVES

1. To show how the physical factors—location, topography, resources, and climate—influence the lives of the people of Brazil.

2. To increase the vocabulary of the pupils and to master the pronunciation and spelling of the most important names, and the meanings of certain words.

3. To learn to recognize in pictures some of the animals, plants, people, and types of homes characteristic of the Amazon River region.

4. To study the ways of living of the Indians in the Amazon Basin.

5. To develop an understanding of the ways in which Brazil and the United States depend upon each other.

6. To give a general but brief account of the history of Brazil.

7. To study the transportation facilities available in Brazil.
8. To obtain a knowledge of the most important cities of Brazil.
9. To learn what important commercial crops grow in Brazil.
10. To find out how coffee and rubber are grown, treated, and distributed.

OVERVIEW

"Fellow Americans" is a fourth grade unit on Brazil with particular emphasis on the region surrounding the Amazon River.

In beginning this unit the teacher could make a statement similar to the following in order to direct the thoughts of the pupils toward Brazil.

"Do you know that there are Americans who do not live in the United States of America and who never lived in our country? Neither their parents nor their grandparents ever lived here. Do you know that there is another United States--not another United States of America but a United States of Brazil?

"We live in a part of the world named North America while they live in a part of the world named South America. That is why we mustn't consider ourselves the only Americans in the world.

"The people who live in Brazil are like the people of our country in many ways but they are
different, too. During the next few weeks we are going to discover in what ways our neighbors are like us and how they differ from us.

"All of you know that there were many Indians in our country when Columbus discovered it. There are still about half a million Indians in the United States. There are some Indians in Brazil too. They live near the biggest river in the world—the Amazon River.

"Most of you like to read stories about the Indians who live in our country. I believe you will enjoy learning about some other Indians as well as about some other Americans."

POSSIBLE APPROACHES

1. Before the lesson begins the teacher should display on a table a rubber ball, coffee beans, a chocolate bar, Brazil nuts, tapioca, and a piece of hard wood. These items will probably be familiar to the children. A good background for this exhibit would be a map of South America or several colorful pictures.

Teacher: "What is a neighbor?"

Child: "A neighbor is someone who lives nearby."

Teacher: "All of you have neighbors, but did you know that your country, the United States of
America, has neighbors too?" (At this point the teacher may allow a child to point to the United States on the map.) "Now someone find the next door neighbors of the United States." (Another child points to Canada and Mexico).

"On this table are some things that come from another neighbor farther away. These materials come from a country named Brazil." (Teacher writes "Brazil" on the board and has the children say it after her.)

The teacher may then point to Brazil on the map, and explain its geographic position in relation to the United States. The unit may then be started with a study of the products of Brazil.

2. The teacher may secure a series of pictures on Brazil from the Pan American Union, the Office of Inter-American Affairs, the various shipping companies, and the Latin American Airlines. If possible, pictures showing the different sections of the country should be in the collection. The pictures may be passed around the room allowing each child to see them. The teacher could then ask the children what they saw in the pictures that made them think they were not taken in the United States. The class should then be encouraged to ask questions concerning the people, food, homes, travel, occupations, etc., of Brazil.
These questions may be listed on the board.

The children will probably want to know something about the unfamiliar objects shown in the pictures, thus beginning the work on the unit.

3. If maps, articles, and pictures appear in the newspaper about the time the unit is to be launched, they may be displayed on the bulletin board and the unit may be introduced as a current event.

4. The teacher should obtain several children's books about Brazil. She should show the class some of the pictures in these books and read interesting excerpts from them. There is scarcely a better way of arousing interest in youngsters than by reading a good story to them.

I. Outline of Subject Matter

Why should Brazil and the United States be friendly neighbors?

A. Brazilian exports to the United States

1. Coffee
2. Cotton
3. Hides
4. Cacao
5. Frozen and chilled meats
6. Tobacco
7. Rubber
8. Yerbe mate
9. Sugar

B. Brazilian imports from the United States
1. Automobiles 5. Machinery and tools  
2. Gasoline 6. Engines  
3. Kerosene 7. Motion-picture films  
4. Flour 8. Electric cars  

C. The geographic position of Brazil in relation to the United States.  
D. Friendly relations between Brazil and the United States.  
E. Brazil and the War.  
F. Pan American ideals of democracy and peace.  

What are the chief industries and products of Brazil?

A. Agricultural Products  
1. Coffee 8. Yerbe mate  
2. Cotton 9. Tobacco  
5. Rice 12. Sweet potatoes  
7. Oranges 14. Cattle  

B. Forest Products  
1. Parana pine 5. Vegetable oils  
2. Brazil nuts 6. Carnauba wax  
3. Coconuts 7. Rubber  
4. Timbo (gives the insect-killer, rotenone)
C. Mineral Products
   1. Gold
   2. Manganese
   3. Iron
   4. Coal
   5. Diamonds

D. Manufactured Products
   1. Cloth
   2. Flour
   3. Foods
   4. Hardware
   5. Machinery
   6. Silk
   7. Tobacco
   8. Pig iron
   9. Cement
  10. Brick
  11. Shoes
  12. Hats
  13. Paper
  14. Chemicals

What are the geographical characteristics of Brazil?
   A. Location
   B. Size
   C. Regions
   D. Climate

Who lives in Brazil?
   A. The number of people
   B. The white people
   C. The mestizos or mixed group
   D. The Negroes, mulattoes, and zambos
   E. The Indians.

What are the important cities of Brazil?
   A. The capital--Rio de Janeiro (study how the people of Rio live)
B. Other large cities--Sao Paulo, Santos, Recife (Pernambuco), Salvador, Porto Alegre, Belem, Belo Horizonte. Their importance, population, industries, etc.

C. Chief seaports--Rio de Janeiro, Santos, Recife, Salvador.

How do the people travel?
A. By air
B. By water
C. By rail
D. By auto, horse, mule, etc.

What are the important events in the history of Brazil?
A. The discovery by Pedro Alvares Cabral
B. The first colonists
C. The government of colonial Brazil under the Portuguese
D. Dom Pedro I proclaims the Independence of Brazil September 7, 1822.
E. The reign of Dom Pedro II.
F. Brazil abolishes slavery in 1888.
G. Brazil becomes a republic in 1889.
H. The present government of Brazil.
What progress has been made in education?

A. The drop in illiteracy
B. Facilities for education
C. The education of girls
D. The education of boys.

What is the largest river in Brazil?

A. The size of the Amazon River
B. The source of the Amazon River
C. Two large cities along the Amazon
   1. Belem
   2. Manaus
D. The denseness of the Amazon jungle
E. The climate.

Who lives in the jungle?

A. The type of Indians
   1. Their weapons
   2. Their families
   3. Their homes
   4. Their food.

What products of economic importance grow in the jungle?

A. Brazil nuts (study the growth)
B. Rubber (study the growth and method of tapping trees)
C. Cacao (study the meaning of cacao, cocoa, chocolate)
D. Vegetable ivory  
E. Babassu nut oil  
F. Lumber.

What are the dangers of the Amazon jungle?  
A. Tropical diseases  
B. Insects  
C. Snakes  
D. Wild pigs  
E. Jaguars  
F. Piranha (flesh-eating fish)  
G. Alligators.

How can we better understand the people of Brazil?  
A. Their language  
B. Their unit of exchange (the Cruzeiro which is written Cr $1.00 and is worth about five cents).  
C. Their customs and institutions  
D. Their music, art, and literature  
Their games.

II. Method

In teaching this unit a variety of methods may be used. As many books as possible should be made available to the children. Care should be taken in selecting books so that slow, as well as more
accomplished, readers will have plenty of interesting stories.

At the beginning of the unit the children should be permitted to ask questions about its many phases. The teacher may make suggestions so that all important materials are included. The questions should be grouped according to major headings, such as: What grows in Brazil? How do the people travel? What kind of homes do they live in? What do they eat?, etc. These questions and topics should be kept for future reference.

Each child may then choose the topic in which he is most interested. This will divide the class into several small groups. These groups should be urged to read as much as possible about their topic. Some children will probably volunteer to go to the library and secure additional books and pictures. From time to time each group should be given the chance to report to the class about what they have been doing and what they have learned.

After the study is concluded the list of questions should be read and discussed. If some questions remain unanswered, a group of capable children may be chosen to try to find the answers and bring back the information to the rest of the class.
A unit of this type may be made more meaningful if it is correlated with some of the other subjects. In this way the children may almost live the subject instead of just reading about it.

III. Correlation

GEOGRAPHY: During the geography period the state textbook, *Living in Different Lands* by McConnell, may be used as a basis in addition to the geographies that are available in the room. During the geography period the children should be grouped rather informally and permitted to discuss the information found in the basic textbook. Important facts may be read aloud and points to be remembered listed on the blackboard.

During this period, the children should learn how the people of Brazil live and how their natural environment affects their activities.

HISTORY: During the history period the outstanding events in the history of Brazil should be studied. Pictures and stories of Brazilian heroes and statesmen may be used. Not only past history but current news items concerning Brazil should be included.

READING: If sets of books are available that have stories about Brazil, these stories may be used for reading lessons.

1. *Distant Doorways*, by Nila Banton Smith has three stories that have their setting along the
Amazon River. The first story, "Jungle Boy of the Amazon," is an excellent introduction to the study of Brazil. Before the lesson, the writer would give the group the following assignment:

a. Into how many parts is the story divided? Tell briefly the main points in each part.
b. What did Emilio's father trade for rubber?
c. What Indian superstition is told in this story?
d. What were two reasons for building houses on stilts?
e. What made Emilio happy?

After the children have been allowed sufficient time for preparation, the group may discuss the story with the teacher. Each child should have the opportunity to express his opinion and each viewpoint should be respected and considered.

After this discussion the teacher's questions may be answered, as well as any questions the children may raise. New words should be learned and important or unusual parts of the story should be read aloud.

2. Wide Wings, by Arthur I. Gates, contains two excellent stories:

a. "The Story of the Banana"

b. "Where the Raincoat Grows"
The same procedure may be used with these stories. The children should be encouraged at all times to read as many books as possible for information and for pleasure and to share what they read with the rest of the class.

LANGUAGE:

1. Make a glossary of the new words learned.
2. Write letters requesting information about Brazil.
3. Write thank-you notes to guest speakers.
4. Write invitations for the culminating activity.
5. Pretend you are riding in a dugout canoe on the Amazon River and write a letter home.
6. Write a story about an imaginary visit to Brazil.
7. Choose the topic that interests you most and write a paragraph about it.
8. Children may give oral reports to the class of stories, legends, and books read concerning Brazil.
9. In grammar drills the teacher may compose exercises using subject matter about Brazil to teach a rule, such as:
Correct these sentences:

1. The Amazon River is in Brazil
2. Rio de Janeiro is a beautiful modern city
3. What direction is Brazil from the United States

ARITHMETIC: The new currency unit of Brazil is the Cruzeiro (pronounced Croo-zayro), which is written Cr$1.00 (the decimal point being a comma, not a period). The Cruzeiro, which has had an average value of five cents in U.S. money, is divided into one-hundred Centavos. Problems of the following type may be given for drill:

1. One "Cruzeiro" costs five cents. How many would you get for thirty cents?
2. If one cruzeiro is worth five cents, how much would nine be worth?

Examples of other problems which may be used are:

1. 1,495 miles of the Amazon River are in Peru, and 1,965 miles are in Brazil. What is the total length of the river?
2. How many more miles are in Brazil than in Peru?
3. It is 3,100 miles from the eastern coast to the western coast of our country. How
much longer is the Amazon River?

4. Estimate the cost of a trip to Brazil.

SPELLING: Teach the following words. Others may be added if the need arises:

1. Brazil 7. neighbor 13. cocoa
2. Amazon 8. Indian 14. chocolate
3. coffee 9. canoe 15. coconut
4. rubber 10. equator 16. cacao
5. jungle 11. tributary 17. South America
6. palm 12. bananas 18. Portuguese

PENMANSHIP: Each child may copy the letter asking for information, the thank-you note to a guest speaker, the invitation to the culminating activity, or any other classroom correspondence. The class may vote which one is the best to send.

MUSIC:

1. Listen to Brazilian music on a victrola.
2. Learn Brazilian songs.
The two songs that follow are found in The Latin-American Song Book, Ginn and Co., Boston, 1942.

a. "Come Here, Vitu" is a lively and popular game song of Brazil. Vitu is a name, and some other may be substituted if desired.

**COME HERE, VITU**

1. "Come here, Vi-tu, come here, Vi-tu; And share my crim-son cape." "I will not, I will not, I will share my chocolate stick." "I will not, I will not, I will not; I'm a-fraid I can't es-cape"

2. Come not; You are up to some new
here, Vi-tu come trick.
b. "Whirling Around" is a game song that is very popular among the children of Brazil. It was brought to Brazil from Spain by way of Portugal.

Oh, whirl-ing a-round and twirl-ing a-round; Then turn-ing a-gain and swing-ing a-gain; There's treas-ure for you and pleas-ure for me, I'm choos-ing a part-ner now, as you see, So whirl a-round and twirl a-round! The treas-ure will be found.
ART:

1. Model out of clay some of the animals that live in Brazil.
2. Draw and paint pictures of the plants and animals of Brazil.
3. Draw scenes of the various regions.
4. Make a miniature dugout canoe.
5. Illustrate the stories you have read.
6. Pretend that you are visiting Brazil.
   Draw or paint a picture of what you might see.
7. Paint scenery for a play.

HEALTH:

1. Find out what inoculations and vaccinations are needed before visiting the Amazon.
2. Find out what is being done to eliminate the tropical diseases that have been so prevalent in the Amazon basin.
3. Find out why white people are unable to live for any length of time in the tropical Amazon region.

SCIENCE:

1. Make a collection of pictures showing the birds, animals, and insects that live in Brazil.
2. Collect pictures of the plants that grow in Brazil.

3. Find out why the seasons of the Northern and Southern hemispheres are reversed.

GAMES: During recess the class may play games that the children of Brazil enjoy.

1. "Pigeon Flies"--One person is chosen as leader. This person calls out animals or insects that fly. Everyone raises his hand until an animal is called that does not fly. If anyone raises his hand at that time he or she must pay a forfeit. Later the forfeits are redeemed in various funny ways.

2. "Musical Handkerchief"--Everyone sits in a circle. A handkerchief is tied into knots until it looks like a ball. While someone plays the piano the handkerchief is tossed from one person to another. Whoever is caught holding the handkerchief when the music stops is out. The game is continued until only one remains. The last person wins the game.

OTHER ACTIVITIES:

1. Using an outline map of the world, show the route from Louisville to Brazil.
2. Make a list of the things you would need for a journey to Brazil.
3. Collect pictures, maps, postage stamps, news articles, and stories of the country.
4. Invite someone who has visited Brazil to talk to the class.
5. Make a list of the uses of rubber.
6. Compose original riddles about Brazil.
7. Construct an Indian village in a sand box.
8. Make a list of what you would like to see and do if you had a year to spend in Brazil.
9. Show a motion picture or film strip.

AUDIO-VISUAL AIDS:

Visual education has been defined as a method of imparting information. It is based on the psychological principle that one has a better conception of the thing he sees than the thing he reads about or hears discussed.

Audio-visual aids assist instruction. If a movie or film strip is going to be shown to a class, it should be appropriate to the age and experience of the pupils. To give the greatest value, it must be closely related to the curriculum. It should be shown at exactly the time the class is making a certain study. Audio-visual aids, however, cannot be substituted for oral or written work.
No film or film strip should be shown unless it has been previewed first by the teacher. A teacher knows and understands her particular class best and unless she previews a picture first, she has no way of knowing whether it will furnish the learning situation that she desires.

After the film has been selected and previewed, the class should be prepared before showing it. The purposes of showing the film should be known not only by the teacher but by the pupils as well. Difficult words or phrases that the children may not understand or be able to read should be explained. Places mentioned should be pointed out on a map and other points that will aid the children in securing the greatest benefits should be discussed. Studies that have been made prove that in order for each child to grasp the important points, it is sometimes wise for a film to be shown again after a discussion has been held.

After a film has been shown there should be follow-up activities depending upon the type of film that has been shown. Discussions, experiments, projects of various kinds, and additional readings are a few of the many kinds of follow-up activities in which the class may engage.
The lesson plans for three motion picture films and one film strip follows. The procedure that is suggested has been found to be effective for the use of these aids.

I. "Rubber" Motion Picture 605 (Silent)
Louisville Board of Education

a. Purposes

(1) To show where rubber grows.
(2) To teach how it is tapped, smoked, and prepared for shipment.
(3) To show how rubber is compounded so that it may be used more effectively.
(4) To show how soft rubber articles such as tires and tennis shoes are made.
(5) To show how hard rubber articles such as fountain pens are made.

b. Preparation

(1) The class should have studied and read about how rubber grows and how it is prepared for shipment. It may be well for them to learn other places where rubber grows and how it is made into the articles we use every day.
(2) Locate these countries and add the
percentages of rubber that comes from each one:

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>5 per cent</td>
</tr>
<tr>
<td>South America</td>
<td>3 per cent</td>
</tr>
<tr>
<td>Central America</td>
<td>2 per cent</td>
</tr>
<tr>
<td>Malaysia</td>
<td>90 per cent</td>
</tr>
</tbody>
</table>

(3) Study these words: obtained, latex, preserve, crude, chemicals, fabric, vulcanizer, vulcanized, sulphur.

c. Content

This film opens by showing a large rotating relief globe. It stops at intervals and circles the areas where rubber grows. The percentage of the rubber used that grows in each area is shown.

A native is shown as he taps a tree and places a cup in position to catch the latex. Another native collects the milky juice. It is poured into pans, skimmed, pressed into sheets, rolled and smoked to preserve it. The sheets are sorted and baled for shipment. After it arrives in the United States, it is unpacked, washed, and dried. Chemicals are added to make it strong.

Next automobile tires may be seen being made. First hot rubber is pressed into strong cotton fabric. The rubber sheets are fitted on tire shaping blocks. It next goes to the tread mold and then to the vulcanizer where it stays from one to three hours.
Tennis shoes are cut out by machinery from a sheet of rubber. The canvas top is put on, the insole is inserted, and the bottom of the shoe is rolled to insure the sticking of the canvas to the rubber fabric. The toe cap, ankle patch, and rubber trimming is placed into position. Another man attaches the rubber outsole.

Rubber becomes hard when mixed with 32% sulphur. It is used for combs, bracelets, fountain pens, paper knives, knife handles, and buttons. The picture shows rubber tubes being cut into lengths for making fountain pen parts and the pen being assembled.

d. Questions

(1) How does rubber grow?

(2) How is rubber prepared for shipment?

(3) Why does the United States use more rubber than any other country?

(4) How is soft rubber made hard?

(5) Why is plantation rubber better than wild rubber?

(6) What did we do during the war when our supply of rubber was cut off?

e. Follow-Up Activities

(1) Make a list of all the uses of rubber.

(2) On an outline map of the world, color the places where rubber grows.
(3) Study about synthetic rubber.

f. Rating-Comments

This is a good picture but ends very abruptly. The tapping of the trees, preparation for shipment, making of tires, and tennis shoes are very good scenes. The picture is a little old but may be used to advantage. Most pens are no longer made of rubber and are different in design than the film demonstrates.

2. "Brazil" (People of the Plantations)
Motion Picture--Indiana University Extension Division

a. Purposes

(1) To teach what a vast country Brazil is.
(2) So the class may see how coffee is grown, picked, dried, and shipped.
(3) To show how sugar cane grows.
(4) To show how the people on a plantation live.
(5) To show the many different types of people that comprise the population of Brazil.

b. Preparation

(1) This picture may be used during the study of the products of Brazil. The children should know the location, climate, important cities, and have a general knowledge
of how the people of Brazil live.

(2) Study these words: plantation, financial, residential, orientals, Europeans, immigrant.

(3) Think of the answers to these questions while watching the film:
(a) What process does coffee go through from the time it is picked until it is shipped?
(b) What types of people live in Brazil?
(c) How does sugar cane grow?
(d) Describe Rio de Janeiro.

c. Content

The film opens by showing a map of South America and the boundaries of Brazil. The country of Brazil is then divided into sections showing what crops predominate in each one. Next dots, symbolizing the important cities appear. The residential and financial districts of Rio de Janeiro and the plantation owner's office are shown. He is heard talking over the telephone in Portuguese.

The next scenes take place on the coffee plantation and show how every member of the family help harvest the coffee berries. First it is picked, then raked together into piles. Next it is sifted of dirt and the sticks or gravel picked out. At another part of the
plantation a few scenes show sugar cane being cut. The picture then goes back to the coffee-growing section. The coffee is then put into sacks and hauled to another place where it is washed and spread out in the sun to dry before being loaded on ships.

The picture shows the different nationalities that comprise the population of Brazil and the other activities of the people living on the plantations—such as their schools, church services, homes and meals.

d. Questions

Answer the questions that the children were told to think about while watching the picture. Encourage a discussion of the ways the United States of Brazil and the United States of America are alike and the ways the two countries are different.

e. Follow-Up Activities

(1) On an outline map, show the sections of Brazil and insert pictures of what grows in each section.

(2) Draw pictures of a coffee plantation. A group of children might make a mural.

(3) Study about other products such as rubber, cocoa, etc.

f. Rating-Comments

This is an excellent picture for use in the fourth grade geography course of study. The photography
is good and the vocabulary is suitable for the children. It is difficult to explain how coffee grows and how it is processed for marketing. Undoubtedly this film will help clear these concepts.

3. "The Amazon Awakens" Motion Picture
Indiana University
Extension Division

a. Purposes
(1) To show the size of the Amazon River and the Amazon River Basin.
(2) To teach the history of the Amazon River Basin.
(3) To show the industrial progress it is making and its future possibilities.
(4) To show the richness of its natural resources.
(5) To show the plant and animal life that live in and near the Amazon River.
(6) To show how the natives live.
(7) To show how rubber trees are tapped and the rubber prepared for shipment.
(8) To show the important cities of Brazil.

b. Preparation
(1) Trace the Amazon River on the map and point out the important cities and tributaries.
(2) Tell the class the purpose of Fordlandia.

(3) Review these words:

<table>
<thead>
<tr>
<th>Amazonian orchids</th>
<th>mohogany</th>
<th>papaya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manaus sloth</td>
<td>Rio Negro</td>
<td>exported</td>
</tr>
<tr>
<td>tapir</td>
<td>cacao</td>
<td>commercial</td>
</tr>
<tr>
<td>piranha</td>
<td>Iquitos</td>
<td>mandioca</td>
</tr>
<tr>
<td>Sincono tree</td>
<td></td>
<td>(quinine)</td>
</tr>
</tbody>
</table>

c. Content

"The Amazon Awakens" begins by showing maps of South America and comparing the size of the Amazon River Region and the United States. A brief history of the land is told and scenes showing the general topography of this region are shown. The commentator next stresses the vast network of rivers and tells about the sources of the many rivers. Beautiful pictures of the dense jungle with the tropical flowers and multicolored birds are next seen. Then animal life both in and around the river are shown. We also see the huts of the natives and their balsa rafts.

The beautiful city of Iquitos with its white-tiled buildings and the people and schools of the city are shown. More products of the forest such as the sincono tree, vegetable ivory from which buttons are made, and the giant mohogany trees are also photographed.

Next we go to the modern city of Manaus on the Rio Negro River. Here we see a mosaic tile plaza, a
cathedral, opera house, and the residential district. A ceremony honoring the rubber gatherers who are leaving to tap the rubber trees is being held. We next see them tapping the trees and making rubber balls over a fire.

The settlement of Fordlandia where rubber trees are cultivated is an attractive modern settlement. Every precaution to safeguard the health and safety of the employees and their families has been taken.

The last city visited is the commercial settlement of Belem, a city with a population of 300,000. Here we see a group of school children watching latex being hardened on a paddle into flat pieces. The climate of this country is not as hot as we ordinarily think. A temperature of 92° is about the highest they experience.

d. Questions

(1) How are rubber trees cultivated?
(2) What did you learn from this picture that you did not know?
(3) Why has it been possible to build cities in the dense forest?
(4) In what ways is this region of the world rich?

e. Follow-Up Activities

(1) Make a list of the things we use
that come from the region around
the Amazon River.

(2) On an outline map of South America,
put in the important cities along
the Amazon and the largest tribu-
taries.

f. Rating-Comments

A beautiful film photographed in technicolor. It
is long and covers a multitude of topics. Unless it
is used to summarize a unit of study, it should not be
shown all at once. It would be a beautiful way to
close this study. The children would enjoy it and
although there are a number of difficult words and
phrases the children will understand them enough to
appreciate the film to a great extent.

4. "Our Pan American Neighbors" Film Strip (F-608)
Louisville Board of Education

a. Purposes

(1) To compare and contrast aspects of
Latin American life with corresponding
ones in the United States.

(2) To present a comprehensive view of
the important activities of Latin
America.

(3) To show how coffee is picked and
dried, how rubber trees are tapped,
and how raw rubber is made into
balls for shipment.

b. Preparation

(1) Locate Latin America on the map and show its position from the United States.

(2) Discuss what has been learned about Latin America.

(3) It is not necessary for fourth grade children to learn all the difficult words in this film. The writer has selected the ones that she would stress:

Bello Horizonte, balsa
henequen, Rio de Janeiro
coffee finca, latex
Pan American Highway

c. Content

This film strip presents an overview of all the Latin American countries. There are a number of frames showing scenes of the lovely South American cities as well as pictures of the natural beauty of the continent—such as the flowers, pampas, mountains, etc. The industries and occupations in which the people engage are depicted in an interesting manner. Recreation and modes of travel, some strange to us, are also included. There are some very good scenes showing coffee being picked and dried, bananas being loaded for export, and rubber being tapped, shaped into balls.
over a fire, and loaded for shipment. Excellent maps are included as well as pictures of the flags of these countries.

d. Questions

(1) What countries are included in the term Latin America?
(2) What are some ways that the people of Latin America earn a living?
(3) How is life different in Latin America than in the United States? How is it the same?
(4) If you had the chance to visit some of these places, what would you particularly like to see? Why?

e. Follow-Up Activities

(1) Trace the Pan American Highway on an outline map.
(2) Color the Latin American countries on an outline map of the world.

f. Rating-Comments

This film should be used at the conclusion of the study of Brazil. Through it, the children may become interested in another country that may be studied. Some frames may be stressed and discussions held concerning the pictures that show topics that have already been studied.
IV. Evaluation

At the end of the unit, it is important for the teacher to evaluate the pupils' growth. A fairly accurate conclusion may be reached if the teacher thinks through the objectives that were set forth at the beginning of the unit. Other indications of pupil growth may be evident in the behavior of the children, such as:

1. Do they show a desire and willingness to study about other Latin-American countries?
2. Do they apply what has been learned during the course of the unit to new or slightly different situations?
3. Do they continue to show interest in the subject?
4. Do they bring in items of general interest on related subjects?
5. Have they talked about the subject at home and with their friends?

With young children short, simple check-ups bring better results than a longer, formal test.

Following are types of check-ups that may be used:

True or False

1. Brazil is smaller than the United States.
2. Brazil leads the world in the production of coffee. etc.
Multiple Choice
1. The land surrounding the Amazon River is (a desert), (mountainous), (a jungle).
2. The City of (Manaus), (Rio de Janeiro), (Belem), is the capital of Brazil.
   etc.

Completion
1. The people of Brazil speak _____________.
2. ________ live in villages along the Amazon River.
   etc.

Essay
1. Why don't the Indians who live along the Amazon River have farms like ours?
2. Why are their houses made with heavily thatched roofs?
   etc.

V. Culminating Activities
Children always look forward to some sort of closing activity. Children are little actors and actresses at heart and will exert more effort during the study if they can look forward to an entertainment at the end, no matter how simple the performance, or small the audience. The following activities may be suitable:

1. During the study of the unit, good pictures, poems, or any other work that has been done should be
preserved until the unit has been completed. The teacher should strive to have as many children represented in these activities as circumstances permit and not merely the superior ones.

At the beginning of the program the class may sing the Brazilian songs that have been learned. One child may be selected to announce them and explain how they are used in Brazil.

A picture show may then be the next part of the program. Each child who has drawn a good picture may hold it up and say something about it. Children who do not have suitable pictures to show may recite several riddles and allow the audience to answer them. Others may recite original poems or tell short stories or legends.

2. The children, with the help of the teacher, may arrange an interesting exhibit. It may include pictures that members of the class have drawn or painted, clay animals, clippings, products of Brazil, etc. A number of children, preferably those who have contributed the most to the collection, may explain the items to the visitors.

3. The class may write a class play about Brazil.

4. A favorite Brazilian story or legend may be dramatized.
5. Have a Brazilian party, during which the children may sing Brazilian songs and serve simple refreshments that come from Brazil.
Chapter IV

Source Material
for a
Unit on Brazil
Source Material for a Unit on Brazil

I. The Physical Characteristics of Brazil

A. Location

Brazil is in the east central part of South America. Most of Brazil lies in the hot belt. Its boundaries touch all the countries of that continent except two. It is sometimes called "The Land of the Southern Cross" because as you cross the equator a group of stars may be seen that form a cross.

B. Size

Brazil covers almost half (forty-eight per cent) of the entire area of South America. It is greater in area than the United States and its four thousand mile coast line is longer than our own Atlantic and Pacific coasts put together. Its area is 3,286,170 square miles.

C. Regions

1. The Amazon Lowland. This rainy lowland, most of which is jungle forest, occupies the northern and northwestern portion of Brazil. It lies in the basin drained by the Amazon River, the largest river in all the world. Much of the Amazon lowland has never been explored. It is sparsely inhabited, the back country being almost entirely populated by uncivilized Indians. The white inhabitants of this region live mostly in the cities of Manaus and Belem and in the small towns along the river between these cities.

2. The Eastern Coastal Region. This is a tropical highland southeast of the Amazon lowland. It has but little forested land, and the least rainfall in all Brazil. In many years this region
suffers from drought. Goats out-number cattle; and the population, most of whom are Negroes, or mestizos of Negro descent, raise tropical and semi-tropical crops. The largest of the streams which drain this plateau is the Sao Francisco River.

3. The Central Coastal Region. This region, a part of the Brazilian highland, is the great coffee and cattle section, and is the very heart of the nation. It contains nearly half the people, the capital city, the chief port, the best highways and railways, and the greater part of the manufactures, as well as immense mineral resources.

4. The Southern Coastal Region. Drained by the Parana River, this part of Brazil forms a part of the Great Brazilian highland. This is a Temperate Belt Region, whose cooler climate has attracted many of the settlers who came to Brazil from temperate Europe. Cattle and sheep ranches, lumbering in the pine forests, yerba gathering, and many excellent crops make this the second most important region of Brazil.

5. The Southern Interior. To the south of the Amazon lowland lies a tropical region of lowland and plateau, known as Matto Grosso. It is drained by the Paraguay and Parana rivers. Grasslands, forested grasslands, and swamps cover the region. Cattle in large numbers are raised on the vast ranches, but they do not compare with those of the pampas, and they have to be driven long distances to market.

D. Climate

The climate of Brazil's five regions varies.

1. Amazon Lowland Region: hot and rainy.
2. Eastern Coastal Region: long, very dry summers; short and not very rainy winters. Along the coast, sea winds bring heavier rains than farther inland.
3. Central Coastal Region: hot, rainy summers; cool, dry winters.
4. Southern Coastal Region: cool and fairly rainy winters, warm and not too rainy summers.

5. **Southern Interior Region**: hot and rainy half the year, hot and dry the other half.

II. The History of Brazil

The Portuguese fleet under the command of Pedro Alvares Cabral first reached the shores of Brazil April 22, 1500.

The first Europeans who lived in Brazil were stranded seamen, adventurers, and deserters from ships. To further immigration, Portugal freed many criminals on condition that they settle in the new continent.

From 1580 to 1640 Portugal disappeared from history as an independent empire. All its colonies, including Brazil, became the property of the Spanish crown. For twenty-three years an independent Dutch administration existed in the north of Brazil. In 1640, however, Portugal broke away from Spain and recovered her empire, while Holland soon lost its control of northern Brazil.

For about four hundred years Brazil remained a colony of Portugal. At the opening of the nineteenth century, during the turbulent period of the Latin American revolutions, Dom Pedro I proclaimed the Independence of Brazil, September 7, 1822.

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In 1831 Pedro I abdicated in favor of his son, Pedro II, who was then six years old. In 1840 when he was fifteen he was crowned Emperor of Brazil. Pedro II reigned in peace for nearly fifty years. During that time Brazil acquired a position of respect in the eyes of the whole world. In 1888 slavery was abolished and in 1889 Brazil became a republic. It is made up of twenty states, one territory, and a federal district in which the capital, Rio de Janeiro, is situated.

Some of the Brazilian states are very large. Amazonas, the state which includes much of the basin of the Amazon River, has an area equal to nearly one-fourth of the entire country. It is so thinly peopled, however, that the population averages less than one person to each square mile. Matto Grosso, perhaps the least known of all the Brazilian states, is more than twice as large as Texas; Sao Paulo, the coffee state, is the richest and the most powerful in the republic; and the state of Rio de Janeiro is the most densely populated, with about eighty-five people to each square mile.

Before 1930 the government of Brazil was similar to ours, having an elected president and congress. The courts, also, had about the same powers. Between 1930 and 1945 Brazil was more or less a totalitarian
state under the dictatorship of Getulio Vargas.

September 18, 1946 Brazil adopted a new Constitution returning the country to representative government and guaranteeing freedom of speech, thought, religion, press, and assembly. The new Constitution provides for a two-house Congress and an independent judiciary; gives the President veto power but provides that a two-thirds vote of the Congress can override his veto.

III. The Population of Brazil

Brazil ranks first in population in South America. Its 44,000,000 people is about one-third the population of the United States, which has a smaller area. Most of the Brazilians live within 200 miles of the seacoast. The population is composed of about:

- six tenths—whites, predominantly Portuguese, although there has been heavy immigration from Germany, Italy, Russia, and Japan.
- three tenths—mestizos, mixtures of White, Indian, and Negro races.
- one tenth—jungle Indians.

These figures, however, are misleading, for the large majority of Brazilians, even many of the so-called "Whites," are mestizos of one kind or another. As the great Brazilian sociologist, Gilberto Freyre, says, "Nearly all Brazilians have some white blood," thus giving evidence not only of the extent of racial mixture in Brazil, but of the Brazilian's pride in it.

IV. The Most Important Cities in Brazil

A. The Capital

Rio de Janeiro, founded in 1565, is the second largest city in South America. It has a population of 1,535,200. Set like some exquisite jewel in the sparkling blue waters of its lovely harbor, Rio deserves its place among the most beautiful cities of the world. There is breathtaking beauty everywhere in Rio: splendid buildings of marble; avenues of royal palms; brightly colored roofs; and sedate old streets, their sidewalks carpeted with geometric patterns in tiny black and white mosaics. Rio's modern schools, museums, libraries, hospitals, and theaters add to the charm of this great metropolis.

One place in Rio which no tourist should miss seeing is the Botanical Gardens. These gardens occupy more than two thousand acres and contain more than fifty thousand kinds of plants and trees. Many of these grow in Brazil, while others have been brought from all parts of the world.

Rio is one of the great commercial cities of the world. Ships come and go, bringing passengers and freight from every part of the world and carrying away to distant lands the products of Brazil.

B. Other Large Cities

Other large cities in order of size are Sao
Paulo, Recife, Salvador (Baia), Porto Alegre, Belem (Para), Bello Horizonte, Santos. These and several other Brazilian cities each have a population of more than one hundred thousand.

C. Chief Seaports

Chief seaports in order of importance are:

Rio de Janeiro, Santos, Recife, Salvador (Baia).

V. The Transportation Facilities

A. By air:

Transportation by plane is available between the principal cities; to other countries of South America; to the United States; and to Europe by way of West Africa.

B. By water:

There are forty thousand miles of navigable inland waterways. In the Amazon Valley the rivers and streams are the only good means of transportation. In other parts of the country, some of the rivers are of little use because they do not flow in the proper direction, or because they flow too rapidly down from the highlands to the coast.

C. By rail:

In 1945 Brazil had nearly twenty-five thousand miles of railroad, most of which is in the east central coastal region where they are needed for transporting coffee
and other products. Rio de Janeiro is connected by rail with Montevideo and Buenos Aires. New railroads are being built in the southwestern coastal region. In the eastern coastal region the railways are nearly all short lines joining the highlands with the seacoast. The Amazon lowland region has almost no railways. The railways that do exist in Brazil, however, are becoming more efficient in handling both passengers and freight.

D. By road:

Most of the modern highways are in the east-central coastal region. New roads are being built rapidly in the southeastern coastal region. Elsewhere there are few roads in Brazil. Most of the roads are simply graded dirt. During the dry season, therefore, the usable mileage is much greater than during the wet season when highway travel in some areas practically ceases.

VI. The Chief Industries and Products of Brazil

A. Agricultural products:

1. Coffee. Brazil leads all other nations in the production of coffee. Sao Paulo, the coffee state, is the richest of all the Brazilian states. Sao Paulo (City) is second in size to Rio and is a beautiful city, with fine buildings, splendid schools, smooth roads, tree-lined boulevards, and parks lovely
with ponds, gardens, trees, and velvety grass.
All these things have been made possible chiefly by one product—coffee.

Three or four times a year the coffee trees are covered with small white flowers which fill the air with their fragrance. Soon the blossoms fade and drop, and the berries begin to form. The leaves of the tree are a shiny green and the berries form in clusters which look like dark, short-stemmed cherries.

The laborers pick the fruit from the trees or shake it onto large sheets of cloth spread on the ground. The berries are put into large baskets and carried to waiting carts which take them to the buildings where they are prepared for market.

In the center of each berry, buried in a soft pulp, are two beans lying with their flat sides together. The fruit is first put into machines which mash the pulp and wash it away. The beans are then spread out in large paved yards to dry in the hot sunshine. This drying process takes about three weeks. Workmen with long rakes turn the beans over from time to time so that all may be thoroughly dried. If a shower comes up in the daytime, the beans are hastily covered.

Under the thick outside skin of a coffee bean is another, thinner covering. These skins are broken as the beans are passed between grooved rollers. Then
they are blown away by ventilating fans, while the beans drop into large bins. In other machines the beans are graded according to size and then put into bags. When the bags are full they are sewed up and shipped to various parts of the world.

Before they can be used for making "coffee," the beans are roasted. Roasting turns them a dark brown and gives them a good flavor.¹

2. Other important crops. Cotton, corn, cacao, rice, sugar, oranges, yerba mate, tobacco, beans, manioc, sweet potatoes, and bananas.

3. Cattle. Cattle are grazed in many parts of the land, but in only one region--the southern coastal region--is the cattle industry of real importance. Here there are many meat packing plants. Hides are exported. Hogs are raised in the central and south-western coastal regions.

The diet of the Brazilian people includes great quantities of meat products. It has been estimated that there are 50,000,000 head of cattle in Brazil. In the southern state of Rio Grande do Sul there are some 10,000,000 sheep. In the northeast dry sections there are 5,000,000 goats.

¹ Nellie B. Allen, South America, Boston, Ginn and co., 1938, pp. 76-84.
The diet of the Brazilian is heavy with starch, fruit, and fats. Few people drink milk except perhaps the children in the larger cities.

B. Forest Products:

Of the many forest trees of Brazil, the Parana pine found along the Parana River, is the most valuable. Most of the lumber made from this tree in Brazil is sent to Argentina. Vegetable oils, Brazil nuts, coconuts, rubber, carnauba wax, and timbo from which is derived the insect-killer, rotenone, are products of the forests and trees of the eastern coastal region and the Amazon lowlands. Brazil possesses a billion acres of forest, or thirteen per cent of the world's total, and is surpassed only by Russia and the British Empire.

C. Mineral Products:

Brazil’s great wealth of mineral resources is yet to be developed. The richest mineral region in Brazil is in the state of Minas Geraes. The most important minerals produced are:

1. Gold: This important mineral is mined principally in the central coastal region.


3. Iron: The central coastal region contains the richest deposits of iron known to the world.
--about twenty-five per cent of the world's reserves. Production has been slow because of lack of good coal, but is increasing.

4. **Coal**: Some poor quality coal is found in the southeastern region along the coast.

5. **Diamonds**: Diamonds are found in several sections of Brazil. Brazil is the world's chief source of black diamonds, which are used in industry. These are mined in the east coastal region.

D. **Manufactured Products**:

The most important manufactured products are cotton and woolen cloth, flour, foods, hardware, machinery, silk, pig iron, cement, tobacco, brick, shoes, hats, paper and chemicals.

VII. **The Interdependence of Brazil and the United States**

The people of the United States are greatly interested in Brazil. We are the best customer of that country, and our Brazilian trade in some years amounts to about half a billion dollars. Brazil sells us more coffee than she sells to all other countries put together. She also sells us minerals, cotton, hides, cacao, frozen and chilled meats, tobacco, rubber, yerba mate, and sugar. In return we send to Brazil automobiles, gasoline, kerosene,
flour, machinery, engines, motion-picture films, coal, electrical equipment, and many other things.

VIII. Education in Brazil

In education, Brazil has scored a success that is little short of spectacular. In the last ten years illiteracy has dropped from an estimated seventy-five per cent to less than sixty-five per cent and is steadily decreasing. Facilities for education from grade schools through colleges and universities are being rapidly developed. Primary education is free and compulsory. Strong emphasis is placed on physical education and manual training.

The education of girls is designed to acquaint them with the problems of home-making. They acquire ideals of cleanliness and neatness. The boys receive the same fundamentals of cleanliness and sanitation, and they also learn the use of tools of various sorts.

IX. The Region Around the Amazon River

A. The Mighty Amazon River

About one hundred miles from the delta of the Amazon, the ocean loses its beautiful blue color and becomes a muddy yellow. This change is caused by the muddy water which the many mouths of the Amazon pour into the ocean. The distance between the most northerly and the most southerly of these mouths is more than
one hundred-fifty miles. One writer calls the Amazon the "king of rivers," and the land which it drains the "queen of basins." At several points near the mouth, the river is between fifty and sixty miles wide and looks more like a sea than a river.¹

The Amazon is really a labyrinth of rivers. The tributaries are the most important part of the system. More than half of them rise in the Andean mountains or foothills. The tributaries of the Amazon are wide and remarkably deep, and are navigable for small craft for hundreds of miles into the interior. By means of the river system, therefore, the country may be penetrated almost everywhere.²

The Amazon itself has a length of 3,460 miles of which 1,495 lie in Peru and 1,965 in Brazil. For a distance of more than seven hundred miles from its mouth, to Manaus, the main channel of the river is more than two hundred feet deep. From Manaus to Iquitos in Peru, nearly two thousand miles, the channel is thirty feet deep. The waters of the Amazon are turgid with mud. The roaring noise made by the rushing waters, called the pororoca, can easily be heard a

mile from the river's edge.  

B. The Amazon Basin

The Amazon Basin covers 2,225,000 square miles of Brazil. This is an area equal to about three-fifths of the entire country. It is so thinly peopled, however, that the population averages less than one person to each square mile. No one knows with any degree of certainty just how many Indians are scattered throughout the Amazon valley, but reliable estimates claim that scarcely ten-thousand Indians inhabit the great, empty forests.

Large areas have never been explored. No roads or railroads have been built through the great wilderness, and the rivers are the only highways.

Malaria, prime scourge of the Amazon Valley, has made access to the resources of this area dangerous and difficult. Today, with rubber gathering centers reopened, malaria control is all the more important. Brazil and the United States allotted five million dollars for disease control and prevention.

C. Two cities along the Amazon River:

1. Belem: The traveller enters the great interior nearly always through the city of Belem, capital of the Brazilian state of Para. This is a modern city of 309,200 population, located on the Rio Para, about one-hundred miles from the ocean. The city has broad avenues lined with

1. Fred A. Carlson, op. cit., pp. 121-123.
mango trees, extensive parks and public gardens, one of the most beautiful cathedrals in all Brazil, a good normal school, a large municipal theater, good hospitals, and modern public schools. It is the point of trans-shipment for much of the traffic of the Amazon region. Here are located the customs house and the army and navy arsenals. Excellent hotels await the traveller. Department stores, similar to those of European or American cities of similar size, await his patronage. The great sights of Belem are its two gardens, the zoological and botanical, which contain all the fauna and flora of the Amazon world. Many ocean-going freight vessels ascend the river to Manaus, some even to Iquitos. The larger passenger-carrying vessels, however, stop at Belem, and passengers transfer to picturesque, flat-bottomed, side- or stern-paddle river steamers.

There are no great cities in the interior. Above Belem only twelve Brazilian cities of any size are found on the Amazon River or its tributaries. Eleven of these have between twelve thousand and twenty thousand inhabitants, and the only city of real importance is Manaus, a center of some 87,400 people.

2. Manaus: Manaus is important because it is the capital of the state of Amazonas, and is the port from which rubber and other tropical products are shipped abroad. It is the administrative center of a great state and a cultural center of the interior. Manaus is one of the most attractive small cities of all Brazil. Although it is situated only one hundred twenty feet above sea level, the efforts of the department of public sanitation have made it healthful. An excellent school system, a state-supported high school or gymnasium, a normal school of importance, and even a university contribute to the education of its citizens. Like other important cities, Manaus contains several wide boulevards, a number of important public and private buildings, and many beautiful residences. A street car system, electric lights, good water, and an adequate sewer system add to the attractiveness of the city.

2. Ibid., p. 124.
D. The Jungle

1. Climate: The flood plain of the Amazon is a melancholy shadow world of jungle--savage and relentless. During the wet season in the Amazon Basin it rains every day. In the western portion of the region the precipitation is more than one hundred twenty-five inches annually; rainfall decreases slightly to the east but is greater on the coast than in the central portion. At Manaus, the maximum rainfall occurs from December to June and at Belem from January to May.

After sundown in the Amazon lowland the air rapidly becomes chilly. Night temperatures of around sixty degrees Fahrenheit are by no means uncommon. In the daytime it is unbearably hot and humid. It might be said that the night is the winter of these tropical regions.

As a consequence of these climatic conditions, fevers, ulcers, respiratory and rheumatic ailments are common.1

2. Vegetation: Scarcely any grass grows in the forests (selvas) of the Amazon. The forest is terribly monotonous. Day after day the traveller on a river steamer passes the same dense walls of vegetation. For hundreds of miles in every direction

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it is apparently the same. The trees are so thick, the vines so many, and the leaves so big that in large areas no sunshine can get through to lighten the gloom or to dry the ground. This wonderful forest is always green and always brilliant with flowers.

Away from the Amazon the ground is better drained; vegetation is neither so thick nor so persistent; and there are occasional grassy savannas that are excellent for grazing.

3. **Important economic products of the jungle:**
   a. **Brazil nuts:** The Brazil nut trees begin bearing well only when about forty years of age, and continue to yield for half a century or longer. The trees grow wild throughout much of the region, in groves of as many as a hundred together. The nuts grow in a hard, round shell about as large as a grapefruit. The pods contain fifteen to thirty nuts each and fall in December. The nut is not only good to eat, but it produces a fine oil that is said to be far superior to coconut oil.

   b. **Rubber:** Rubber gathering was for many years the great source of income to dwellers in this region. Until fifty years ago ninety per cent of the world's rubber came from the Amazon valley. In 1940, only two per cent originated there. Today, about ninety-five per cent of the world's natural
rubber is produced on plantations in Malaya and the
East Indies. Rubber trees occur throughout the
Amazon region. The "Hevea Brasiliensis" is the most
sought after, for it produces the best grade rubber.
The plantations, in general, are producing this
variety.

The trees grow to a height of thirty or forty
feet and begin to produce when they are six to ten
years old. The rate of production gradually increases
as the trees become more mature.

A gatherer and his family build a little hut
nearby. It is merely a pavilion set several feet off
the ground and made accessible by means of a short
ladder. Walls around three sides keep out the pre­
vailing winds. A thatched roof sheds most of the rain.
The furniture consists of several hammocks, a chest
or two, a few reed mats, and some earthenware pottery.
Cooking is done over a homemade dirt fireplace.

One rubber gatherer will tend from one hundred
to two hundred trees. He carefully plans his route
so that he may reach every tree with a minimum of
travel. The rubber gatherer carries some little cups
and a tool somewhat like a hatchet. Arriving at the
first rubber tree, the laborer cuts some little gashes
in its bark, being careful not to cut so deep as to
injure the tree. Beneath each gash he fastens a
little cup so that the latex will drop into it.

Later in the day he makes a second round to collect the latex which has dripped into the cups. If he is working alone, he brings the latex back to his hut. If several laborers are working for a company, they carry the latex to some central place. Here two posts are fixed in the ground about six feet apart, and a pole placed horizontally on the posts is so arranged that it may be turned easily. Under the pole the men build a fire of palm nuts which burn with a thick smoke. Over the fire they place a metal cone with a hole in the small end through which the smoke passes.

These preparations made, the workers pour some latex on the pole just above the cone, turning the pole round and round as they pour. The heat and the smoke harden the latex and darken it. More latex is added from time to time, until a large ball, or biscuit, weighing many pounds is formed.

The laborer who works alone prepares his rubber a little differently. He uses a smaller pole, one end of which is paddle-shaped. He dips this end into his pail of latex and turns it back and forth over the smoke of his little fire. The balls which he makes are small, usually weighing from four to eight pounds.¹

The efficiency of the plantation method becomes evident when it is noted that in the East Indies one hundred trees may be planted to an acre, sixty thousand or more to the square mile, and a single attendant may care for from five hundred to six hundred trees.

c. **Cacao**: Chocolate and cocoa are made from the fruit of the cacao tree. This tree grows well throughout the torrid zone. It needs considerable rain, a rich soil, and a warm temperature averaging from seventy degrees to ninety degrees the year around.

The big, dark-colored cacao pods grow close to the trunks and branches of the trees. Workmen cut off the pods with sharp knives. In order to reach the higher pods, they use knives fastened to poles.¹

d. **Vegetable Ivory**: Another important product of the Amazon region is vegetable ivory, produced from the kernel of the Tagua palm nut. It is extensively used in the manufacture of buttons, umbrella handles, and toilet articles.

e. **Babassu Nut Oil**: The oil of the Babassu nut is used in the manufacture of fine toilet soaps and perfumes.

f. **Lumber**: In the Amazon region are

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¹ Nellie B. Allen, *op. cit.*, pp. 67-70
found vast quantities of splendid dyewoods and hardwoods. There is an almost endless variety of literally hundreds of species.

E. The Indians

1. Characteristics: The inhabitants of the Amazon interior are chiefly of Indian blood. There are many types of Indians. Most are gentle and inoffensive; a few are bloodthirsty man-killers. In general, they are peaceable and kindhearted, and usually indolent. They seldom work until they have to. Travellers among them are generally well received, often helped, and seldom injured.

2. Weapons: Along the main streams of the Amazon River and its principal tributaries are Indians who use poisoned arrows that they shoot through blow-pipes with deadly accuracy. These weapons are usually used in hunting but there have been times when they were turned against strangers.

South of the Amazon territory, the Indians do not poison their weapons. Sometimes arrows with three or four barbs are used, and these are deadly because they are so difficult to withdraw from a wound. Frequently Indians use clubs, occasionally lances.

3. Families: Children are not very numerous. From two to five children are the rule, and the death rate is very high. In all likelihood, the Indian
population is about stationary.

4. **Homes**: The Indian homes are square or rectangular huts with roofs made of thatch. The walls are made of reeds or boughs, and enclose one room which is occupied by the entire family.

5. **Indian Food**: Indian food consists largely of meat, either game or domesticated. Wild rice, bananas, manioc root and a few vegetables are eaten. There are fields of manioc for it is one of the chief foods of the natives in the warm regions. The thick roots look somewhat like sweet potatoes. The people boil them for food or grind them into a coarse flour that they use in making cakes which serve in the place of bread. It is from a variety of manioc that the tapioca which we use in puddings is made. On the higher ground, the Indians have yams, pumpkins, beans, corn, and leafy vegetables, but in the lower regions these are usually lacking.

6. **The Insect Danger**: On the land or near the river banks, mosquitoes and gnats become a torment. There are ticks and spiders of many varieties and sizes. Night flying beetles are among the worst pests of the tropics, while the wood-eating termite causes untold damage.¹

7. Reptile, Animal and Bird Life: Snakes are prevalent all through the tropical interior but not in such great numbers as we have been led to believe. Unless they are cornered and attacked or stepped upon, most snakes will move quietly away from man.

The Brazilian government has developed a snake farm in the city of Sao Paulo. Serums prepared here and distributed throughout the interior have saved many lives.

Bird life flourishes throughout the region. Geese, ducks, gulls, wild fowl, and parrots abound in the forest. During the day there is a deep stillness. Toward evening, life begins to awaken: birds, bats, insects, monkeys, and jungle cats become alert and noisy. Egrets are common in many places. The Amazon jungle is the home of a wild pig called a peca, and of several varieties of wild cats like the jaguar. The monkeys of the Amazon forest are small.

All Brazilian waters teem with life. Alligators sometimes measuring ten feet in length infest practically every river in the interior. The most dangerous fish in South America is the flesh-eating piranha. The rivers abound with edible fish whose names are utterly unknown to North Americans. The "dourado," a freshwater salmon three feet long, is the favorite.¹

¹ Fred A. Carlson, *op. cit.*, pp. 140-142.
8. **Fruits:**

   a. **Cajuada**--this fruit is used to make a refreshing drink. From this fruit is obtained the cashew nut.

   b. **Mamao or papaya**--this fruit is shaped something like a pear and weighs from two to ten pounds. The taste is a cross between a peach and cantaloupe.

   c. **Jacaje**--shaped like a long watermelon and attains a weight of ten to twenty pounds. The fruit is sweet and delicious.

   d. **Mangoe**--shape of an egg and weight of a large pear.

   e. **Banana**--grows in wild profusion throughout the tropics. There are many varieties. The popular names are gold banana, the size of a man's thumb; apple banana, with a flavor suggestive of a winesap apple; banana Sal Thome, used for cooking; and silver banana, resembling those sold in the United States. There is no fruit more easily grown, more inexpensive, and more abundant in food values.

   f. **Other fruits**--Oranges are likewise found everywhere below the frost line in a host of varieties. The first naval orange tree planted in California came from Brazil. Grapefruit, unknown in Brazil until a few years ago, is being raised today.
The original habitat of the pineapple is Brazil. Lemons and limes are found nearly everywhere. Peaches, pears, apples, and watermelons have been recently introduced from the United States and Europe, and they are rapidly finding a place on Brazilian tables.

X. Brazilian Music

The music of Brazil is perhaps the most varied and the richest of the Hemisphere. Villa-Lobos, the great Brazilian composer, has done wonders in making his country the music center of the Latin American world. Most Brazilian dances, being of Negro origin, have a collective characteristic and are performed in circles. The charm and individuality of the Brazilian dances are enhanced by the percussion instruments which accompany the performer's contortions as well as by the rhythm and the expressive values of the singing with which the dance is enlivened. Instruments that are used are gourd rattles, maracas, pipes, castanets, marimbas, drums, slap sticks, harp, guitar, and saxophone.

XI. Holidays

Official holidays in Brazil are: January first Universal Brotherhood; April twenty-first Tiradentes' Day. Tiradentes means "tooth-puller." This dentist, whose real name was Alferes de Cavallaria Joaquim
Jose de Silva Xavier, was the first martyr in the cause of Brazilian freedom. May the first is celebrated as Labor Day; September seventh is Independence Day; and November fifteenth is the Proclamation of the Republic. The national dates are May third, Discovery of Brazil; and October twelfth Discovery of America. The following church holidays are observed: January sixth, Ash Wednesday, Good Friday, Easter Sunday, May twenty-sixth, June twenty-fourth, June twenty-ninth, August fifteenth, November first, and December eighth. The great social festival "Carnaval Carioca" takes place each year during the three days preceding Lent in Rio de Janeiro. This masquerade celebration is said to have begun in 1641. Elaborate decorations are created for the ballrooms and floats; a new supply of songs is produced for the occasion and people of all ages dressed in costume revel in the streets, singing, dancing, and throwing confetti.

XII. The Brazilian Flag

The Brazilian national colors are green and yellow. The flag consists of a green rectangle (twice as long as it is wide) whose center is occupied by a rhombus, or diamond-shaped figure, yellow in color. The green represents the vegetable kingdom and the yellow the mineral. Within the diamond-shaped figure is found a blue sphere, with an idealized representation of the heavens at the capital of Brazil when the constellation of the Southern Cross is at the meridian. Besides the five white stars of this constellation, there are sixteen others, the whole representing
the twenty states of the Brazilian Federal Union and the city of Rio de Janeiro. The course of the terrestrial orbit is marked in the sphere by a white band, on which is inscribed the legend "Order and Progress." The blue and white in the sphere recall the colors of monarchical Portugal and colonial Brazil. The sphere itself recalls the Brazilian Imperial flag, which contained the armillary sphere. The constellation of the Southern Cross represents the discovery of Brazil and the faith of the early navigators and pioneers. The twenty-one stars symbolize civic independence and cooperation. In brief, the Brazilian flag is intended to bring to mind the past, the present, and the future of the country.

Chapter V

The Procedure Used in Teaching

Fellow Americans
The Procedure Used in Teaching

Fellow Americans

Introduction

The primary objective of the fourth grade course of study in social studies is to acquaint the children with the different types of environments of the world and to show the effect of the climate upon the lives of the people, the animals, and the plants. Before beginning this main theme of the year, the children are taught how to tell directions. Their "imaginary trip" begins in Louisville. Various ways of traveling to New York City are discussed. At New York they board an ocean liner bound for the hot-wet land that surrounds the Amazon River.

I. The Procedure

When the discussion of the outstanding points of interest about New York City was over, the writer posted a number of attractive book covers about Brazil. Underneath the covers questions were written to arouse the interest of the class. Children always notice anything new that is on display so immediately they began requesting the books that belonged to the jackets and asking questions about the unfamiliar names and places. When one of the children heard
that Brazil was the name of one of the books she said, "We have some Brazil nuts at home. I'll bring some to school tomorrow." Other children started asking questions about a series of pictures that had been put up. One of the pictures showed the bay of Rio, another a man smoking rubber, a third showed a coffee plantation, while the fourth one depicted an Indian village. The writer suggested that their questions be written on the blackboard so that they could be copied and preserved for future reference. The following list of questions were asked by the children:

1. What kind of people live in Brazil?
2. What kind of houses do they live in?
3. What kind of clothes do they wear?
4. What language do they speak?
5. What animals live in Brazil?
6. What grows in Brazil?
7. What foods do they eat?
8. How do they eat?
9. How do they celebrate holidays?
10. What important rivers are in Brazil?
11. How do the people travel?
12. What important cities are in Brazil?
13. How do the people earn a living?
14. What do we buy from Brazil?
15. What do we sell to Brazil?

Since the list was quite long some of the questions were grouped together so that the class could be divided into committees to find the answers. The idea of working on a committee was new to these children and enthusiasm increased. The next day the questions were grouped in the following way:
I. What kind of people live in Brazil? What language do they speak?

II. What animals live in Brazil? What grows in Brazil? What foods do they eat? How do they eat?

III. What kind of houses do they live in? What kind of clothes do they wear? How do they celebrate holidays?

IV. What important rivers are in Brazil? What important cities are in Brazil? How do the people travel?

V. How do the people earn a living? What do we buy from Brazil? What do we sell to Brazil?

The children selected the group with which they wanted to work. Since there were to be five groups this allowed about six or seven members to each group. Each group needed a leader. The class discussed the qualities a good chairman should possess and the duties he or she was expected to perform.

The following day each group was given the opportunity to meet together and choose a chairman. After the committees were established, activities in which the class could engage during the progress of the topic under consideration were listed. The list thus compiled was:

1. Read stories about Brazil.
2. Go to the library and look up information.
3. Collect articles and pictures for an exhibit.
4. Listen to Brazilian music.
5. Learn Brazilian songs.
6. Play Brazilian games.
7. Have a program.
8. Write invitations to other classes for the program.
9. Draw pictures about Brazil.
10. Have a movie.

In the meantime a number of books that contained material on Brazil and the Amazon River appeared on shelves and tables. Some of the books were supplementary geographies and others were stories about the country. A few of the children went to the library and secured additional books and pictures. The next step was to list the books that contained information on the topic and the pages where it could be found. This was a profitable language lesson since the children learned to use the "Table of Contents" and "Index" of each book as well as the correct way to write titles. The following books and page numbers were listed on a chart:

<table>
<thead>
<tr>
<th>Stories About Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distant Doorways, 35-61; 10-11.</td>
</tr>
<tr>
<td>2. Brazil in Story and Pictures</td>
</tr>
<tr>
<td>4. Here and Far Away, 260-262; 314-322.</td>
</tr>
<tr>
<td>5. Maria Rosa</td>
</tr>
<tr>
<td>6. Green and Gold</td>
</tr>
<tr>
<td>7. Brazil, Giant to the South</td>
</tr>
<tr>
<td>8. Presents for Lupe</td>
</tr>
<tr>
<td>9. Two Children of Brazil</td>
</tr>
<tr>
<td>10. Amazon Adventures of Two Children</td>
</tr>
<tr>
<td>11. The Blue Butterfly Goes to South America</td>
</tr>
<tr>
<td>12. Donald Duck Sees South America</td>
</tr>
</tbody>
</table>
Geographies About Brazil

2. The Earth and Its People, 421-430.
3. How and Where We Live, 38-40; 43-45; 103-106; 173-176.
4. People of Other Lands, 15-20.
5. Our Neighbors Near and Far, 44-60.

As a basis for class discussions the children read their state textbook, Living in Different Lands by W.R. McConnell. While reading lessons were being taught, the children had the opportunity to work on their committee's questions. The picture that follows shows a group of children working on their problems. After several days of independent study, each group met with their teacher in order to make certain they were finding the answers to their questions. Before reporting to the class, each group met with their teacher again. This time each child told what his contribution was going to be. A few children needed additional individual help. This was furnished either by another member of the group or by the teacher.

The day that each group was to report to the class, the members met out in the hall to discuss among themselves what they were going to tell the class. Only one group reported each day. Thus the audience did not become tired. Every child had some contribution to make. Of course some of the reports were quite meagre and none of them were very long but for a
group of children just entering the fourth grade working more independently than ever before in their school experience, the results were quite satisfying.

Much of the other work of the class centered about Brazil. A set of readers, *Distant Doorways*, by Nila Banton Smith, were borrowed from another room. The stories about the Amazon River were used as reading lessons. The procedure used for these lessons is described on pages forty-eight through fifty. The class kept a list of the new words learned, wrote stories about an imaginary visit to Brazil, and a number of children read stories and books about the country. They prepared reports which they delivered to the class. They learned to spell the words listed on page fifty-two because these words became a vital part of their oral and written vocabulary. They enjoyed learning the two Brazilian songs that appear on pages fifty-three and fifty-four and were eager to draw pictures of their imaginary experiences.

The children were quite interested in the growth of rubber and how it is processed for shipment. Besides reading widely about the subject, the class was shown a film entitled "Rubber" which may be obtained from the Audio-Visual Aids Department of the Louisville Board of Education. This film taught how rubber trees are tapped and how the rubber is smoked
in order to prepare it for shipment.

Toward the end of the unit the film strip entitled "Our Pan American Neighbors," which also may be obtained from the Audio-Visual Aids Department of the Louisville Board of Education, was shown. This film strip compared various aspects of Latin American life with corresponding ones in the United States. It also showed how coffee is picked, how rubber trees are tapped, and how raw rubber is made into balls for shipment. A more detailed account of the procedure used with the motion picture film may be found on pages fifty-nine through sixty-two and for the film strip on pages sixty-eight through seventy.

II. The Culminating Activity

During the planning period of the unit, the class welcomed the suggestion to have a program. Children like for others to see what they are learning. During the progress of the unit, proposals were made concerning some information, song, or story that could be used as a part of the program.

As the study of the unit drew to a close the class arranged the program, selected the songs, wrote the parts that explained the pictures, and chose the children whose pictures were to be used and would therefore have a speaking part.
It was possible to invite seven other classes and the Principal to see the program. The class composed an invitation which was copied by the eight people who had received a "one" in penmanship on the preceding report card.

As many children as possible participated in the program. The entire class sang the songs. Another child held each picture while it was being explained to the audience. Each child spoke his part over the microphone. The picture that follows this page shows one of the children announcing a song. The other children are holding pictures that they drew that were explained to the audience. In order to secure a clear picture, the photographer recommended that only a small group of the children who explained pictures be included in the photograph.

The Program

Announcer: We have been studying about Brazil. We are going to tell you some of the things we have learned. Our program will begin with a song named "Stories of Travel."

(class sings)

Announcer: We will now sing "If I Had Wings."

(The class decided that only the second verse of this song was appropriate.)

First picture: (map of Brazil) Brazil is a country in South America. It covers almost half of the continent. Brazil is a larger country than the United States.
Second picture: Rio de Janeiro is the capital of Brazil. It is the second largest city in South America and one of the prettiest cities in the world.

Third picture: This picture shows an ocean liner going up the Amazon River. The Amazon River is so wide and deep that ocean liners can go farther up it than any other river in the world.

Fourth picture: Alligators and piranha fish live in the Amazon River.

Fifth picture: This Indian is going fishing with a bow and arrow. The piranha fish have such sharp teeth that they bite the line in two. The Indians attach a string to the arrow and after the fish is shot pull it in.

Sixth picture: The Indians who live along the Amazon River live in houses made of sticks and mud with roofs of palm leaves.

Seventh picture: (painted by three children and explained by them)

First child: The climate around the Amazon River is hot and wet. For this reason the Indians who live there wear very few clothes.

Second child: The Indians make bread out of the root of the manioc plant. The Indian women grate the roots, squeeze out the poisonous juice, and bake the bread in the form of pancakes.

Third child: Brazil nuts grow in the jungle along the Amazon River. They grow on tall trees in hard round shells that are about as big as a grapefruit. There are between fifteen and thirty nuts in each pod.

Eighth picture: The Indians who live along the Amazon River travel in dugout canoes. They use the trunks of large trees. The center is either chopped or burned out into the proper shape.

Ninth picture: Coffee grows on trees in Brazil. It looks like dark red cherries. The seed is the coffee bean. Most of the coffee we buy comes from Brazil.
Tenth picture: Cocoa, from which we make chocolate, grows on a cacao tree. The cacao pods grow close to the trunk and branches of the tree.

Eleventh picture: This picture shows a man tapping a rubber tree. He cuts the trunk of the rubber tree with a sharp knife. The white liquid that drips out of the tree into a little cup is called latex. This is the liquid rubber.

Twelfth picture: After the rubber has been gathered, it is smoked over a fire to make it hard. It is sometimes shipped to the United States in large rubber balls.

Thirteenth picture: Many wild animals live in Brazil. The jaguar looks like a leopard. Long ago Brazil was named "The Land of Parrots."

Announcer: We will now have three book reports.

First child: The name of my book is Presents for Lupe. The author is Dorothy Lathrop.

Lupe was a little red squirrel from South America. She lived in a pet store window until John and Joan persuaded their mother to buy her for them.

Lupe was no happier at her new home than she had been in the window of the store. The children tried to make her happy by giving her Brazil nuts, an Indian doll, and other gifts from her old home but Lupe continued to feel homesick.

Finally someone gave Lupe a big gourd. Lupe began keeping house in the gourd. After she had this home, she was no longer homesick.

Second child: The name of my book is Green and Gold. The author is Berta and Elmer Hader.

From Green to Gold
For young and old
This is the story of bananas.

The banana is one of our oldest foods. It has been mentioned in writing left by the people of China over three thousand years ago. In order to move the plant the people learned to dry the roots and take them with them as they traveled from place to place. They found the
plant would grow best in rich soil and in a warm, moist climate. The people also learned to save only the best fruit roots so the bananas grew better and sweeter.

A sea captain brought some bananas to Boston from South America. The people liked them and asked for more. A banana company was formed that transported them from South America to Boston. The children liked the fruit so much that they would hang them on their Christmas trees. The banana tree is very tall. The banana bunch does not grow as we see them hanging in the grocery store. The bunch grows up instead of down.

Third child: The name of my book is Maria Rosa. The author is Vera Kelsey.

Maria Rosa was a little Brazilian girl. She was unhappy because she wanted to go with her mother to the carnival. Her friends tried to cheer her up by taking her to the ball game, by taking her to the zoo, and by having a parade. But Maria Rosa still was not happy.

One day she told one of her little friends that she was going to the carnival. She became a queen and she met the carnival king. Suddenly Maria Rosa woke up and discovered it was all a lovely dream.

Announcer: We will now sing two Brazilian songs. The first one is "Come Here, Vitu." It is a lively and popular game song of Brazil.

(class sings)

Announcer: The next song is "Whirling Around." It is a game song that is popular with the children of Brazil.

(class sings)

Announcer: This is the end of our program.
The photographer made the pictures the afternoon of the program. The following Monday the pictures appeared on the bulletin board. The children were delighted with the results. Someone suggested a letter be written to the photographer. The following letter was composed by the class. The children also selected someone to copy the letter and another class member to address the envelope.

Roosevelt School
Louisville, Kentucky
December 10, 1946.

Dear Mr. ____________________________,

We want to thank you for taking our pictures Friday. The whole class thinks they are very good. We have them up in our classroom so that everyone can see them.

We appreciate the patience and interest you took to make our pictures.

Sincerely yours,
4-B Class.
Chapter VI

Results of Personal Interviews

and

Evaluation of the Unit
Results of Personal Interviews
and
Evaluation of the Unit

Introduction

Since the primary objective of this thesis, as stated in Chapter I, is to "aid the fourth grade teachers of Louisville, Kentucky," it was necessary to secure the opinion of others concerning what materials they thought should be presented to a fourth grade class and to find out whether anything had been omitted that would be of help. The writer talked with the Director of Curriculum and Research, an Intermediate grade Supervisor, an elementary Principal, a member of the Social Studies Curriculum Committee, and three fourth grade teachers. The check list that follows was used to guide the discussions:

Questions:
Do you think the following subject matter should be taught to a fourth grade class?

1. The reasons for friendliness between the United States and Brazil.
   a. Brazilian exports to the United States.
   b. Brazilian imports from the United States.
   c. The geographic position.
   d. Pan American ideals of democracy and peace.
e. Our historic relationship in the past.
f. Their aid during the war.

2. Should the chief industries and products of Brazil be studied?
   a. Agricultural products
   b. Forest products
   c. Mineral products
   d. Manufactured products.

3. Should these geographical characteristics be included?
   a. Location
   b. Size
   c. Regions
   d. Climate.

4. Should the children be taught the various types of people that comprise the population such as the whites, mestizos, negroes, mulattoes, zambos, and Indians?

5. Do you think a knowledge of the capital and other large important cities should be noted?

6. Do you think a part of the unit should concern air, water, rail, and other means of transportation?

7. Should the important events in the history of Brazil receive attention?

8. Should the children know something of the progress that has been made in education?
9. Should the following be taught concerning the Amazon River region?

a. The size of the river.
b. The source of the river.
c. The important tributaries.
d. The large cities along its shore. (Belem and Manaus)
e. The denseness of the jungle.
f. The climate.
g. The weapons, homes, food, and other facts concerning the lives of the Indians.
h. The products of economic importance that grow in the jungle: Brazil nuts, rubber, cacao, vegetable ivory, lumber.
i. The dangers of the jungle: diseases, wild animals, reptiles, insects, wild Indian tribes, etc.

10. Would you like material concerning the language, customs, institutions, music, art, literature, games, etc.?

11. Would you like a list of audio-visual aids to instruction that are available and where they may be obtained?

a. Flat pictures
b. Films
c. Film strips.
12. Would suggestions of possible approaches to the study of the unit be helpful?

13. Would methods of correlation of this unit with other subjects aid in teaching the unit?

14. Do you think there should be a list of possible activities?

15. Do you think teachers would find it helpful if several types of culminating activities were included?

16. Would you find some detailed source material intended for use by the teacher of value?

17. Do you have any other suggestions to make?

I. Results of the Personal Interviews

A. The Director of Curriculum and Research

The first interview was with the Director of Curriculum and Research. He answered "yes" to all the questions on the questionnaire and suggested that pamphlets and leaflets should not be omitted from the bibliography. He also suggested that the particular place in the unit when a certain audio-visual aid or book would be the most beneficial should be marked with some notation. Correlation with other school subjects should be a natural outgrowth. No effort should be made to correlate just for the sake of correlation. There should be a period during the day that is devoted to the study of Brazil and any
subject that is needed to make the study more real should be utilized at that time. If correlation is forced, children will become bored with the study.

The writer agrees with his statement and found that others expressed a similar viewpoint that no teacher should attempt to teach all the information in the unit to any one class. The unit, however, should be so enriched that teachers may select the information most beneficial to her particular group. Some classes are able to absorb more information and engage in more and varied activities than others.

B. The Intermediate Grade Supervisor

The Supervisor stressed the fact that the teacher must guard against telling too much. The lecture method should not be used. Since there is little written on the history of Brazil that is on the children's level the teacher may recast the stories so that the children can read them themselves. She said that in teaching the Brazilian exports to the United States and the Brazilian imports from the United States the interdependence of the two countries should be clear to the children. The climate and how it affects the lives of the people, the agricultural products, forest products, and goods that are manufactured in the factories are of primary concern. Names of cities may be mentioned but no effort should
be made to force the children to memorize the names. The children may receive a conception of the beauty of Brazilian cities by means of pictures. The Supervisor suggested that it would be helpful to compile a geographical vocabulary and a list of geographical concepts since it is at this age that children should be taught to think geographically.

C. The Member of the Social Studies Curriculum Committee

This teacher thought that emphasis should be placed on why people live as they do and how the people of hot-wet lands are like us and in what ways they are different from us and why they are different from us. Any detailed study should be left for the fifth and sixth grades. No history should be taught except to help the children to understand why the Portuguese language is spoken in Brazil. She thought it very important that the children be taught the various types of people that comprise the population in order that comparisons may be drawn with the races that live here. There is little or no racial discrimination among the Brazilians.

D. The Elementary Principal

The Elementary Principal thought that the similarities of the United States of America and the United States of Brazil should be stressed. He also
thought that the racial harmony enjoyed in Brazil should be emphasized. Children should not be asked to memorize names of cities. Some of the historical highlights may be given to the children by the teacher. He suggested that a list of phonograph records be included in the list of audio-visual aids.

E. The Teachers

The teachers interviewed felt that in the fourth grade a foundation should be laid to prepare the children for the higher grades. They felt that the types of climates should be stressed and that it is unnecessary to go too deeply into the other aspects of the surrounding territory. The human response to environment should constantly be kept uppermost in mind. These teachers agreed that the teaching of "Pan American ideals of democracy and peace" was too far advanced for fourth grade children. They also thought that children of this age would not be interested in studying "Our historic relationship in the past." Agricultural products should be taught in connection with climate in order to build up the geographical concept that certain things may be raised in certain climates. It appears that everyone questioned thought that the study of Brazil offered a very good opportunity to show that races can live together in harmony. Racial discrimination does not
present the problem in Brazil that it does here. It was also agreed that since names of cities are easily forgotten, children should only know where the cities are and why they're located in certain places. Mention of the methods of transportation could hardly be avoided and certainly should be included.

The teachers also agreed that the history of Brazil should not be dwelled upon. One teacher, however, thought that only enough historical background should be established to help the children understand why the Portuguese language is spoken in Brazil and why certain customs are observed.

There was some disagreement on the eighth question -- "Should the children know something of the progress that has been made in education?" One of the teachers said that children are always interested in the schools of other children while the other teachers thought this question was unimportant. These teachers thought that it might be worthwhile to mention that the Indian children who live in the jungle are taught what they need to know to live in their particular environment, while in the cities there are schools.

The study of the region around the Amazon River is always of interest to the children and all the teachers thought this part of the unit should be
emphasized. One of the teachers, however, stated that it should not be studied exclusive of the other factors that make up the country. The teachers agreed that material concerning the language, customs, institutions, music, art, literature, games, etc.; lists of audio-visual aids to instruction; suggestions of possible approaches to the study of the unit; methods of correlating the unit with other subject matter; lists of possible activities; several types of culminating activities; and detailed source material intended for use by the teacher would definitely be found helpful.

II. Evaluation of the Unit by a Graduate School Curriculum Construction Class at the University of Louisville.

Apparently the unit met the approval of this class. On the whole the students agreed that it was well-organized, interesting, comprehensive, and complete. The objectives in one case were thought to be "too broad" and in another case "over-ambitious." Another student stated "The subject is well chosen because it is interesting and practical, aiming toward goals of good citizenship internationally as well as locally. Teaching groups to live together peacefully as good neighbors is a principle that strengthens peace and security in the world and will lead to
better citizenship within the community." Another student thinking in the same direction asked the following question: "Could teachers inculcate youngsters with the idea that fundamentally all people are alike and that it is only psychologically that we are different? We must do all our teaching with the primary objective of making citizens. Teaching individuals to think how we would feel and act if we were in the other persons position and had his heritage and environment." This same student also wrote, "More time should be given to why these people are as they are and how they feel about their northern neighbors."

Another of the students offered two suggestions for additional study. One suggestion was to mention the city of Natal as being a jumping-off place for our planes to Africa. The men of our air force brought back favorable reports concerning both the country and the people. The other suggestion was to tell the children the story of the Brazilian flag.

III. Evaluation of the Unit by the Writer

The writer is convinced that the unit method of instruction is a very desirable mode of teaching. Children are more interested when they can participate in the activities of the class. The slow learners as
well as the brighter pupils benefit since each pupil has the opportunity to do as much or as little as his ability allows. They have the chance to read widely thus securing the viewpoints of more than one author. Each child has the opportunity to share his information with his classmates. In order to do this effectively it is necessary for him to organize his material in an interesting way. This method encourages the spirit of cooperation. Often a child may be heard saying to a fellow classmate, "This book has a good part about your topic." Through committee activities, pupils learn to assume responsibility since everyone is expected to make some contribution. The unit is long--too long to teach to any one class. The writer devoted approximately eight weeks to the unit and there remained enough material and activities for possibly another eight weeks. The children's interest did not lag but other units of equal importance should not be neglected. The regions of Brazil, some of the large cities, the history of the country, progress that has been made in education, and the study of some of the products of the jungle were omitted.

The unit that has been presented may essentially be classified as a subject-matter unit. Yet it does not embrace some of the disadvantages associated with this type of unit. The subject matter was planned in
advance however under the guidance of the teacher the children set up their own problems and questions which were used as a basis for study. Through correlation with other school subjects the children had the opportunity to engage in many and varied experiences. Although books were relied upon as a major resource for teaching and learning, a variety of audio-visual teaching aids were utilized.

The evaluation of the effectiveness of the unit did not depend upon the results of a written test administered at the end of the unit but rather upon evidences of pupil growth such as the ability to work independently or to cooperate with a group, a desire to do further reading on the subject, and the ability to apply learning and skills in other situations.

There were no formal recitations but instead many informal discussions. The time to be devoted to the unit was not limited to a certain number of days or weeks. Thus the unit is neither a subject-matter unit nor an experience unit as these two types are generally defined but rather a combination of these two types. It may best be described as a functional subject-matter unit. In this way the pupils' needs and interests are met as well as the requirements of the social studies curriculum of the Louisville Public School System.
This was the first experience these children had with this type of study. They have studied several units since this first attempt and are becoming more skilled in looking up information, organizing the material, and reporting to the class.

Some remarks which children have made indicate that they were interested in the unit and that they talked about it at home. One child was absent about two weeks because of a tonsillectomy. His mother said he was quite disturbed because he "was missing part of Brazil." Another child remarked after the unit was over that he had told his mother, "I'm going to Brazil when I get big." Recently while working on another unit a child was overheard to remark, "I wish we could study about the jungle again."

The children were not only interested in the subject matter but they also liked the method. When the class returned to the room after the program one of the little girls remarked, "Oh, Miss Alpiger, let's start studying another unit right away." But that, dear reader, could be the beginning of another thesis.
Bibliography
References on the Unit Method of Teaching

Books:


Encyclopedia:


Periodicals:

1. Hurd, Archer Willis, "What Do You Mean by the Unit-Problem, Project Plan of Instruction?" School and Society, Nov. 10, 1945, pp. 300-301.


Teacher's Bibliography on Brazil

Books:


Pamphlets:


Leaflets:


2. Principal Products of Brazil, Brazilian Government Trade Bureau, 551 Fifth Avenue, New York 17, N.Y., June, 1943.

Music Book:

Children's Bibliography on Brazil

Fiction:


Joa and Tatu find adventure up the Amazon River with their mother and father. Part of their journey is by plane and part by boat. They visit cities in Brazil before starting up the Amazon. Their trip by boat gives them the chance to see quaint Indian villages, curious animals, and the mysterious jungle.


Two children visit Rio de Janeiro at the time of the carnival. The book also describes a Brazilian child's party.

3. Duarte, Margarida Estrela Bandeira, The Legend of the Palm Tree, ill. by Paula Werneck, New York: Grosset and Dunlap, 1940.

This story tell how an entire tribe of Indians died because of lack of rain. One family that remained set forth in search of happiness. After much traveling they came upon a single palm tree growing in the desert. This tree was supposed to be an Indian woman named Carnauba, who had died only to be changed by the moon into
a palm tree to save the stricken.

By following Carnauba's directions the little Indian boy learned how to secure food, drink, medicine, clothing, and shelter from the coconut palm. By planting the seeds, palm trees stand swaying where once the desert had been. Thus the Indians of Brazil call the coconut palm the good Tree of Providence.


A collection of eighteen stories concerning typical animals of Brazil.


The story of bananas.


An interesting account of Brazil especially suited for slow readers.


This book has many good photographs of outstanding points of interest in Brazil.


Patty and Petey live in an orphan's home until Uncle Nick, who lives in South America,
sends for them. Patty takes her beloved blue framed butterfly, that Uncle Nick had previously sent, on the long journey.

Children will enjoy reading about Patty and Petey's ocean voyage to South America, as well as their experiences in becoming adjusted to their new environment.


Maria Rosa, aged six, longed to go to the annual three-day carnival held in Rio de Janeiro. Nothing could make her forget it. Flying kites, a football game, a giant anteater, a circus—all had failed to keep Maria from thinking about the carnival.

Imagine her delight when she becomes a queen, but child-like falls asleep before it is over.


Lupe was a little red squirrel from South America. Her owners, John and Joan, brought her gifts from her native land to keep her happy and satisfied. Lupe never seemed contented until someone gave her a gourd. Lupe set up housekeeping in the gourd and considered her life complete.

The cartoon character that children love visits various places in South America.


A chapter is devoted to each of the ten republics, and the three colonies in Guiana. The book indicates the variety in climate and topography, and the wealth of resources and products of the continent.


Dohobare, a wild Caraja Indian boy, lives in the interior of Brazil. He lives with his father, mother, and little sister in a small house made of poles and covered with palm leaves.

Dohobare had never been sick. Measles, whooping cough, and colds are white man's diseases and no one ever brought them into the jungle.

Dohobare wore no clothes and he had never gone to school.

Dohobare and his family were constantly on the watch for dangers--alligators, biting fish, insects, animals, snakes, or other Indians.

This book gives a vivid description of the customs, habits, food, and ways of living of the
Indians who live deep in the jungle of South America.


This book is not concerned directly with Brazil but it gives interesting accounts of some of the products that grow there.


An easy to read book about the Brazilian jungle. Chiquita, a pet monkey, has several narrow escapes in the jungle. In the end he saves the lives of the family.

**Geographies:**


Pamphlets:


Readers:


Music Books:


Appendix

Visual Aids

Filmstrip: Audio-Visual Aid Department of the Louisville Board of Education
F - 608 - "Our Pan American Neighbors"

This filmstrip presents some of the beautiful cities of Latin America. It illustrates such crops as tobacco, coffee, sugar, rubber, oil, and henequen. It points out that air transportation has brought us closer to our Pan American neighbors.

Movie: Audio-Visual Aid Department of the Louisville Board of Education
Silent #605 - "Rubber"

This film shows the process through which rubber goes from the time the trees are tapped until it arrives in the United States where it is made into tires, tennis shoes, and fountain pens.
Motion Pictures That May Be Obtained From
Indiana University Extension Division

"Amazon Awakens, The": 38 minutes, sound, color
GSC - 135 -------50¢
Tells the fascinating story of the Amazon River Basin, its history, its industrial progress, its richness of natural resources, and the possibilities for its future.

"Belo Horizonte": 17 minutes, sound, GS-132 --50¢
The story of Brazil's "planned city with a plan." Belo Horizonte, a city of more than 200,000 inhabitants, is unique in that, less than fifty years ago, before a single house or street was built, complete plans were drawn up. Now one of the most progressive and modern cities in the world, located in a section rich in mineral resources.

"Brazil": 10 minutes, sound, color. GSC-43 ----50¢
Industrial Brazil (Rio de Janeiro, Santos, and Sao Paulo) and some of the Amazonian lowlands country. Compares life in the busy metropolises with that in the Brazilian wilds.

"Brazil (People of the Plantations)" : 10 minutes, sound, GS-33 -----------$1.50
Provides a geographical orientation to Brazil's vast extent, its regional contrasts, and its coast cities, before concentrating on the coffee-growing area. A land-owner, an agent, and a family of pickers on a large coffee plantation, with its varied crops, its mixture of immigrant peoples, its educational and religious activities. Film personnel and incorporated dialogue reveal Brazil as a predominantly Portuguese country.

"Coffee from Brazil to You": 20 minutes, sound IS-4
-------------$1.25
The story of coffee: clearing and preparation of the soil; planting the seed; transplanting; eight-inch plants and mature trees; coffee picking, washing, drying, hulling, grading, sizing, shipment by rail, testing, selling, shipment by water, roasting, and packaging. The locale is Sao Paulo and Santos.
"Rio the Magnificent": 7 minutes, sound, KS-51 -- $1.50

Scenes of the beautiful bay, including Sugar Loaf Rock and the beaches. Famous buildings, sidewalk mosaics, and the marketplace. The unusual butterfly industry.

"Sao Paulo": 14 minutes, sound, GS-133 ----------- 50¢

An interesting study of progress in Brazil's second largest city, one of the fastest growing cities in the world. Here we see a cross section of modern South America with its busy industry, its growing commerce, its beauty of art and architecture, and its up-to-date trends in education.

"Southern Brazil": 20 minutes, sound, GS-154 ----- 50¢

Shows Brazil's march of progress as exemplified in its southernmost area, the states of Parana, Santa Cantarina, and Rio Grande di Sul. Pictures Brazil's great cattle country and its granary.

"Touring Brazil": 9 minutes, sound, KS-50 -------- $1.50

Random scenes of: Rio de Janeiro, the harbor, Sugar Loaf Mountain, stone statue of Christ on the mountain top, mosaic pavements, statues and monuments of the city, street vendors, trees and birds in the Botanical Gardens, and Carnival procession and floats; Penlise, shrine and religious procession; and scenes of natives tapping wild rubber trees, collecting sap, and curing it over a fire; of drilling, loading, and crushing ore in a gold mine and pouring molten gold into forms.
Motion Pictures That May Be Obtained From
The University of Kentucky

#3180 - "The Amazon Awakens" color, four reels --- 50¢

This film tells the story of the Amazon River Basin, its history, industrial progress, richness of natural resources and the possibilities for its future.

#367 - "Belo Horizonte" two reels ---------------- 50¢

Belo Horizonte is the progressively modern, planned city which has been built within the last half century as the capital of the Brazilian State, Minas Geraes. With its beautiful government buildings, residential section, avenues and parks, and planned industrial section, the city serves as the hub of a vast mining area with such resources as quartz, mica, one-fourth of the world's iron reserve, and precious stones.

#3065 - "Brazil" one reel ---------------------- $1.50

This subject provides a geographical orientation to Brazil's vast extent, its regional contrasts and coast cities, before concentrating on the coffee-growing area. A land owner, agent, and family of pickers are seen in their relationships to a large plantation, with its varied crops, its mixture of immigrant peoples, its educational and religious activities.

#3093 - "Brazil" one reel ------------------------ 50¢

Three great cities, Rio de Janeiro, Santos, and Sao Paulo, and the Amazon River Valley are pictured.

#R327 - "Brazil, Amazonian Lowlands" silent, one reel

Describing the Amazonian Lowlands, this film locates the immense drainage basin of the Amazon River and shows the wild life, native Indians, jungle products--Brazil nuts and wild rubber--of the territory. Scenes of the cities of Manaos, Santarem, and Belem are shown.
The principal agricultural and industrial products of eastern Brazil, coffee, sugar, pineapple, silk, shoes, etc., are outlined. Rio de Janeiro, the capital, Sao Salvador, Sao Paulo and Santos are depicted.

The story of coffee culture is depicted. Coffee-growing procedures as practiced on the big plantations of Brazil are illustrated from the burning over of the newly cut area selected for a new plantation, the planting of the coffee beans from which coffee plants are grown, picking of coffee cherries, to loading of coffee into ships at Santos. The film closes with scenes of roasting plants in Brooklyn.

The story of orchids and other tropical flora in South America is told.

In this study of progress in Sao Paulo, Brazil's second largest city, a cross-section of modern South America with its busy industry, growing commerce, beauty of art and architecture, and up-to-date trends in education, is shown.
Flat Pictures

Brazilian Panel Posters, Ideal School Supply Co.,
Chicago, Illinois, 1940

This set of pictures contains four panels.
The titles of the panels are: Botafoga Bay at Rio,
Coffee Plantation, Amazon Rubber Camp, and Indians
of Brazil.

May, Stella Burke, Brazil, Informative Classroom
Picture Series, Grand Rapids Michigan, 1944.

In this set are sixteen plates of photographs
totaling forty-one pictures and a pictorial map
measuring 17 X 22. The text for each plate is printed
on an individual sheet of paper, making it possible
to use the text while the pictures are being displayed.
Phonograph Records

Patriotic and Folk Music of the Americas, Educational Department, RCA Victor Division Radio Corporation of America, Camden, N.J.

Hino Nacional Brasileiro (National Anthem of Brazil) Record Number 83679, $.75.

Festival of Brazilian Music (Villa-Lobos) Album DM-773, five records, $5.50.

Brazilian Songs (Sung in Portuguese) Elsie Houston Album M-798, three records, $3.50.

Carnival in Rio (Brazilian Songs sung in Portuguese) Album P-137, three records, $2.00