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Appreciation units in the teaching of geography in senior high school

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THESIS

Appreciation Units in the Teaching of Geography in Senior High School

by

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APPRECIATION UNITS IN TEACHING GEOGRAPHY IN SENIOR HIGH SCHOOL

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INTRODUCTION

Geography in Secondary Schools is one of the more casually treated of the required subjects. This is due first to the fact that the connection between geography and a future job or position is not so obvious as that of stenography, typewriting, and bookkeeping. In the second place, due to a lack of background in subject matter and to a lack of knowledge of methods of presentation, teachers avoid the teaching of geography if possible. In small schools after the classes in the major subjects have been distributed among the teachers, geography classes are assigned where there is a vacant class period in a teacher's program. Even in large schools where it would be possible to have one or more teachers teaching only geography, the work frequently is divided among three or more teachers, who usually accept the classes reluctantly. Finally, there is a general misconception of the meaning of geography and what it includes. Most people consider geography as a study of rivers, mountains, lakes, products, and trade. Their idea of a product is wheat, with no conscious connection with bread; iron with no connection with the common things they use every day that are made of iron; and trade with no connection with their everyday shopping.

To correct these conditions, three lines of endeavor are needed. In the first place, it is possible to show pupils the utilitarian value of geography by developing the monetary value of a cultural background and outlook. Machines can do
much of the routine work and usually because a person of limited capacity can be trained to run them, the wages are not large. However, people who work up to positions of private secretary or executive need a wide range of knowledge not only for the business, but also from the social point of view.

In the second place, colleges and teacher-training schools can increase the number and kind of courses in geography and make them not only directly valuable for teaching geography, but also valuable for general cultural or basic preparation for teaching any subject. Unfortunately, there are teachers now trying to teach geography in High School, who have not had a formal course in geography since they were in the eighth grade.

The third line of endeavor is to overcome the lack of appreciation of the meaning and scope of geography. We can accomplish this by emphasizing its human side and the connection between the study and our every day lives, - what we eat, see, hear, and wear. If you asked most pupils and even teachers what was the relation between geography and their program that morning before coming to school, the answer would be, "None." Yet, their program involved shelter, water, heat, fuel, food, clothing, and transportation - all geographical factors. If the radio and newspaper accompanied their breakfast, geography could not have been avoided since all of the advertising and much of the news is geographical and the selling of time on the radio and the sale of the newspapers are businesses of geographical significance.

Mindful of these conditions in the state of geography
as a subject in High School, the following chapters have been written. They include a study of methods, techniques, textbooks, units of study, equipment, and bibliography. The effort has been made to choose units within the pupils' experience or interest, to show the relation between geography and the common everyday programs of the pupils, and to lay the foundation both for a permanent consciousness of this relation and for a continuous and intelligent appreciation of people, commodities, and conditions locally and internationally.

Teachers, who have not had the experience of teaching the one subject, geography, have no idea of the possibilities: the new interests, new subjects, new approaches, techniques, procedures, responses, and so on. Teachers of mathematics may find the same formulae and theorems monotonous and teachers of languages may lose interest in the same declensions and conjugations, but a teacher of six classes of geography a year, for even fifteen years, who has specialized in that subject will find each year and even each class interesting, stimulating, and challenging. This, at any rate, is my experience.

Acknowledgement is made to Dr. Guy M. Wilson of Boston University for his suggestions and corrections, during his seminar course of 1934-1935.
CHAPTER I

Definition and Limitations of the Problem.

The problem set for this study is the developing of appreciation units which may be used as samples of teaching units in secondary school classes of Commercial Geography. Appreciation units, as developed in this study, include material which is within the pupil's observation and experience or which appeal to his interest, through the selecting of materials and procedures to develop further interest, greater desire and ability to learn more about the subject, and a better understanding and appreciation of it.

The general objectives in the teaching of Geography may be classified as follows: the indirect objectives are first to form a background for more intelligent living in the world, for greater interest in its growth and development and for greater sympathy with and a better understanding and appreciation of the people of the world; and second, to instill a sense of the responsibility of every citizen to be more familiar with world affairs, conditions and problems, in order to vote more intelligently and in order to become a better world citizen. The direct objectives are; a. to orient the pupil in the great world environment; b. to create a desire and to develop an ability to talk, read, and travel more intelligently, to see or to hear lectures, motion pictures, and theater productions with greater profit; c. to begin to develop a consciousness of causes, general laws, and effects in world civilization and progress; d. to provide a broad basic background, particularly with regard to
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people, places, products, and their geographical and economic relationships as essential factors in all business, and finally e. to develop the ability to find geographical and economic information, to use books and other sources of information, and to apply such information.

The units developed in this study must meet the requirements of the general objectives as listed above. Any teacher will readily understand the difficulty of transferring the spirit of the classroom to the printed page. It must be assumed, therefore, that the teacher is prepared to put the right attitude and spirit into these units, most of which were actually developed in the classroom.

The method of the present study is a combination of research and trial and error. Research is involved in the following sources: typical texts on methods of teaching in secondary schools; teachers' manuals published in connection with certain text-books, such as Teachers' Manual to accompany "Factors of Economic Geography" by Staples and York; Masters' Theses, which have been accepted; and magazines, such as "Economic Geography".

The trial and error procedure takes place partly in the classroom and partly in periods of study and contemplation. The procedure is along two main lines; first, using the basic materials in the texts and in supplementary books as the foundation of the unit and making the objectives, the approach,

Staples and York, Factors of Economic Geography
South-Western Publishing Co. 1934.

"Economic Geography Magazine" published by Clark University.
set-up, and procedure give the unit the appreciation point of view, instead of the problem, drill, or preparation for examination point of view; and second, to construct typical set-ups for making the best use, from an appreciation standpoint of important current world news of geographical significance.
CHAPTER II

Study of Existing Text Books.

Since the principal source of subject matter for the geography course is the text book, a comparative study of the standard texts was made. This study revealed that during the last twenty-five years, there has been little change in the format of high school geography text books. In decided contrast to the grammar or junior high texts, which are large books, with wide margins, large print, many illustrations, and excellent maps, our high school texts are small books, with narrow margins, fine print, long, solid paragraphs and few maps, (practically no physiographic or topographical maps). The writers of high school texts have sacrificed map visualization almost completely; and by condensing and making more prosy the material, they have lessened the appeal and interest tremendously. The tendency among publishers of books, other than text books, both fiction and non-fiction, is to make them larger, with alluring covers and jackets, with pictorial maps on the inside of the covers, with large print, wide margins, and many illustrations.

Van Loon's Geography (1) was read by thousands of readers, in spite of its cost and subject. If the book were not so attractive, it is doubtful if the general public would have discovered that the reading material was interesting.

There is also a great unanimity, among the authors of

High School geographies, relative to the subject matter and even its arrangement and comparative emphases. The usual arrangement, which I shall call the vertical approach, is in three parts: part one, the United States; part two, Foreign countries; part three, World commerce. (1) There may be a slight variance in this division, but the idea of studying the products and industries of the United States first and then taking the foreign countries as distinct chapters, obtains in most texts, (2) (3). Usually in the grades, there is a division paralleling this: Grade V, the United States; Grade VI, Europe; Grade VII, Asia, etc. It would seem better in the High School not to continue the subject as isolated continents, but instead to have a horizontal division by products, industries, and commerce. Having had the vertical division in the grades, this horizontal division would give a new attack and a new viewpoint. Also, the horizontal division encourages an international and world interdependence viewpoint. Finally, the geographical information in the current sources of current events is not pigeonholed by continents. Usually a situation in the United States is described and then compared with similar situations in other countries. Ex. The weather. The value of gold. The scarcity or abundance of some product. Exports and imports.

(1) Smith, J. Russell, Commerce and Industry. Henry Holt Co. 1925
(2) Staples and York, Factors of Economic Geography. South-Western Publishing Co. 1934.
(3) Whitteck, R. Hughes Industrial Geography. American Book Co. 1931.
Huntington and Cushing follow this horizontal division in their book. (1) There is a tendency among educators lately to favor the horizontal or non-regional division of the subject. For example, Prescott makes this comment: "Does not geography often favor the glorification of political sovereignty by dividing up world areas in accordance with political divisions rather than on the basis of common characteristics of terrain, climate, products, or culture? Would it not be better to favor implicitly a more humanistic attitude by describing world areas in terms of the manner in which resources and population contribute to human welfare? I am aware that human geography is rapidly dispossessing political geography in our Schools." (2) Among text book writers, Colby of the University of Chicago, suggests the regional approach: "A study of a region is concerned with the major industries by which people gain a living, with the distribution of those industries, and particularly with the problem of how such industries utilize the land and other natural resources with which the region is endowed." As an example, he takes the West Indian and Caribbean regions, as the typical sugar countries; the Orient as the silk center; Denmark, as the dairy industry center, etc. (3) This is not contrary to the horizontal approach recommended in this paper. Instead of

(1) Huntington, Elsworth and Cushing, Sumner W., Modern Business Geography. World Book Co. 1930.

(2) "Education", January 1935

starting with a region, one could start with the characteristic product of the region, such as the banana, for example, with which the pupil is familiar; with silk dress material; with butter, cheese, eggs, etc. Then when the product has been studied in the typical region, other similar regions of production may be studied, using the typical region characteristics as a pattern.

There is very little attempt to apply patterns or material learned for one country to other similar situations and countries. Staples and York in "Factors of Economic Geography" have used the same approach in many chapters. For example, topic 1, History; topic 2, Geography, etc. While it is consistent, it seems needlessly dull. It would seem sensible to study manufacturing in the United States, for example, and then show similar or dissimilar conditions in foreign countries.

The omission of human geography in our high school texts is complete. This is not true in grade and junior high texts. Even in the early grades, the pupils enjoy stories of little children in other lands, in their primers and readers. Probably every pupil could give an appreciative description of these foreign children up to ten years of age. After that, there is a hiatus in our description of children from ten up to adult years. Are we not missing a superb chance to teach citizenship, in particular a love for our country, with all its political, social, economic, and educational opportunities, by not continuing in our high school geography classes, information concerning the life, especially the adolescent life in other lands? Even
admitting conditions during the depression, our country would not suffer by such comparisons. Also if the high school pupil age is the most fertile ground for the dissemination of anti-government propaganda, such an appreciation of our advantages might be a wholesome antidote. It might lead the intelligent and honest youth to realize somewhat, that much of this propaganda is not to bring about a change in the order of things, but to create disorder, anarchy, and chaos. Could we not in our study of wheat, for example, study the life of the wheat farmer and his family in the United States, emphasizing from an appreciation standpoint the lessening of physical labor and drudgery in the lives of the farmer and his wife, through the use of machinery? Could we not enumerate the cultural advantages of music, art, and literature through an almost universal use of the radio, movies, and libraries? Could we not describe, in detail, their homes, their dress, their way of living? After such a study in our country, we could compare and contrast the life of a farmer and his family in the other wheat countries, Russia, Argentina, Australia, etc. Perhaps we can influence the high school text book writers to include some human geography in their revisions and in their new books.

The conclusion made from this study of text books is that the following changes should be made: a. the format of the geography text books in High School should be made more attractive; b. the number of maps and types of maps should be increased; c. the approach and procedure should be horizontal, that is by products and industries, rather than vertical, that
is by isolated political units; d. human geography should be included; e. the opportunity for teaching citizenship should be recognized.
CHAPTER III.

Historical Comparison of Methods of Teaching.

The following historical comparison of methods of teaching geography has been made to present a critical view of each method in order to lay the foundation for the formulation of the new method. The oldest method, the verbatim memorization method, ought not be called a method of teaching, it is really a method of learning. As a method, it has been in use from the beginning and is still in use in many places. The theory was that by such memorization, the brain absorbed the knowledge. Whether it was understood and assimilated or not was relatively unimportant. It was even maintained that later on in years, these facts might be brought into consciousness, when they could be understood. This idea would parallel mentally, the physical digestive process of the cow. We have no word for mental indigestion, but no doubt suffering from it was prevalent. Dawson says, "Reciting might well be banished from the educational system. It belongs to the field of dramatics and means the formal delivery of a prepared or memorized address. The expression, socialized recitation, which we have recently come to use with great frequency, is absurd. We ought to eliminate the word recitation, because it carries with it implications that take one back to an outgrown educational era, in which little real teaching was done. Neither Socrates nor Horace Mann had pupils recite to them."(1)

(1) Dawson, Edgar, Teaching the Social Studies, p.295.
There is still a place for verbatim memorization. Beautiful, superb, or sublime selections of poetry and prose may be memorized verbatim, because the complete effect is lost if the wording is changed. This method might even be used occasionally in geography teaching, if the selection memorized gave a mental picture of the geographical features of a country or of the people and their ideals and ways of living, provided the effort were entirely voluntary on the part of the pupil.

The lecture or presentation method of teaching is the easiest method for the teacher. This fact probably accounts for its persistence in secondary schools and colleges. The disciplinary problem is solved by making no demands on the pupils. They sit and listen or they sit and do not listen; they may or may not take notes; they may or may not go over the lecture and add to it by supplementary reading outside of class; they may or may not pass the examination, that is given every week, month, or term. Dawson opposes this method when he says: "To teach is to guide less-trained minds into methods of study, reflection, and action, explaining to them orally whatever they cannot master in some other way and stimulating them to go forward on their own initiative." (1) Another authority writes: "Always interpret the human geography by the geographical conditions. Use the scientific method, rather than the lecture and fact method." (2)

(1) Dawson, Edgar, Teaching the Social Studies, p. 295.
Note: This is an interesting book - contains an excellent elaboration of the relation between geography and history.
All teachers present material, at times, even in the progressive schools, but this presentation differs from the old lecture method in its purpose and motivation. Sometimes the pupils are oriented at the beginning of a unit of work by having certain facts, relationships, etc. presented. It is doubtful, though, if really progressive teachers will talk for any length of time, without including the class, by asking a question or allowing a comment.

The question and answer type of recitation was the standard method in the upper grades for a number of years and later superseded largely the lecture method in secondary schools. A skillful teacher can conduct a class in a thought provoking, interesting, and even exciting question and answer period. The reason for its disrepute as a method is due partly to the type of assignment and preparation which this method presupposes and partly to the type of question. For example, these are typical assignments: "For next time, take Chapter Nine" or "Take pages 296 to 321". The question and answer method proved that the pupils had studied, had grasped the gist or essential points of the lesson, could even show relationships and make comparisons or had not done any of these things. The questions asked in this method were fact questions and thought questions. Monroe differentiates between thought questioning and fact questioning thus: "Fact questions call for ready made answers; thought questions are new questions and usually require reflective thinking."(1)

The ready made answers often included long paragraphs of the text memorized verbatim. Thought provoking questions may be used as minor techniques in the appreciation method, especially in developing comparisons and summaries. This will be discussed under techniques in Chapter Four.

One of the methods of teaching endorsed for many years by supervisors and superintendents, was the drill method. Geography, at least up to 20 years ago, was a much drilled subject. A certificate of proficiency, which was actually given to a pupil in Morristown, New Jersey, on March 8, 1826, illustrates the extremes, to which drill was carried.

GEOGRAPHY A CENTURY AGO
Certificate (1)

Elizabeth Crane hath been engaged, during her attendance at this school, in storing her memory, that strong and capacious storehouse of mankind, with useful ideas, lessons, and information generally.

Pursuant to this end, she hath deposited in her memory for future use the multiplication and other arithmetical tables.

She hath repeated the principal divisions, oceans, islands, etc., and answered 109 questions on the map of the world. She hath recited the principal divisions, lakes, rivers, bays, gulfs, etc., and answered 41 questions on the map of North America.

She hath defined the boundaries of 12 of the United States and repeated 95 of the chief towns and 33 of the

(1) Journal of Geography, October 1933, p.298.
principal rivers belonging to these 12 states and answered 86 questions corresponding to the geography of that fine country. On the map of South America, she hath committed to memory the different countries belonging to that great peninsula and repeated 58 chief towns and 33 of the principal rivers and answered 39 questions corresponding with its geography.

Let no one say, hereafter, that females cannot learn, for that is an assertion without foundation. Elizabeth is a living proof to the contrary and she merits the approbation and encouragement of her parents and friends.

(Signed) P. Warden

Morristown, New Jersey
March 8, 1826.

Dr. Wilson of Boston University referred to drill, in general, as follows: "Drill material should be practically useful, should be worthy of the time expended in its mastery, and should be small enough in amount to make 100 per cent accuracy possible."(1) Geographical knowledge would not fit this criterion, if the objectives, which were stated at the beginning of this study, were followed.

A pupil who was a good pupil in geography as recently as twenty years ago, could recite definitions verbatim and could list cities in order of size with the same rapidity as he could say the multiplication tables. That children did not understand the definitions always is shown by amusing results of written tests. For example, "The equator is a menagerie lion running

(1) Guy M. Wilson, lecture notes, 1935.
Of primary importance is the concept of the economy. The economy consists of all the factors that contribute to the production, distribution, and consumption of goods and services. It includes the natural resources, the labor force, the capital, and the technology. The economy is also influenced by government policies and market forces.

In a capitalist economy, the production and distribution of goods and services are determined by the free market. The prices of goods and services are set by supply and demand. In a socialist economy, the government controls the production and distribution of goods and services. The government sets the prices and determines what goods and services are produced.

The economy is also affected by the environment. The depletion of natural resources, pollution, and climate change are all issues that affect the economy. The economy must balance the need for economic growth with the need to protect the environment.

In conclusion, the economy is a complex system that is influenced by many factors. It is important to understand the economy in order to make informed decisions about how to allocate resources and how to use natural resources in a sustainable way.
around the earth." York makes the following statement about the drill method: "No one can remember isolated facts for any length of time and nothing will stultify the pupil's interest more than to compel him to memorize facts and figures that have no real meaning to him. The general aim in teaching geography should be to widen the horizon of the pupil's interest in the world about him."(1)

The question may be asked, "How are we to fix essentials of place geography and other facts and figures?" Since the old method of endless repetition of disassociated facts does not guarantee permanent retention, the emphasis, through association of ideas, is recommended. The old and the newer method are shown in the following examples. An assignment that used to be given was, "Name the states of the United States in alphabetical order." By drill this could be achieved, but to no practical purpose. Associating the states regionally by industries and by other geographical factors, the pupils know the states, not just by name, but by associated characteristics. Again, when studying the effect of the rise and overflow of the Mississippi River in the Spring, following the story in the current papers of the loss of life and property, the states affected are noted almost unconsciously and no doubt are remembered. In the days of just drill, the exercise was: Name the states that border on the Mississippi. We wonder if any of the bright pupils of those days asked, "What difference does it make, whether they border it or not?"

(1) Miller, Jay Wilson, Editor, Methods in Commercial Teaching. York, George M. Chapter Seven, p.165.
Another important factor in the memorization by association is the provision for noting relative importance, which was lacking in the purely drill procedure. For example, the old direction would be, "Name the largest cities in the states of the United States." In fact, a famous race consisted of writing the names of the states, capitals, and large cities as fast as possible, thus:

Maine           Augusta           Portland
New Hampshire   Concord           Manchester, etc.

Records were made and broken and champions were honored in this competition. It is obvious, however, that the largest city of Utah received the same degree of attention as that of New York State. In the association method, a question might be, "Why is New York the largest city in the United States?" The largest city of Utah and a number of others would be among those which the pupils did not need to note especially, because they could look them up in an Atlas or World Almanac at any time.

The drill method suggests tests, even invites them. At one time, a teacher was rated more or less on the showing her pupils made on the annual tests sent out by the superintendent of schools. (1) Monroe says of testing, "Courtis's Standard Tests in Geography for states and important cities of the United States and the Hahn-Lackey Geography Scales show the difficulty of making standardized tests in geography, because of the amount

(1) Quincy, Mass., 1910-1915.
of material, the possibility of more than one answer, and the differences in courses of studies and text books used in different places. Probably all teachers will agree that the two topics, states and important cities of the United States, are important ones. However, other tests do not admit of such concrete material, nor is it proved that this sort of knowledge and testing is desirable or in keeping with the aims in the teaching of Geography, which provides for future interest and growth."(1)

It is safe to say that the drill method defeats the objectives of the subject, not only from the point of view of present utilitarian value, but also from the point of view of future interest and application.

The problem and the project methods were a decided departure from the old methods in both approach and procedure. Educators have made seemingly needlessly elaborate differentiation between the terms, problem and project. For example, Dawson says: "The term problem stresses the thing undertaken, while the project stresses the motive with which it is undertaken. As soon as pupils undertake to solve or even to study a problem, the project element enters in and becomes dominant."(2) Another leading educator uses the term, project, to cover many activities, thus: The project method is "any unit of purposeful activity where the dominating purpose as an inner urge, (a) fixes the

...
aim of the action, (b) guides its progress, and (c) furnishes the drive, its inner motivation. Ex. (a) To make a wooden table or a poem; (b) to enjoy reading an essay or the working out of a mathematical problem for pleasure; (c) to solve a problem, like determining the true cause of the Mexican War, because it needs to be solved, irrespective of the element of pleasure in the process; or (d) to acquire some definite knowledge or some degree of skill, as learning dates or the multiplication tables."(1)

The terms "problem and project" have been so used and abused that all that seems possible is to differentiate them from the earlier methods, the verbatim and drill methods. Kilpatrick's definition is so broad that, if accepted, practically all teaching which involves purposeful activity is a project.

Generally speaking, in the problem method, a problem is stated, which a pupil, after using all the available reference and resources, is expected to solve. The advantages of this method are that it motivates the work; it results in more intelligent research; and it increases the power of weighing evidence, seeing relationships, making comparisons, and arriving at conclusions. Because it is difficult to get a real situation and because the current problems are not yet solved and are not within the power of pupils to solve, the problem method is not recommended in geography teaching. Most so-called problems are just questions. For example, "What will be the outcome of the Manchukuo situation?" This is a problem. "What are

(1) Kilpatrick, Wm.H., Teachers College Record, Vol. 22, No. 4, p. 283.
the geographical causes of the war between Japan and China?"
This is a concrete question, which has a definite answer.

A more concrete distinction is the following: "The project involves constructive or creative ability and must end with a successful completion of an objective unit of work. A problem may be solved in thought only."(1) If a table is to be made, the completion of it is the goal. Some teachers call their units, projects, if any concrete thing has been made, such as a sand table, a miniature Panama Canal, or even an illustrated notebook. This type of achievement should be merely a motivation technique in the achieving of the real goal which is not only a greater interest at the time, but for future application. This distinction might seem a mere quibbling over terms, except that if the teacher or pupils concentrate exclusively on a notebook or other motivating medium, they will feel a completeness of accomplishment, which will defeat our most important aim, future interest and growth.

The Dalton Plan and similar individual contract methods are distinctive in that the school year is divided into certain goal periods, usually four weeks, and a certain amount of work must be accomplished in a period before the work of the next period is undertaken. The pupils are given individual assignments and work independently at their own rate of speed. Tests are usually given at the end of the goal periods. Provision for individual differences may be made by maximum and minimum.

units of work.

The Dalton Plan, according to its exponents, has the following fundamental principles: a. "Individual instruction, so that each child may work to capacity, in spite of great individual differences; b. freedom, with stabilizing responsibility, so that each child may work at his own speed, in his own time; and c. a socialized environment: community living, so that each child may not merely be an intelligent participator in the life of his immediate group, but also a part of the still greater objective, to bring the various groups into such constant interaction that there will be group consciousness and a feeling of group responsibility."(1) The Dalton Plan is weak at this point. In social subjects, especially, individual effort and activity toward an individual goal is contrary to the achieving of group consciousness and group responsibility.

In creating the new method, the appreciation method, educators have neither discarded nor ignored the older methods. The best of the old methods has been incorporated in the new, usually as general or minor techniques. In the appreciation method, the choice of material, the orientation, the development and results depend entirely on their contribution to the accomplishment of the objectives set up for this subject. The name "appreciation" is well chosen since its definition is: "A sympathetic and critical estimate", which connotes understanding, as well.

It is hoped that the evaluation of the teaching or the learning will not be from the point of view of immediate or present gains, but rather will emphasize the "carry-over" of interest and power into the future. For example, an "A" pupil, in the past was one who could prove in an oral or written test that he or she knew the text-book "backwards, forwards, and upside down". When more diversified material was used, the criterion was still the amount of knowledge that the pupil had at the end of a period or term. We cannot test the present method by the old standards. We cannot ascertain by testing or in any other way that because of our methods of teaching, our pupils after leaving school are going to read a diversified list of books, magazines, and newspapers with a sympathetically critical estimate of world geography, people, and affairs. A test such as that of Eurich and Wilson on Current Affairs,(1) which appeared in Time on March 1935 would be an interesting check-up for our graduates out of school five or ten or more years. If most of the graduates did well on this test and if all the subjects in high school had had this appreciation idea as one of their objectives, there would be some indication of the success of the method. The most we can do is to expose the pupils to all the good influences, while we have them in school and hope, trust, and expect, to some extent, that they will continue the activity in the future.

(1) Eurich, Alvin C. and Wilson, Elmo C., Current Affairs Test. Time Magazine, March 11, 1935. (University of Minnesota)
It is further contended by our educators that the social studies must form the central motivating force of the preparation for an intelligent citizenry. Our world has grown so small through rapid transportation and rapid communication that we are affected immediately today by circumstances occurring all over the world, which only a few years ago would not have affected us at all. The franchise has been extended to so many and on so many subjects, that unless we have intelligent and interested voters, we may have an ignorant mass of people ruled by dictators, propagandists, and demagogues.

The importance of an intelligent use of leisure time has been stressed especially in the last five years. Reading diversified material, attending lectures on current affairs, listening to worthwhile radio programs may become habitual if the interest and intelligent understanding are allowed to develop while the pupils are in school. There should be no sharp break between the process of learning in school and the continuous education all through the adult life.

After making this comparative and almost chronological study of the methods of teaching Geography, one sees the evolution from a strictly fact subject, circumscribed by drill and examinations, to a broad, interesting subject of many approaches, emphases, and results. In order to attain these new results, the appreciation method is recommended. However, the teacher must keep in mind constantly the objectives set up for the subject, because they govern the approach, the spirit, and the success of the entire course. In order that these objectives
may not seem merely theoretical, the next chapter in this study will be devoted to the techniques which have been used in developing them.

A word might be said about any conclusion reached in the teaching of such a changing subject. While the appreciation method is used in the development of the present study, the writer would concede the value of occasional problem units in geography. The progressive teacher will be on the alert for improvements in methods, for additional techniques, and for elaborations of new units of work. In this connection, Monroe emphasizes this continued activity and initiative of the teacher in the following statement: "It will be unfortunate if the time ever comes when teachers consider that teaching procedures have been so evaluated by scientific methods, that they no longer need to give thought to questions relating to the techniques they should employ. Also, it seems likely that the scientific study of teaching will show that there are no "best" techniques of teaching. Teachers should constantly seek out new procedures or attempt to introduce variations in their present methods, so that his work may have the spice of variety and novelty and not degenerate into a mechanical routine."(1)

CHAPTER IV.

Appreciation Technique.

The teacher, who decides to use the appreciation method of teaching must make use of the appreciation technique. The procedure will include: (a) a choice of units of work; (this will be discussed in a later chapter) (b) the following of the general techniques and (c) the following of the minor techniques.

The general techniques include: (a) Motivation-interest; (b) provision for individual differences; (c) development of character results; (d) technique of socialization; and (e) development of permanent interest and desire to continue the study in the future.

Motivation from the standpoint of the child includes the following: (a) "Curiosity with reference to the child and its people; (b) the relation of geographical facts to economic values as developed from real problems of the child; (c) the social value of geographical data, since they furnish a basis for the understanding of current happenings, the planning of trips, and are constantly involved in reading and conversation; (d) the play motive involved in planning grown up experiences, also in use of geographical facts in games and contests; (e) the connection of geography with romance and adventure, as needed in books of travel and education." (2) An illustration

(1) Wilson, Guy M. Lectures at Boston University 1934.
The text on the page is not legible due to the quality of the image. It appears to be a page from a document, possibly a book or a report, but the content cannot be accurately transcribed.
of this may be seen in a contrast of two methods of teaching about the Tropics. It can be taught as a physical unit, with climate, topography, products, etc. as topics; but with the idea of interest as a motivating force, one would follow the procedure suggested by Colby and Foster: the fruits from the tropics, especially the banana is the familiar and interesting approach. (1)

Provision for individual differences may be made by homogeneous grouping, by minimum and maximum requirements, by individual assistance. In the large high schools, there has been a tendency to group pupils homogeneously. A discussion of the advantages and disadvantages of this method might develop into a long argument. After seeing it tried for two years (2), the following advantages are apparent: in technically skilled subjects, such as bookkeeping, stenography, typewriting, etc., a class progresses according to its ability; in college preparatory subjects, such as the foreign languages, college mathematics, physics, and chemistry, bright pupils are not held back by slower ones, so that whole classes are accelerated. The disadvantages of homogeneous grouping are: (a) It does not take long for pupils to appraise their status and try to live up to it or boast about it or live down to it; (b) pupils travel in these groups all day, so that the poorer

(1) Colby, C. C. and Foster, Alice Economic Geography for Secondary Schools, Chapter I.
(2) Quincy Senior High School, 1934 and 1935.
groups develop into gangs; and (c) pupils, who excel in the poorer groups, form the idea that they are superior, since they have no other basis for comparison. If the pupils in a high school were grouped alphabetically in home rooms, homogeneously in technically skilled subjects, and in college and non-college groups in the social subjects, there would be an almost complete elimination of the disadvantages of grouping. Geography, history, English and sciences would then be grouped as college and non-college divisions. In that case, all of the other provisions for individual differences could be made.

There has been a steady advance of socialization in our schools in the last fifteen years and especially in the last five years. The extreme is found in theory largely, but actually in the most progressive schools: the pupils conduct the class, initiate the problems, direct the discussions, move about at will, talk at will, etc. In the conservative socialization, the teacher is still the director, but she allows some latitude by allowing pupils to work together in groups for research and discussion, and by allowing freer class discussions. New teachers are cautioned in the socialization of their class period, because of the disciplinary difficulties. As the teachers are able to arouse a sufficient interest among the pupils and to secure an orderly, cooperative attitude, socialization is possible and desirable. Adams says: "The object of a socialized lesson is not to test knowledge gained, but rather to create a deeper delight in the study by giving the pupils a chance to talk over with one another the lesson which has now
become a common possession."(1)

The development of a permanent interest and a desire to continue the study in the future is the most important objective of the appreciation method. This is accomplished through interest and research in a diversified list of references while in school.

The minor techniques apply to the working out of the units. Dr. Wilson suggests: assignments, questioning, supervised study, and testing.(2)

The following techniques have been used in a long unit of the appreciation type: orientation, definition, assignment, discussion, supervised study, questioning, organization, comparison, summarization, generalization, application, and evaluation. This order and this number of techniques will vary in different units of work. In the unit of work, "What were the geographical causes of the war between Japan and China", (3) and the supplementary unit on a comparison of the two island countries, Japan and Great Britain, all of these techniques were used.

Orientation is preparing the pupils so that they feel the atmosphere or spirit of the unit. This may take a period of several weeks. For example, in the unit: "Made in U.S.A." and "Made in foreign countries", the pupils hunted for these trade marks and brought to class goods marked "Made in U.S.A." or

(2) Wilson, G. M. Lecture at Boston University, 1934.
(3) See detailed outline of units, p. 62.
"Made in Japan", etc. (1) Out of this orientation, which required two weeks, the unit was developed.

The assignment in a long unit of work is especially important. If the orientation is successful and sufficient interest is aroused, a long assignment is possible. The ideal way, is to have the pupils work out the important topics. They can do this through skillful questioning and development, in a unit such as "Made in U.S.A." etc. (1) When a workable procedure is decided on, the assignment should be mimeographed, if possible. The assignment may be for the whole class, for groups, or for individuals. In long units, the group method sustains the interest in class discussions, summarizations, and evaluations for a longer time than is sustained by the whole class or the individual assignment method.

The supervised study includes all activities for the accumulation of data under the supervision of the teacher. This may be individual supervision or it may be group supervision. If correct habits of research have been acquired, the teacher in High School finds the work of supervision much lessened. However, some pupils will have to be taught the use of the index, the way to find material quickly, and the kind of book to use for different types of inquiry. At first the reference must be very definite, not only to prevent loss of time, but to prevent a distaste for reference books because of the labor and discouragement involved in their use. In some schools, there are so few reference books that a (1) See detailed outline of units, p. 70
teacher of a large class has to use considerable ingenuity to keep all pupils busy during the supervised study period. In a case of this kind, the class may be divided into a group doing library reference work and one doing a laboratory exercise, such as making a map, graph, or chart. The ideal is to have a library in the class room. Since this is usually prohibitively costly, a well equipped school library suffices. For example, in one school (1), a large well-equipped library is directed by a trained librarian, assisted by some volunteer teachers and pupils. The pupils are trained so well and enjoy library work so much, that they frequently choose it for a vocation and are eagerly sought by the librarian of the Public Library. The procedure for borrowing books for supervised study is as follows: A teacher sends in a list of books the day before they are needed. On the next day, she sends for the books, which are all ready. They are returned at the end of the period or day, as the teacher specifies. The library is open every period for pupils during study periods. Books on references may be taken out by the pupils at the end of the session and returned before school, the next day. In this way, one book may be used by eight or even more pupils in one day.

The supervised study period may be a laboratory lesson, which may include map, chart, and graph making, the making of digests of reading material, the making of notebooks, etc. Educators generally stress the fact that the laboratory work must

(1) Quincy Senior High School.
grow out of problems. Emphasis should secure reflective thinking in laboratory exercises instead of merely routine manipulation."(1) Parker says: "Freely merge discussion, laboratory exercises, and interpretations."(2)

Among the newer techniques included in visual education are the motion and still pictures. These are types of motivation that may be used and abused. They should be pertinent to the unit of work, being studied. They may precede the study for the purpose of orientation or they may be used during the study for elaboration or at the end for summarization. Discussion and explanations should precede and follow, rather than continue during the showing of the pictures. Thwing sums up the advantages of their use as follows: (a) "They afford the most perfect medium for swift and rapid review of the student's past experience; (b) they make it possible to bring new interpretation of past experience to the child; (c) they offer the quickest and most effective substitute for real life; (d) they should raise problems so appealing that the student keeps thinking of them long after seeing them; (e) they should be simple and contain a minimum of fact explanation. The disadvantages are: This is a form of passive education. The mind may be inactive. The response may be entirely emotional and not intellectual. It does not promote co-operation."(3) A source book for teachers of commercial subjects by Woodring and Harold (4)

(1) Dewey, John, Science as Subject Matter and as Method, p.125
Science, January 28, 1910.
(2) Parker, S. C. Teaching in High School, p.460.
contains a chapter on geography films.

There is a possibility of extending appreciation by a development of power to recognize geographic facts and settings, in the "best-seller" commercial pictures; for example, the evidences of a cold climate in Sweden in the picture "Queen Christina", and the health conditions in certain parts of China in "The Painted Veil".

Another important technique is the organization of material: "Taking stock from time to time and expressing concisely the tentative conclusions are necessary."(1) The analyses, comparisons, summarizations, and generalizations make excellent class exercises. The teacher or pupil may write the definite points made on the blackboard. An expanse of blackboard covered during a period in this way is dramatic evidence of something accomplished. A teacher displays cleverness, if she asks the questions that will prevent the discussion from wandering and that will lead to acceptable conclusions. An excellent opportunity for organization, comparison, and summarization was found in the unit on textiles (2), at the end of the study of each textile center.

The evaluation may include a discussion of the conclusions, or may be an expression of what the pupils think of the unit and of the probability of further interest. Parker points out an important consideration in evaluation in the following statement: "In an evaluation, an attitude of unbiased and sus-

(1) Parker, S. C. Methods of Teaching in High Schools, p. 200.
(2) Textile Unit, Page 49 of this study.
pended judgment must be maintained."(1)

Other techniques and procedures include, "demonstrations, experiments, notebook making, clubs, exhibits, assemblies, reports, talks by pupils, field trips, bulletin boards, current events, visual materials, collections, projects, and question box".(2) These provide a wide latitude for the provision for individual differences, but in order to secure the best results, most of them should be voluntary contributions. Notebook making, especially, should be for the most part optional.

Current events may be considered briefly at the time of their occurrence and referred to more elaborately when a topic to which they are related is being discussed. When something of a geographical significance occurs that is nationally or internationally important, the regular work may be suspended and a unit based on the current event may be worked out.

The minor technique, testing, is inconsistent with the objectives for the subject. However, if tests are demanded, as they are in many places, one question, which will show the pupil's grasp of the subject, may be graded adequately. An example of this type of testing and grading is given on page 66 of this study.

There are some very minor, but very important techniques which must be remembered. The mechanics of having materials ready and almost automatically moved results in a

smoothness and order which is worth all the time spent in preparation. The arrangement of material on a pupil's desk or table is also important. For example, in one lesson, a textbook, an outline map, and a paper on which to take notes may be on the pupil's desk. These may be arranged so that they will not have to be moved during the entire period. All of these preparations, when made at the beginning of a lesson, prevent the confusion of papers rattling, of pupils walking around unnecessarily, and other interruptions during the lesson.

A word should be added about the atmosphere of the room. A geographical atmosphere may be achieved by wall decorations, well arranged display cabinets, black-board work, bulletins, a globe, books, magazines, and so on. The most effective wall decorations are large wall maps. Desk paper weights may be made of polished granite and, of course, the little desk pencil sharpener must be the small globe type.

Dr. Wilson summarizes the evaluation of the appreciation lessons in the following statement: "The criteria of judging the appreciation lessons follow the characteristics of the appreciation unit; (a) the work undertaken shall constitute a sizable, worthwhile unit; (b) there will be evidence of spontaneity, freedom, enjoyment, and of an atmosphere of interest; (c) there will be evidence in the unit of rather wide exposure; (d) it must not be drill, problem work, or constant pressure for mastery of fundamental knowledge; (e) there must be provision for expression and growth."(1)

(1) Wilson, G. M. Lectures at Boston University, 1935.
There will be no one procedure or technique that can be used always. "To furnish needed diversity, numerous types of lessons should be recognized. The attempt to motivate all lessons in one way results in monotony and lack of interest."(1)

(1) Branom, M. S. The Project Method in Education, p.228.
CHAPTER V.

Making the Units.

Many educators believe that the units of work should be sizable. It would be possible to reduce the number to four units: a, Agriculture--food; b, Agriculture--raw products for manufacture; c, Manufacture; d, Commerce. However, at least ten units of work are recommended, because it is stimulating to begin a unit of work and satisfying to finish it and because working on one long unit after another may result in plodding, mediocre performance. For these reasons, also, it is better to have units of varying lengths.

The following time schedule is recommended for the year's work:

1. Local city or town 2 weeks
2. Local state or section of U. S. 2 weeks
3. Products of the vegetable kingdom
   a. Wheat and other cereals-8 weeks)
   b. Forestry 1 week ) 11 weeks
   c. Textiles 2 weeks)
4. Products of the animal kingdom 2 weeks
5. Products of the mineral kingdom
   Non-metallic minerals and power 3 weeks
6. The special unit of the year 7 weeks
7. Products of the mineral kingdom
   Metallic minerals 2 weeks
8. Manufacturing 4 weeks
9. Trade and Transportation 4 weeks
10. Summaries by continents 3 weeks
The time schedule recommended is based on a study by products and industries, for reasons given in the chapter on text-books. However, it must be remembered that there is no unanimity of opinion on this method. The makers of text-books suggest the regional study. For that reason, it is easier to follow that method and may be advisable for new teachers. York says: (1) "By general consensus of opinion among geography teachers, the best method of approach seems to be through a study of each region of a special country. Problems concerning one country or section of a country are likely to be more definite and less complex than those concerning the problems of a wider area of the world. For instance, to study wheat as a commodity must necessarily take the pupils far afield over the entire country. The multitude of facts and figures from new and strange places, tend to confuse rather than stimulate, to scatter attention rather than concentrate it. For that reason, it is probably better to begin with the home region." This opinion is quoted here because it epitomizes the opinion of Commercial Geography text-book writers, in general. An approximate time schedule following the usual text-book allotment of pages would be: (2)

(1) Miller, J. Wilson, Editor, Methods in Commercial Teaching York, E. M. Chapter VII., p. 167.
(2) Smith, J. R., Commerce and Industry.
The United States.
1. The cereals 3 weeks
2. The animal industries 1 week
3. The vegetable industries 1 "
4. The fruit and canning industries 1 "
5. Sugar and tobacco 1 "
6. Fisheries 1 "
7. Manufacturing 3 "
8. Forestry 1 week
9. Textiles 2 weeks
10. Leather and rubber 1 week
11. Metal industries 1 "
12. Chemicals 1 "
13. Mineral industries 1 "
14. Building material, pottery, etc. 1 "
15. Trade and routes of North America 2 weeks

Foreign Countries
1. Canada 1 week
2. Mexico 1 "
3. The Caribbean Lands 1 "
4. Brazil 1 "
5. The River Plata countries 1 "
6. The Andean countries 1 "
7. Europe 6 weeks
8. Asia 2 "
9. Africa 1 "
10. Australia 1 "
11. World Commerce 3 weeks

The weak points in the argument for this usual textbook arrangement are that it repeats the arrangement used in the grades; it gives no credit for increased power of study acquired in the grades; and it does not develop a broad and international point of view. For these reasons, the study by products and industries is recommended. The conditions in the United States for a product or industry are studied first. Immediately the conditions in a foreign country are compared and contrasted.

Some units have been described in detail in this paper, but the list is by no means complete. The great advantage in teaching geography, apart from a general interest, is the possibility and even the necessity of change. An outline in
geography should be elastic and changeable. The teacher is guided by the interest in the problem and by the probability of a carry-over into the future. If the newspapers are full of news about Danzig, for example, then that is the time to study the geographical characteristics of that region. However, the teacher will not go too far afield if she keeps in mind always, the year's time schedule. Also, it is possible to use part of the period for the world news of the moment and part for the regular work. The geography period will never develop into a current events class, if only news of particular geographical significance is stressed.

A new special unit every year is a challenge to a teacher in its initiation, orientation, development, and conclusion. The same units every year may be new to the pupils of the particular year, but are monotonous for the teacher. This reflects directly on the responsiveness of the pupils. The subject is too big, too varied, and too changing to make any monotony excusable.

The appreciation units will sometimes come from the pupils' own experience and contributions. The educators in the Progressive Schools go so far as to say that the pupils can and will initiate all their own problems. That the educators are not able to measure the amount of orientation and general foundation that is accomplished by the teacher makes experienced teachers question the initiation by the pupils.

Problems of general human interest, such as conditions of living, types of home life, methods of farming, manufacturing,
and transportation, etc., all make good appreciation units. The alive teacher is always on the alert in all her experiences, traveling, conversations, radio listening, studying, and reading for elements of human interest with a geographical setting or significance, which can be used as appreciation units in her classes.

While a definite allotment of time is given and a certain order recommended, changes may be made. In this connection, one author says: "The logical arrangement of a subject is something to be reached, rather than something from which a process can begin; it is a goal rather than a starting point. Besides, the logical conception of the subject as a whole may exist in the teacher's mind, and yet be quite unsuitable for the pupil's mind. The methodical and logical teacher can quite well keep account of all the gaps that are left in the orderly presentation of his subject, and make sure that at the appropriate moment this gap shall be filled."(1)

In choosing a unit of work, the teacher must consider what information there is on the subject. When the pupils are unable to find information and are unable to find it reasonably readily, they lose interest and even resent being given such an assignment.

The teacher must consider the practical and cultural values of the work to the pupil, now and in the future. York says: "One must take into consideration, not only what informa-

(1) Adams, John, Modern Developments in Educational Practice, p. 243.
tion is to be secured, but how that information can be related to present-day needs and interests."(1) Another educator says: "As the pupil grows and his interests break the bounds of his own personal experience, he must be led farther and farther afield, regionally, factually, and philosophically, until he may embrace in his thinking, and vicariously in his experience, the world and all its peoples, and see them as far as his innate ability permits, as part of his own milieu."(2) Inglis, in the same connection, makes this statement: The units of study must "further the pupils' interest in geography after school days, when it will probably find its activity in the pupils' avocational and leisure program. There will be the two possibilities of growth, the direct, through travel and the indirect through reading. There has been a tendency to organize material and determine content and method with reference to the organization of the subjects or logical sciences rather than with reference to the needs and capacities of the pupils and with respect to the situation in life in which they may use them."(3)

(1) Miller, J. Wilson, Editor, Methods in Commercial Teaching York, G. M. Chapter VII, p. 173.
CHAPTER VI.
The Units In Detail.

The detailed outlines of units, which follow, are based on a year's outline of work, following the time schedule recommended in the previous chapter and based on the usual material included in Commercial Geography texts. Three special units: The textile industry; The geographical causes of the war between China and Japan; and "Made in U. S. A." "Made in foreign countries" have been worked out in great detail, as examples of the development of a long unit. In the other units, the approach and general trend of the work are indicated. The unit "The Saar Basin" is included, as an example of the utilization of a problem of current world news.

**Unit I Local geography. The industrial development of Quincy.**

The indirect objective in the study of local geography is to form a background for more intelligent living in a city, town, or village, for greater interest in its growth and development, and for greater sympathy with its problems.

The direct objectives are: a. to bridge the gap between the geography of Grade VIII and that of this course in Grade X and b. to form a basis of comparison between the local geographical factors and those of other regions of the world.

The time required on this unit varies. At the time of the tercentenary of Quincy, this unit was the major one for the year and required seven weeks for its completion. A historical treatment of the subject was first made, then a
description of the industries of today, a list of the handicaps and advantages, and finally, a summary, which included the possibilities of the future followed.

The source material for a local study is rich in first hand information, but is meager in reference material in books. Much information, from personal experience and from previous study in the grades, give the pupils a background for the study. A word might be said here about encouraging the pupils to use and apply what they have learned in the previous grades. Often the pupils are like the "Chambered Nautilus" of Oliver Wendell Holmes' famous poem, they seal up the old chambers "of knowledge" at the end of each grade.(1) Undoubtedly, pupils do forget facts, but they would not forget conditions, relationships, and conclusions, if every teacher were familiar with the work of the previous grades and made possible a carry-over of information by repeated recall.

The best way to find out about the conditions of local industries today is to visit the industries. However, in a city of 16 square miles, having some forty industries, and with over two hundred pupils working on the unit, discretion must be used in making the assignment. For this reason, two pupils were chosen to visit the industry located nearest their homes. They were instructed to write or telephone to the company, stating what they wanted to know and why they wanted the

(1) Holmes, Oliver Wendell, The Chambered Nautilus: "He left the past year's dwelling for the new --- Built up its idle door, stretched in his last-found home, and knew the old no more."
information. They were also instructed in the procedure of taking part in an interview. This is a good opportunity to teach courtesy, respect for others, gratefulness for favors, etc. This method of sending two pupils, so instructed, is better usually than a teacher-conducted tour, in that the pupils must assume the responsibility and also because this method is the least disturbing to the personnel of the industry. Exceptions to this are the largest industries, such as the local telephone exchange and the Fore River Shipbuilding Company, where whole classes with their teachers are welcome.

In compiling the history of the industries, usually a pooling of all information gleaned from the older members of the pupils' families makes a fairly complete report. The use of such information, given by fathers, mothers, even grandfathers and grandmothers, should be encouraged, since it increases the pupil's respect for these members of their families. The lack of respect, often observed in this connection, which is caused by a different method or terminology in the older and newer education, could be lessened considerably by the attitude of teachers.

In a local study, there is so much illustrative material, pictures, charts, and pamphlets, that the school room can assume a very decorated appearance. Also, because of this fact, pupils enjoy making individual booklets. From these booklets, a comprehensive illustrated class booklet, with a chapter for each industry, can be compiled and used for future reference.
When the local study is a short unit, the approach may be through the answering of a more or less comprehensive question. For example, how have three geographical factors, a) its position on the Atlantic Ocean, b) the Fore River, and c) the granite quarries, influenced the history of Quincy? The conclusions might be charted thus:

| THE GEOGRAPHICAL FACTOR | THE RESULTING INDUSTRY | THE EFFECT ON THE HISTORY |

Another small unit of local interest may be evolved from the question: What are the advantages and disadvantages of Quincy granite as a building material? for monumental purposes? This was a very pertinent question when the use of Quincy granite in the construction of the new Boston Post Office was being discussed in Congress. It is a perennial discussion, when local buildings are being built.

One question, which brings in both geographic and civic factors, is the following: What are the advantages of Quincy, as a residential city? This involves a study of climate (healthfulness and pleasantness), of the proximity to the metropolis, Boston (industrial and cultural advantages), of the industrial advantages in Quincy (opportunities for work), of the civic advantages (fire and police protection, good streets, sewerage, parks, playgrounds, schools, libraries, churches, etc.), of the transportation facilities (for travel, for food, and supplies), and of the general morale of the city and its people.

Every city or town has its geographical factors, which
have more or less influenced its history and development. Also, certain major events of current interest which can be based on these geographical factors, make excellent material for appreciation units.
I.

The Textile Industry. (1)

In order to create an atmosphere of special interest, the textile industry was studied as the first unit of the year, because the newspapers in September 1934 were full of interesting and exciting news of the nation-wide textile strike. This seemed an excellent motivating point of view for the usual review of New England geography. The discussions brought out a realization of what the textile industry includes and the competition among sections of our country and between our country and that of the foreign countries manufacturing textiles. The difference in standards of living seemed to bring a human interest, since it is the basic reason for the difference in the cost of manufacturing in sections of the United States and in foreign countries. The fact that this strike was just one step in the series of relations between capital and labor and the fact that the settlement, which terminated the strike, is, by no means a permanent settlement, makes this unit one which will form a background for more interested and appreciative readings of similar conditions, not only in the textile, but in other industries, in the future.

The approach might also be: The textile industry from the point of view of the Processing Tax 1934-35: or the textile industry from the point of view of Japanese Imports, 1935. The same outline, practically, may be used.

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(1) This unit was developed in September and October 1934 in Quincy Senior High School.
II

The outline on which the unit was based is as follows:

I. Definition of the term textile.

II. What has been the history of the industry in New England?
   B. Describe the conditions obtaining in textile cities in New England from 1914 - 1930.
      1. Type of factory—Expensive building, landscaped lawns, formal gardens, palatial offices, elaborate equipment and machinery, rest rooms and lunchrooms for workers.
      2. Type of home and way of living of workers: - Comfortable and not too crowded homes, bathrooms, electric lights, etc; good and varied food; high school education for children; luxuries - radio, telephone, automobile; movies and other recreation.
      3. Type of City: Good schools-free; good police and fire protection; good streets, sewer system, water system, etc.
      4. The result of those improvements, comforts, and luxuries is a high cost of living and a high cost of manufacturing: wages must be high; Taxes and rent will be high to support the city.
   C. The advantages and disadvantages of New England for manufacturing:
Advantages                                      Disadvantages
Good climate for manufacturing                Practically no raw material
Some waterpower                                Insufficient power
Skilled labor                                  High cost of living
Capital                                        High standards of living
Market                                        High cost of manufacturing
Early Start                                    Expensive climate to live in
                                                (heat in winter)
Reputation

D. Reasons for the decline in the industry.

1. Before 1929, growing competition with the South, which had the following advantages:
   a. Raw material—cotton.
   b. Adequate power—coal and waterpower in Alabama. Waterpower in Piedmont area.
   c. Labor—the natives may be trained. Skilled workers may be influenced to go South from New England.
      (Opportunity here for interesting discussion on the ease or difficulty of persuading New Englanders to leave here for the South. The discussion usually brings out an inherent love for New England and a divided opinion concerning the acceptance of welfare, rather than leaving New England.
   e. Market—not movable directly, but new markets may be developed. Improved transportation facilities shorten distances and cost.
f. Low cost of living in the South.
g. Low cost of manufacturing in the South.

2. During 1929-1934
   a. Competition with the South continued.
   b. General country-wide depression.

E. Summary of conditions in the United States.

III. The textile industry in foreign countries.

A. Where are the centers of manufacturing?
B. Describe the typical conditions in each country.
   Follow outlines in II C.

C. Compare the advantages and disadvantages of manufacturing in New England with those in England, Japan, Czechoslovakia.

D. Summary and comparison of conditions in foreign countries and in the United States.

E. Develop idea of tariff from point of view of standards of living and cost of manufacturing.

The first step in the working out of the unit is the orientation. The newspapers and magazines in 1934, when this unit was undertaken, were a motivating source of information and interest. Incidentally, this was a good opportunity to start the habit of reading newspapers and magazines regularly, as part of the recommended daily preparation.

The presentation of the unit consists of an informal discussion of the textile industry and a pooling of the pupils' contributions from their own experience, from the experience of
their families and friends, and from their reading of newspapers, magazines, and books.

This presentation of the subject will probably bring out some facts concerning the textile industry outside of New England. At any rate, the pupils must have an idea of the scope of the subject at this point.

The second step is to begin the development of a bibliography. Spending one period in the school library and one in the public library is most profitable. The locations and use of catalog cards, the location in the library of this type of book, and the mechanics of borrowing books may be explained in a period. Also, one period should be spent in teaching the use of the Reader's Guide. For this purpose one school library (1) has enough Reader's Guides of one issue to supply a class. The particular set is for February and March 1922. There are bound volumes of Literary Digest, National Geographic Survey and Current History for that year, so that references can be looked up immediately in class. Special references in current Reader's Guides and in current magazines should be used to supplement the class lesson.

A word of caution might be said concerning reference material. Clippings from the newspapers or less expensive magazines (Liberty, Time, etc.) may be accepted; but clippings from books and expensive magazines should not be accepted. Teachers have had unfortunate experiences in certain instances,

(1) Quincy Senior High School Library.
when library books have been mutilated by pupils. One girl cut the whole section on Europe out of four library books. One boy in a town near Boston cut the pictures out of a volume belonging to a set, which cost $150.00 to replace. It is safe to state definitely that you will not accept any pictures or clippings cut out of any book or expensive magazine, such as "The National Geographic". There is one other caution: Before giving a library assignment, pupils should be cautioned not to leave library books anywhere in the building. They are sometimes stolen, sometimes borrowed without permission and returned months later. One girl worried for a week over a public library book worth $5.00 which had been taken from her desk. She said that if she had realized its value she would not have left it. While we do not like to admit the presence of thieves and mutilators of property, in a group of two thousand, it is probable there are some. If you state that you will give more credit for handmade illustrations, there is a surprisingly good response. There is another argument against too much emphasis and credit for clippings. Poor children, with no sources of illustrative material at their homes, cannot help feeling some resentment, if they see that other pupils are given much credit for this material.

A uniform report of books used and information found is recommended, not only to insure complete reports and to facilitate making a class booklet, but also to form the habit of thus using books in the future. The report includes: author's name, title of the book, publisher, date of publication, source (school, public, or home library), information found,
pictures, graphs, charts, etc. Include the number of the pages on which the information was found. The name of the publisher is important because it is hoped that pupils, acquiring the habit of noticing it, will realize later on that each publisher prints books of a certain standard which is more or less a guarantee of the kind of book. This is parallel to the standard, which the name of certain dealers of clothes, food, furniture, or other commodities, guarantees. The date of publication is particularly important in geography books, because human and economic conditions change constantly. The report for magazines is similar to the book report, except that the name and date of the magazine and the author and title of the particular article are given. The clippings from newspapers with the name and date of the paper may be brought to class. One page of the bibliography from the class booklet made for this unit is included here for the purpose of illustrating a typical annotated bibliography.

Allen, Nellie B.

Africa, Australia, and the islands of the Pacific. Ginn and Company, 1924
Public Library J916A15

Information:
- Wool in South Africa
- Raising of Wool
- Cotton and its uses in West Africa

Pages
- 58, 101, 106
- 370, 357, 358
- 115

Information:

Pictures:
- Wool market

Pages
- 88
Allen, Nellie B.

Asia
Ginn and Company, 1929
School Library 915-A

Information:
Silk growing in Japan
History of the silk industry
Cotton growing in China
Wool industry in Syria
Silk in United States
Silk in France
Silk in Italy

Pages
49, 50, 72, 79, 81
50, 51
148, 149, 152
164, 167, 174
316
81
50, 51
51

Pictures:
Arrangement of silkworms
Hand silk-loom
Preparing silk for shipping
Weaving silk

51
53
54
144

Allen, Nellie B.

Cotton and other useful fibers
Ginn and Company, 1927
Public Library J677 A15

Information:
As the title indicates, the whole book is about textiles. There is more information about the people who work in these industries than is found in most technical texts.

Pictures:
There are many good pictures of the people and the conditions of work.

Allen, Nellie B.

North America
Ginn and Company, 1922

Information:
Textiles in New England

Pictures:
Spinning room in large cotton factory
Manufacturing plant in Manchester, N.H.
The third step to consider is the technique for class lessons. Mention has been made of informal discussions and a pooling of the pupils' knowledge of the subject. The next step includes the oral reports from books, magazines, and newspapers. The ability to give an interesting report may be developed slowly, but is most worth while. A pupil should realize that not only must he find the information, but he must practice giving the report, before he presents it to the class. The following steps have been found conducive to a good report of a book, magazine, or newspaper: a. The pupil should show the book, magazine, or newspaper to the class if possible, and tell the title, author, and where he got the book. This is helpful to pupils who may wish to use the book for their topics. Also, having the book in class gives the teacher an opportunity to suggest other points in the books which may be looked up at the moment. For example, the following questions are suggested: "Is the author a man or a woman? What is his or her position? Do you think the book is too difficult for high school pupils to read enjoyably? Does the format of the book appeal to you?"

The next step in giving the report is to announce the topic. Then the pupils should tell in a few sentences the main point of the reference and he may read a few sentences that are especially interesting. A monotonous and continuous reading is to be avoided.

Interest is aroused in report giving if the pupil locates all places mentioned, on the wall maps. In this unit, wall maps of Massachusetts, New England, North America and the
world were displayed around the room. It is excellent practice to locate a place on all of the maps in the order of the size of their area. For example, locate Lowell and Lawrence on each map. In this way, the difference in the scale of maps and the difference in the size of places compared with the size of the whole country or world is emphasized.

While reports are being given, the activity of the class is important. The pupils may make notes for their own use, for further reference, or for comparisons and for summaries. After the report is given, questions may be asked or an informal discussion may follow. Care must be taken to time the reports and discussions to sustain interest, to make a desirable balance, and to ensure concentration on the topic being discussed. The value of this type of lesson is measured by the power gained by the pupil making the report and by the active participation of the class.

The next step in the development of the unit includes all laboratory exercises. These will include practice in using reference material as has been explained. Also, maps, charts, graphs, pictures, and other illustrations may be drawn or traced. It has been found that pupils who make a good start on a laboratory exercise under the supervision of the teacher will usually finish it outside of class. For map work, outline maps may be used directly or they may be traced. A very good desk outline map of New England is edited by Leonard O. Packard and published by Ryan and Buker of Cambridge, Massachusetts, but it is too expensive to supply every pupil every year. For that
reason, tracing is recommended, but a good quality of tissue must be used, and when the map has been colored, it should be mounted on a heavy piece of paper. Coloring before mounting is suggested because it is better to put the color on the back of the tissue. In this way, more harmonious colors are achieved and the visibility of the printing is not impaired.

Another technique in the development of this unit includes all visual aids. These include maps, pictures, charts, blackboard illustrations, and bulletins. Also, films, slides, and all screen projections are included. For this unit, there are the following motion picture films: Flax to Linen; Cotton Goods; Silk; Woolen Goods. There are slides showing machinery for textiles, cotton growing and manufacturing, and one whole set of New England slides. Among the film slides are those of Belgium, France, Germany, and Japan. Postal cards, pictures, and even pages of books may be projected on the screen by the new projectors. (For description of this projector, see Chap. VII, page 112 of this study.) (For suggestions on the use of motion pictures and slides see Chap. IV, page 33.)

After the research has been completed, the pupils edit and rewrite their own contributions. In this connection, correlation with English is possible and desirable. A teacher of any subject who is critical of the English used by the pupil tends to improve that pupils' general ability to write well. Each pupil's completed paper should have an introduction, an elaboration, and a conclusion or summary. Typical introductions and conclusions should be worked out first by all the class
together, so that there will be an acceptable standard toward which to work in the individual papers.

One of the most interesting techniques is the development of a complete summary and conclusion for the entire unit. This class exercise may take several days and require all the blackboard space and much paper for note taking by the pupils. Although the teacher may direct the pupil by skillful questioning toward acceptable conclusions, there should be some latitude allowed by a trial and error method and by a careful weighing of all evidence.

In one unit during a year, a class booklet should be made. The procedure for making a class booklet are as follows: (a) Each pupil writes out the information in any order on any kind of paper; (b) When all the information is found and the summaries are made, each pupil copies all of his findings in the order listed in the outline. The pupils are instructed to use only one side of the paper, to put their names on every page, and instead of pasting any of the illustrative material, to clip it together on the last page. Thus arranged, each pupil passes in his individual booklet, which the teacher grades for the pupil's record.

The individual booklets are then taken apart. All the page ones are put together; the page twos and so on until the fourteen groups are separated. It takes a whole period to take these booklets apart, with all the class helping. Fourteen editors and many assistants are appointed to make the class booklet. One editor, for example, edits the chapter on mineral
resources or page eight of the individual booklets. Editing, as used in this connection, means going over all the material and making a composite report that will cover all the information presented. Editors can use many assistants in making the complete annotated bibliography and in selecting the illustrative material. The illustrations are mounted uniformly. The best cover for the class booklet is chosen informally by the pupils. Other unusually good covers are used as first pages for each chapter. When all the chapters are complete, an editor-in-chief assembles the booklet and numbers the pages. Finally, volunteers typewrite the booklet in school time for the most part, when they have a free period. Usually pupils from the upper classes are willing to do some of the typing.

Ordinarily the final technique in a unit is the test or examination. As has been said, this is contrary to the intent and purpose of the appreciation method. However, it has been proved that pupils developing a unit in this way are better able to pass a general test than they are under the old system of drill.

The success of this unit may be measured by the extent of participation by all the pupils, by their apparent interest, and by the manifestation in future work of the power and interest gained in this unit.
UNIT III.

What Are the Geographical Causes of the War between Japan and China?

This unit of work, comprising a study of Asia, was studied as an appreciation unit in 1934. (1)

The reasons for choosing this subject were: (a) It is a current question and of course not settled. There has been much about it in books, in the newspapers, and in magazines. There is no question but that it will be in these media of news for some time. The hope is that by arousing an interest in this question, and by showing the sources of information, the pupils' interest will be projected into further reading, as time goes on. Further than this, it is hoped that by getting the pupils' attention averted to some extent from the sports and the comics, they may have their interest aroused in other items of world news. (2) (b) The fact that the United States is vitally concerned in this war through our interests in the Philippines. (c) Pupils find the Chinese and Japanese people and customs interesting. This factor makes the motivation of the problem easy. (d) Our school library is well equipped with supplementary material for this problem.

When this unit was developed in 1934, it was found that it appealed to the interests of pupils of all abilities. The slower groups needed more individual help, more concrete

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(1) This unit was developed in April and May 1934, in Quincy Senior High School.
(2) The reading of sporting pages and comics is not decried; the reading of them, exclusively, is deplored.
motivating material and much simpler reference material. The results varied, too: some pupils copied the exact words of the reference books; some pupils found "Japan" in the index, found a reference, and then used it whether it applied to the question or not. The slower groups need more help in organizing the material to fit the outline. The success of the problem depends largely on this help, this constant supervision, and the frequent check up at the very beginning and until the pupils know what to do and how to do it. Some of the pupils had never worked on such a large unit or one that required steady effort for such a long period. Careful planning of the mechanics of the work prevent both discouragement and boredom.

The objectives for this unit are: a. To acquire a background in oriental geography and history, in order to understand present day events; b. To show that while wars are historical facts, their causes and the conditions of being waged may be largely geographical; c. To become better acquainted and more intelligently interested in books, magazines, newspapers, and in those parts of radio and movie programs that are sources of world knowledge.

The pupils contributed the following reasons for studying the question:

1. "Japan and China have been fighting since 1929. Pupils of our age were too young to know much about any war, except as we read of them in our history. There is much about this war in the paper and magazines every day. By knowing some of the causes of war, we can understand better what is going on."
2. "This subject is interesting because it is still a question. It is unusual because no war was declared. Japan won the war, but the world doesn't admit that Japan won anything. Studying this way, we are better able to see all sides of the question."

3. "We are interested in the Chinese-Japanese war because we may be drawn into it. The United States have American citizens over there, who must be protected. Also, the Americans have interests and investments, that must be protected. We do not want our trade interfered with. We don't want Japan to get any more powerful. Our Philippine Islands are very near Japan and might need our protection."

4. Senior boy, 19 years old: "My reason for studying this question is to widen my knowledge about the land in the Far East. In case of war, I would like to know the kind of country I will have to fight."

5. Senior girl: "Questions of this nature should be studied more or less intensively by the layman, as well as by the student. By reading intelligently and absorbing the cream of the matter, a person broadens his mind and the scope of topics for conversation. It is a splendid thing to know about the customs, traditions, and general outlook of other countries, as well as the latest political facts. I feel that the study of this problem and the knowledge which I will gain of these fascinating and picturesque countries, will give me a new interest in the world, in which I live, as well as opening up a new study in which I will become enough interested to pursue farther."
6. Sophomore boy: "We study this so we will read papers more. Japanese are up to something and we want to know all about it. This is history, too."

The summary of reasons for studying this unit, which was made for the class booklet, is as follows:

1. It is something that is not yet settled.
2. It might affect our own country.
3. It is interesting to know that geographical factors may cause war.
4. It is interesting to find out how the Japanese, Chinese, Manchurians, and Koreans live, dress, eat; also to find out about their customs, trade, industries, and improvements.
5. It is a question that requires reading in many books, magazines, and newspapers. We can keep on reading about it after we leave school.
6. When the news is flashed on the screen in the movies, we will be more interested and understand it better.

Since making a class booklet was anticipated, the following arrangement of topics was used:

Page 1. Cover. (competition for the best cover for the class booklet)
" 2. Table of Contents.
Page 5. Position, area, and population of Japan, China, and Manchuria.
Page 6. Climate of Japan, China and Manchuria.
Page 7. Topography of Japan, China and Manchuria.

" 8. Mineral resources of Japan, China and Manchuria.

" 9. Agriculture of Japan, China and Manchuria.

" 10. Manufacturing of Japan, China and Manchuria.

" 11. Standards of living of Japan, China, and Manchuria.

" 12. Trade and transportation of Japan, China, and Manchuria.


III. Procedure.

The techniques for developing this unit are similar to those of Unit 2, pages 52 to 61 in this study.

Although testing is not consistent with the appreciation method of teaching, some concrete method of grading pupils is still required in most schools. The teacher can estimate the activity of the pupil during the period of research and during the laboratory periods. Also, the ability to make a good oral report can be measured. The pupil's participation in class discussions and contributions to the summarizations may be noted.

In written work, the pupil's individual notebook can be graded. If a written test is given, one general question, "What were the geographical causes of the war between China and Japan?" suffices, since it is inclusive of the whole unit. This test was actually given and the answers were rated as follows:

Japan went to war with China because she wanted Manchuria, which China owned, in order, (a) to get more food for her crowded
population; (b) to have more room for her crowded population; and (c) to have more mineral resources. If one of the main reasons was given a passing mark was given on the test. There was only one pupil out of 174, who did not seem to grasp the situation at all.

When a unit has been completed there may be a carry-over of interest if the pupils are encouraged to comment informally on current news items. For example, a pupil says, "I saw in the paper last night that Japan, etc." The teacher may say, "Did you see in the paper that Japan’s trade is alarming Great Britain?"

As a review, comparison, contrast, and application of the factors underlying the Japanese situation, the situation in Great Britain was taken, because there are many parallel characteristics. The food situation, the manufacturing, the source of money to buy necessities, the abundance of coal and iron, the early start, the colonies, etc., were discussed. The first lesson in this short unit was planned according to Dr. Wilson’s plan. (Dr. Wilson of Boston University)

The question: England is a small island country with a large population like Japan. How do England’s food, raw products, and trade problems compare with those of Japan?

<table>
<thead>
<tr>
<th>Essential Points</th>
<th>Review, (Japan)</th>
<th>Advance, England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td></td>
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<tr>
<td>Area</td>
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<tr>
<td>Topography</td>
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<tr>
<td>Climate</td>
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<tr>
<td>Agriculture</td>
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<tr>
<td>Mineral Resources</td>
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<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and Transportaion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
On each pupil's desk there should be the following:

Left
Map of Great Britain
J. R. Smith's Commerce & Industry open to Chapter 23
Paper on which to record findings
One pupil - World Almanac
" " - Statesman's Year Book

Right
Map of Japan
Wall maps. World; Asia; Europe
Globe

Ask the pupils why the map of Japan should be on the right side of the desk.

Objectives of the lesson: To bring out the essential facts about Great Britain's problems more quickly and intelligently by contrast and comparison with Japan's; to show that certain geographical facts, laws, and patterns may be applied to other geographical problems.

Summary of Lesson: General statements interpreting topics or essential points.

Assignment: Read in one of the Supplementary books, information about the foreign trade of Great Britain and apply this information to the summary of this lesson. A list of the supplementary books may be written on the board.

In order to evaluate the whole unit, the teacher might try to determine if the objectives were fulfilled. Since these were not essentially immediate objectives, we are successful if an interest and a desire for more information is created, if the pupils are better able to attack the next
problem, and if the pupils are better able to correlate their geographical knowledge with that of history, English, etc.

The pupils said: (a) They were not tired of the subject. (b) That it was not too long to spend on it from the interest point of view. (c) That it was more difficult than chapter by chapter work in J. R. Smith's "Commerce and Industry", but more interesting. (d) That the references in the school library magazines, except those in the Literary Digest, were difficult. (e) That they thought they would continue to read about Japan and China in the newspapers.

Concentrating on this type of work, that is, on a large unit worked out in notebook form, once a year, contributes to the interest, industry, and "stick-to-it-ive-ness", of the pupil.

Finally, the teacher furthers her own knowledge of the subject.
Unit 4

"Made in U. S. A." "Made in Foreign Countries." (1)

Question: Should we buy imported goods?

I Objectives: 1. To provide a motivating approach to the study of foreign countries.

2. To awaken an interest in foreign countries, through a study of the manufacture of familiar products.

3. To study the conditions of manufacture so that the pupils will have as complete an appreciation of the standards and ways of living in the foreign countries as possible.

4. To begin a development of an intelligent attitude toward world trade to counteract the propaganda of the two extremes: one group, which considers it unpatriotic to buy any foreign product; the other which would sell a foreign product if the profits warranted it, even if our own similar industries were crippled and our people unemployed, because of the foreign competition.

II Orientation: 1. Informal talk about the "Made in -----" mark in general.

2. Ask the pupils:

(1) To bring in a list of goods stamped "Made in -----." On the first day they may have

(1) This unit was developed in 1935 in Quincy Senior High School.
articles with them that are marked. For example: rulers, compasses, watches, combs, pens, etc.

(2) To cut out of newspapers, advertisements of foreign goods.

(3) To make a note of advertisements in magazines and books, of goods marked definitely "Made in U.S." or "Made in a foreign country". (Name, date, and page of magazine should be included.)

3. If blackboard space permits, divide it into sections thus:

Made in U.S.A. | Made in England | Made in Germany | Made in Italy | etc.

Add the countries, as products from them are reported. If there are several classes or groups, a friendly rivalry may be achieved by adding the class or group number to the names of products as they are written on the board.

Made in
For example: Switzerland watch (3) that is, 3rd period class. cheese (5) that is, 5th period class.

If blackboard space is not available, the tabulation may be made on cardboards, large enough to display on available wall space.

4. This orientation, research, and tabulation re-
quires a week or even two weeks. However, after the first day or so, only a part of the period is needed for the tabulation on the board.

III Intensive Research: After a fairly large list of products is acquired, a study of their history is begun. The class may be divided into groups to study conditions in one country. If possible let the pupils choose the country which interests them the most.

The outline for the study of a country is the reverse of the usual order.

1. Location of England, for example. (distance from the U. S.)
2. Size and population.
3. Manufacturing
   a. Kind: Textile, leather, iron, steel, etc.
   b. Raw materials: Kind and source.
   c. Power: Kind and source.
   d. Labor: Skilled and unskilled.
4. The manufacturing town, city or district.
   Location, size, topography, climate, general appearance.
5. The people.
   a. Type, mode of living, homes, etc.
   b. How they are supplied with food, clothing, shelter, etc.
(a) Food

Agricultural possibilities locally.
Agricultural possibilities within the country.
Agricultural imports—from what countries?

(b) Clothing

Domestic raw material
Imports—from what countries?

(c) Shelter

Materials—supplied at home
Materials—imported—from what countries?

c. Wages received—conditions of labor.

d. Summary of standards of living.

Compare with conditions in the United States. If possible, compare, (a) home conditions, luxuries, (cars, electrical devices in homes, dress accessories, etc.) (b) educational possibilities, especially for boys and girls of high school age. (c) recreation—sports, theaters, movies, etc. (d) freedom—political, religious. (This last topic depends upon its handling. As it is dangerous, it may be omitted.)
6. Summary
   a. We import from England, for example, the following goods:
   b. England exports to other countries:
   c. The conditions of manufacturing in England are:
      (a) Inventory of resources.
      (b) Inventory of goods imported.
      (c) General description of people and standards of living, wages received, etc.
   d. Does the United States manufacture goods similar to those imported from England?
      Develop the idea of the two-sidedness of trade.
   e. Compare conditions and standards of living in England with those in the United States.
   f. The effect of our tariff on imported goods.

7. General summary for whole unit
   Should the United States allow these countries to send these goods to us?
   Forbid: Cheap and inferior goods, such as electric light bulbs, shoes, etc., which compete with our better made goods.
   Forbid or regulate rigidly: Necessities such as cotton cloth, etc. which compete with our manufactures.
   Allow, but tax: Luxuries such as Paris hats, oriental rugs, perfumery, etc., which we can not duplicate.
   Allow without tax: Necessities which we do
not manufacture such as aniline dyes, scientific instruments, etc.

IV Sources of information.

1. Books, magazines, and newspapers (See Bibliography Chapter IX)
2. People who know foreign conditions - parents, friends, etc.
3. Travel booklets and post cards.

V Class motivation and procedure: See Unit 2, page 52 to 61, of this study.

VI The evaluation of the unit will consist of an appraisal of:
   a. the interest of the pupils; b. the increased use of reference material; c. the apparent power gained; d. the increased knowledge of the subject.

Although tests are inconsistent with the appreciation method, it may be necessary to use them for the purpose of grading the pupils. In that case, an informal essay type of test on a general question may be used. The following are suggested: Why should we buy "Made in U. S." goods? When is it permissible to buy "Made in a foreign country" goods? What effect has low standards of living on the selling price of foreign goods? Why is it impossible for the United States manufacturers to sell products more cheaply than can foreign countries? What is the relation between our tariff and the cost of
manufacturing in foreign countries?

The pupils' evaluation of the unit is interesting, even if it is not a very valid check.

A brief parallel unit may be given to show gains made in this unit. For example, conditions in Australia or in South America may be studied and summarized. The procedures to follow in studying a parallel unit are explained in Unit 3, pages 67 and 68.
Unit 5

The Saar Basin (1)

The geographical significance of the Saar question:

Preparation: Reading as widely as possible in current newspapers and magazines about the plebiscite, which will take place in January 1935.

Geographical points to emphasize:

1. Location—strategic position between France and Germany.
2. Nationality of the people. Number of people involved.

Possible outcomes.

Ownership by France—Does France need the coal? Strategic advantage to France to have the area?

Ownership by Germany—Questions, as above.

Control by League of Nations—This would be of what advantage to the people of the area? To the peace of the world?

(1) This unit was studied in December 1934 and was continued for part of each class period until after the Plebiscite Vote results were published.
The outcome of the plebiscite in the Holstein-Slesvig provinces of Denmark might be noted.


Magruder: National Governments and International relations. Allyn and Bacon-1933.

Unit 6
Local State - Massachusetts.

The unit on Massachusetts was the major one for the year, in 1930, when the tercentenary of its settlement was being commemorated. Usually, the study of Massachusetts is included in the study of New England.

The question studied was: How has the history of Massachusetts, especially the industrial history, been influenced by the geographical conditions of England, the Netherlands, and Massachusetts?

Six weeks was spent on the work, including the time spent for the orientation, research, reporting, and for making individual and class booklets.

This unit is excellent for correlation with history, since the bibliography includes many history books. The habit of finding geographical information in history books, English, books, etc. is a commendable one to develop. (Even the Bible contains much geographical material.)

This unit is so large that assignment by groups is best. However, it is profitable to expect the pupil to write out a report on all the topics for his booklet, that is, on one topic from his own research, and on the other topics from what he has heard in class. Thus he will have to give very good attention to the oral reports given in class and he may develop the desirable ability to take notes as he listens. The pupil giving the report will give it more carefully, if he knows that
the material is to be used by the other pupils.

The development of the study falls naturally into chronological groups.

Question: How has the history of Massachusetts, especially the industrial history been influenced by the geographical conditions of England, the Netherlands, and Massachusetts?

Group I England.

a. What are the geographical conditions (position, topography, climate, agricultural possibility, natural resources)

b. What were the early industries? (type, power, etc.)

c. Describe the education, training, and way of living of the people at the time of the Pilgrims.

d. Why did the Pilgrims leave England? Did they intend to return to England?

Group II The Netherlands.

a. Compare the conditions in the Netherlands in the early part of the 17th century, with those in England, following similar questions.
Massachusetts.

Group III Massachusetts - 1620

a. Why did the colonists settle in Massachusetts?

b. What were the geographical conditions, which they found? (Climate, topography, agricultural possibilities, natural resources)

c. In what ways did the early colonists adapt their way of living to fit the geographical conditions? (Homes, farms, industries)

d. Describe the manufacturing of the early times. (Reasons for manufacturing, raw materials, power, skill, market)

e. Summarize the industrial history of the 17th century.

Group IV Massachusetts - 1700 to 1800

a. The new settlers were of what nationality; had what education, training, etc?

b. Why and how was manufacturing developed?

c. What were the sources of raw materials and power?

d. What markets were developed? What were the means of transportation?

e. What other developments were made during this century? (education, way of living, activity in Revolutionary War, geographical causes of that war, activities in forming new nation) Comment on time required for the communication of news.

f. Summary.
Group V  Massachusetts 1800 - 1900

Follow questions of Group IV, a to d.

  e. What were the geographical handicaps and advantages? What effect had the increase in population on the realization of the handicaps? (Not enough power, raw materials, or room to raise food.)

  f. Parallel the major historical events with the industrial history.

Group VI Massachusetts 1900 - to present time.

  a. What are the characteristics of the people? (Type in general, nationality, education, training, way of living (homes, etc.), culture, industry, ambitions, etc.)

  b. What has been the industrial development? (The type of industry, raw material, power, transportation, market) How has Massachusetts been handicapped by competition with the South and West? (The South and West are near the sources of raw material. Being near the center of the food supply makes the cost of living and so the cost of manufacturing lower in South and West.) What has been the effect of an early start in manufacturing in Massachusetts? The effect of a good reputation? Ex. the shoe industry.

  c. Parallel the growth of the people historically with their industrial development.
(No text content extracted from the image.)
Summary of the Unit

Briefly state century by century the stages in the industrial development of Massachusetts, giving the geographical reasons for this development. What are the prospects for the future?

Suggested comparison:

Did the same type of people and their descendents in the same sphere of society in England, make a progress similar to that made by Pilgrims and their descendents in Massachusetts?

The procedures for the development of the unit are explained in Unit 2, pages 52 to 61.

The evaluation may be similar to that explained in Unit 2, page 61 and Unit 3, page 68.
Unit 7

Wheat.

Units 7 to 12 are typical geographical units. All commercial geography texts and courses of study include them. A departure from the usual approach is suggested for each one, in order to make it possible to follow the appreciation method of teaching.

Wheat, since it is the most important cereal of the United States, may be studied intensively, with a short comparative study of the other cereals following.

Branom (1) suggests an interesting approach, but his study is limited to the United States. Topics, which include a study of wheat in other countries are added in this study. Also, topics which bring in a study of the wheat industry under the New Deal are added.

"A. Interdependence (City: Manufacture, distribution, consumption.

(Country: Production, preparation for market, disposition.

(Relating city and country: Transportation.

B. City end of the study of wheat.

a. Uses: Have children enumerate the uses of wheat products.

b. Sources of the wheat products of the home.

   Made in the home.
   Secured from the bakery.

c. Making of wheat products.

d. Securing the flour: the family, the baker, the wholesaler.

e. Manufacturing the flour.

C. Country end of the study of wheat.
a. Source of the raw material, wheat.
b. Transportation of the wheat to the mill; railroad, waterway, wagon road.
c. Production of wheat.
d. Harvesting and thrashing.
e. Disposition of the wheat.

If the study is being made with rural children, the teacher will consider the country end of the study of wheat for motivation material. 

(1)

Additional questions:

Questions on the export of wheat.

Why did we use wheat substitutes during the war and send our wheat to Europe? (Most other grains would ferment.)

How does the amount of wheat exported today compare with the amount exported before the World War? Why?

Questions on the New Deal:

What was the policy of the New Deal in limiting the production of wheat in the United States?

What were some natural causes limiting the production of wheat in 1935? (The floods in some sections; the drought and dust storms in other sections.)

The study of the wheat industries in foreign countries includes a location of the wheat areas of the world and the following comparison of conditions in the foreign countries with those of the United States:

a. Compare the size of farms, methods of farming, number of bushels produced per acre.

b. Compare the methods of manufacture.

c. Compare the amount of wheat raised for domestic use. (In Europe, especially, the farmers eat dark bread and export the white (wheat) flour, because wheat is a better money crop.

d. Describe the farms, homes, way of living, etc., in these foreign countries.

e. What people of the world never eat white bread.

In the comparison with foreign countries, there is an excellent opportunity for group assignment: (a) the Rumanian wheat grower, (b) the Russian, (c) the Indian, (Indus Valley), (d) the Australian, (e) the Argentinian, etc. Canada is so closely associated with the United States that conditions there might be studied in the first part of the unit, right along with those of the United States.

When a short study of the other cereals is added, the production of rye, oats, and barley in Germany, Norway, Sweden, Finland, Russia, etc. the production of rice in Japan, China, the East Indies, and India, the production of corn in Rumania, etc. may be studied similarly by groups.

Wheat may be taken as the special unit of the year and individual and class booklets may be made.
Unit 8

The Animal Industry.

There are several possibilities of approach in this unit. The dairy industry, especially in the Northeastern States is one, with which the pupils are familiar. The source of the milk used by the pupils may be the first inquiry. In Quincy, for example, the cows which supply the milk, range over the hills, of northern Vermont. A study of the modern scientific methods of dairying, of the care of the milk and cream, pasteurization, refrigeration, and transportation follow. A biography of Louis Pasteur may be given as a special report. A comparison of present day conditions with those thirty or forty years ago may include data contributed by the pupils' parents. Condensed or canned cream and milk industries are important even in local trade. The Borden Milk Co. programs, a weekly feature on the radio, are motivating and instructive.

A study of the source and manufacture of butter and cheese will extend to the North Central States. The butter used in Quincy comes from Wisconsin. Individual reports on cheese will include foreign countries. A special report on cheese making in Switzerland is interesting. A debate might be prepared on "Should we import cheese, when we could manufacture all the cheese we need in the United States?" This brings in the point of supporting home industries and lessening unemployment. On the other side, imported cheese is a luxury, used by people rich enough to pay the high price including the duty. Since they can afford to buy it and since our factories do not make the same
kinds, should not these people be allowed to buy foreign cheese?

From a local study, the industry in the entire United States and in foreign countries may be studied. Denmark is particularly interesting as an example of a small country, which makes the most of every inch of land and which, by clever business practice and insistence on high standards, is able to obtain a high price and resulting large profit for its products. Germany may be studied, as an example of a country using butter substitutes. A topic for discussion is: "Is butter a luxury?"

From what states do the eggs you use come from? The study of the egg industry can go along with that of milk, butter, and cheese. Again, Denmark has an effective method of dating eggs, fining people who sell inferior eggs and even forbidding them to sell them, if they are again found guilty.

Where does your butcher get the meat to supply your family? The study of meat may start with the local market and continue to the stockyards and ranches. Refrigeration and transportation, especially a comparison with earlier methods of shipping animals alive, are interesting. Thirty-five years ago, animals were driven through the main streets to the local slaughter houses. In some places, the butcher killed an animal and went from house to house cutting off pieces as required. One's chance of getting tenderloin depended on one's location on the butcher's route. If there is a large wholesaler, such as Swift & Co., there is usually a possibility of the class visiting the plant. Sometimes the manager will send a butcher over to the school to cut up a side of beef and explain the different
cuts. The domestic science kitchen offers the best place for this demonstration.

Does your butcher sell meat which comes from Argentina or Australia? The foreign study of the animal industry will include Argentina and Australia. It is interesting to compare present methods of shipping from these distant countries, with those of comparatively few years ago, when cattle ships with their slow transportation and very bad conditions ploughed the seas. No doubt, the pupils have read stories, some of them lurid, about cattle boats. It would be very desirable to check up on the extent to which we import meat. Also, the government regulations, tariff, inspection, etc. may be an interesting special topic.

The foreign study should include a comparison of the amount of meat consumed in places which are densely populated and where the people are too poor to import meat, with that consumed in England, for example, or New York City. The question may then be asked, "What do these people eat instead of meat?" The answer will show that peas, beans, soy bean, cheese, nuts, and eggs are substitutes.

There is a question whether it is a good practice to make the pupils more satisfied with conditions in the United States by comparisons with conditions in other countries. For example, where could you go outside of the United States, where you could have meat and butter, as a usual part of the menu? Where would it not be possible to have them? (Even the amount given welfare recipients is sufficient for some meat and butter.) Another question based on the same idea is: Which of these countries have no meat, butter, nor white bread? Plan your meals for a day or week, leaving those three...
products out of the menu. It must be noted that dark bread in those countries means bread made of rye, oats, or barley and no white flour. Our dark bread contains from fifty to seventy-five per cent white flour. In this connection, the stories of the experiences which the mothers and the grandmothers of the pupils had in the use of wheat substitutes during the World War, are interesting.

The unusual animals and the by-products of the animal industry may be taken up by individual or group assignments with oral reports given in class. The pupils may make out the list, a very long one, including unusual and interesting products. That search often develops into a real game in that the effort to make the longest list becomes exciting. Honey, cochineal, hair, furs, and horn are some that the pupils enjoy. Oriental rugs make an interesting report.

The indexes of the commercial geographies are so definite in the references to the animal industry that this unit presents a good opportunity for an index assignment. It is timed well too, since this unit is studied in the early part of the year.
Unit 9

The Vegetable Industries.

Next to the weather, probably the most universal subject of conversation is food. During the last twenty years especially, there has been an increasingly great interest in diets. Most high school pupils are interested in foods and diets and have many contributions to give from the conversation of adults.

The purpose of the unit is to show the importance of the vegetable industry as a food product and as a money crop. Incidentally, some of the important factors such as the actual raising of vegetables, the preparation for market, transportation (note importance of refrigeration cars) and the canning industry will be discussed.

Procedure:

A discussion of familiar diets will show that the inclusion of some foods and the exclusion of certain other foods have very definite effects on the body. The simplest diet to analyze is the reducing diet. The pupils will note the omissions or reductions in the quantity of bread, cereals, potatoes, etc. The names, carbohydrate and proteid, may be developed. Boys, especially, are interested in the college athletes' diet. It may be suggested that they bring into class actual diets, used by college athletes during the training season.
The description of the document page is not possible due to the lack of visible text or images.
A chart showing the food elements, their sources, and their uses may be made by the pupils.

<table>
<thead>
<tr>
<th>Name of food element</th>
<th>Effect on the body</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate</td>
<td>Supplies heat, fat and energy</td>
<td>Bread, cereals, potatoes, etc.</td>
</tr>
<tr>
<td>Proteids</td>
<td>Supply muscle and body tissue</td>
<td>Meat, eggs, cheese, nuts, peas, and beans</td>
</tr>
</tbody>
</table>

Note: Milk contains all the food elements.

Comment on the importance attached to vitamins by many advertisers of food products.

Interesting check-ups on the subject are the following: The class may be asked to bring into class, menus cut out of the newspapers or copied out of books and magazines. These may be exchanged and each pupil may group the various foods into their proper class, carbohydrate or proteid.

The class may be asked to make out a dinner menu, which contains all the food elements, but does not include meat. In a poor district, do not stress elaborate menus. If the dinner suggested is macaroni and cheese, baked in milk, accept it, even though your idea of dinner is four courses.

A study of the foods eaten in foreign countries would naturally follow that of home menus. The fact that dense populations limit the number of animals raised and lead to the necessity of a vegetable diet may be shown in the case of Japan.
and refuted in the case of England. Further comparisons between these two countries will develop into a discussion of the possibility of importing meat.

The study of the actual raising of vegetables, the preparation for market, especially the canning industry, and the transportation of vegetables in their many forms is admirably adapted to individual or group work. The subject may be divided in the following ways:

1. Regionally.
   
   Different climatic areas.

2. Groups of vegetables.
   
   Truck products for use in immediate vicinity.
   Truck products for refrigerator car transportation.
   Truck products for canning.
   Truck products for manufacture and sale in a different form.

3. Stages in the vegetable industry.
   
   1. Actual farming or raising of crops.
   2. Preparation for market.
   3. Transportation.

The study of the vegetable industry has many interesting possibilities of expansion, but because most of the trade in vegetables is local and practically all of it domestic, the time unit for this industry in most outlines of commercial geography is limited.
Unit 10

Power and Heat.

The approach to the study of power may logically come from the source of power found locally, or from the source of power used in the pupils' homes. In New England, naturally, water power is the geographical approach, but except in certain places, pupils have as remote an idea of a water power plant as they have of a coal mine. So, since the pupils use gas, electricity, oil, or coal in their homes, one of these will serve as a more familiar approach. A study of local power and heat will lead to research in books. The study of conditions in the United States will lead to that in foreign countries.

A study of the source of power and heat in the home will also lead to a study of power used in transportation and manufacturing. Since the pupils are interested in automobiles and airplanes, this study of power for transportation is usually exciting. Though they may never have been in an airplane, many can tell exactly the number of miles that can be traveled on a gallon of gas. The study of power in manufacturing may be taken as a separate unit after a study of metals, as suggested in the problem on the textile industries. (See unit 2, page 49 of this study.)

The unit, power and heat, may be adapted to a long study as the special unit of the year. Group assignments for each type are best, because of the immense amount of material and because the class work is more interesting. The groups
would include coal, petroleum, gas, alcohol, water, and by-products. Subdivisions of these groups are possible: Coal: use as coal, use as by-products, kinds, transportation, mining, history of formation. The reverse of the usual order is used because of the motivation; histories are usually an uninteresting approach.

J. R. Smith suggests the following questions for discussion, "Which is more valuable the waterpower of New England or the coal of Pennsylvania or the petroleum of California?" (1)

G. M. York suggests this exercise: "Prepare three maps showing the distribution of developed sources of power of coal, petroleum, and water. Note the countries that produce three, two, one, or none of these sources. Write a short discussion of the relative importance of the countries listed." (2)

The coal mines of Wales are the most widely described of the foreign deposits. "In Search of Wales" by H. V. Morton (3) describes vividly these mines, including the life of the animals, which spend their entire lives in them. Pupils, with an artistic tendency, may draw elaborate pictures of the shafts and various levels.

A map showing the pipe lines of the oil companies from Texas to New Jersey, etc. fixes the location of places.

A visit to an oil storage plant, such as the Cities Service Plant in Braintree, emphasizes the magnitude of the

(1) Smith, J. R. Commerce and Industry, p. 225.
(3) Morton, H. V. In Search of Wales.
industry. If there has been a controversy in the city over the location of storage tanks, the hazards and the decreased value and undesirability of adjoining property for residence may be discussed. In this case, the local newspapers may be used for reference. As always in the use of local papers, an avoidance of the subject of personalities and politics is the part of discretion.

There has been much material in the magazines and in the newspapers about the two government projects, the Bowlder Dam and the Tennessee River Project. With most classes, it is not difficult to keep the discussion within purely geographical bounds. However, the discussion has possibilities of going into economics and government ownership of power and even further. In this connection the teacher must have the arguments "pro and con" very definitely in mind, before the discussion gets out of bounds and into a discussion of Communism, etc.

For bright groups of pupils, the following is suggested: The World Powers included the United States, Great Britain, Germany, and France for many years. Italy and Japan have been added. What is the connection between becoming a world power and the possession of coal and iron? This question will bring out a discussion of the industrial age, manufacturing, search for raw products, world trade, accumulation of wealth, increase in population, stimulation of the people by all this activity, etc. Then will follow the reasons for the rise of Italy and Japan to power without these two resources. The advantage to Italy of its position in the path of the great trade
routes to the East is most important. Isolation would have meant no rise beyond ordinary agricultural advances. The Japanese needed more room for her people and had an unparalleled ability to imitate and duplicate the achievements of others. To clarify the question further, comparison of these countries with those which do not have coal and iron is necessary. There is practically no coal or iron in South America, Australia, Africa, most of Asia and Russia in Europe. China is the exception in that it has both coal and iron, but is in spite of that, backward. However, a short study of the distribution of population, the vast areas of useless lands because of climatic factors, and the inaccessibility of the mines explain largely the fact that these resources have not been developed. We might speculate on the status of the United States and Great Britain, if there were no coal and iron. Would we be a World Power? Would we be one nation? The joining of the South and West with the Great Lake and North Eastern States through the exchange of food and raw products for manufactures may have been the strongest element in keeping the country a unit. The bibliography for this question will include history and economics as well as geography books.
Unit 11
Iron and Steel.

The manufacture of the automobile may be taken as the approach to this unit. The topics for study will include:

   List as bulky and non-bulky. Discuss the cost of transporting heavy bulky materials.

2. Source of raw materials. (rubber, steel, coal, etc.)

3. Concentration of the industry around the Great Lakes. Advantages.
   a. In assembling raw materials.
   b. Proximity to coal fields.
   c. Proximity to food supply. (cost of living)
   d. In distributing finished product.

What attempts have been made to scatter the automobile industry? Bay State Automobile was manufactured by Long, in Framingham for a few years. Competition with the Great Lakes manufactures caused its failure.

4. The Lake Superior iron mines.
   a. Description.

5. The Gary, Indiana steel plants.
   a. Reason for the choice of location.
   b. Methods of making steel.

6. The automobile manufacturing plant.

There is much illustrative material in the advertising pamphlets of the individual automobile companies.
J. R. Smith (1) asks this question: "When automobile sales are good, what other industries benefit, directly or indirectly?" It might also be asked, "What industries suffer because of increased sales of automobiles?" That may be a controversial question, since it involves the economies practiced by some people in order to own an automobile, such as saving on food, clothing, rent, etc. Industries supplying these would naturally suffer.

7. Other iron and steel industries.
   a. Products manufactured.
   b. Uses.
   c. Distribution and transportation.
   d. J. R. Smith (2) suggests the question: "Compare Kansas City as a place for the starting of an agricultural implement factory and a jewelry factory."
   e. The manufacture of the new stream-line trains makes an interesting special topic.
   f. The manufacture of the electric refrigerators is explained in detail in most of the advertising pamphlets.

8. The iron and steel industries, in foreign countries, were largely concentrated in Great Britain, Germany, and France, but especially since the World War, Japan, and Czechoslovakia are among the leaders in manufacturing today. The importation of machinery has changed many countries from merely producers of

(1) Smith, J. R. Commerce and Industry, p. 309.
(2) Smith, J. R. Commerce and Industry, p. 308.
raw materials to manufacturing countries. The United States, Great Britain, and France have suffered through the competition with countries having lower standards of living and hence lower cost of production. The controversy over the importing of Japan-made goods started first in Great Britain, but has now become very bitter in the United States. The unit, "Made in U. S. A.", "Made in Foreign Countries" on page 70 of this thesis is an elaboration of this point.

9. The other metals may be studied by assigning to individuals or groups, one metal. These reports should have the use of the metal, as the approach. The effect of the New Deal on the value of gold and silver may be the approach for the study of those metals. The pupils, no doubt, will know about the selling of old gold, through personal experience in their families, through the newspapers, and through radio programs. Wm. J. Bryan's attitude toward silver may be looked up as a special research problem.

G. M. York suggests the following exercise: "List six or eight chief producers of iron, copper, lead, tin, aluminum, gold, silver, platinum, mercury, and radium. How many of these do English people control? How does this affect their international position?"(1)

Unit 12

Trade Routes.

The usual maps of the trade routes of the United States and of the world, in the commercial geography books, are dull and confusing networks of lines, with tiny dots to represent the cities.

The approach is to show the relationship between trade routes and areas of production of raw and manufactured goods and centers of population. To motivate a study of trade routes, it is interesting to explain their meaning with the following map work:

1. Products are transported over trade routes. Individual and large product maps showing the areas of raw and manufactured products may be made.

2. People prepare the products for market and people use the products transported. Some places or regions are densely populated, while some are sparsely populated.

Make two lists as follows:

<table>
<thead>
<tr>
<th>Densely populated</th>
<th>Sparsely populated</th>
</tr>
</thead>
</table>
| 1. Parts of the United States a. Northeastern states  
   b. North central states  
   c. etc. | 1. Parts of the United States a. Rocky Mountain States  
   b. States just east of the Rockies  
   c. etc. |
| 2. Parts of Europe a. Northwestern countries b. etc. | 2. Canada, especially Northern part. |
| 3. Parts of Asia a. etc. | 3. Most of Mexico |
**Densely populated (continued)**

1. Parts of Africa

4. Parts of Africa

**Sparsely populated (continued)**

4. South America, especially the northern part.

5. Parts of Europe.
   a. Spain
   b. Balkan countries
   c. etc.

6. Parts of Asia
   a. etc.

7. Parts of Africa
   a. etc.

8. Most of Australia.

This division is suggested, but the pupils may work out their own division. After each region, list the geographical factors of location, climate, topography, resources, and industry under two headings: advantages, handicaps. Group places having similar advantages or handicaps. Make general summaries or conclusions answering the question: Why are some places densely populated and some sparsely populated?

3. The trade centers are cities. A population map of the cities may be studied and applied to the study of population by regions in topic 2. Mathematically-minded pupils may be interested in computing the relative size of these cities compared with the size of their home cities or of the largest city they know.

4. Trade routes develop between places having a large population.

5. A comparison of the passenger train routes and ocean routes with the trade routes may be made. Tourists pamphlets furnish these data. Comment on the identical routes of
null
passengers and products between large production areas. The tourists' books will show that the passenger routes extend from these areas into the National Parks and resorts of all kinds. A study of the trade in food and supplies for the tourist's accommodations will show how the trade routes follow even into these commercially unproductive areas.

6. Pupils enjoy interpreting the trade routes in unusual places after making this study. A trade route map then means more than a network of lines printed in a seemingly confusing manner.
CHAPTER VII

Conclusion.

Conclusion according to Webster is: "the end; final decision; result; summing up of a discourse."(1)

Geography, both from the standpoint of subject matter and methods, has no end, nor does it allow for final decisions, nor can results be accurately measured. A teacher, who decides to specialize in the teaching of geography, must make up her mind to study for the rest of her life. An interest in the subject makes such study obligatory, since most reading, conversations, radio programs, travel, etc. will be selected with geography in mind. When the interest becomes more complete, the geographical significance in peoples, places, and things will determine the trend of thought, appreciation, and expression. After that, your case is hopeless; you cannot avoid the subject. For example, you put aside a geography text, pick up a current popular magazine, and relax in preparation for sheer entertainment. Fifteen minutes later you realize that you have been reading, enthralled, an article on the largest water power project in the world or the possibility of community heating plants or the appalling conditions of labor in Japan.

Besides that interest in subject matter, there are the changes in methods of teaching, new approaches, new maps, new books, new equipment, new units, new responses by the pupils,

(1) Webster's Dictionary.
and new suggestions and reactions from them. So there can be no final decisions, no stereotyped outlines, no last word in methods of procedure. We can, from time to time, however, sum up our progress to date. It is well to read through our objectives often and to make new ones; it is well to review methods and techniques and try to improve them.

The appreciation method of teaching geography is recommended to be relied upon, chiefly. In that method, units are studied, materials used, and procedures followed which are within the pupils' observation, experience, or interest and which will develop a further interest in the subject, a desire and ability to learn more about it, a better understanding of it, and appreciation for it.

The appreciation technique calls eventually for the building up of permanent fields of interest, through a variety of approaches, procedures, and developments.

The appreciation technique calls for a new type of High School geography textbook. The following changes are suggested: The textbook should be an attractive, appealing, and interesting looking book; it should contain more human geography; there should be more maps (political, topographical, climatic, production, even pictorial maps); the material should be grouped around products and industries, rather than around isolated political units.

In choosing and organizing units of work, the pupils may initiate their own problems or questions directly; the teacher may work up to a nucleus of work by exploring with the
pupils in the field of their interests and experience; or the teacher may initiate, present, and develop the unit, providing for sufficient motivation to produce the maximum of cooperation and effort from the pupils. Not every product, industry, or country need be studied; the typical ones which will have the greatest motivation carry-over value for the particular group of pupils, are sufficient. The purpose is not so much an immediate acquisition of facts and particular knowledge as an active curiosity, a permanent interest, and an ability to find information or interesting and useful geographical material, when it is needed. Incidentally, a storehouse of information and a rich background of material will be almost unconsciously accumulated in a mentally digested and usable form. At the beginning of the year, it is well to know approximately what subject matter is to be studied and the relative length of time which is to be devoted to each unit. This schedule should be flexible and elastic enough to allow for modification if an occurrence in world news warrants, from a motivation standpoint, a change in the order of units or the creation of new units.

The detailed units included in this thesis have all been used in commercial geography classes. The teacher, who catches their psychology in purpose and interest, will present them effectively. Usually a teacher is more successful in a unit of her own initiation or one initiated in her classroom, because the added interest, industry, and appreciation are very contagious.

The equipment listed in Chapter VIII is available in
one school(l) after years spent in their acquisition. If the teacher has little equipment, she should make out a list of things needed in the order of their desirability or necessity and acquire them gradually. Some principals are very interested in geography, so that there is little difficulty in getting equipment. In any case, a teacher must know what she wants, why it is needed, how much it will be used, how long it will be usable, and how much it costs. After receiving the equipment, the teacher should be very sure that it is used; superintendents have sometimes been influenced to buy still and motion picture machines that are not used enough to warrant the amount of money expended for them.

The results of teaching are usually difficult to measure, but are especially so, in teaching geography through the appreciation technique. We would have to call the pupils back after five, ten, or twenty years or send them a questionnaire in order to find out how much of a carry-over there had been in Geography. There would be difficulty even then, since much of their interest and the material they have acquired that is really geographical, is not associated in their minds with geography at all. The old method of testing did show how much of facts the pupils remembered at the time of testing, but the usual method of testing directed attention to facts and minor details and frequently missed the larger and permanent purposes of Geography.

(1) Quincy Senior High School, Quincy, Massachusetts.
In the appreciation method, we try to measure interest, industry, and increase of power and comprehension. In our supervised study periods, in the type of reports given, in the type of books used for reference, we can secure attention to the more fundamental considerations.

In general, "education should result in reasonableness and complete-mindedness. Reasonableness is the enlargement and enrichment of personality. It is mental good manners. It moves in the air of reflection and contemplation. It is the pilot for the ship of the will. Complete-mindedness is a form of personal resource and connotes self-enrichment."(1)

"We want to give our pupils atmosphere and perspective, we want to avoid intellectual and moral vulgarity arising from narrowness of vision and from failure to understand other people's point of view."(2)

Finally, education in school should result in a realization of the need of further education and the further development of appreciation and understandings, not necessarily in formal higher educational institutions, but in a continuously intelligent observation, attention, and reading about the world, as the home, workshop and playground of man.

(1) Tawing, C. I. What education has the most worth? p. 176-225 Macmillan 1924.

CHAPTER VIII

Equipment.

Note: See page 106 for suggestions on accumulating equipment.

A. Wall Maps.

2. Europe S 2 " " " "
3. North America S 5 " " " "
4. New England J 172 r " " " "
5. Massachusetts Peerless Hammet Co., Boston
6. United States


Maps 4, 5, and 6 may be moved from room to room, if necessary. Maps 1, 2, and 3 should be in every geography room all the time. The map of the world should be in the front of the room, because it should be used most often. Unless details are needed, the habit of using a world map for location gives a much better sense of position and proportion. This map of the world is recommended because it does not enlarge the northern hemisphere. There are any number of adults today, who have no ideas of the true size of Australia and Brazil, because they have always studied maps which showed them a third of the size of the United States.

B. Globe: 12 inch. A good looking globe with adjustable axis and extended equator is a joy in the class room.

C. Board compasses and yard stick.
D. Desk outline maps.


Asia
Europe
Massachusetts
New England
North America
South America
United States
World.

A set of each can be filed for use as class exercises. The cost of the maps and the time it takes to work one out completely would make one or at the most two maps per pupil adequate for one year. To lessen the cost more, the maps may be used many times, if they are traced. If a good tracing paper (onion skin) is used, the printing may be done on that paper. Maps should be rarely, if ever drawn free hand; they are too inaccurate.

E. Small Outline Maps

United States            D 1 Nystrom series of desk maps.
North America           D 5   "   "   "   "   "
Northeastern States    D 170  "   "   "   "   "
North Central States, etc.  D 178  "   "   "   "   "

F. Commercial exhibits in glass-doored dust-proof cabinets.

All exhibits should be in glass containers or in jars with screw tops and should have typewritten or India ink printed labels. They should be arranged not only so that they can be seen readily, but so that they may be taken out for class demonstration with no loss of time.
G. Stereoptican machine and slides.

A plug in the floor does not cost much if the room is already wired for electricity. Dark curtains are not absolutely necessary, but are desirable. Otherwise, the pictures may be shown to advantage on dark days or even in the part of the day when the sun does not shine in the room.

H. Moving picture machine and reels.

For use of these reels, see the chapter in this thesis on technique in teaching. A list which has been found fairly adequate is the following:

1. Alaska  
2. Bituminous coal  
3. Cattle  
4. Central America  
5. Coffee  
6. Cotton goods  
7. Cotton growing  
8. Cows and dairying  
9. Dutch East Indies  
10. East Indian Island  
11. Flax to linen  
12. Forest people of Central Africa  
13. From Bahamas to Jamaica  
14. Haiti to Trinidad  
15. Hawaiian Islands  
16. Houses of the Arctic and Tropics  
17. Iron ore and pig iron  
18. Irrigation  
19. Leather  
20. Lumbering  
21. Mexico  
22. Mining and smelting copper  
23. New England fisheries  
24. Oil, producing crude oil  
25. Oil, refining oil  
26. Panama Canal  
27. Philippine Islands  
28. Pig iron to steel  
29. Refrigeration  
30. Reforestation  
31. Rice  
32. Roosevelt Dam  
33. Rubber  
34. Silk  
35. Sugar, beet and cane  
36. Transportation  
37. Tree to newspaper  
38. Wanderers of the Arabian Desert  
39. Water power  
40. Wheat to bread  
41. Woolen goods  
42. Yosemite National Park

New reels are being produced annually. During the last few years, commercial companies have supplied free or at a small cost, educational films which incidentally advertise their products. One clock manufacturer, for example has an excellent reel on the history of keeping time.
The stereoptican and motion picture machines are not difficult to operate. There are always one or more boys in each class who are eager to do it and who may be taught the operation in a short time.

I. "Talking" motion picture machines and educational films are available, but are prohibitively expensive for the class room. Also, the machines are much more difficult to operate.

J. Opaque Projector.

Ralph Harris, Inc., Bromfield St., Boston, Mass. $110.

This is a reflectoscope. Pictures up to 6 1/4 inches square and even pages in a book may be enlarged on the screen. The machine is very easy to operate.

K. Bulletin Board.

The material for the bulletin may be chosen by the pupils and arranged by them, under the teacher's supervision. Committees may be appointed weeks in advance, in fact a year's schedule of dates may be planned. The material for the bulletin board is accumulated by all the pupils.

L. Filing Cases.

Filing cases are necessary if clippings, pictures, pamphlets, etc. are to be arranged in a usable order. Steel ones last forever and do not become shabby looking, though wooden ones will serve the purpose.

M. Closet.

A closet large enough to store wall maps, to file the sets of desk maps, etc. ensures the proper care of this material, and
makes its use available at all times.

N. Shears, paste, colored pencils, pencil sharpener.

M. Neat maps, charts, graphs, etc. can not be made without proper tools.

O. Reference material.

Most of the reference material in a school which has a good library will be kept in the library. However, every classroom needs an Atlas, Dictionary, and World Almanac.
CHAPTER IX

Bibliography.

Most of the books in the following bibliography are in our school library; the others are in our Quincy public library. Many of the books were not added to our school library for use in the geography department. English, history, and household arts teachers have recommended them for their departments. The travel books are on the outside reading lists of the English department.

The Dewey system of numbering is used in the school library, so that these books are found in numbers 280, 640, 914, and so on. There is an advantage in this distribution in that it gives the pupils a wider range of exploration and also shows the interdependence, correlation, and overlapping of the subjects.

There are from two to twenty copies of some books which are needed to that extent.

A word might be added concerning rebinding. Up to a short time ago, books that were originally bound in colorful, attractive, and appealing bindings came back from the binders in dull, plain-colored, and forbidding looking bindings. Now it is possible to get bindings in bright colors and even attractive plaids.

In order to facilitate the use of the bibliography, the books have been grouped as follows:
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Encyclopedias.

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Nelson's Encyclopedia

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Abstract of the Census and Census Volumes

Booklets from Travel Agencies and Commercial Companies

Century of Progress Pamphlets. Chicago 1933-34

Railway and Steamship Travel Pamphlets

Southern Railway Pamphlet, Washington, D. C.

U. S. Department of Agriculture: Yearbook of U. S. Department of Agriculture


World Almanac, New York: World Telegram (published every year)


Sullivan, Mark, Our Times, New York: C. Scribner's Sons, 1933, 5 volumes.

Magazines.


Economic Geography (Clark University) Worcester, Massachusetts

Education January 1935 Palmer Company, Boston, Massachusetts.


National Geographic Magazine Washington, D. C.


Teachers' Manuals.

There are many more teachers' manuals available for elementary grades than for secondary schools. A progressive teacher will watch the publishers' catalogs for their appearance. Since they are usually written to accompany a particular textbook, the procedure, choice of subject, outlines, etc. are all provided for. There is a list of reference books, which may be used, but except for this latitude, the following of the manual would mean following the text-book method for the most
part. However, there are suggestions and individual exercises that may be used.


Pupils' Workbooks.

Pupils' workbooks were late in appearing for secondary schools. They are, in themselves, practically text-books. The good features are that they suggest and allow space for many graphs and charts. They contain many outline maps. The disadvantages are: (a) the material is monotonous in its repetition of certain types of exercises and outlines; (b) the books have so much material that it would require more than the time allowed for completion, hence the book would not be all used in a year; (c) the books are expensive. It is often difficult to get new text-books that cost between one and two dollars and which must last five or more years. It would be impossible in most cities to get a new workbook costing from 50 to 75 cents apiece for every pupil every year. A teacher should at least see, if not own, each one that comes out, since they are stimulating and always have some helpful suggestions.


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Greely, Adolphus W., True Tales of Arctic Heroism in the New World, New York: C. Scribner's Sons, 1912. xii, 385 pp.


Stevenson, Robert Louis, *In the South Seas*, C. Scribner's Sons, 1908.


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Bullen, Frank T., *The Cruise of the Cachalot around the World, after Whale Sperm*. 

Clemens, Samuel, Innocents Abroad.

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Davis, Mrs. Mary L., Sourdough Gold (Yukon), Boston: W. A. Wilde Company, 1933. 351 pp.

Davis, Mrs. Mary L., Uncle Sam's Attic (Alaska), Boston: W. A. Wilde Company, 1930. xvi, 402 pp.

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