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PRINCIPLES OF WORLD GEOGRAPHY:  
A TEACHING SYLLABUS FOR GRADES 9-11

by

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I would like to thank Dr. Charles  
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PRINCIPLES OF WORLD GEOGRAPHY:  
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Curriculum development and implementation for American secondary schools have often ignored or given little emphasis to the study of geography. The students are limited in their exposure to geography because the curriculum developers have not perceived geography to be essential for fulfilling the requirements of secondary social science education. This is especially true for the smaller schools that are limited, because of their small enrollments, to a rather narrow curriculum and inadequate human and material resources. One of the most persistent misconceptions about geography is that the subject is only concerned with detailed inventories of facts relating to different parts of the world. This misconception has led many curriculum developers to relegate geography to a nonessential or secondary status in relation to the other social sciences. Notable and continuing efforts to promote the advance of geographic education in secondary schools has been undertaken by the National Council for Geographic Education and the Association of American Geographers. The completion of the High School Geography Project by the Association of American Geographers can be cited as one of the more important achievements in the area of secondary geographic education.

This report will present a one semester (eighteen week) course syllabus titled, "Principles of World Geography." It is hoped that this course will be both meaningful and relevant to contemporary secondary social science students, as well as a means of strengthening the position of geography within the school curriculum. The course is necessarily flexible in approach and structure because it is directed towards the needs and abilities of students from grades nine through eleven. It is composed of ten specific teaching-learning units and is



based on the text World Geography Today by Saul Israel, Douglas L. Johnson and Denis Wood. "A teaching unit is an organization of objectives, activities, and resources, with its focus on a purpose or problem, prepared for use in a teaching-learning situation."<sup>1</sup>

Although the teacher will use this text as the basic outline for the course, individual units and daily lessons will not be totally dependent upon it. Related themes, issues and activities will be developed through the use of outside resources and the imagination and experiences of the instructor. He must also insure that the course is not overfilled. In order to keep social studies courses manageable and still important, he must be skillful at picking and choosing from numerous points and concepts. The idea of an instructor attempting to cover the entire subject, or the textbook, is unrealistic and hopelessly out of date.<sup>2</sup> A good teacher should be able to vary the course to suit the interests, needs, and abilities of his students. To accomplish this, decisions need to be made concerning what the students should learn from the course, what topics should receive most emphasis, what need there is for modifying the time spent on various topics, and what variety of teaching methods need to be employed.<sup>3</sup> These decisions constitute the bases for course planning and organization. The analysis, ordering and creative accumulation of subject matter, far from being an alternative to planning, is one very important part of it. This process of organization is not sought for the sake of organization, but for the achievement of definite and desirable

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<sup>1</sup>Marcella H. Nerborvig, Unit Planning: A Model For Curriculum Development (Worthington, Ohio: Jones Publishing Company, 1970), p. 11.

<sup>2</sup>Leonard H. Clark, Teaching Social Studies In Secondary Schools: A Handbook (New York: Macmillan Company Inc., 1973), p. 41.

<sup>3</sup>Leonard H. Clark and Irving S. Starr, Secondary School Teaching Methods (New York: The Macmillan Company Inc., 1962), p. 60.

qualities of good teaching. Planning, then, is the deliberate designing of flexibility into every lesson part. Good planning is the springboard to effective and creative teaching.<sup>4</sup>

#### ORGANIZATION OF THE SYLLABUS

The course syllabus is divided into ten specific teaching-learning units. A set of general course objectives ties these units together and provides purpose and direction for the course as a whole. These course aims or objectives are the bases for the course syllabus and establish in generalized terms, just what is to be learned by the students and why. The teacher can then begin to develop the individual course units with the hope of maintaining continuity throughout the course. Once these objectives have been established he should then pre-test the learners' status with respect to these objectives through the use of a variety of testing procedures implemented on the first day of class.

Following the course objectives and the pre-assessment are the instructional units. In this case, each unit will be preceded by a list of generalized desired understandings which the student should gain through study and involvement with the unit. After the statement of understandings, the more specific terminal behavioral objectives desired for the students will be listed along with a general outline of the unit content. When the general unit objectives and the outline have been completed, the planning procedure moves to the more specific daily lesson plan, the core of instruction. Although it must be specific in nature, it is most important that it ties in with the course objectives and units in order to insure a cohesive instructional package.

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<sup>4</sup>Derwin J. Jefferies, Lesson Planning and Lesson Teaching (Titusville,

A summary of the preceding discussion is outlined below for additional clarity:

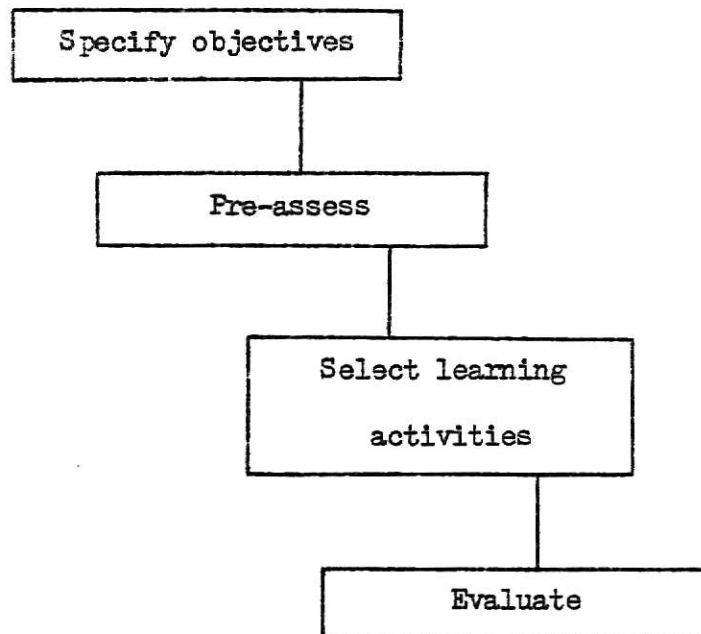
- I. General course objectives
- II. Pre-test, learner analysis
- III. The teaching-learning unit (10)
  - A. desired understandings
  - B. behavioral objectives
  - C. unit outline--subject matter and topics
- IV. The daily lesson
  - A. terminal behavioral objectives
  - B. subject matter outline
  - C. activities---procedure for obtaining objectives
  - D. materials and resources needed
  - E. any special notes, reminders or announcements
  - F. assignment to be made
- V. Evaluation

The particular structure and format for the course which has been described above, closely follows the empirical instructional model described by Popham and Baker.<sup>5</sup>

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<sup>5</sup>James W. Popham and Eva L. Baker, Establishing Instructional Goals (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970) p. 12.

This simple model can be visualized in the following way:



Popham and Baker state that:

"The value of this empirical scheme is that regardless of an individual's teaching style, it provides a procedure whereby the teacher, as a technically skilled expert, can, over time, systematically improve the quality of his instruction."<sup>6</sup>

#### General Course Objectives

According to Preston James, two broad course objectives are held to be important for any introductory course in geography. These two objectives are applicable to the needs and goals of this course and are stated as follows:

1. The course will introduce the student to geography as a field of learning.

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<sup>6</sup>Ibid., p. 20.

2. The course will introduce the student to the world as interpreted by geographers.

Other objectives for the course are:

3. To have the student integrate a representative variety of facts and generalizations from all the regions of the world, including both physical and social topics.
4. To improve and stimulate the student's perception of and interest in the physical and cultural features of the earth's surface that are generally thought of as geographical; i.e., place location and its significance, distributions and areal differentiations, spatial relationships, and man-environment systems.
5. To insure that the student has knowledge of and understands certain basic geographical abstractions such as: ecosystem, man-land relations, region, sequent occupation, change through time, location, distance, spatial distribution, spatial interaction, spatial hierarchy, and areal association.
6. To teach students ways of observing, classifying, relating, and measuring the phenomena of the earth's surface, and ways of relating these phenomena to their various contexts whether physical, biotic, economic, social, technological, political, historical, etc . . .
7. To interpret the environment in resource terms - i.e., the necessity and availability of resources to support the requirements of the population, pressure on resources, and problems associated with resource development, waste, destruction, and conservation.

## Instructional Objectives

Objectives of a unit or lesson need to be defined. The teacher must answer the question: "What is the unit-lesson intended to achieve?" The statement of precise objectives gives the teacher an important advantage by removing the ambiguity of his instructional goals so that he can be in a position to evaluate the worth of his objectives.<sup>7</sup> There are three common mistakes that need to be avoided when stating objectives: 1) stating objectives in such general terms that they are rendered meaningless; 2) proposing too many objectives; 3) writing out geographical content as though it were the teaching objectives.<sup>8</sup>

Objectives translate the teacher's general theories and educational philosophies into specific classroom activities. They should aid the teacher in selecting suitable learning activities since the teacher knows exactly what kind of student behavior he is trying to produce. Through the use of objectives it is also possible to evaluate instruction on the basis of whether the students accomplish the intended objectives.<sup>9</sup>

## The Pre-test

The individual teacher is responsible for establishing the general instructional objectives for his course. These objectives will be a direct indication of the type of geographic knowledge, concepts, theories, areas, and analyses which the teacher perceives to be important for the development of an effective

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<sup>7</sup>James W. Popham and Eva L. Baker, Establishing Instructional Goals (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970), p. 12.

<sup>8</sup>Patrick Bailey, Teaching Geography (Newton Abbot, England: David and Charles Ltd., 1974), p. 111.

<sup>9</sup>Popham and Baker, Establishing Instructional Goals, p. 38.

geography course. These objectives are also constructed for the benefit of the student since the student is the beneficiary of instruction. Keeping the objectives in mind, the teacher should develop a pre-testing procedure in order to analyze the learners' previous exposure to geography. The pre-test can help establish a rapport and lines of communication between the teacher and students as well as aid the teacher in determining the style and direction to assume in the opening days of classroom instruction.

### The Teaching Unit

The instructor needs to organize his ideas of what should be taught into a unit plan. The organizing of a course by unit planning enables the instructor to implement these ideas into activities so that they can ultimately be learned by the students. Ideally, each unit should make a clearly defined contribution to the course structure. Within the unit plan the instructor should design each lesson so that it makes the fullest possible use of preceding lessons. The lesson should also be designed so that it can be the greatest possible help to succeeding lessons and their parts.<sup>10</sup>

Units are usually built around a theme, topic, or problem, and the resources employed must be organized in a way which will tie the course and lessons together. One may describe this type of planning as the "post-hole" concept. This means that a topic is developed with some detailed analysis and then the teacher attempts to "string fence" in order to show interrelationships among the units and topics.<sup>11</sup>

The value of the unit approach and its advantages over ordinary day-to-day

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<sup>10</sup>Jeffries, Lesson Planning, p. 490.

<sup>11</sup>Claire W. Keller, Involving Students in the New Social Studies (Boston: Little, Brown and Co., 1972), p. 21.

teaching have been listed by Clark:

1. It provides greater opportunities for integrated teaching in which one can bring out the various relationships and interrelationships in the topics under discussion more easily than in the day-to-day approach.
2. It provides for continuity, whereas day-by-day teaching is fragmented.
3. It provides opportunities for flexibility not found in day-by-day teaching.
4. It provides greater opportunity for the individualization of instruction.
5. It provides greater opportunity for in depth study.
6. It provides greater opportunities for pupil initiative and responsibility and for pupil participation in planning.<sup>12</sup>

### The Daily Lesson

The daily lesson plan is the breaking down of course unit potentials into their daily components and is often one of the major problems in learning to plan objectives for teaching. The lesson plan should be employed for the pre-thinking of preparation, the development of performance techniques, for guidelines to discussion and for evaluation.<sup>13</sup> The development of a lesson plan should facilitate invention and performance by the teacher through its careful design and it should employ an open ended framework. The lesson plan contains the terminal behavioral objectives, and if necessary, notes on materials and activities to be used, assignments to be made, and any miscellaneous reminders.<sup>14</sup>

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<sup>12</sup>Clark, Teaching Social Studies, pp. 42-43.

<sup>13</sup>Jeffries, Lesson Planning, p. 164.



## Evaluation

Evaluation is an integral part of unit planning. When one conducts a unit of study, careful attention should be paid to the development of the evaluation activity. Through careful use of and reference to the material outlined in Appendix I, the instructor should be able to decide which material warrants evaluation as he proceeds through the unit. Of the geographic concepts and generalizations which are stated for the unit, the instructor must be conscious of which ones were adequately dealt with in the unit activities. The instructor should also consider his behaviorally expressed objectives when he determines what and how to evaluate. The evaluation will be at the end of the unit and should be based on the objectives stated at the beginning of the unit. It may be advisable to administer one or two short quizzes at mid points in the unit to insure that the students keep up with the work and to measure student progress and understanding. Poor quiz results would indicate a need for review or other remedial work in order to insure achievement of the objectives.

In recent years the development of course work in geography has been trending towards inquiry and involving students in solving geographic problems. The concepts and behavioral objectives listed for the ten units emphasize geographic knowledge but also stress the need for inductive reasoning and the development of generalizations by the students. This being the case, the testing devices employed should not only measure simple recall of knowledge but also require the students to relate facts in order to form generalizations and solve problems. A properly worded objective test item can perform this task but the most effective means is the use of a few carefully selected essay questions. The instructor must take care in order to insure that he is measuring the content of the unit, the desired behaviors of the students, and material considered important to the field of geography.

The preparation of valid test items is one of the most difficult tasks of the instructor. Several points to observe in the use and construction of these items are: Keep the goals of teaching in mind; be aware of the objectives of the test; keep the length consistent with the purpose; make the test legible and in line with the reading level of the students; make the items difficult enough to be discriminating; provide clear and complete directions; jot down items as one teaches, day by day; use a variety of items; items of the same type should be grouped; avoid patterns of responses; avoid ambiguities and give away expressions; do not use exact statements from the textbook; avoid long and involved statements.<sup>15</sup>

For the grade level, unit length, and content involved in this course, several types of test items are appropriate for evaluation. For the measurement of recall, fill-in-the-blank questions can be employed. These have the advantage of being easy to prepare and are good for testing factual information; however, they stress rote memory. True-false statements are easy to prepare and score and can be adopted to a wide range of material. The disadvantage of true-false items is that they encourage guessing, and they can often be ambiguous or tricky. Multiple choice test items are generally considered to be the best all-around questions since they are easy to score, they can be used to test understanding and application, and they allow for testing of synthesis of material from several sources. Some of the disadvantages are that they are very time consuming to construct, they encourage guessing, and the questions are difficult to state in a manner that all will interpret in the same way.<sup>16</sup> Matching items are easy to construct and score, save space

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<sup>15</sup>J. Harvey Littrell, "Construction of Test Items." (College of Education, Kansas State University), p. 2.

<sup>16</sup>Ibid., p. 1.

and time, and are good for testing factual information. Some of the disadvantages are that they encourage guessing, they do not measure understanding, and missing one item may cause students to miss others. The advantages of the essay question are also numerous. The use of this type of question encourages good study habits, they are easy to prepare, they permit creative and divergent thinking, they are useful for evaluating reasoning and critical thinking, and they allow for testing synthesis of material from several sources.<sup>17</sup> As with other test items, the use of essay questions has some disadvantages. The questions cover only a limited sampling of the material being taught and they are not always as effective on varying types of material. If the student is unsure of the answer, he may ramble or try to "snow" the instructor. Scoring an essay test is very difficult and time consuming and it is often highly subjective and unreliable. A unit test employing a balanced mix of these type of test items should prove to be an effective evaluation tool.<sup>18</sup>

The use of work sheets during the course of a unit is an effective means of familiarizing the students with unit content and the types of questions they can expect on an examination. Work sheets are a familiar student activity, a proven teaching tool, and they can be designed so as to include all types of questions which will demand a variety of thought processes by the students in order to answer questions and solve problems. Work sheets can also be collected for graded assignments during the course of the unit. The evaluation of these assignments will provide the instructor with information related to general student progress, attainment of objectives, and the usefulness and validity of his questions. Other than unit exams and work sheets,

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<sup>17</sup>Ibid., p. 4.

<sup>18</sup>Ibid., p. 4.

evaluation will consist of quizzes, reports, projects, map work, and daily performance in class. Through the use of a number of evaluation devices the instructor will be able to make a reasonable and fair assessment of student achievement through the process of the course.

The basic outline for a regional approach to a secondary Principles of World Geography course is presented in Appendix I and II. It is hoped that this will be a functional approach and a system of organization for any instructor attempting to teach a World Regional course, whether he employs the text adopted as the basis for this syllabus or any other high school World Geography text. This syllabus is an attempt to make geography interesting, informative, relevant, and suitable for the needs and abilities of the students. The planning and preparation of a syllabus is also undertaken to provide a basis for well organized and effective teaching. This should not establish a rigid guide and framework for the instructor. On the contrary, because it provides a prepared set of concepts and teaching objectives with which to work, the instructor will be able to teach each unit with more flexibility and creativeness.

The need for flexibility in a teaching unit is vital. It is not uncommon for an instructor to conduct what was thought to be a well planned and interesting lesson or activity, only to discover that it was not well received by the students in terms of interest and achievement of the learning objectives. Secondary teaching is a continuing experiment with and refinement of approach, methods, content, and activities. Depending upon the interest and success of the students, lessons will need to be revised, added, or eliminated. The same procedure will hold true for the generalizations, concepts, and objectives. The material outlined in Appendix I and II will serve as the preliminary guide for an instructor endeavoring to teach a secondary World Geography course. It is subject to revision depending upon its ultimate practicality and success in the classroom.

## THE GEOGRAPHICAL APPROACH OF THE SYLLABUS

According to Bailey, over a long period of time, four standard methods of course planning have developed for the teaching of geography in schools. These are: regional, systematic, topic-based or thematic, and ideas or concept-based.<sup>19</sup>

Regional courses study areas or regions as a method of developing geographical skills. Regions can be defined in a variety of ways but are usually defined in a framework of natural or cultural features. A regional course can be described as a study of regional systems and regional interactions.<sup>20</sup> Description is important in the regional context but it should not play the dominant role in the modern classroom. In a systematic course, geographical ideas, skills, and subject matter are grouped and studied under a series of systematic headings such as landforms, climatology, agricultural systems, and urban systems. Within these courses there is a need to adjust the terminology to the level being taught.<sup>21</sup> For a topic-based or thematic course geographical ideas or materials are structured around topics or themes. Examples of this approach are studies of Mediterranean agriculture, energy consumption, new towns, deforestation, etc. Through the use of a network of topics of this kind, theoretically, it is possible to build a sound global survey and at the same time expose the students to the various modes of geographical thought and

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<sup>19</sup>Bailey, Teaching Geography, p. 104.

<sup>20</sup>Ibid., p. 104.

<sup>21</sup>Ibid., p. 104.

conceptualization. Using an idea-based or concept-based course approach, abstract geographical ideas are selected as the starting points, and the subject matter is selected to appropriately demonstrate these ideas. It is good to relate each concept or idea to the local area and then proceed with subsequent development on larger scales. Examples of these ideas or concepts are associations of urban or industrial functions, transport networks, and settlement hierarchies.<sup>22</sup>

The course being developed in this syllabus is titled Principles of World Geography. The overall emphasis in course approach is regional but the topic-based or thematic approach will be employed throughout the course when dealing with the world's general cultural-physical regions. The final unit, titled "Using the World's Resources" is almost completely topic-based or thematic. This unit will deal with world trade, the interdependence of the world's nations, and the conservation of the world's resources. The first unit is the one qualifying the course for classification under the "principles" title. This unit deals with principles of physical geography, principles of maps and their usage, and basic principles concerning the development and evolution of human cultures. This unit is largely systematic in approach. Units two through nine cover eight specific physical-cultural regions of the world. These units constitute the regional emphases which are basic to this course.

A geography course using the regional approach can effectively introduce the high school student to the intellectual attitudes and ideas of the geographer. In addition to this, the approach can help to convey the beginnings of a world view to the students. Geography, among all the other courses in the curriculum,

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<sup>22</sup>Ibid., p. 5.

is specifically directed towards providing students with knowledge of what other peoples and places are like and their spatial location and form. The division of the earth into cultural-physical regions and the observation, description, and analysis of these regions are all concerned with spatial form and distribution.<sup>23</sup> As Bailey notes: "This surely is essential information for the informed citizen, the conveying of which is an important objective of any course in geography. Region-based courses, or at least, courses which contain substantial elements of regional description and analysis, probably do this most effectively."<sup>24</sup>

The region is an areal generalization defined in terms of specific criteria. As a course approach it is a device used to comprehend differences and similarities on the earth's surface.<sup>25</sup> The regional approach provides the students with a wealth of ideas and information. These are essential for the development of any good geography course, but in order to be effective the material must be presented in various and imaginative ways. Attention must be given to insure that the level of difficulty is appropriate and that the course design allows room for repetition, since repetition of ideas in different contexts and at different levels of abstraction is essential for effective teaching and learning.<sup>26</sup> The provision of a wealth of ideas and information, however, does not constitute knowledge or comprehension by the learner. The teacher must ensure that the student is able to put together the

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<sup>23</sup>Rhoads Murphey, The Scope of Geography (Chicago, Illinois: Rand McNalley College Publishing Company, 1973), p. 4.

<sup>24</sup>Bailey, Teaching Geography, pp. 107-108.

<sup>25</sup>Jan Broek, Geography: It's Scope and Spirit (Columbus, Ohio: Charles E. Merrill Publishing Company, 1965), p. 73.

<sup>26</sup>Bailey, Teaching Geography, p. 107.



facts concerning a region in order to form a pattern or to support a general statement of relationship. In other words, the student must develop skills of generalization by assembling separate facts into a pattern so that conclusions can be drawn and an understanding of a region developed.<sup>27</sup>

Through the experience of a semester Principles of World Geography course it is hoped that the student, in developing his world view, will begin to realize that the natural and cultural phenomena found together in an area, are open to rational organization and comprehension.<sup>28</sup> The use of the regional approach should help the student achieve this realization since it requires the development of a particular style of thought known as the integrative mode. Employing this mode necessitates the use and development of three inquiry processes: observation, analysis, and holistic integration. If the student focuses these inquiry processes on the distribution of economic, social, political, and physical phenomena, he should meet with success in determining the distinctive spatial patterns and discovering the nature of their relationships as well as experience success in developing his sense of global awareness.<sup>29</sup>

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<sup>27</sup>Murphey, The Scope, p. 3.

<sup>28</sup>Broek, Geography: It's Scope and Spirit, p. 73.

<sup>29</sup>Richard Chorley and Peter Haggett, Frontiers in Geographical Teaching (London: Methuen and Company Ltd., 1965), p. 302.



## Appendix I

The following appendix is organized into two specific and functional parts pertaining to each of the ten unit divisions of the course syllabus. The first part of each unit division is a body of several representative geographic concepts and generalizations. The second part is a list of instructional objectives for the unit.

The representative geographic concepts and generalizations for each unit are assembled in one part in order to give the instructor a general overview of the unit material which is to be organized into an instructional package. These concepts and generalizations will serve as a bases and departure point for any instructor attempting to organize the material in the text as well as one attempting to draw on additional materials and media from alternate sources. These concepts and generalizations can also be reproduced and distributed to the students at the start of each unit. This would provide the student with a concise and interpretative introduction to the unit and a ready source of reference when he begins to investigate these concepts in more detail.

The instructional objectives for each unit are included as a direct aid for the instructor. They are a list of specific student behaviors that the instructor is attempting to elicit from the students through the use of various teaching procedures employed during the process of the unit. The instructional objectives are always stated in terms which can be observed and measured. Thus, when the instructor proceeds to construct a test, he can use the instructional objectives as a guideline for selecting or composing proper test questions. The statement of objectives not only gives the instructor specific teaching goals but provides him with a means of assessing student progress in terms of these objectives. As one can see, then, the instructor is

not only using the objectives as the basic outline for the development of lessons in day by day instruction, but as a means of aiding evaluation.

## UNIT ONE: THE EARTH AND ITS PEOPLE

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

Earth-sun relationships are responsible for the length of the year, length of day, seasons, and partially responsible for the variation in the types of climates found over the earth.

The angle of solar incidence (insolation) has a definite effect upon earth temperature.

Aside from the factor of relative incidence of solar radiation, the main causes for the great variety in climates are: latitude and altitude, bodies of land and water, high and low pressure centers, and ocean currents.

There are four major and distinctive types of land formations on the earth's surface: mountains, hills, plateaus, and plains.

The great natural forces that have combined to shape the earth's surface are glaciers, wind, water, and internal pressures.

Of the four major types of landforms, plains are the most important to man for human settlement and economic activity.

Man has developed the earth grid system of parallels and meridians on representations of the earth for the purpose of place location and association.

All map projections are distorted to some degree, and only the globe is a true representation of the earth.

Scales of distance and symbols representing physical and cultural features, as well as lines of latitude and longitude, are key parts of most maps.

Human response to habitat varies with the natural resources available, cultural traditions, and technological capabilities.

The diverse social geography of the human species has influenced the development of nationalism as a unifying force and as a world-wide divisive force.

## UNIT ONE: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. List and define the four earth-sun relationships.
2. Describe the character of the earth as the habitat of humans; its land and water areas, its physiography, and climate.
3. Describe the effect of the angle of the sun's rays upon temperature.
4. Define the earth's four major landforms.
5. Describe the four great forces of nature that combine to shape the earth's surface.
6. Specify the difference between weather and climate.
7. List the four main causes for the variety of climates.
8. Relate the effects of climate to the patterns of natural vegetation found on the earth.
9. Specify the difference between longitude and latitude.
10. Explain why various types of map projections contain distortions.
11. Name and describe the qualities of three types of map projections.
12. List the major divisions of mankind.
13. Discuss the meaning and components of a people's culture.
14. Apply the concept of cultural diffusion to the interaction of the regions of the world.
15. Relate population distribution and the qualities of an environment to the inhabitants' ability to feed themselves.

## UNIT TWO: WESTERN EUROPE

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

Western Europe is a region in the cultural sense rather than in the physical sense since there is no distinct physical barrier separating it from Eastern Europe.

The overall density of population in Western Europe is extremely heavy.

Western Europe is highly urbanized. Land is considered a scarce resource and the settlement pattern is usually dense and clustered which helps conserve land for agricultural uses.

Agriculture in Western Europe is generally intensive and productive, so that relatively large yields are obtained per acre.

The transport network of Western Europe is extremely well developed compared to other world regions. Intensive use is made of the navigable rivers, and canal, railroad, highway and pipeline networks are also used extensively and intensively.

Western Europe has developed a number of regions with relatively distinct economic and social characteristics, partly because of its peninsular shape and partly because of the location of strategic mountain landforms.

The social, economic, and political patterns that have developed in Western Europe as a result of the Industrial Revolution have had a profound impact upon the other world regions.

Within Western Europe there are extremes of economic advancement, from underdevelopment to the highest levels of industrialization.

The total land area of Western Europe is relatively small and the numerous politically independent units or nation-states are comparable in size to various states of the United States.

The concept of the nation-state had its beginnings in Western European countries and then spread to other parts of the world.

Some Western European countries built huge overseas empires in the past and still maintain remnants of this colonial legacy today.

Colonialism-imperialism has had a major influence upon the economic development of Western Europe.

## UNIT TWO: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit the student will be able to:

1. Describe the influences of the ocean upon Europe's climate.
2. Explain why the location of Western Europe on several oceans and seas is ideal for communication and trade.
3. Describe Western Europe's strategic position as it relates to East-West tensions and the global balance of power.
4. List the nations of the Common Market (EEC).
5. Locate the industrial Midlands of Britain and describe the factors that influenced the original industrial development in these areas.
6. Evaluate the impact of the textile industry upon Great Britain.
7. Relate the problems of food production, labor production, and lack of critical raw materials to Britain's balance of payments problems.
8. Analyze the roots of the historic and contemporary conflict in Northern Ireland.
9. Describe the location and boundaries of Scandinavia.
10. Define the term fiords.
11. List the major natural resources of the Scandinavian countries.
12. Describe how Denmark, a country of few natural resources, has been able to maintain such a high standard of living.
13. Associate the importance of lumbering with the type of climate found in Scandinavia.

14. Describe the importance of the polders to the Dutch people in terms of settlement and agriculture.
15. Give three reasons why Rotterdam has developed into the largest port in the world.
16. Tell why industry has developed along the base of the Ardennes Plateau in Belgium.
17. Relate the location and topography of the Low Countries to the historic problem of these lands becoming a battleground for Europe.
18. List several reasons why France is largely self-sufficient and even an exporter of foodstuffs.
19. Explain how the use of rivers and canals has aided the development of French and European heavy industry.
20. Explain why Paris continues to grow and plays such a dominant role in the cultural and economic trends of the whole nation.
21. Relate the availability of good iron, coal, and other resources, as well as a good transport network, to Germany's development of heavy industry.
22. Recognize the importance of German scientific research and development to its role as a world leader in all types of industry.
23. Locate the Ruhr industrial region and describe its importance to Germany and the rest of Europe.
24. Describe the political and economic difference between East and West Germany.
25. Identify the two main topographic regions of Germany.
26. Discuss how West Germany has strengthened its political and economic position in Europe.
27. Describe how the topography of Switzerland and Austria is similar.
28. Describe the factors of location, economics, and politics that have made Switzerland into a nation of world importance.
29. Relate the status of Vienna as the primate city of contemporary Austria to the role it played as the capital of the Austro-Hungarian Empire.
30. Associate the topography of Austria and Switzerland with the production of cheap electricity and the development of machine tools and specialized industries.

31. Compare the economic development of northern and southern Italy.
32. Locate and describe Italy's most important agricultural and industrial region.
33. List three of the reasons for the poverty and underdevelopment of Southern Italy.
34. Explain why agriculture is marginal in much of Spain.
35. Compare the climate of the northern Iberian peninsula to the climate found in the south.
36. Discuss why Spain and Portugal are considered overpopulated despite the fact of their relatively small population density.
37. Distinguish between the climate and topography of northern and southern Greece.
38. List three principal sources of income for Greece.
39. Understand the reasons for the limited potential for industrialization in Greece.



UNIT THREE: THE SOVIET UNION AND EASTERN EUROPE  
REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

In area, the Soviet Union is the world's largest nation, however, its population is mostly concentrated in what is known as the European Soviet Union. This population imbalance is due to a variety of factors which include; climate, the availability of arable land, distribution of mineral and fuel resources, the problems of distance and transportation, and the historical development of Imperial Russia west of the Urals.

The area west of the Ural Mountains is considered the heartland of the Soviet Union.

Historically, Russia has had to maintain a defensive posture toward outside powers since the populous area of the North European Plain is an easy invasion route and has been the site of numerous military campaigns launched from the west.

The Soviet Union possesses a tremendous mineral wealth and the patterns of soils and climates compare with those of the United States and Canada. The overall production of agricultural and industrial products has lagged behind North America partly because of the historical influence of the feudal system and Russia's rather late emergence from this system.

Within the contemporary boundaries of the U.S.S.R. are most of the same ethnic groups that were included in the old Russian empire. The Russians have been the only European nation that have managed to keep their empire intact, and even expand it in the twentieth century.

The largest single group of citizens is Russian but other ethnic groups account for approximately forty-six percent of the total population.

Two of the most limiting factors in Soviet development are the problems of harsh climate and great distances.

The development of Eastern Europe has been handicapped by its history of fragmented loyalties, languages, and cultures.

The development of nation-states in Eastern Europe in the twentieth century has satisfied nationalist fervor, but because of the division into smaller political units, the problems of economic development have been accentuated.

Since World War II most East European nations have been dominated by and made into satellites of the Soviet Union.

Eastern Europe is divided into four general physiographic regions:

- (1) the Great European Plain in the north; (2) the central mountains, upland basins, and plateaus; (3) the plains of the Danube Basin; (4) the southern mountain ranges.

### UNIT THREE: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Compare the Soviet population and its distribution with the population of the United States.
2. Describe the areal extent of the Soviet Union and compare it with other nations.
3. Describe the role of the major rivers in the western Soviet Union.
4. List and locate the seven different climate regions of the Soviet Union.
5. Define the terms permafrost, taiga, steppe, podzol, chernozem, and COMECON.
6. Describe the major factors limiting the usefulness of most Soviet ports.
7. Specify the differences between a state farm and a collective farm.
8. Identify and locate the Donets Basin as the most important mining and industrial center of the western Soviet Union.

9. Name the two most important contributions of the Caucasus region to the Soviet economy.
10. Locate the Kuznetsk Basin and tell why it has become such a fast growing industrial area.
11. List the methods the Soviet Union has employed to stimulate settlement in the eastern Soviet Union.
12. Discuss the problems of distance and climate and their effect on the economic development of Siberia.
13. Name and locate the four geographic areas of Eastern Europe.
14. Describe the political importance of Eastern Europe to the Soviet Union in terms of satellites and buffer zone nations.
15. Compare the function of the Warsaw Pact to the function of NATO.
16. Explain why the varied population groups of contemporary Yugoslavia have historically acted as a divisive force in Yugoslavian development.
17. Describe the environmental conditions that are favorable to Polish agriculture.
18. Realize that national borders are not necessarily related to geographic or ethnic factors, but are often determined by politics.

UNIT FOUR: NORTH AFRICA AND THE MIDDLE EAST  
REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

The Middle East and North Africa are predominantly areas of deserts and dry grasslands. Agriculture and settlement is mainly concentrated along the coasts, and in the occasional fertile river valleys, wadis and oases.

The Middle East is characterized by an abundance of oil resources and an absence of widely developed water resources.

Oasis agriculture and nomadic grazing dominate much of North Africa and the Middle East.

Throughout history the Middle East has played a role as the crossroads of the world, due to its relative location at a pivotal point between large continental land masses.

Because of the location of the lands of North Africa and the Middle East around the Mediterranean, the sea has played a major role in the dispersal of people, trade, and cultural influences.

The cultural roots of North Africa are from two worlds: the Mediterranean world and the historical contact with southern Europe; and the Arab world, with associations and influences from the Middle East.

Despite the relatively recent and sizeable discoveries of petroleum, much of North Africa suffers from a lack of basic resources, population pressures, and shortages of water and arable land which are critical problems, especially in the interior.

Throughout the regions of North Africa and the Middle East, Islam is the dominant religious and cultural force with only a few localized exceptions.

In the twentieth century, the tide of nationalism has become a dominant political and social force within the region, and the potential for international conflict has been heightened.

Since World War II, the emergence of Israel as a major political and military power in the region, has caused constant tension between Israel and her Arab neighbors, which has erupted into major violent military clashes on several occasions.

#### UNIT FOUR: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Outline the areal extent of the Ottoman Empire from 1400 to World War I.
2. Define nomadism and transhumance.
3. Describe the limitations of the desert climate on the economic development of North Africa and the Middle East.
4. Name and locate the three most important river systems of the region.
5. Relate the patterns of intense settlement to the areas of Mediterranean climate and irrigated river valleys.
6. Assess the impact of oil production upon the economies, cultures, and politics of the nations of North Africa and the Middle East.
7. Analyze the causes of political instability associated with the creation and expansion of Israel and the consequent problem of Palestinian refugees.
8. Define what is meant by the term Fertile Crescent.
9. Define the terms qanats and basin irrigation.
10. Assess the role of nomadism in the future of the Middle East.
11. Explain why nearly all of Egypt's people live along the Nile River.
12. List three positive and three negative effects of the Aswan High Dam.
13. Assess the role of the Suez Canal in world trade and politics.
14. Locate the Atlas Mountains and assess their importance to the lands on the northwest African coast.
15. Prepare a map locating principal oil producing and agricultural areas of the Middle East and North Africa.

16. Describe the interdependent relationship between the nomad and the town dweller in the region.
17. Understand that the use of petroleum as a political weapon by the countries of the Middle East and North Africa is having serious effects on the industrialized countries of the world.

## UNIT FIVE: SUB-SAHARAN AFRICA

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

There is a general lack of industrial development in Sub-Saharan Africa, part of which can be blamed on neglect by the European colonial powers who once controlled the area.

Some modern industrial centers based upon metallic resources such as gold, manganese, copper, tin, and uranium have been developed primarily by European capitalists.

For a continent so large as Africa there are few really large rivers. Many of these rivers, because of waterfalls, rapids, and seasonal fluctuations have made early exploration and present day navigation difficult to impossible.

The presence of major physical-climatic barriers has been an obstacle to communication and trade and is partly responsible for the great cultural variety of Sub-Saharan Africa.

Aside from Nigeria and Angola, the nations of Sub-Saharan Africa generally lack plentiful fuel resources. This lack has been a major obstacle to economic development in these countries.

The potential hydroelectric power of this region is estimated to be forty percent of the world's future potential. Development of this resource would add greatly to the region's economic potential.

Subsistence farming and hunting and fishing are typical of the native response to the habitat in areas that have not been dominated by European trade and culture.

Post World War II nationalism has fostered an unstable and often violent political situation as these countries have rapidly gained their independence from European colonial powers.

Rhodesia and South Africa, dominated politically and economically by white minority governments, must be considered as unique examples of nations in Sub-Saharan Africa.

#### UNIT FIVE: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Name and locate the geographical barriers that have helped isolate the people of Sub-Saharan Africa.
2. Name and locate four of the early African Kingdoms.
3. Name and locate the present day independent African nations and identify the European colonial nation that used to control it.
4. Locate and describe the areas of tropical rain forest, savanna, desert, Mediterranean, and humid sub-tropical climates in Sub-Saharan Africa.
5. Associate the climate zones with the density of population and types of agricultural activity found in each zone.
6. Assess the importance of plantation agriculture and subsistence farming.
7. Compare and contrast the systems of plantation agriculture and subsistence farming.
8. Locate the Sahel region of Africa and describe the role of this region as a transition zone between the Sahara and savanna.
9. Explain why the location of different tribal groups within a single nation-state acts as a negative force to national unity.
10. Indicate the significance of the historical link between the United States and Liberia.
11. Analyze why many of the political borders of Africa that were set up by the former colonial nations of Europe are artificial or unrealistic in nature.
12. Analyze why the Kataganese want to separate from the larger nation of Zaire.
13. List the environmental factors that make the highlands of East Africa such good farming areas.



14. Indicate why the country of Somalia is of such strategic geographic importance to the United States and to the Soviet Union.
15. Explain why the Indians and Pakistanis came to settle in Uganda and Kenya and why they have been forced to leave.
16. Recognize the trade and development problems associated with landlocked nations.
17. Assess the importance of Kinshasa and Brazzaville as trade centers for the nations within or bordering the Zaire River Basin.
18. Describe the veld region of southern Africa.
19. Describe the policy of apartheid in South Africa and assess the impact that this policy has upon South Africa's relations with other nations.
20. Explain why Lesotho needs to maintain good relations with South Africa.
21. Tell of the former policies of colonial rulers that have created present-day problems for the countries of Sub-Saharan Africa.

## UNIT SIX: THE ORIENT

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

Like Africa, much of South and Southeast Asia was once under the dominance of European colonial powers.

Since World War II, there has been a widespread nationalistic movement in South and Southeast Asia against colonialism, so that the region is almost completely independent today, with the exception of Brunei.

Since the western imperialistic powers were forced to give up their control there has been a political vacuum that communism is trying to fill.

One of the major problems faced by the newly independent nations of South and Southeast Asia was the establishment of economic and political stability.

China is the second largest nation of the world in land area and the largest in population. Within the boundaries of this nation there is a great physical and cultural diversity.

China has large supplies of coal and other raw materials but is deficient in some mineral resources. The huge population, however, puts great strain upon the mineral resource base of the nation.

China's population is estimated at more than 800 million and is increasing rapidly. This increase in population presents that nation with the constant problem of producing enough food.

In China, nearly all land that can possibly be used for agriculture is already worked intensively.

For its large population, transportation and communication systems are underdeveloped, which hinders further economic development.

Chinese civilization has greatly influenced the culture of neighboring Japan and Korea.

Today there are two Chinas, mainland communist China and anti-communist Nationalist China on the island of Taiwan.

Japan is a nation characterized by a high level of industrial development and intensive agriculture.

Japan's raw material and agricultural resources are inadequate to meet its needs so consequently she depends upon large volumes of imports, and world-wide markets for her finished industrial products in order to support her people.

Korea's mountainous peninsula has played an important part in the history of East Asia because of its position between China and Japan.

Overall, Korean soil is poor, farming techniques are not technically advanced, and the standard of living in the rural areas is still generally low.

The truce line near the 38th parallel divides Korea into communist North Korea and non-communist South Korea.

The landforms of South and Southeast Asia are diverse.

South and Southeast Asia are mainly tropical climates, but the pattern of precipitation shows pronounced areal and seasonal variation.

Certain areas of South and Southeast Asia are the most densely populated areas of the world.

Illiteracy and economic underdevelopment are problems throughout most of South and Southeast Asia.

The nations of South and Southeast Asia are striving to accelerate the pace of industrialization.

Famine has been a persistent problem in the subsistence agricultural areas of South Asia.

## UNIT SIX: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Give a reasonable estimate of the percentage of the world's population living in the Far East.
2. Indicate which Asian countries have become politically independent since World War II.
3. Provide reasons for the concentration of much of the population of Asia into relatively small areas.
4. Name and locate six of the great river valleys of the Orient and provide reasons for their great importance to the region.
5. Define the term monsoon and describe its importance to the nations of Asia.
6. Describe the effect of the Himalayas over the climates of India and Tibet.
7. Locate and describe the major climate regions of Asia.
8. Name and locate the three topographical regions of the Indian subcontinent.
9. Discuss the problems of population and food supply for India and China.
10. Define what is meant by a caste system and relate its impact to problems of economic and social development.
11. Assess the impact of British colonization upon the development of India's transport system.
12. Describe the geographic, political, economic, and social problems that eventually led to the break of East and West Pakistan.
13. Compare and contrast the agriculture of southeast and north-east China.
14. Specify the importance of Manchuria to the Chinese economy.
15. Evaluate the overall impact of China's Great Leap Forward.
16. Evaluate the success of China's commune system.
17. Realize that the Chinese recycle as much material as possible so that nothing is wasted which can be turned into a useful product.

18. Assess China's importance as one of the three global super-powers.
19. Describe Japan's importance to trade and industry in Asia and the world.
20. Compare the climate and latitude of Japan with that of the eastern coast of the United States.
21. Analyze why Japan's agriculture maintains such high yields per acre.
22. Assess the impact of Japan's rapid economic growth upon the natural environment.
23. Relate the division of Korea to the economic problems the two nations have faced since 1950.
24. Evaluate the importance of plantation agriculture to the nations of South and Southeast Asia and name three of the most important plantation products.
25. Explain what locational factors have helped Singapore become one of the world's busiest ports.
26. Name and locate the three major political divisions of Malaysia.
27. Analyze the problems the Indonesians must overcome to achieve national unity and balanced development.
28. Describe the system of shifting agriculture practiced in many parts of Southeast Asia.
29. Describe the system of paddy rice agriculture found in much of Asia.
30. Analyze the internal political problems of the Philippines and the importance of the Philippines to the United States interests in Asia.
31. Define SEATO and describe its political and economic purposes.

## UNIT SEVEN: THE PACIFIC WORLD

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

Australia is the only nation of the world that is also a continent.

Australia has a wide variety of physical features but most of the land area is arid to semi-arid and lacks major rivers.

Australia and New Zealand are separated by 1200 miles of ocean (Tasman Sea) and have a pronounced difference in physical environments.

Australia and New Zealand depend heavily upon overseas markets for their agricultural and mineral production and upon imports in order to obtain many sophisticated manufactured goods.

The relatively small populations of Australia and New Zealand with their consequent small domestic markets, inhibit the profitable development of many industries.

Many unique species of flora and fauna have evolved on Australia and New Zealand. It is believed that these unique species developed as a result of the relative isolation of these areas from other land masses.

The cultural and political traditions of Australia and New Zealand are largely based on British heritage but they are both independent, self-governing nations.

The basic population groups and geographic regions of the Pacific Islands are known as Micronesian, Melanesian, and Polynesian.

Due in part to their geographic isolation, some of the cultures on the Pacific Islands have remained static or retrogressed.

The three great island groups of the Pacific, although their total land mass is relatively small, cover vast areas in the Pacific.

There is a great variety of peoples and cultures throughout the Pacific Islands.

Many of the Pacific Islands were fought over during World War II, causing great disruptions of the islands and their inhabitants. Today, most islands are still considered dependent territories.

#### UNIT SEVEN: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Describe and locate the landforms and climates of Australia.
2. Describe the population distribution of Australia and provide logical reasons for the pattern described.
3. List major agricultural products and describe their means of production in Australia and New Zealand.
4. Describe the problems of economically viable sheep and cattle production in the interior of Australia.
5. Assess the importance of hydroelectric development to the industries and overall economy of New Zealand.
6. List the main export products of New Zealand and provide reasons why New Zealand has been able to produce and export these products so cheaply.
7. Identify the Maori's as the aboriginal inhabitants of New Zealand and evaluate their status within contemporary New Zealand society.
8. Identify and locate the island groups of Melanesia, Micronesia, and Polynesia.
9. Define the terms barrier reef, atoll, lagoon, and coral.
10. Assess the roles of the United States, Britain, France, Australia, and New Zealand in the administration of these islands.
11. Evaluate the impact of tourism on the people and cultures of Tahiti, Fiji, and Samoa.

## UNIT EIGHT: LATIN AMERICA

## REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

The concept of Latin America as a world regional division is founded on the idea that it is a cultural division rather than a physical one.

Colonialism is of major historical and geographical importance when considering the development of Latin America. Today there are still some small remnants of colonialism in Latin America.

The Spanish and Portugese heritage in Latin America has had a great impact upon the region, and to a lesser extent the heritage of Britain, France, and the Netherlands.

In addition to the colonial settlers, Latin America's population includes people descended from African and Asian slaves, native Indians, and more recent immigrants from Europe and Asia.

The population growth of Latin America is extremely rapid, with many areas of high density, but the overall population density is still rather low.'

The gap between the rich and the poor in Latin America is great. Traditionally, most of the land and wealth has been concentrated in the hands of about five percent of the population. People of Spanish colonial descent are usually members of the wealthy land-owning class.

In large part, the economies of the nations of Latin America depend upon the production of primary products, and in many cases the economy is heavily dependent upon the sale of a single export product.

The historical and contemporary political climate of Latin America can be characterized as unstable, with many nations experiencing repeated changes of government, and a tendency towards military dictatorship or juntas.



## UNIT EIGHT: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Locate five of the major population centers in Latin America.
2. Designate the regions of the Pre-Columbian Aztec, Maya, and Inca civilizations.
3. Locate and describe the major topographic features of Latin America.
4. Locate and describe the major climate regions of Latin America.
5. Name and locate the three major river systems in South America.
6. Describe what the Latin American nations are doing to improve interregional trade.
7. Explain the importance of tourism to the economy of Mexico.
8. Describe the climate-altitude zones of Mexico and list the types of crops grown in each zone.
9. Analyze the importance of the Panama Canal to world trade, interregional trade and the United States.
10. Assess the role of oil production in the overall development of the Venezuelan economy.
11. Explain the problems of United State-Cuban relations in terms of why Cuba has had to depend upon Soviet aid since the break in diplomatic and trade relations.
12. Describe the attempts of the Brazilian government to open up the Amazon Basin to settlement.
13. Assess the importance of coffee to Brazil's export trade and balance of payments.
14. Describe the negative effects of rapid urbanization and population growth in Brazil.
15. Explain the importance of the exotic rivers to the desert west coast of Peru.
16. Define the terms mestizo, montana, guano, and altiplano.
17. Name the major agricultural export of Ecuador.
18. Explain why the tin mining regions of highland Bolivia are areas of political unrest.

19. Analyze the problems presented by cultural dualism in the Andean nations.
20. Associate the trade problems of Bolivia and Paraguay with those of the landlocked nations of Africa.
21. Name the three principal regions of Chile.
22. Describe the importance of the Pampas to the economy of Argentina and the world.
23. Explain why Argentina has developed such a good transport network over the Pampas.
24. Locate the area of Chile where agriculture has been most productive and explain why this is so.
25. Explain why Montevideo is considered a primate city in Uruguay.
26. Realize that many countries of Latin America face serious problems which includes overpopulation, unequal land distribution, lack of investment capital and skilled labor, urban slums, and poor health and education standards.

UNIT NINE: THE UNITED STATES AND CANADA  
REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

The United States

The United States is a nation of continental proportions, encompassing coastal plains and interior plains, highlands, plateaus, and mountains.

The climate of the United States is diverse, with humid subtropical, humid continental, steppe, desert and marine regions.

The United States is blessed with many natural harbors and several navigable rivers. The rivers provide economic transportation for bulk goods and access to the interior of the nation, especially from the Gulf Coast.

The United States has rich resources of soil, water, forests, and minerals, many of which have been used with little concern for the future.

Despite its abundance of natural resources, the United States is not self-sufficient and consequently must import agricultural and mineral products to maintain its economy.

The Great Lakes, being navigable, have provided a means of cheap transportation for materials in the interior northeast. Most important, is that they exist between major iron and coal producing areas and have played a major role in the development of heavy industry along the lakes by providing a means of cheap transportation.

The people of the United States are of many national origins, chiefly European.

The United States has experienced rapid urbanization in the twentieth century. The United States is truly an urban-industrial nation since only three percent of the population is directly engaged in agriculture.

In general, the people of the United States enjoy a high standard of living which may be attributed to the balanced supply of resources at home,

exploitation of resources abroad, the relatively early start in industrialization, and a competitive economic system.

The United States occupies a position of world leadership because of its economic strength and influence around the world. Along with the Soviet Union, the United States is considered a global superpower.

Two outstanding features of United States foreign policy in recent years have been our involvement in Viet Nam and our global programs of foreign aid.

### Canada

The nation Canada is a land mass of continental proportions. Because of the extension of much of the land into the northern latitudes, much of the country is still remote and sparsely populated.

Many of the physiographic features near the borders of the United States and Canada are shared by both countries, so that in most areas the political division was an arbitrary one.

The Canadian Shield is a physiographic region that is strictly Canadian.

The great majority of the Canadian people live within 150 miles of the United States border.

Canada was bonded into a nation from two distinct European colonial cultures, the English and the French. In recent years there has been increased friction between French and English speaking Canadians. Some French Canadians have proposed making the province of Quebec a separate nation.

The official policy of the Canadian government is for bilingualism in education and communication.

Canada is blessed with varied and abundant natural resources which are being exploited somewhat more carefully than similar resources in the United States.

Canadian economic development in the post World War II years has expanded rapidly, especially in mining, manufacturing, the development of transportation facilities and hydroelectric power.

The United States and English-speaking Canada share a very similar historic development and national heritage.

Canada has developed a democratic form of government modeled somewhat after the English system.

The United States and Canada have peaceful and cooperative international relations and share the longest undefended frontier in the world.

The United States and Canada are partners in the defense of the North American Continent.

#### UNIT NINE: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit, the student will be able to:

1. Locate and describe the major climate regions of the United States.
2. Locate and describe the main topographic regions of the United States.
3. Explain why dairying has become the most important agricultural activity in New England.
4. Explain the historic development of the textile industry in New England.
5. List the factors which account for New York City's size and prosperity.
6. Define the concept megalopolis and explain the implications of this development for the eastern United States.
7. Locate the major coal producing areas of the United States.
8. Assess the location and availability of resources in western Pennsylvania and determine why this area has become an important center for heavy industry.
9. Name and locate the three major agricultural belts of the Midwest.
- \*10. List four reasons why the cities of the Midwest have become important industrial areas.

11. Assess the importance of the St. Lawrence Seaway to the cities of the Great Lakes and their markets.
12. Describe the extent and location of the Mississippi River basin and assess the importance of the river to trade and industry within this area.
13. List several reasons why the southern states are attracting much new industry and capital.
14. Define the Tennessee Valley Authority and describe its role in the development of the Southern economy.
15. Explain what is meant by dry-land farming.
16. Locate the most productive copper mining center of the United States.
17. Analyze the environmental constraints to development of the Basin and Range Province.
18. Describe how the development of hydroelectric power in the Colombia River Basin has influenced the location of industries.
19. Analyze the problems associated with the development of coal fired power plants in the Basin and Range region.
20. Evaluate the overall role of California as a major food producer for the United States.
21. Describe the topography and climate regions of Alaska.
22. Assess the strategic importance of Alaska to United States defense.
23. List six of the major natural resources of Alaska.
24. Describe the ethnic and cultural diversity of the Hawaiian Islands.
25. Name the principal crops of Hawaii.
26. Evaluate the impact of tourism and the importance of tourism to Hawaii.
27. Relate the problems of transportation and relative isolation of Alaska and Hawaii to their cost of living and problems of economic development.
28. Name, locate, and describe the major topographic region of Canada.
29. Describe and locate the four climate regions of Canada.
30. Explain the relation of the Canadian Shield to Canada's mineral production.

31. Provide an explanation for the persistent economic problems and lower standard of living for the people of Canada's maritime provinces.

## UNIT TEN: USING THE WORLD'S RESOURCES

### REPRESENTATIVE GEOGRAPHIC CONCEPTS AND GENERALIZATIONS

International investments and multi-national corporations have helped spread the Industrial Revolution to many parts of the world.

The demand for world resources has promoted innovations in the use and transport of these resources.

The growing demand for world resources has brought close relations and trade among nations and also competition for resources and tension among nations.

Several nations have established closer relations because of their mutual sharing and financing of technical development problems.

In several regions of the world countries have established closer ties through the development of regional security pacts designed to provide collective security.

Nations have been brought together by developing regional economic cooperation and free trade.

The United Nations administers many projects designed to promote world peace, and economic and social progress.

The problem of controlling the world arms race, especially nuclear arms, is one of the major crises facing the world today. The arms race is a vast waste of human and material resources.

Unequal distribution of natural resources makes the world's people inter-dependent through world trade.

All nations are dependent upon international trade. Some nations must import food products in order to feed their people, others must find markets for the products on which their economy is based, and others need trade to stimulate their economies and maintain prosperity.



There are numerous political and economic barriers to free trade throughout the world.

The economy of the United States is so tied in with the economies of other nations that it must continue to be a large importing and exporting nation even though we have extensive, well developed resources. If the United States stopped international trade, the economies of many other nations would become severely depressed.

The unwise exploitation and use of the world's natural resources has caused critical environmental problems throughout the world.

On a global scale, human resources are underdeveloped due to wide-spread illiteracy and low standards of public health and nutrition.

#### UNIT TEN: INSTRUCTIONAL OBJECTIVES

Upon completion of the work in this unit the student will be able to:

1. Name three regional international economic organizations and explain how membership in such a group helps maintain a nation's trade.
2. Explain the role of multi-national corporations in world trade and development.
3. Discuss the importance of soil conservation and reforestation in relation to the world's potential to feed itself.
4. List the world's most critical natural resources.
5. List five conservation techniques used to preserve soil for agriculture.
6. Assess the value of hydroelectric power to the development of the Third World.
7. Predict several adjustments that will need to be made in the global economic system when oil resources become critically scarce and expensive.
8. List the major needs and problems of the world's underdeveloped countries.
9. Identify and describe the work of four international development and assistance organizations.

10. Describe the importance of the Marshall plan to the economic recovery of post World War II Europe.
11. Explain the concept of "spheres of influence" in terms of global international relations and the three global "superpowers."
12. Understand that traditional methods of food production can no longer feed the world's rapidly increasing population.

## APPENDIX II

### REPRESENTATIVE LESSON PLANS

This appendix includes examples of activities designed for two units of the text World Geography Today. Units One and Nine have been selected as examples. Unit One, titled The Earth and Its People, provides the students with an introduction to the study of geography by introducing them to basic principles of the discipline which they will need and apply through the remainder of the course. This unit is broken down into five chapters of approximately six pages each. Unit Nine, the United States and Canada, is a broad survey of the Anglo-American region consisting of ten chapters with an average length of eight pages.

These activities are meant to be a broad outline of instruction for the unit. They are believed to be sound ideas and methods of instruction but they are not to be interpreted as absolute and all encompassing. The individual instructor must be prepared to add or subtract materials and ideas, or improvise, depending upon the time, facilities, and materials available.

Weaknesses in the activities will no doubt be discovered as day to day instruction proceeds. Also, questions will naturally arise from the students which will be unexpected and difficult to answer. These questions will take class time away from the prescribed activities and may even direct the instructor to revise or make additions to the activities.

The activities described are ones to be conducted during regular class time. It can be safely assumed that there will be a normal range of student ability in any one class so that student progress on the activities will not be uniform. Slower students will require additional help and should be encouraged to finish the activities by spending additional time on them. As a supplement to class time activities the instructor will find it necessary to

assign short homework assignments in addition to the required reading. Chapter review questions, map exercises, the collection of news and magazine articles, and other similar assignments should be made as the need presents itself.

UNIT ONE: THE EARTH AND ITS PEOPLE; Pages 3-39

Chapter 1: The Earth in Space; pages 3-6

Activities. An understanding of the earth-sun relationships or the earth motions is the basis for understanding the receipt of the sun's energy and its spatial variation over the earth's surface. The students should learn that these relationships and the cyclic changes in the length and intensity of the receipt of solar energy are responsible for the variation in climate over the earth's surface.

It is important to provide the student with precise definitions of the terms rotation, revolution, inclination, and parallelism for their personal reference. At this time, it would be appropriate for the instructor to assign the major and continuing project for the semester term. This will require the student to compile a dictionary of geographic terms through the course of the semester to be evaluated at mid term and at the end of the term. All important words relevant to the course of study will be defined and included in this project. This will provide the student with a ready study guide and aid in the development of note taking and organization skills. The definition of the four earth-sun relationships will mark the start of this project.

In addition to the explanation in the text, the instructor should demonstrate these principles in the following manner:

Four small globes that are inclined on their axis and that can be rotated should be placed around a table lamp at four equally spaced points of the compass. The north polar axis should be inclined toward the same direction on all four globes. When the room is darkened and the table light is on, the

students should be able to observe the north-south displacement of the circle of illumination. It will be explained that each globe represents the earth's constant direction of inclination in its revolution around the sun and that each position represents the seasonal distribution of the sun's energy at the winter solstice, spring equinox, summer solstice, and fall equinox.

This arrangement of globes will also illustrate the  $23.5^{\circ}$  inclination of the earth's axis from the vertical and the maintenance of this inclination in a constant direction, which is parallelism. A globe can be rotated to its own east to demonstrate rotation and how this movement is responsible for the cycle of day and night. It should also be pointed out that the north-south displacement of the terminator causes greater variations in the length of day and night through the seasons, the farther north or south one travels on the earth's surface.

The seasonal difference in the angle of incidence of solar radiation over the earth's surface and the effects this has upon the seasonal temperature variation can be illustrated by a simple diagram and then reinforced by the use of a small globe. It can be shown that the more perpendicular rays fall on a smaller area of the earth, thus heating it more intensely. It should also be emphasized that the more perpendicular rays travel a shorter distance through the atmosphere so that fewer rays are absorbed or deflected by the atmosphere.

Chapter 2: The Face of the Earth; pages 7-14

Activities. This chapter deals with the major landforms and the natural forces that shape them. Many terms unfamiliar to the students will be introduced in this chapter so use of the glossary and other sources of reference should be emphasized.

One of the most effective ways to convey to the student the knowledge of the major landforms is to liberally employ visual aids. Films or filmstrips, photographic prints, and color slides can all be effectively employed, depending upon their quality and availability. The concepts of hills, mountains, plateaus, and plains are so basic to the physical environment, that the average high school student should have little trouble in distinguishing these landforms visually and then arriving at a succinct definition for each landform.

While showing photographs of various types of mountains and hills, the instructor should note that relief is the vertical difference between the highest and lowest elevations in an area. Thus, the distinction between a mountain and a hill is one of relative relief.

The plateau landform can be described by showing the students pictures of mesas and escarpments. Plateaus can be related to these features by explaining that the plateau is a landform rising sharply above the level of the surrounding area on at least one side, this sharp rise being termed an escarpment. A good shaded relief map of North America can help the instructor develop this point. By pointing out the Laurentian, Columbia, Edwards, and Mexican plateaus, the student should be able to develop a mental image of a plateau.

The plains landform is an easier one to describe and visualize since the plain is a broad level land formation or a landform of low relief. The shaded

relief map is a useful tool for showing the location and relatively level features of plains in the United States. The Atlantic Coastal Plains, Gulf Coast Plain, Central Plains, and Great Plains can all be pointed out on this map. The location of flood plains or alluvial plains also needs explanation. It should be pointed out that plains are formed by the processes of erosion, deposition, and uplifting, so these terms need to be defined. The favorable conditions that plains provide for agriculture, settlement, and transportation should be explained and discussed. Again, a well selected set of visual materials can be of great help to the students in forming a mental image and recognizing the characteristics of each landform.

It is extremely important for the student to know, understand, and relate the natural forces that have combined to shape the earth's surface. The four major natural earth shaping forces are glaciers, wind, water, and internal pressures. Again, the use of films, filmstrips and commercial or personal slide collections can facilitate the teacher's instruction and the student's learning. Photographs depicting the various types of glaciers can be shown and slides showing the results of glaciation can be associated with these. The student should be made aware of the fact that much of North America was once covered by a continental glacier and that alpine glaciers exist in a few of the high mountain areas of the states today.

To illustrate that wind is a land-shaping force, the students can be shown pictures of Dust Bowl scenes from the Great Plains although it must be noted that human factors played an important role in the formation of the Dust Bowl. To further illustrate the importance of wind, pictures of coastal dunes, barchans, wind sculptured rock formations, and loess deposits should be shown, accompanied by an explanation of how these features were formed.

To illustrate the impact of water upon the land, photographs of the Grand Canyon, the goosenecks of the San Juan river in Utah, the alluvial fans



of Death Valley, or a satellite photograph of the Nile River delta, etc., can be shown as graphic examples of the work of water.

Volcanoes and faults are obvious examples of the results of internal pressure upon the landscape. A world map illustrating the extent and pattern of volcanism is a useful teaching tool for showing the global pattern for this type of activity. Numerous educational films and slide collections are available on volcanism and earthquakes. Aerial photographs of the San Andreas fault in California are available, and the faulting of the Point Reyes peninsula north of San Francisco can be easily observed on a large scale map of the area.

Chapter 3: The Earth's Climate; pages 15-22

Activities. The study of climate is important because it is a major constraining force upon human activity. Humans must adjust to these constraints in terms of housing, clothing, crops, freedom of movement, and comfort.

The student should first understand that climate is not synonymous with weather. Weather is defined as the day to day variability of temperature, precipitation, winds, and cloud cover. Climate is defined as the average course or condition of the weather at a place over a period of years. The main causes for the variety in climates must be listed and explained as well as the interrelationships among these causes. Latitude and altitude, bodies of land and water, high and low pressure centers, and ocean currents can be listed as the main causes for climatic variety. Climate, weather, and other terms should be included in the student's dictionary if necessary.

To illustrate the relationship between climate and altitude, the instructor can employ a profile diagram of the Sierra Nevada in central California which incorporates data on altitude, annual precipitation, and mean annual temperature. The instructor can also associate the change in vegetation with the change in altitude and consequent change in climate. A table noting the change in vegetation with altitude at different latitudes can be prepared and distributed using a spirit master. The use of this table should be an effective tool for explaining this concept to the students. The difference in elevation of the tree line in the Rockies can be compared for northern New Mexico, central Wyoming, and northern Montana to further illustrate this point.

The distribution of rainfall in mountain regions, or the orographic rainfall pattern, is another vital concept for the understanding of climate.

The diagram of the Sierra Nevada can be used to show the process of orographic rainfall. Since the warm, moist air from the Pacific coast moves inland, it cools and condenses on the windward side of the Sierras as it rises over the mountains, thus producing precipitation. On the leeward side, the air has lost much of its moisture when it begins to descend and warm up, thus producing the rain shadow effect.

The influences of bodies of land and water upon climate can be shown by comparing temperature and precipitation graphs from several coastal and continental regions. The differential heating of land and water bodies can also be demonstrated by measuring the change in temperature in a pan filled with water and a like pan filled with an equal amount of sand over a forty-five minute time period. Each pan must be heated by an identical heat lamp positioned in an identical manner over the materials. This experiment will graphically demonstrate the more rapid heating of the land as compared to water bodies, thus illustrating the moderating influence of water upon climate. Measurements of the cooling rates of the materials can also be taken after the lamps have been removed, in order to show the rapid heat loss from the land surface due to radiation.

For an introductory high school class, the study of wind systems and high and low pressure belts can be a difficult and confusing task for the students. The instructor should attempt to keep the lesson as simple and succinct as possible. A spirit master of the wind and pressure belts can be prepared so that the students will have a source of reference for their study of these global systems.

Throughout this lesson the students should be encouraged to make constant reference to the world map of climate and vegetation groups. They should not be expected to memorize the map or the accompanying charts, but they need to be made fully aware that this map should be a reference tool to be used as they study the various world regions.

A good class project relating to the subject of world climates would be to have students choose areas with the same climate and then compare the topographic features of these areas. This would be a problem-solving exercise, since they would need to collect data from several maps, analyze the data, and then use it for comparing the physical features of the various areas. Through this exercise the students will need to integrate the information in the chapter as well as the information from the climate and topographic maps, in order to provide reasons for similarities and differences.

Another exercise would be for the class to determine the climate of a place from photographs of vegetation, landforms, houses, style of dress, and daily activities being pursued by the people. Students would need to provide reasons for their conclusions.

Chapter 4: The Geographer's Blueprints; pages 23-30

Activities. When introducing the students to maps and their uses, the instructor must first note that a primary use of maps is to determine location. The students must then be brought to the understanding that location is determined through the use of the geographic grid, or longitude and latitude. Precise definitions of these terms should accompany any explanations concerning them. The globe should be liberally employed as an example with all explanations. After the geographical grid has been discussed and explained thoroughly, the students should be assigned numerous problems requiring them to state the grid reference for a specific city or to locate and name a specific city by its grid reference.

When the concepts of longitude and latitude have been mastered, the instructor can introduce the subject of time zones, the International Date Line, and their importance. Since the students have already studied the earth motions, the idea of change in sun time over the earth's surface due to rotation, should not be difficult to understand. It can be shown that there is a one hour difference in sun time for every  $15^{\circ}$  longitude by dividing  $360^{\circ}$  by 24 hours, which equals  $15^{\circ}$  for every hour. For this reason, the earth is divided into twenty-four time zones with each zone including fifteen degrees of longitude. The International Date Line should need no more explanation than to state that it roughly follows the 180th meridian and that depending upon the direction of travel, when one crosses the line, a day is either gained or lost. To promote understanding, the instructor might have the students figure the change in days for an east and west direction of travel.

Another very important topic of this chapter is the construction and use of map projections. The students should realize that in order for cartographers

to depict round surface of the earth on a flat surface there must be some distortion or the physical features will usually not be shown in their actual size and spatial relationships to each other. To demonstrate the concept of map projections, the instructor can employ a clear plastic globe which possesses the outlines of the earth's grid and continents. This globe must be lighted from the center. A translucent piece of rigid plastic may be wrapped around the globe in the form of a cylinder which is tangent at the equator. This will demonstrate a map projection based on the principle of a cylinder which can then be compared to the characteristics of a Mercator projection. The great distortion of area at the high latitudes can easily be seen. The principle of a conic projection can be demonstrated by shaping the piece of plastic into a cone and placing it over the globe so that it is touching a parallel in the mid latitudes. The shadows cast on the plastic will show relatively true shapes and sizes where the plastic is touching the globe and progressively more distortion the farther north or south of this point one looks. It must be noted that the point where the cone touches the earth is a standard parallel and that this projection is useful for showing countries of the mid latitudes with some accuracy.

The principle of the Azimuthal Equidistant projection can be demonstrated by maintaining the plastic in the shape of a plane and holding it to the globe so that it touches only one point, such as a major city. The students will be able to see that straight lines radiating from the center point are great circles. It should be noted that this type of projection is important to navigators in measuring distance from a specific point. It will also be easy to see that the shapes of the continents become increasingly distorted as one moves away from the focal point.

The topographic map is an important tool for the students to become familiar with. The instructor should prepare a spirit master which will

explain the use of scale, grid reference, legend, and map symbols. The definitions of contours, contour intervals, and index contours need to be provided. A list of the characteristics of contour lines should follow these definitions. When the students have become familiar with the material through explanation and the use of the spirit master sheets, they should then study the features of a variety of topographic maps. A map from the local area should be used by the students to do several simple map interpretation exercises. Each student should be required to do the following: Locate the highest and lowest point on the map; locate a small area having the greatest relief; locate the areas of steepest and gentlest slopes; locate and name the major surface water features; locate any unique landforms such as ravines, canyons, buttes, waterfalls, etc.; locate their church, school, and any wooded area. This exercise will require the students to apply the use of contour lines to specific problems and to interpret map symbols. If copies can be obtained, the U.S.G.S. booklet, Topographic Maps, can be issued to the students for an aid in map explanation and symbol interpretation.

A meaningful participatory exercise for students is to have them construct a map of a one or two square block area next to their school. It should be possible to take the class out to construct a rough field map of the area during school time. Students can be divided into groups so that some are responsible for pacing off the overall dimensions of the block, some for measuring the dimensions of individual lots and property lines, and others for measuring detail such as streets, houses, driveways, etc. The students can exchange this information in class and then begin constructing their finished map as a homework assignment. Students should be free to construct a map of any reasonable size, but all maps must include a compass rose, ratio and bar scales, at least three map symbols, and a map legend. Through this exercise, the students should develop a more thorough understanding of map construction,

map orientation, the use of scale, and the importance of symbols.



Chapter 5: The Earth and Its People; pages 31-39

Activities. This chapter deals with some of the ways humans interact with their environment. The term culture is defined, and it is explained how culture often serves as a mediator between people and the environment they live in. Also discussed are some aspects of food production in various climate zones and the relationship between food production and population distribution. The cultural and environmental factors which are necessary for the development and growth of industry are summarized as well as the relationship between industry and the growth of cities.

The concept of culture, what it is and how it functions, should receive a strong emphasis in this chapter. Culture can be defined as learned behavior or knowledge which helps people adapt to their natural surroundings. To emphasize this point, pictorial examples can be shown to the class which illustrate how humans have changed the face of the land in order to satisfy their needs. A distinction should be made between material and non-material culture. To aid the students in this distinction, the instructor can use the overhead projector to list several examples of material and non-material culture within the local community which the class suggests. The class might also be asked to think of examples of non-material aspects of culture coming into conflict with, or taking precedence over, the material aspects.

Other points to be made concerning culture are: the distinction between simple and complex cultures or societies; the idea that cultural change is often uneven, since the material part of culture can change more rapidly than the non-material part; that change from a simple to a complex culture alters

human use of natural resources; and that cultural diffusion is the transmitting of aspects of one culture to another.

To help develop skills of map reading and interpretation, the students should compare and relate the information from the World Food Supply map on page 33, the World Climate Map on pages 18-19, and the World Population Map on page 32. These maps should be discussed in class in order to give the students guidance in map reading and interpretation of data from a visual form to a verbal form. The students should be made aware that climate, population distribution, and food producing regions are not always spatially related, and that there are other human and environmental factors which affect this relationship.

To follow up on the above activity, the instructor can lead the class in an exercise in which they are required to suggest ways in which modern technology has made it possible for people to live in places where they cannot grow their food. This will aid the students in relating the importance of transport networks to cities and industrial regions, military installations, research stations, and remote areas where resources are being developed. Discussion should follow on the importance of transport to the student's own community. They should be prepared to list and locate the types of transport systems that serve their town and name the types of goods and materials each transport system specializes in handling.

The concept of the metropolis should be introduced to the students by first defining the term and then breaking down its description into its various parts. The interdependence of all the parts of a metropolis needs emphasis in class discussion. A class exercise can be conducted in which the students will examine their own metropolis or a neighboring one by describing the inner organization of all its parts and how these parts are related.

The topic of industrialization can be related to the development of the metropolis as well as the various factors necessary for industrial development. Some of these factors are: a supply of raw materials, a source of power, skilled labor, investment capital for development, climate and topography which is favorable for transportation, and a favorable living environment. Other elements can probably be added to this list by students. When studying the world regions during the remainder of the course, nations will be mentioned frequently. Students should be familiar with these factors so they can note which are present and which are missing in any given country and then analyze the future prospects for industrial development within that country.

Many general but important concepts are introduced in this chapter. How thoroughly the instructor covers these concepts depends upon the ability of the students and the time available for the unit. In addition to lecture, discussion, map interpretation, and other class activities, the instructor should furnish worksheets which require the students to reread the text material and answer in writing relevant questions from the material. To insure that the students have more than a simple recall knowledge of the material, questions requiring some degree of inquiry and analysis should be included.

UNIT NINE: THE UNITED STATES AND CANADA; Pages 437-517

Chapters 43-52

Activities. The unit on North America is quite long considering the two to three week time limit available for its study. Most of the textbook reading on this unit is material which the students will be able to grasp easily so they should be required to read the entire unit on their own. Reading assignments should be made from day to day, a chapter at a time.

The instructor can introduce this unit through the use of a globe and the climate and population maps on page 439. The indented nature of the North American coastlines should be noted as well as the relative location of North America to the rest of the world, the proximity of Alaska to the Soviet Union, and the names and locations of the various regions of the United States and Canada. The climate regions map of North America should be employed to familiarize the students with the variety and distribution of climates over the continent. Particular note should be given to the great extent of sub-arctic and arctic climate through Canada and Alaska. Students should be asked to determine what influence this type of climate has upon the settlement pattern, agriculture, and industry of Canada. Landforms and ocean currents should also be related to the effect they have upon the distribution of climate. The overall distribution of population needs to be studied in terms of how this distribution relates to climate, landforms, and relative location.

The unit is broken down into nine chapters, which include an introduction chapter to the United States and Canada and subsequent chapters dealing with specific regions of each nation. The instructor may wish to break away from

the organization of the book by unifying the material through the use of a series of themes such as: the physical background, population, agriculture, industry, transport, economic development and foreign trade, conservation, and urbanization. The subject matter of the individual themes can be associated with the specific regions described in the book. This method can give the students an alternate way of organizing the large amount of information dealt with in this unit.

A method to introduce the physical background of North America would be to have each student prepare a research report on a particular physiographic region of the continent. Students would be required to give a three to five minute oral report and prepare a two page written report on the region. The oral reports would serve the purpose of introducing the students to the other regions they did not research. The instructor should emphasize that this is just one of many possible ways to regionalize the study of the continent. Reports should include facts on such things as location, climate, soils, vegetation, population, economic activity, and other unique or important information relevant to the region. During each report the student should be required to point out the location and extent of his region on the map. One to two class hours in the library may be required by the students to insure time for research and completion of the reports.

To study the topic of transportation, the class can be divided into four groups, each group being responsible for a separate topic on railroad, air, highway, or coastal and inland water transport. The class will work in the library researching their topic for one class period. The group researching railroad transportation should be told to look for such things as total miles of track, total miles of multiple track, the pattern and density of the network, major transcontinental routes and major railroad centers. The group doing air transport should look for major air routes, major air terminals, the pattern

of air transport, numbers of passengers handled at particular points, total passenger miles, volume of air freight, etc. The group investigating coastal and inland water transport should look for all navigable rivers, all rivers which have been channeled and had locks installed in order to make them navigable, all canals, Great Lakes shipping routes and key locks, major inland ports, and developments such as the intercoastal waterway and channeling projects. The highway group should note the systems of state and federal highways, especially the pattern and extent of the interstate system, the major transcontinental routes, and strategic or pioneering highways, such as the Alcan and roads of northern Canada. Students will probably find additional information to add to their surveys as they investigate the topic. The instructor should issue spirit master copies of maps of the United States and Canada to all students so they can attempt to map the patterns of transport, major routes, and major transport modes.

A possible addition to this exercise would be to give the students a list of 8-12 selected North American cities, for which they will assess the role of a particular mode of transport upon the development of each city. The cities should be selected carefully in order to insure that a different set of location, topographical, and transport types is characteristic for each. By judging which transport mode was or is most important to a particular city's development, the students should learn to associate location and topography with the types of transport which are vital to a city or that have played a major role in its development and evolution.

In order to stress the importance of place location and spatial distribution as well as to develop map skills, the students need to be assigned some map exercises. Spirit master copies of maps of the United States, Canada, or the whole of North America should be distributed to the students so that they can map selected themes and phenomena of this region. As a first step,

students should be required to label the fifty states, the Canadian Provinces, and twenty to twenty-five of the major urban regions of North America. The names and locations of the major rivers should also be included in the exercise. On another map, the students can outline the major agricultural regions or belt regions which are discussed in their book. They should be required to shade each region and develop a corresponding map key. The location of North America's mineral resources and manufacturing areas are other important themes which should be mapped by students. The location and extent of the major producing oil fields and coal deposits should be outlined or shaded according to a key. Associated with the mapping of the mineral resources, the students should map the location of the major steel, aluminum, and other metal processing centers as well as other major centers of heavy and light industry. The preparation of these maps will introduce the students to the basic concept of thematic mapping and familiarize them with the location of key population centers, agricultural regions, and mineral resources.

In addition to the above exercises, the instructor should prepare at least three worksheets which will require the students to review the reading assignments and maps in order to answer the questions. Questions should not be entirely centered on factual information and recall but should require the student to do some higher levels of thinking such as association and analysis.



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PRINCIPLES OF WORLD GEOGRAPHY:  
A TEACHING SYLLABUS FOR GRADES 9-11

by

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AN ABSTRACT OF A MASTER'S REPORT

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Geography has received little emphasis within the social studies curricula of American secondary schools. The persistent misconception that geography deals only with detailed inventories of facts borrowed from other disciplines, which relate to various parts of the world, is finally being dispelled. Within the past decade the teaching of geography has been increasingly emphasized and the discipline is beginning to assume an equal role in the social studies curricula. Through this emphasis, students will receive a broader social studies education which will help them recognize the social, political, economic, and historical dimensions of spatial and environmental problems. A geography course can aid the student in his understanding of our increasingly interdependent and dynamic world.

At the high school level, an introductory World geography course should provide the student with an introduction to the discipline of geography, (as well as help the student develop a world view within a spatial and environmental framework.) The basis of this report is to present a plan for a one semester, ten unit, course syllabus for grades 9-11 entitled, "Principles of World Geography."

The statement of eight generalized course objectives furnishes a unifying set of goals which serve to tie the ten units together and provide a continuity in course approach. Although the major approach of the syllabus is regional, it qualifies as a "principles" course because the introductory unit deals with principles of physical geography, principles of maps and their use, and basic principles concerning the development and evolution of human cultures. Units two through nine constitute the regional course approach and are devoted to the geographic description and analysis of eight specific world regions. Unit ten covers such themes as the interdependence of the world's nations, world trade, and the conservation of the world's resources.

For each of the units there is a list of generalizations that are basic to the region or topic. Instructional objectives for each unit are also listed. It should be noted that these generalizations and objectives are not encyclopedic in nature, they are simply representative. The final stage of the syllabus includes the outlines of the daily lesson plans for two units. These are representative examples of the types of teaching procedures, subject matter, themes, and materials that can be employed during the process of the course.