Changing Objectives in the Teaching of Geography 1870-1930

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CHANGING OBJECTIVES IN THE
TEACHING OF GEOGRAPHY
1870 - 1930

BY
FRANCESCA LICHTER URBANCEK

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INTRODUCTION

The Problem

Many new objectives in the teaching of geography have developed since 1870. The science of education has also slowly evolved since about 1870, when a more definite scientific meaning became attached to its study. Authors of that period endeavored to show in their geography writings ideals most in accordance with the trend of the science of education. Writers of textbooks and books dealing with method in geography gave by means of their introductions, prefaces, forewords, and messages to teachers the results which they hoped students would succeed in attaining through the proper use of their texts. Since most of the authors were teachers, ample opportunity was afforded them to test their objectives in their own classrooms. Classroom experiments frequently gave rise to new and desirable results that could be applied to the teaching of geography. As time went on, therefore, the lists of objectives grew and took on a new significance. To determine the changing objectives in the teaching of geography as given by the outstanding authors in the fields of education and geography has been the problem of this thesis.
The Aim

The aim of this investigation has been to discover what change, if any, has taken place in the objectives to the teaching of geography in the period from 1870 to 1930; and, to determine, in the event of a change, what trend it has taken.

Method of Procedure

At the Crerar Library all books listed in the card catalogue under the title of Geography were consulted. Search was also made at the Chicago Public Library, the Newberry Library, the Northwestern University Library, and the Evanston Public Library, in an effort to supplement the material found at the Crerar Library. Over 600 books were examined with the result that all books listing objectives in the teaching of geography appropriate to this investigation were selected (228 in all) for use in the writing of this thesis and for bibliographical references. In cases where the objectives were the same or nearly the same, one author's work was selected as representative. The author, the title of the work, the publisher, and the year of copyright were entered upon standard 6 x 4 cards. On these cards were copied the objectives given by the various authors; and notations were made to help later in the giving of these objectives. After 100 cards had been used it was found that the space on a single card was inadequate in many cases to hold all the data to be recorded. When
this was the case the data were written on sheets of foolscap with a notation of bibliographical references similar to that used on the cards.

The next task was to sort these cards and sheets into a chronological order, a task which was facilitated by a previous notation of the copyright date in the lower right-hand corner of each card and sheet. An examination of these data showed in some portions a lack of necessary material, which demanded additional investigation. This supplementary material was then recorded in the same manner, as has been previously explained; and was given its proper place in relation to the material previously sorted. This mass of data was divided into five chronological divisions. The reasons for these divisions will be given in the arrangement of data later. After a careful analysis of each of the five piles, some material was found to duplicate certain ideas and was consequently eliminated.

Sources of the Data

The following were the sources of the data used in this investigation: textbooks in geography, books on method in geography, magazine articles, courses of study, pamphlets, reports of educational committees, reports of geography societies, and reports of lectures and addresses on geography.

Organization of the Data

After the data had been divided into divisions or
prospective chapters, as has been stated in the method of procedure, it became necessary to organize it into what eventu­ally became five chapters. The general plan of the organi­zation of the chapters follows: The first chapter embraces the objectives in the teaching of geography as found in primary sources from 1870 to 1892, the year which witnessed the appointment of the Committee of Ten at the National Education Association convention; the second chapter opens with the Report of the Committee of Ten and continues through subsequent reports of committees to the meeting of the National Education Association in 1902 and the delivery of the Davis report on the "Progress of Geography in the Schools"; the third chapter deals with the founding of geographical societies and geographical publications and continues to the World War, when progress in the teaching of geography ceased temporarily; the fourth chapter follows the lines of the recon­struction period after the World War up to 1925; and the fifth chapter shows the trends in the objectives for the teaching of geography at the present time.

Limitation of the Investigation

This investigation is limited to a detailed analysis of the objectives of the teaching of geography as found in primary sources during the sixty-year period, 1870 to 1930.
CHAPTER I

FORMATION OF OBJECTIVES FROM 1870 TO 1892

Educational readjustment after the Civil War had been rather long-drawn-out, but about 1870 the forward motion of the evolving science of education caught geography within its wake and gave it a much-needed impetus. The field had been well set; and time and opportunity created an urge to improve educational standards and to establish better objectives for all the subjects taught and for geography in particular. The influence of this new movement affected first of all the purely physical and mathematical aspects of geography; only later, as we shall see, was it to extend itself to the political, industrial, and social. There it was to stay until the revolutionary recommendations of the Committee of Ten, closely followed by the additional interest of the Committee of Fifteen, set about another educational upheaval. The reaction was felt among teachers of geography and among educationists concerned with the objectives and methods of that subject, and began slowly to bring about changes in the types of geography taught as well as in methods of teaching (20:144-5).

But despite this attempt at reform geography content
during this period consisted mainly of uncorrelated facts concerning the earth and its inhabitants; and the outstanding objective seemed to be to learn by rote the subject matter of the text used in class and to recite it verbatim to the teacher (18:1-13). Location, descriptive physical geography, mathematical facts, a little home and field geography, a great deal of mechanical map-drawing, a bit of visual geography from text and stereoscope (the latter being rarely found as a part of school equipment during that time), and a heavy burden of memory work comprised the schooling of the time. Among all these phases location remained the prime factor of all teaching of geography. The pupil was thrown upon his own resources, and ability to succeed in any examination depended entirely upon memorization (18:1-13). The contents of the textbooks of the day, of the proceedings of the National Education Association, of courses of study, and of histories of education will bear out the foregoing contentions.

Let us first substantiate these statements on the authority of educational historians, and then we will go into some detail concerning the textbooks used and the objectives sought after during the period between 1870 and 1893.

Redway, a Fellow of the Royal Geographical Society, declares in his New Basis of Geography that physical geography as understood about 1870 meant merely the study of fixed, unchanging forms. The physiographic side was brought into
prominence, the cause and effect of land forms being studied in detail (67:178).

Crawford and McDonald, referring to trends in physical geography, state that

The early geography books can hardly be said to have been physical geographies in the sense in which we use the term today. It is true that they emphasize the locations of mountains, streams, and water bodies, but they did not enter into the laws which explained the actions of physical forces of nature. In other words, they consisted mainly of descriptive physical geography, rather than scientific physical geography (18:7-8).

Visher in his "An American View of Geography" describes the content of the earlier American textbooks, and says:

In olden times, geography was regarded as a description of the earth's surface. It included an account of such physical features as the rivers, mountains and plains of the different countries, and also occasionally a description of the inhabitants and products. A generation ago, and in some places even more recently, work in geography consisted largely of drill in the names and locations of capes, bays, rivers, states and capitals (88:91).

King, President of the National Summer School of Methods and Master of the Dearborn School in Boston, and formerly Sub-Master of the Lewis School in Boston, surveys in his "Methods and Aids in Geography" the methods and objectives in geography in those days past and says of them:

Since geography deals so largely with facts and since it is not so much a science in itself as it is a collection of facts and principles taken from various other sciences, the main object in teaching it has apparently been, in the past, simply to impart, in shortest possible time a knowledge of the two least important facts, -- namely locality and bare statistics (47:23-4).
Most of the textbooks in geography denominated, brief or shorter courses seemed to be merely combinations of atlases, and dictionaries, making the height of mountains, the length of river, the population of towns and the locality of insignificant capes more prominent than their real value demands; while descriptions of the greatest nations upon the earth, and the grandest phenomena of nature, have been condensed or generalized until they are as interesting for young minds to read as an old fashioned spelling book (47:23-4).

Holtz, in writing about the same period, finds more to praise than do most other authorities; but we must remember that, despite the improvement in the content and organization of textbooks, there had been but little advance in actual classroom procedure. He says:

With the seventies came a reduction in memoriter work, both in text and in map study; a better balance of the different branches; the relegation of mathematical geography until after the home geography; finer cartography; a better application of physical geography; the recognition of commercial geography; and the addition of state supplements. Representative texts of this period are those of Colton, Swinton, and Harper's. The latter made a special effort to emphasize the commercial side (41:336-7).

The Influence of Pestalozzi: Guyot

From the foregoing statements we gather that the scientific geographical background of those who shaped educational practice and procedure during this period was meager and not very comprehensive; and yet, if we look into some of the texts of those days, we will be rather agreeably surprised at the attempts then being made to apply the philosophy of Pestalozzi to the teaching of geography. Pestalozzi exercised a potent
influence upon the teachers of his day and of succeeding generations. This influence passed down to his pupil, Ritter, and thence to Ritter's pupil, Guyot, who brought Pestalozzi's philosophy of teaching into America, making it the governing principle of all his work for the establishment of better objectives in the teaching of geography (19:294-302).

In discussing Pestalozzi's theory Cubberley says:

The Pestalozzian form of instruction, based on sense perception, reasoning, and individual judgment, called for a complete change in classroom procedure. What Pestalozzi tried most of all to do was to get children to use their senses and their minds, to look carefully, to count, to observe forms, to get, by means of their five important senses clear impressions and ideas as to objects and life in the world about them and then to think over what they had seen and be able to answer his questions, because they had observed carefully and reasoned clearly (19:298).

The Pestalozzian methods of instruction were introduced into the Oswego State Normal School of New York, which succeeded in gaining such publicity and recognition that its methods of oral instruction and object teaching became the dominant forces in the education just preceding 1870 and continuing beyond. Teachers graduated from the Oswego School and trained in the new methods were at a premium and were eagerly sought after by wide-awake school authorities, but they were too few in number to make their influence very largely felt outside of their own immediate communities. If, despite so many years of effort, physical geography was still on a very unsatisfactory scientific basis, it must be at once
evident that the effort to organize social geography was destined to encounter still greater obstacles (18:9-10).

Naturally this objective and oral teaching was to effect a great change in geography instruction in the decades following 1870. The first and most immediate effect was the vastly increased attention to home geography; and with the pupils' home environment as a basis the textbooks of the day proceeded to discuss the geography of the neighborhood, the community, and the region. For the political and statistical facts of geography, physical and human aspects were substituted; these, of course, called for outdoor observation. One cannot appreciate fully the contribution of Guyot in making known to the educational world the investigations and theories of Ritter. It was while under the influence of Ritter's doctrine, that the earth was adapted to man, that Guyot produced his outstanding text. The interest aroused everywhere by this text is attested by the number of publishing houses needed to supply the ever-increasing demand on the part of teachers, eager to apply its newer methods to their teaching.

In March, 1869, Scribner and Company, New York; Lee and Shepard, Boston; Hadley, Hill and Company, Chicago; and Ingham and Bragg, Cleveland, published simultaneously the first book of Guyot's Geographical Series. From this wide-spread publication it is apparent that his publishers considered his works of sound educational value and a good business proposi-
tion. Such wide-spread publication is also a criterion of his popularity. The preface of this book, written by Mary Howe Smith, states the aims of the book as intended by Guyot himself, who wished the book to be considered as an "Introduction to the Study of Geography." The purposes of the work, as listed in the "Message to Teachers", are:

1. To fill the mind of the young with vivid pictures of nature in such regions of the globe as may be considered great geographical types.
2. To give the pupil as correct conceptions as possible of the leading geographical forms of land and water, with the terms by which they are designated, in order that when employing these terms, he may always attach a distinct idea to each.
3. To give him an idea of the manner of representing portions of the earth's surface by maps, thus preparing him to make the map itself a special object of study, as he must do in the next grade.
4. To awaken a desire for future study, and at the same time to develop the powers of perception and imagination which will be constantly exercised in that study (36:Message to Teachers).

Coupled with the aims above are "suggested ideas" for the effective teaching of the content of the book, which is presented in the form of mental journeys to the places discussed.

The teacher is requested to take the children on a few field trips in their immediate vicinity before placing the text in their hands, for thus they will acquire a background of geography upon which the text can build. The material of this book is planned for classes under nine years of age, and an effort was made to keep it in as simple language as possible. Suggested methods of procedure were for the teacher to
assign a certain number of pages to be studied; then to assemble the class, letting each child read aloud and then requiring him to give in his own words what he had just read. No definite set of questions was given at the end of each chapter, but sets of questions are given at the end of the book as an aid to the teacher in guiding her into asking questions suitable to the chapter just covered. A summary at the end of each journey was to be learned by rote, "carefully committed to memory," as well as all definitions contained in the lessons. Pictures were to be examined carefully, and discussed with a view of illustrating the ideas found in the text. Maps were not to be used during the lesson, but rather at the end of the separate journeys; the region traversed was located on the maps and the descriptions of the localities recalled and related as a review of the lesson. The purpose of this method is thus stated in the "Message to Teachers":

"Thus, the pupil is first made acquainted with nature, and afterwards with the conventional signs by means of which it is represented to the eye, and he is lead constantly to associate the one with the other" (36:Message to Teachers).

From these suggestions as to the mode of study we may gather that, in addition to the objectives formerly stated, the author had in mind the following:

1. Ability to read aloud before a class of listeners.

2. Knowledge of new words which constantly come up in the new material presented.
3. Power of retention, tested when the teacher asks the questions given at the end of the book.


5. Training in poise which the recitation in class gives.

6. Judgment trained in picking out the most important points of interest in the pictures, as well as development of powers of observation.

7. Power to interpret a map.

Howe shows how important she considered this last point to be in the "Message to Teachers" which takes the place of the preface of the book.

The thorough study of the map, on the wall and in the book, and the mastering of it so as to engrave, so to speak, its image in the mind of the pupil in strong and deeply cut outlines, never to be effaced, is, and must remain, the prominent object of the course. With this result obtained, everything is gained and a solid foundation is laid for the future edifice of his geographical knowledge; for he will have a well-prepared frame, within which every new fact will readily find its appropriate and lasting place. Without it, nothing but a loose and baseless fabric can ever be reared on a ground so poorly prepared" (36:Message to Teachers).

Guyot earnestly expressed his wish that the books he had been the instrument of placing on the market for the use of school children would gain lasting results to the good of education. He thus expresses his inmost desire.

Let me close by expressing the sincere wish that the results of so much arduous labor may be productive of some lasting good for the cause of public education.
Without that sustaining hope, these various works never would have been begun, nor can they without it be carried to a successful completion (36:Message to Teachers).

The lasting good that he so earnestly and so sincerely sought to secure was achieved, for even at the present time his praises are sung by educators. Holtz declares:

Guyot's 'Introduction to Geography' is a beautiful, interesting reader in geography. It takes the child about his home locality first, then on journeys farther and farther from home. Physical, scenic, commercial, and historic units or types are chosen for these journeys. These travels are finally unified and summarized so as to present a picture of the whole country. A marked feature is that maps are not used before, but after, a region has been thus traveled over with picture and text. The map work also is definite, and limited to essentials. Before the Guyot books came out only political maps had been used in textbooks. He introduced a color physical map by combining it with the political (41:333).

Guyot by his profuse use of pictures did much to advance visual education.

Hart and Anderson's Stereoscopes

In New York a school supply house, Hart and Anderson, published in 1872 a book which was meant to explain the illustrated material produced for use with their stereoscopes. The results which they hoped would be the outcome of the correct use of their material were stated in the introduction to the book, which they entitled 'The World in the Stereoscope.' It contained stories and data descriptive of the pictures and suggested to the teacher a profitable method of using them. In describing the method to be followed in using the stereo-
scope they say:

One of the earliest points to which a good teacher directs his efforts is that of training his pupils to observe. The eye is but the instrument of the mind; and it is surprising to notice how soon and how thoroughly the mind can be brought into the habit of careful and close observation (39; Introduction).

The authors do not set down in a formal manner the aims to be secured through the use of the stereoscope, but from their suggestions and comments we may infer that their aims were as follows:

1. To increase the interest in geography study.
2. To give an appreciation of the beauty of the pictures in themselves.
3. To aid in rousing in the child a new interest in reading about the vivid places, events, and people portrayed and by so doing to help in teaching reading in a natural, correct, and easy fashion.
4. To enlarge the pupils' knowledge of the world we live in.
5. To aid the teacher in her descriptions to the class of distant places so that the young minds can get really correct ideas from their words.
6. To embellish the words of the textbook and give them real meaning.
7. To do valuable service in the presenting of objects which cannot be themselves presented.
8. To lend variety to the descriptions.

9. To train the faculties of observation and memory.

10. To help in comparing two places of geographical fame.


To say the least, these intended objectives were most desirable, and were readily obtained through the proper use of these stereoscopes. They were more attractive than ever, and their effect of creating interest was very wholesome in classes where they were used. Colors always have a psychological attraction to children, and Hart and Anderson's offerings presented something new and appealing, for all of the textbooks used by the children were printed in black and white, with no colored illustrations, and did not contain the variety of appeal that the stereoscopes did. By using different pictures in the stereoscope pupils could take in at a glance places far removed from each other and not represented in the text. The cost and bulkiness of the stereoscopes, however, prevented a much-deserved popularity, and a further deterrent to their spread was the fact that the public had to be educated in their use before school directors and boards of education would consent to their introduction.

At the present time stereoscopes are a part of the standard equipment of every special geography room.
Hart and Anderson's stereoscopic pictures covered a wide range of things of world interest. If we take every tenth one at random as given in the book the list of subjects will be as follows:

1. The Yosemite Valley.
2. The Chicago Conflagration.
3. Glaciers and Ice Caves.
4. The Pyramids and Sphinx.
5. The Coliseum at Midnight.
7. Constantinople.
10. The Alhambra by Moonlight.
11. The City of Washington.
12. Egyptian Rivers.
13. The Mountains of Scotland.
15. Old Ironsides.
16. The Indians.
17. Bridges.
18. Vegetation in the Tropics.
The most serious criticism of the pictures is that they are not vitalized. Almost without exception they are pictures of inanimate things only, and we consider that geographical pictures, to be true types, should contain, for the most part, people and their activities.

Every year showed steady progress toward the realization of more perfect ideals and further clarification of objectives. We have observed that in 1870 special emphasis was laid upon locational geography and that textbooks began to be more copiously and more attractively illustrated, thus indicating a growing belief in visual methods. But in 1873 interest was again upon physical geography and map-drawing, for Guyot again put upon the market, in answer to numerous requests from teachers, a new text intended for the upper grades of the elementary school and entirely different in concept and spirit from the first book of his series to which reference has previously been made.

Guyot's *Physical Geography*

In 1873, Scribner, Armstrong, and Company, publishers of Guyot's *Physical Geography*, registered his new textbook in the Office of the Librarian of Congress at Washington. Thompson, Bigelow, and Brown handled the book in Boston, and Hadley Brothers in Chicago, showing that Guyot was still the popular geographer of his day and that his texts were used outside of his home community. Although teachers trained at Oswego in
Guyot's method were few in number and widely scattered; his book so thoroughly explained just how it was to be used that his plan of teaching could be followed closely without special training, as was his original intention.

Guyot prefaced his work by giving his notion of the chief objectives to be sought for in the teaching of the science of physical geography.

In this science the material body of the globe, with its atmosphere, the myriads of plants and animal forms living upon it, and man himself, as a part of the life system, are not only considered in themselves but in their mutual relations, as working together towards a common end. Though entirely resting upon the solid basis of observed phenomena, it does not stop here. Its aim is preeminently the discovery of the laws which govern this phenomena, and of the grand chain of causes and effects which explains the mode of occurrence (25;Preface).

Two additional objectives as described by Guyot were:

To give the youth in our schools some knowledge of the laws of these natural phenomena, in the midst of which we live and move.

To furnish the pupils of higher grades a general outline of Physical Geography, which, by simplicity and conciseness, would be suited both to the amount of general information they are expected to possess and the limited time available for this study in the school course (25;Preface).

The book was written to be used by children over nine years of age and contained fewer pictures than the first book of his series. It was planned in topic form. To illustrate, let us reproduce one of the topics called, "Results of Internal Heat -- Volcanic Phenomena." It is subdivided into the following:
2. Volcanic activity -- Vesuvius.
3. Vesuvius, the typical volcano.
4. Relative positions of volcanoes.
5. Volcanic zones.
7. Earthquake defined.
9. Duration of earthquakes.
10. Distributions of earthquakes.
11. Relation of atmospheric and astronomical conditions.

These data occupy about one-tenth of his book and are well interspersed with pictures, maps, and diagrams, from which we can ascertain the thoroughness with which the child of that day was taught physical geography by topics. At the close of each chapter, instead of at the end of his book, as had been his former style, he had a lengthy list of unnumbered questions as a guide to the teacher and an aid to the pupil in knowing his lesson. The book as a whole is divided into five parts:

Part I. The Earth.
Part II. The Land.
Part III. The Waters.
Part IV. The Atmosphere.

Part V. Life upon the Earth.

This list gives us an insight into the things a child was taught and supposed to know in his elementary years of geography and the thoroughness with which physical geography was taught. At the end of the book there is a table of mean temperatures and rainfall in the United States and other parts of the world and an alphabetical list of pronunciations for all of the places mentioned in the text. We find here two types of supplementary and collateral material not previously found in geography textbooks.

Holtz furnishes us with a short descriptive critical outline of Guyot's work.

In Guyot's Intermediate and Grammar School Geographies the arrangement was analytical -- deductive. Here physical geography was really brought to bear on the political. The map study was cut down to reasonable limits by a better selection, and was more than simply locative, being used for the development of topography, climate, etc., as well. Mercator's projection was used in some of the physical maps. For the first time separate color -- physical map were used in addition to the political.

Guyot and Smith were firm believers in map drawing, as were practically all authors and teachers of the time. They, however, made the mistake of recommending complicated construction diagrams, the formulae for which the pupils had to memorize, for the drawing of the continents, etc. Map drawing at this period became elaborate and time wasting (41:335-6).
Swinton's Complete Course in Geography

An interest in industrial and political geography was beginning to crop up; and in response to a growing demand, Swinton, author of Introductory Geography in Reading and Recitations, Grammar Grade Geography, Language Lessons, Decisive Battles of the Civil War, Outlines of World History, Bible Word-Book, and Campaigns of the Army of the Potomac, prepared a textbook which would satisfy this interest. He termed it a Complete Course in Geography, and designed it to be used as a class book for intermediate and grammar grades. It was published by Ivison, Blakeman, Taylor, and Company, New York and Chicago, in 1877, and represents, so the author states, the work of five years of his earnest efforts. He expressed the general aim of this text in this fashion:

In preparing this Course in Geography the author's aim has been to produce a book which should be recognized by teachers as striking a just balance between conflicting theories, and as embodying what is best in the modern methods of geography teaching (22:Preface).

Some specific objectives sought by Swinton, the substance of which is also contained in his Preface, are:

1. To acquaint the pupil with data that will bring to his mind that the fact that on the surface of the earth lives a toiling race of man that it is on man's account that the earth is an object of interest.
2. To inform the student that the physical surroundings of man "determine the pursuit, character and total life of the people inhabiting that region."

3. To make a connection between physical and political geography.

4. To give information about the basal facts of geography, such as "the shape, size, motions of the earth, reading maps, latitude and longitude, the theory of climate, et cetera."

5. To train pupils in making their own definitions and reaching their own conclusions.

6. To train in memorizing and reciting.

7. To give a body of important facts concerning each state.

8. "To plant in the minds of youth vivid and definite knowledge of how different people make their living, of what they contribute to the commerce of the world, of why the productive industry of a nation takes one form rather than another."

9. To show the relationship between the industrial and the commercial.

10. To enhance the artistic and educational values of geography for the student by means of illustrations.

11. To systematize map-drawing by constructing first a few connecting lines, squares, and triangles which will be set
off and give the outline of the forms of counties, states, and countries by being drawn to scale (82:Preface).

Swinton succeeded in accomplishing his expressed aim, for his book has a newness of style and material in advance of his time. He stressed the earth as the home of man, and accented the idea that man's physical surroundings determine his pursuits and life. From this he branched out and made a connection between physical and political geography which hitherto had not been voiced. His greatest contribution to the science of geography was his clear description of the relationship between the industrial and the commercial. In other respects his objectives were much the same as those which had been advanced by other authors previous to his time, many of which are taken for granted by him. Probably the greatest blunder in his work was the amount of time he required for learning the figures and shapes and lines in his suggested map drawings. His books represented a very great advance and were popular for a long time in the schools. Eight years passed before any new contribution of moment was made, and then Gillan appeared to espouse the cause of mathematical geography.

**Gillan's Mathematical Geography**

Gillan, a teacher in the State Normal School, Milwaukee, Wisconsin, in 1885 advocated a clear conception on the part of the learner of the ideas contained in a definition before
it was to be learned by memory. He also contended that a pupil must know that

The earth is round, it turns around, and there is no lower side. Afterwards the work in geography has to do chiefly with descriptions and map exercises. But somewhere near the latter part of the course in the district school, Mathematical Geography, should be taught at least as fully as it is presented in the first sixteen lessons" (34:Preface).

These sixteen lessons are contained in his book, Mathematical Geography, published by the Western Teacher at Milwaukee, Wisconsin, and registered according to an Act of Congress at the Office of the Library of Congress in 1885.

Speaking in general of the methods to be followed by the teacher, he brings out in his Preface three desirable objectives to be gained:

1. Entertainment.
2. Training in scientific methods of investigation.
3. Mental discipline.

Some entertainment and possibly a little training in scientific methods of investigation may be had by noting and recording the time and place of sunrise and sunset, comparative length of noonday shadows, angle of the sun's rays, for a season or a year; but to attempt to teach by observation all the facts of the solar system which influenced the earth as the home of man is a prodigal waste of time (34:Preface).

If we consider some of the topics contained in his book, we can note more fully the nature of the knowledge attainments to be acquired by the student and teacher, according to his chapter headings:
I. The Cube

II. Sections of Solids -- Mathematical Solids.

III. The Sphere at Rest.

IV. The Sphere in Motion.

V. Spherical Form of the Earth.

VI. The Earth an Oblate Spheroid.

VII. The Earth's Motion.

VIII. The Zones.

IX. Change of Seasons.

X. Changes in Circumnavigator's Calendar.

XI. When and Where Does the Day Begin?

XII. Standard Railroad Time.

PART II

XV. The United States Land Survey -- The Township.

XVI. Subdivisions of the Township.

XVII. Another Kind of Government Survey.

XVIII. Different Kinds of Maps.

XIX. Map Reading.

XX. Why Does the Sun Rise North of East in the Summer Time?

XXI. Daybreak in the Arctic Regions -- the Midnight Sun.

Although Gillan's objectives are desirable, it is not easy to see how any child can acquire any degree of entertainment from the type of difficult material which he presents,
for a great amount of solid concentration would be necessary for even an adult to attain any degree of knowledge from the text; and in the end, to say the least, it would not be of an entertaining nature. His other objectives, such as "training in scientific methods of investigation" and "mental discipline" would be the natural outcome of any detailed study of the book whatsoever. For a student of college age it would be a valuable book in scientific mathematical geography, for it is quite thorough and shows a vast amount of attainment by the author. The book could readily be rewritten for students of less mature age, and it must have been a valuable guide to research workers along geographical lines.

Frye's The Child and Nature

In teaching Gillan's work it would be absolutely necessary to follow the book to gain any connected succession of ideas. In contrast to him, Frye a few years later advocated a flexible course in geography where the teacher would be permitted to stray from the text at will and still be teaching a connected sequence of subjects. Of his own work, The Child and Nature (1888), Frye says:

The aim of this work is, ---
1. To grade and apportion subject matter of natural geography to the successive stages of development of the child's mind and rid the study of its myriads of worthless details.
2. To direct attention to the laws of mind growth which condition methods of teaching, and to suggest devices for stimulating and directing mental energy.
3. To review the literature of geography, and indicate lines of study for teaching (31:Preface).

This book is sent out with the hope that it may lighten the work of teachers, and make the school days of childhood happier and more profitable (31:Preface).

He gives credit for the form his book takes to the works of Ritter, Guyot, Humboldt, Wallace, Johnston, and Huxley. In it the subjects treated are set down far more succinctly and clearly than was the style in earlier books, as can be seen from these few chapter titles, as:

Chapter I. Short History of Geography.

II. Value of Studying Continental Slopes, Globe Relief.

III. Sand Modeling in Elementary Geography.

IV. District Relief.


In the Appendix he criticises the usual method of teaching geography during his time and advocates a very flexible course of study, the material of the text to be used when and how the teacher saw fit, according to the intelligence of the class, thus:

The tendency in teaching geography has been to discard the unity of subjects, and make the study a mere vehicle for civil and natural history, just as the science of number is now made to bear the multi-
plicity of isolated business forms that are forced into our arithmetic. It is the aim of this course of study to show what constitutes the science, or sequence of subjects and assign them to the different grades in stages of mental development. This assignment of topics to the various classes being conditioned by the intelligence of the pupils, their natural surroundings, and the amount of time allotted to the subject, it is evident that every course of study must be flexible. It is sincerely hoped that this one will be used purely as suggestive of a better, and under no circumstances be slavishly followed (31: Appendix 201)

Particular attention is called to the following:

1. At least one-half of the first term of each grade should be devoted to review of such subjects as form the basis of the new step to be taken. This not only quickens the pupils' memories, but also gives the teacher the necessary opportunity to judge their power and knowledge and to strengthen weak points.

2. The forms of land and water are to be studied in connection with the forces that work upon them.

3. Too great stress cannot be laid on the importance of keeping the records, which are called for by the lists of questions. Each child should have a book in which to record the results of personal observations. The lines of investigation should, of course, be directed by the teacher.

4. The location of the important countries and cities may be taught incidentally to the study of the relief of continents, if thought best, as a preparation for historical reading. The general location by natural features is sufficient. This will not in the least interfere with orderly development of the course of study.

5. The study of the United States during the winter term of the eighth grade as well as the "Most Important Ten Countries' following should embrace chiefly the general relief and contour, drainage, natural resources, commercial cities, routes of trade and forms of government. That of our own country may include the general location of groups of individual states -- although this is the grade in which the study of our own country naturally belongs, it may be advisable to give a general knowledge of its geography in lower grades, especially if there are many pupils who leave school at an early age. Such lesson should not, however, take the place of the natural development
of the science, but should be merely introduced as incidental work in one of the lower grades.

6. Pupils should be encouraged to read books of travel relating to the continents studied. Teachers should acquaint themselves with the available libraries, and suggest good books to the children. Examine upon all that are read, and so encourage the pupils to read carefully, and to remember. Without such examination they may acquire the habit of reading for the mere passing of impressions.

7. Learning to cull important current events from daily newspapers should form a very essential part of civil geography of the higher grades. The condition of the markets, state of trade, and exports and imports should also be noted.

8. Every teacher should familiarize herself with the entire course of study, to know the work on which she is building, and towards which she is leading.

9. Individuality in teaching is developed, not by following a leader, but by working out a principle (31:Appendix).

Frye evidenced a greater amount of understanding of the child and his needs than any of his predecessors. His text dealt with a greater variety of subjects than had been the custom of previous writers. His insistence upon library reading, newspapers, and magazines was very progressive and worth-while, for it impressed upon the mind of the young student that geography was going on about him at all times and that current happenings possess interest and vitality. He made allowance for the pupils who were to leave school at an early age and insisted upon a good general outlook on the geographical world. He realized the vastness of his course and commented in the Preface upon the fact that he had no intention of insisting on teachers' slavishly following it.
Palmer’s "Scientific Methods in Teaching"

During the same year in which Frye published this book the National Education Association held its annual meeting in San Francisco, and Corwin F. Palmer read a paper on "Scientific Methods in Teaching" in which he analyzed the aim of school work in general and geography in particular, thus:

The aim of all good school work is mental discipline -- to make the pupils think. To this most approved method instruction make no exceptions in the case of geography. . . . "It furnishes about the only opportunity for science training below high school. The study of geography like that of all sciences should accordingly be made the occasion for exercising the child in reasoning as to causes of natural phenomena. It is of more consequence to know what made a city populous than to know its population; to know why a river is long, than to know its length; to know why the brook is not a river, or the pond a lake (62:386).

Stratchey’s Address

Again, in the same year, Stratchey, President of the Royal Geographical Society of London, delivered a lecture at the University of Cambridge on the objectives of geography, in which he said:

The aim of geographical science is to investigate and delineate the various features of the earth; and to study the distribution of land and sea, the configuration and relief of the surface, position on the globe, and so forth, facts which determine the existing conditions of various parts of the earth, or which indicate former conditions; and to ascertain the relations that exist between those features and all that is observed on the earth. Geography is thus ancillary to many other branches of science and learning, for which a knowledge of the relations of such facts or features to the matters with which they deal is essential (80:11).
From the active interest displayed at home and abroad we can see that the time was about ripe for a general house-cleaning and reorganization of the study of geography. A year or so later, about 1890, a movement got under way at the instigation of Parker for the study of the outdoors by direct observation. This was a great step in making the study of geography more concrete (18:5-10).

The "New" Geography

In 1890 elementary textbooks still abounded in definitions and the routine of place geography, and many of them did not consider either causal relations or the relations existing between man and the earth. The National Geographical Society, then in existence for two years, and the American Geographical Society, in existence for forty years, had both tried in vain to awaken general interest in their activities. Yet a new epoch in geographical objectives, aims, and teachings was rapidly coming into being under the influence of the educational upheaval of 1870 (8:487-496).

Holtz, Head of the Department of Geography and Nature Study of the Brooklyn Training School for Teachers, New York City, and author of *Principles and Methods of Teaching Geography*, in reviewing the texts of that period, says:

The "new" geography emphasizes the physical.---In the nineties a number of textbooks appeared, such as Frye's, Redway and Hinman's, and Morton's, which
began to show the effect of instruction in physical geography and geology in the high schools, normal schools, and colleges. Maury, Hinman, Redway, Davis, Shaler, and others had been teaching the teacher's of elementary and high schools the modern, dynamic, and evolutionary physiography which had made great strides during the two previous decades. Physical geography had also been introduced into the normal schools. Therefore the time was ripe for the new books above mentioned. Their chief merit is in the adaptation of physical geography to the elementary school, and in a better application of the causal relation principle. Topographic forms and the forces that made them, the waters of the earth, meteorology, and the adaptation of animal and vegetable life to the physical environment of the chief points in which advance is shown. The commercial phase continues to show progress.

Woodcuts give way to photographic processes, increasing the veracity of the illustrations. The maps are more perfect. A new kind of map now added is the photo-relief map.

But in the descriptive or political part these books are not much better than their predecessors, consisting of the usual laconic, statistical, enumerated paragraphs in the usual unconnected order. That which should be the most fascinating part of geography is dull and uninteresting. The lack in this respect was partially made up by supplementary readers, some excellent ones now appearing, as the famous F.G.Carpenter's Series, and the Readers by King (41:337-8).

Holtz's criticism of geography as it had been followed in the curriculum of the schools is rather severe, for he (writing at the present day) sees it in the light, by comparison, to which it has progressed at present. We are inclined to be a bit more lenient and to grant more credit to those who succeeded in giving geography the impetus and momentum which had changed somewhat the ideals and objectives of its teaching since 1870. For such a new science it had
made surprising steps of advancement.

The National Education Association had very little
to say about geography at its yearly meetings. Mary Howe
Smith had delivered a paper on "How to Teach Geography" at
the meeting in 1871 in St. Louis. Her objectives were covered
by Guyot in his book. Then again, in 1885, at Saratoga
Springs, L.R. Klein read a paper on "Sense Perception in Geo­
raphy", but his paper added nothing new to Smith's lecture
in 1871. With the lively interest in geography now in the
state of waiting a decided and definite change, we must look
forward to the meeting of the National Education Association
in 1892, which was to attempt to settle several important
issues at stake in the educational system of the country and
to revolutionize somewhat the concepts of geography through
the valuable educational service rendered by prominent edu­
cationists appointed at this meeting.
SUMMARY

Hand in hand with the evolving science of education, geography advanced slowly during the period from 1870 to 1892. In 1870 emphasis was on the physical side, not as we understand it today, but merely on the study of fixed, unchanging forms. It did not attempt to account for the physical geography coupled with the locational phase. Map-drawing was systematized and was entered into with vast detail. Some home geography and some mathematical geography were taught, commercial geography was recognized, and some interest shown in political and industrial geography. Nature played a large part in the geography of the times.

Objectives were advancing with each new concept of geography. Knowledge attainments were highly honored and covered a wide range of ideas concerning the earth, its inhabitants, and the universe in general. The writing of examinations continued to be the means of testing the achievements of the students. Pictures acquired an important function in teaching the subject, the art of photography and reproduction being improved continually. Observation was trained by drill, and an attempt was made to enhance the artistic and educational values of geography by means of illustrations and thus also to compare other nations and peoples. Mental discipline was
an outstanding objective, and toward the close of the period entertainment was beginning to have its sway. Training in the use of library material, magazines, and newspapers was attempted by the most successful of teachers, but this was not always as easily done as it is at the present day. Many new and apparently workable methods had been advanced; new types of material had been devised; and objectives had been more clearly defined.
CHAPTER II

DEVELOPMENT OF OBJECTIVES FROM 1892 TO 1902

Since the meetings of the National Education Association brought all the educators of prominence and their educational problems together for discussion, it was natural that the Association should become the vehicle of all the newest educational theories, experiments, material, methods, and objectives. During the period 1892 to 1902 we have many instances of the activities of the National Education Association and the direct influence it exercised upon the scientific education of the time.

(a) Educational Committees

1. The Committee of Ten

When, in 1888, Charles W. Eliot, President of the National Education Association and also President of Harvard University, gave his famous address on "Can School Programs be Shortened and Enriched?" he paved the road which led to his address on "Shortening and Enriching the Grammar School Course" at the National Education Association meeting held at Saratoga Springs, New York, in 1892. At this gathering he spoke in the following manner of the resolutions formed in 1891 at Brown University by a group of New England Educators
who proposed a change in the grammar school program (26:46-7).

The most complete statement of the new subjects proposed for the grammar school programme is that made by the Association of Colleges in New England at their meeting at Brown University last November. That Association then invited the attention of the public to certain changes in the grammar school program which it recommended for gradual adoption (26:619).

Although these changes were five in number, we will quote only the first one, as it is the only one which has any bearing on the subject of geography.

The introduction of elementary natural history into the earlier years of the program to be taught by demonstrations and practical exercises rather than books. The term natural history was doubtless intended to include botany, zoology, geology and physical geography. Some room for these subjects is already made in most grammar school programmes, and the recommendation of the association refers as much to methods of teaching as to time allotted to the subject. The association recommends that the teaching be demonstrative, and that adequate apparatus be provided for teaching these subjects. There is a lamentable lack of the proper apparatus for teaching geography in the public schools. Indeed in many schools there is no proper apparatus for teaching geography, or any other natural history subject, to young children. Natural science apparatus has been provided in some exceptional high schools; but as a rule grammar schools are still destitute in this important respect (26:619-20).

As a direct result of Eliot's two speeches much serious discussion concerning education at all its levels among educators was begun and led to the formation of various committees entrusted with the task of investigating and reporting on educational problems. The first committee, the Committee of Ten, was appointed at the same meeting at which in 1892 Eliot had delivered his address, in the following form:
To the National Council of Education

In the opinion of the Conference of Representatives of Colleges and Secondary Schools, called by authority of the Council, certain conferences by departments of instruction, of teachers in colleges and secondary schools are desirable. We, therefore, recommend to the Council that the following ten persons, namely, President Chas. W. Eliot, of Harvard University, Dr. W.T. Harris, Commissioner of Education, Pres. James B. Angell, of the University of Michigan, Mr. John Tetlow, Master of the Girl's High School, Boston, Pres. James M. Taylor, of Vassar College, Mr. O.D. Robinson, Principal of the Albany, New York, High School, Pres. James H. Baker, of the University of Colorado, Pres. R.H. Jesse, of the University of Missouri, Mr. James C. Mackenzie, Head Master of the Laurenceville, New Jersey, School, and Professor Henry C. King, of Oberlin College, be designated as an Executive Committee with full power to call and arrange for such conferences during the academic year 1892-3; that the results of the conferences be reported to said executive committee for such action as they may deem appropriate; and that the executive committee be requested to report fully concerning their action to the Council.

We recommend, further, that the Council ask the Directors of the National Education Association to authorize the payment of the necessary expenses of the Conference, and that they set apart out of the income and current funds of the present year the sum of twenty-five hundred dollars, which sum shall be available so far as may be necessary to carry on the work of the committee, and shall be disbursed by the Trustees of the National Education Association on vouchers signed by the Chairman of the Executive Committee herein recommended.

Respectfully submitted on behalf of the Conference.

Nicholas Murray Butler
Chairman of Committee (26:754).
The National Education Association at the suggestion of Baker, then a high-school principal, through its National Council adopted the recommendation and the Committee of Ten was appointed to arrange a series of conferences between school and college teachers of the important school subjects. Eliot, President of Harvard University, was made the chairman of the committee, and each of the members of the committee had a group of ten enthusiastic helpers under his immediate direction. The objectives of the Committee of Ten were to determine (1) the limits of the various major school subjects being taught, (2) the best possible practical methods of instruction, (3) how much time should be allotted in teaching these subjects, and (4) the most desirable method of testing the pupils' attainments.

The now-famous report of the Committee of Ten was finished in December, 1894, and each member of the National Council of Education was sent a copy some months before the meeting of the National Education Association which was held in July of the same year. The report was read and discussed at the regular annual meeting, which in that year was at Asbury Park, New Jersey (10:47-50).

It was found that, although the Committee was ostensibly inaugurated to examine secondary schools, it was inevitable that numerous suggestions should be made respecting elementary and college training as well. Thus it was that the data
collected appertained to the entire system of education ranging from the elementary school through the college period.

The findings of the Committee of Ten marked a new era in elementary and secondary geography in the early nineties. On the subcommittee of geography were some of our eminent geographers. They suggested that physical geography should be introduced early in the school life of the pupil, and they also recommended that it should be a prerequisite for high school and college entrance. Although overemphasis was probably placed on physical geography, all that is best in modern geography is based upon the early physical geography. Soon afterwards texts incorporating the recommendations of the Committee of Ten began to appear in our schools (8:487-9).

Bunker, who had been Assistant Superintendent of the Seattle Public Schools, Assistant Superintendent of the Los Angeles Public Schools, and Superintendent of the Berkeley Public Schools, published in 1916 a Government bulletin through the Bureau of Education, of the Department of the Interior, in which he summarizes very succinctly the work of the Committee of Ten (10:47-8).

2. The Committee of Fifteen

The Department of Superintendence of the National Education Association, a few months before the report of the Committee of Ten was published, appointed a committee of fifteen
men on elementary education. When this committee met, they agreed among themselves that they would form three subcommittees, each one of which was to obtain specific information concerning one of the following three subjects:

1. The Training of Teachers.
2. The Correlation of Studies in Elementary Education

Questionnaires were prepared by each subcommittee and sent out to the leading school men and women throughout the country to obtain the necessary data. At the Cleveland meeting of the Association, held in 1895, the report of their findings was presented for discussion before the Department of Superintendence. It is regrettable that so much of the material obtained in the questionnaires was omitted from the report, as the subcommittee on the Correlation of Studies in the Elementary School must have had some valuable data on geography, but the report does not contain them (10:50-1).

At the same meeting at which the Committee of Fifteen made its final report, two new committees were appointed, one on Rural Schools and the other on College Entrance Requirements. They were entirely independent of each other; and since the latter committee did not report its findings until 1899, we shall follow through and see what the former had to reveal in 1897.
3. The Committee on Rural Schools

On July 9, 1895, a committee to be composed of twelve members was appointed at the National Education Association meeting, and was given two years to report on the following four aspects of education:

1. School Maintenance.
2. Supervision.
3. Supply of Teachers.
4. Instruction and Discipline.

The members of the Committee of Twelve on Rural Schools were:

B.A. Hinsdale.          C.C. Rounds.
S.T. Black.             J.H. Phillips
Henry Sabin.            A.B. Polard.
L.B. Evans.             L.E. Wolfe.
C.R. Spinner.           V.T. Harris.

In the order in which they are mentioned above, these men formed subcommittees of three, and each group undertook the research necessary to make the report on the subjects listed, the first three men mentioned forming the subcommittee on School Maintenance, the second three, Supervision, and so forth. They reported their findings at the regular meeting.
of the National Education Association in 1897. In the Appendix of their report they gave this arrangement of the course of study in geography to be followed in the rural schools according to the ages of the pupils:

Group I (5-7 years)

Familiar conversations and simple preparatory exercises, serving to excite a spirit of observation in the child by leading him to observe the most common phenomena of earth and sky. Lessons on relative positions of objects, and distances.


Group II (7-9 years)

Home geography: Observations of phenomena of earth and sky; of the seasons; of contour, surface, mountain, valley, plain, brook, river, pond, soils, vegetation; in short, of whatever elements of geography study can be brought under the observation of the child, that his knowledge of his environment may serve as a basis for his future studies of the world.

Modeling in sand. Notion of map. Extension of study to immediately related regions. Notion of form of the earth; the globe. Illustrated lessons on races of men, and on the picturewque and curious in their customs and manner of life (17:552).

Group III (9-11 years)

Continents and great land and water masses. North America and United States, with incidental treatment of other parts of the world, in connection with history and current events.
In all study of geography note its correlations with other subjects, especially with history, literature, language (17:553).

Group IV (11-13 years)

Study of foreign countries, apportioning the time devoted to them according to their relative interest and importance.

Work of this group to be divided if necessary. The use of modeling, map drawing, and the various means of illustration is presupposed throughout the course in geography, and also the treatment of physical, mathematical, industrial, and commercial geography, in due order and degree. As the subject will usually be taught in the rural school with the aid of textbooks in which these topics are developed, it is unnecessary to enter into details in this statement (17:553).

We can readily observe from this that, although physical geography held a prominent place in the school work of that day, other phases of geography were given more prominence than heretofore. Both field geography and observational geography were getting a firm hold in the curricula of all schools. It may be interesting to note that there is work in modeling in all four of the groups mentioned in the report on rural schools. Then, too, in the same year, Redway and Hinman, Froebel, Lodge, Dean, Parker, and others all published books on the subject of geography, making this year a banner year in the publication of geography texts written in accordance with the ideas sanctioned by the Committee of Ten and the Committee of Fifteen.
4. The Committee on College Entrance Requirements

Under the auspices of the National Education Association, a third important study in education was made by the Committee on College Entrance Requirements which bore directly upon the articulation of secondary and college education. This committee was appointed in 1895 and submitted its final report in 1899 at the Los Angeles meeting of the National Education Association. The men who were put in charge of the research by the Department of Secondary Education were:

George B. Aiton. Edmund J. James.

Bunker says:

The committee consisted of five from the Department of Secondary Education and five from the Department of Higher Education, increased at a later time by two from each department; and it called in for cooperation four committees of three each, appointed respectively from the New England Association of Colleges in Secondary Schools, the Association of the Middle States and Maryland, the Southern Association, and the North Central Association. At a later date, the national committee called upon the Philological Association for a report on Latin and Greek; upon the American Historical Association to prepare a report on the scope and place of history in the secondary schools; upon the Modern language Association of America for...
a report on German and French, with model courses of study for secondary schools; and upon the American Mathematical Association for a report on the subjects in which it was interested (10:52).

Needless to say, there was a wealth of material submitted for discussion, but since our interest lies solely in geography we shall take from the report only those data which appertain to this subject. The Journal of the Proceedings of the National Education Association, 1899, has summed it up thus:

1. That this committee adopt the definition of physical geography given in the report of the Subcommittee on Physical Geography appended to this report, namely, 'the physical environment of man;' and that its principal theories are, the earth as a globe, the atmosphere, the ocean, and the lands, all appropriately limited in scope and difficulty by the time at the disposal of the course and the capacity of high school pupils, and all taught 'with the motive and the special point of view defined above;' and that 'the distribution of organisms should not be taught with reference to zoological and botanical classifications, but in exposition of the organic environment of man and as itself controlled by physio-graphic and other influences.'

2. That in public high schools and other secondary schools physical geography be taught in a course occupying not less than four periods a week during one year; and that this course should be placed in the ninth grade (first high school year, in the present organization of most public schools).

3. That the course in physical geography should include a large amount of field and laboratory work; and lectures, discussions, and textbook study should, so far as practicable, be related to such work. Note-books should not be an end in themselves, but they should be kept in such a way as to emphasize the spirit and method of scientific work.

4. That the course in physical geography outlined in the foregoing propositions, when satisfactorily completed, count as one unit toward satisfying the requirements for admission to college (14:652).
The report referred to in the above quotation is the one made by Brigham, of Colgate University, a member of the Subcommittee on Physical Geography, to the National Education Association at their 1898 meeting in Washington, D.C. Since the committee was ready to report and the regular meeting of the Committee on College Entrance Requirements was not to be held until 1899, the report as read is referred to as the Preliminary Report of the Subcommittee on Physical Geography. Laboratory work in geography was new, and Brigham had done some research in it with his classes, and presented this time schedule as a working outline:

<table>
<thead>
<tr>
<th>Topics</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause of day and night and extent of sunlight over surface</td>
<td>1</td>
</tr>
<tr>
<td>Determination of latitude, north and south line, high noon</td>
<td>1</td>
</tr>
<tr>
<td>Determination of difference of longitude by sending watch</td>
<td>1</td>
</tr>
<tr>
<td>Finding variation of local and standard time</td>
<td>1</td>
</tr>
<tr>
<td>Making maps on different projections</td>
<td>4</td>
</tr>
<tr>
<td>Study of ocean current maps</td>
<td>1</td>
</tr>
<tr>
<td>Study of tide charts</td>
<td>1</td>
</tr>
<tr>
<td>Study of map of the world showing heights of land and depths of sea</td>
<td>2</td>
</tr>
<tr>
<td>Difference in temperature between top and bottom of hill</td>
<td>1</td>
</tr>
<tr>
<td>Finding height of hill or building by barometer</td>
<td>1</td>
</tr>
<tr>
<td>Determination of dew point</td>
<td>1</td>
</tr>
<tr>
<td>Making isotherm and isobar maps from furnished data</td>
<td>4</td>
</tr>
<tr>
<td>Study and reproduction of weather map</td>
<td>1</td>
</tr>
<tr>
<td>Predictions from weather maps written with reasons</td>
<td>2</td>
</tr>
<tr>
<td>Observations of rainfall, temperature, velocity of the winds</td>
<td>-</td>
</tr>
</tbody>
</table>
Determination of the amount of snowfall and the amount of water produced by an inch of snow ........................................... 1
Observations of ground temperatures, depth of frost, et cetera ........................................... 2
Making contour and hachure maps from small models ............................................................. 4
Drawing cross sections from contour maps ............................................................................. 4
Written descriptions of models ................................................................................................. 4
Picture reading (written descriptions) ......................................................................................... 4
Map reading (written descriptions) ............................................................................................... 4
Reproduction of contour maps in hachures ............................................................................... 1
Making map of small area in neighborhood ............................................................................... 1
Trip or journey planning with a study of country to be seen .................................................. 4
Determination of the amount of sediment carried by a stream ............................................... 1
Study of rocks and minerals ........................................................................................................ 10
Study of erosion by sprinkling pot ............................................................................................. 2
In fall four excursions, one a week ........................................................................................... 8
Four excursions in spring ........................................................................................................... 8

(7:981).

(b) Constructive Geography

In 1894, Maltby and Fletcher each produced a book on constructive geography. The book of the former was very thorough and contained many topics and descriptions carrying out specific lesson plans, while that of the latter, a much simpler book, dealt only with the use of sand in constructive geography instruction. Since both of these books were published in the same year, although miles apart - Maltby in New York and Chicago and Fletcher in London - we cannot help but wonder at the seeming coincidence, for we find no such publications previous to this time, and some years elapsed before any other books containing material of this nature were published.
Map Modeling in Geography and History, by Albert Maltby, Principal of the Slippery Rock State Normal School, is easily the better book of the two in treating of the use of construction in illustrating geography lessons. He says,

"The available language of geography can alone render these home elements valuable; and modern educators are almost unanimous in the claim that speech, modeling, pictures, sketches and maps form the primary language of the science. These symbols, however, are of use only when they fix a mental picture of the thing represented, and do not fix attention upon themselves. Through the constructive phase of the imagination, unseen places and peoples must be brought vividly before the mind, and the pupils may then translate them into language of models, chalk models, pictures and maps. . . .

All modeling or drawing that simply reproduces the form of the map without enlarging and completing the pupil's concept surface structure fails of its intended object. It becomes a hindrance rather than an aid, since it fails to build up in the mind a concept of the country or continent as a unit (52:Preface).

Maltby propounded the idea that all geography work could be helped immeasurably by using sand, clay, putty, paper pulp, plaster of Paris, and other materials in the making of outline and physical contour maps. The relief maps may be used in several ways after they have been moulded by the pupils, such as:

1. To obtain from the pupils the statements given in the plan.
2. To fix firmly in their mind the knowledge gained.
3. To help in the study of a text in a good intermediate geography.
4. To give a little well-directed reading.

5. To gain concepts of the general physical features of the continent through previous work and modeling the relief in putty, clay, or paper pulp (52:138).

This volume contains all sorts of valuable aids for the purpose of assisting the teacher and the class in producing material in relief for the class lessons. Sample pictures of volcanoes, mountain chains, rivers, valleys, springs, shorelines, geysers, and also all of the continents are contained in this book, modeled in the materials popularly used in the classroom for hand work in making illustrations of the physical features of places and things dealt with in the regular text.

_Sand Modeling_, by Mary Fletcher, is suitable to the young child's needs and is more or less of a handbook of instructions to the teacher on how to present sand modeling and some of its possible applications to the "new education," as she calls it. Indeed, it has some most usable material for teaching coastlines, capes, gulls, estuaries, islands, peninsulas, seas, channels, canals, mountains, lakes, riverbeds, waterfalls, caves, tunnels, plains, deserts, etc. (29:3-17).
(c) Books

1. Redway and Hinman's *Natural Elementary Geography*

According to the co-authors of *Natural Elementary Geography* (1897), this text was prepared according to the recommendations of the Committee of Fifteen in its Report on Elementary Education. Redway and Hinman designed it for a "pupil's first textbook in the subject," and for use in the third to the sixth year spent in school. This book takes into account "the fact that geography for the schools should be a practical study of man's physical surroundings in their relation to him." From it the child will learn of man "his history, customs, industries and commercial interrelations as determined or modified by inorganic forces of nature" (66: Preface).

The following aspects of geography are recognized as suitable for presentation in elementary texts:

1. A knowledge of names and of locations.
2. An acquaintance with the units of the world's geographical intercourse.
3. A foundation for the advanced study of geography.
4. An adequate preparation for the pupils obliged to leave school at an early age.
5. An acquaintance with linguistic and racial lines,
2. Froebel's Educational Laws

In his Educational Laws, published by D. Appleton and Company in 1897, Froebel contended that there should be a close correlation between geography and nature study.

Geography in its elementary study is almost entirely a department of Nature Study. In order to make the study intelligible to children, they must have clearly defined concepts relating to the varied forms of the earth's surface, which they have received through their own experience with mother earth. They must have a knowledge of the soil of hills and valleys, and of the influence of streams and storms on different kinds of soil. Children in cities who are without such clear concepts must be made acquainted with them by their teachers in excursions to the country or to the suburbs of the city after heavy showers; but even by this plan the necessary conceptions required as apperceptive centers can never be given so thoroughly as they are received by the child who has lived in the country always, and who has become acquainted with the features of mother earth almost as fully as with those of its own mother (30:207).
3. Lodge’s Coloured Handbook

Lodge (1897) is the author of a Coloured Handbook to Kindergarten Geography, a book, which made it easy for the teacher to interest children in map-drawing because of its fill-ins of color, charcoal, chalk, crayon, or water colors. As a consequence he did much to increase the popularity of map-drawing. According to him, the object of his Handbook was twofold:

1. To provide Head Teachers with a complete set of kindergarten maps and diagrams, from which they may select a number for use in their schools.
2. To provide young teachers with suggestions as to geographical instruction which may be given with the coloring (49:Preface).

4. Dean’s Geography Class

Dean hoped that her book, The Geography Class -- How To Interest It (1897) would arouse such an enthusiasm among teachers that they would prepare each lesson with the purpose of creating in the child a desire to study the thing which the teacher had planned. Her volume contained materials suitable for the study of all the countries in Europe, Asia, Africa, Australia, and North and South America. Her favorite method of procedure was the arousing of the pupil’s curiosity through her booklet. This manual contained full-page pictures of natives clad in the native costumes of each country to be
studied, so that the people of those countries were introduced before any knowledge was given to the class of the countries from which they had come. Her method had always been an introduction to the country prior to one of the inhabitants. She suggested in addition, exhibits, room decorations, and table modeling, descriptive geographical poetry, imitations and little plays suited to each country as it was taken up in the course of study (22: Preface).

5. Parker's How to Study Geography

No American had more influence on the reorganization of elementary education than had Parker. After devoting three years to study in Germany, he was given an opportunity to put into practice the theories he had gained from his studies abroad. This opportunity came through his election to the superintendency of schools in Quincy, Massachusetts. Later he was appointed Principal of the Cook County Normal School in Chicago, a post which he held until 1899. His theories were gained largely from Herbart, for, like Herbart, he believed in concentrating all instruction around a central focal study, and this study, he maintained, should be geography.

In 1897 Appleton and Company published his book, How to Study Geography, in which he promulgated his theory that self-expression on the part of the pupil was the best means of developing the thought process. This idea he had borrowed
from Froebel. His Introduction gave an outline of the best order for placing topics before the pupil in elementary structural geography. It began with the structure of the earth as a sphere and ended with man:

1. Concept of the whole earth as a sphere.
2. Positions of the continents on the globe and their relations in position to the oceans.
3. Position of the oceans and their relations to the continents and islands.
4. General structure of the continents.
5. Distribution of heat.
7. Ocean currents.
8. Atmosphere.
10. Distribution of vegetation.
11. Distribution of animals.

Notwithstanding the fact that his course of study is still accepted by many people, we do not agree with Parker's procedure, because we maintain that geography is man living his everyday life. We, therefore, contend that Parker should have begun his book with his last topic and ended it with his first topic.

The next three years were auspicious years in the study of geography because there was a gradual growth towards a more scientific study of the subject. Not only did the Committee on College Entrance Requirements make its report which gave special emphasis to physical and laboratory geography, but also Beadle and Bartlett, Tarr and McMurry, and Morton, eminent teachers of geography, produced books of scientific merit.
6. Beadle and Bartlett's Natural System

According to Beadle, President of Madison State Normal of South Dakota, who collaborated with Bartlett in writing The Natural System of Teaching Geography,

The central idea and aim of the system taught in this book is to impress upon the pupils' minds a picture of the world, definite and clear. This is accomplished through the learning of maps not by looking at them and finding answers to printed questions, but by the repeated drawing of them; first the easier continental forms, but mainly by repeatedly drawing all of them in the hemisphere, and successively adding mountains, rivers, gulfs, bays, lakes, islands, cities, boundary lines of countries and smaller details (4:Message to Teachers).

From this overemphasis upon maps Beadle expected the pupil to acquire the following habits, which, though not explicitly stated by the writer, are evidently required by the objectives which he sets forth in the introduction of his "Message to Teachers".

1. To draw from memory and to scale the map of any of the continents.
2. To locate correctly places of importance and the names of their products.
3. To understand the character of any people.
4. To know the names of distinguished persons from each country drawn.
5. To acquire ability to take any map of any
country or state and draw it on a larger scale and fill in with greater detail.

6. To attain power to draw cross sections of continents and countries and to indicate the great valleys, plains, slopes, using the sea as the datum line.

7. To quicken interest in all other subjects (4:Message to Teachers).

This special training in the study of maps was to continue until that time when the student should have a mental picture of the facts studied. By this method he should learn geography more fully, more correctly, and with a greater saving of time. The system was planned for primary grades and the introductory work was given in mathematical geography. Through daily work on paper and on blackboard, the work of mapping proceeded, with subject matter taking the place of memorizing map questions, a procedure for which Beadle had great antipathy.

In June, 1898, an article by Sanford Niles appeared in the New York School Journal. Niles, an experienced and able critic, had investigated Beadle and Bartlett’s method in class and had found that it is based upon the following assumptions:

1. The foundation of the essentials of geography knowledge as form, position, comparative size, relation, are best acquired from a map, and, however
learned, are always remembered by means of a mental map picture.

2. The mental picture is rendered more definite and permanent by use of the hand in forming it.

3. By copying a picture until it can be reproduced readily in the absence of the original, a mass of detail as to form, size, and relation of parts if mechanically acquired that would be absolutely beyond the power of memory to retain, or even grasp from descriptions alone. The memory is thus actually relieved of the burden.

4. Correct notions of the parts in relation to themselves and the whole can only be obtained from a view of the whole. The picture should be drawn as a whole, to give the correct notions of relations to parts (4: Back Cover)

Niles commended Beadle and Bartlett's work very highly for these reasons:

1. The definite mental picture it gives of the world as a whole and its parts in their true relations -- an end we strive in vain to reach by usual methods.

2. The saving of memory which this picture gives and the opportunity it furnishes for exercising the powers of reason and imagination. The world picture springs into the mind without effort. The child sees the picture and thinks the relations. It enables him to journey about the world with ease and delight.

3. The superior results, both in quality and quantity as may be inferred from the preceding (4: Back Cover).

7. Tarr and McMurry's Works

Tarr, Professor of Dynamic Geology and Physical Geography at Cornell University, and McMurry, Professor of Theory and Practice of Teaching at Teachers' College, Columbia University, contended that geography is after all nothing but actual experience. Since few textbook writers had ever presented Home Geography in book form, these authors undertook
that task in 1900. In their preface, we find these objectives expressed:

1. To treat importance of soil, its sources, uses and future possibilities.

2. To give detailed descriptions and discussions of the physical features of the land.

3. To bear constantly upon home experiences with relations to the foregoing.

4. To show how human relationships are affected by the relative positions of land and water.

5. To produce in the students' mind a bird’s-eye view of the earth as a whole.

6. To suggest suitable excursions, experiments, equipment, etc.

7. To review constantly.

8. To introduce new topics through use of the old ones.

9. To put upon the market a new sized text in geography.

10. To eliminate the use of large maps in large books which always have too many names printed upon them.

11. To alleviate awkward handling of large sized books.

12. To give quality maps not quantity.

13. To entertain by means of photographs having direct relationships to the text (84:Preface).
In Book II which deals with North America, the authors deviated entirely from the path followed by other geography textbook writers, and deemed it necessary to explain such departure. Here, in brief, is the nature of the contents:

1. The first four sections deal with elementary physiography. Human relationships are emphasized constantly. These are used as a foundation for political, commercial, and historical geography. The authors did not think it necessary to follow the time-honored custom of beginning the study of geography with physical geography.

2. Few topics are considered to any great length and most of these are used later for comparisons with the same industry treated in other parts.

3. Confusion is avoided by grouping states whose occupations, industries, and peoples are similar. Such groups of states are considered as one land group or locality.

4. The meaning and use of maps is taught, not by having them drawn to the same scale, but by teaching the meaning and importance of different-sized maps. Few relief maps are shown but those given are considered by experts to be the best of their kind.

5. Distribution maps showing population, products, crops, etc. are used.

6. The pictures are small and not as profuse as those used in the past (85:Preface).
8. Morton's *Elementary Geography*

In Morton's Preface to her *Elementary Geography* (1900) we observe an understanding of the child and his needs on the part of the author through her definition of geography.

Geography naturally resolves itself into a description of that part of the earth's surface which is within one's field of observation and of that part which is beyond the home surroundings. The child should begin to study geography as soon as he is old enough to notice to any extent the objects about him. The instruction at first must be of necessity entirely oral. It should gradually enlarge the pupil's mental horizon and lead to mental conceptions of things far away. The oral work should be continued until the child is prepared to consider the earth as a unit. At this stage of progress a primary book may be placed in his hands. Each lesson, however, should be preceded by oral explanations (59:Preface).

Following are the author's views on what should constitute the geography text of an elementary pupil:

1. Its language should be simple, concise, and accurate.
2. It should relate to the child's experience and environment.
3. It should introduce, in a logical manner, topics pertaining to the earth as a whole.
4. It should give the leading principles of the structural phase of geography.
5. It should show the relationship between relief, drainage, etc. In return these objectives should be sought:-
1. The power to compare, contrast, correlate, see, think, and memorize
2. The presentation of attractive non-essential material to promote interest.
3. The opportunity to furnish those who may never be able to enter the grammar school with a knowledge and an inspiration that shall lead them to study geography with profit and pleasure all their lives (59:Preface).

(d) Davis' Paper

The First Yearbook of the National Society for the Scientific Study of Education, 1902, dealt entirely with the progress of geography in the schools. Davis of Harvard University read a paper entitled the "Progress of Geography in the Schools," at the general meeting of the National Society at Minneapolis where, at the same time, July 9, 1902, there was a meeting of the National Education Association. Later this paper by Davis was widely discussed at summer sessions of universities and normal schools in different sections of the country. In his opening paragraph Davis makes this comment:

The one thing which would be above all others most helpful in continuing the progress already made is the development of a higher ideal as to the content of geography among mature students (21:7).
The following is an outline which shows the various points in this most interesting study; it is, one can see, practically an outline of the contents of the Yearbook:

1. Encouragement from recent progress.

2. Direction in which further progress is most needed.

3. Geography is too generally treated as an elementary study.

4. Illustration from disputed boundaries.

5. Illustrations from immaturity of geography terminology.

6. Inattention to mature geography has a bad effect on school geography.

7. Deficiency of higher learning in geography.

8. Deficiency of higher learning discourages high ideals.

9. Value of principle versus items illustrated by geometry and physics.

10. Examples of excessive detail in the study of countries.

11. The three stages of geography development.

12. The content of modern geography.

13. The unity of geography.


15. The limits of sciences.
17. Systematic geography.
20. Regional physiography.
21. Relation of systematic and regional physiography.
22. Systematic Ontography.
24. Relation of mature geography to school geography.
27. Replacement of items by generalities.
28. Geography facts must be more real.
29. Laboratory exercises must be more specific.
30. The rational element and disciplinary value of geography increased together.
31. Certain parts of geography are not presented in good sequence.
32. Distribution of the divisions of geography in Secondary Schools.

In this paper, as the means of a better understanding of geography, he recommended the following:

1. A better preparation of teachers.
2. A better equipment of laboratories.
3. A replacement of items by generalities.

4. A greater reality in geographical facts.

5. A greater definiteness in laboratory exercise.

6. A common development of the rational, elementary, and disciplinary value of geography.

7. A presentation of certain aspects of geography in a more logical sequence.

8. A better distribution of geography in secondary schools.


In the second half of the First Yearbook he emphasizes the fact that the mere details of geography teaching, learning, and examinations, were overstressed prior to 1900. Whenever an examination is given solely for the ascertaining of innumerable details we find the pupils cramming, a procedure which trains the memory rather than the intelligence. Since the development of memory and the development of intelligence are two fundamental objectives of education, materials should be supplied to aid in the attainment of both. In order to procure the desired results, general principles and relationships must take the place of certain details which, however, are not to be wholly neglected, but which may be touched upon in passing and not be treated as isolated facts (21:13).
Referring to the establishment of general principles in geography, Davis says:

I believe it is possible to discover and establish general principles in geography and likewise, to teach individual items chiefly as illustrations of the principles under which they fall (21:14).

When measuring the value of a school study we must use invariably one of these two standards: (1) Will its use in our life work make it worth the time and effort expended mastering it? (2) Will the enjoyment we obtain from it make it worth our while? The intellectual and aesthetic values are quite apt to be neglected, because, on the whole, we are an extremely practical nation enjoying a stupendous material prosperity (21:48-9). Davis says:

The intellectual profit of geography comes from the enjoyment that every active mind finds in really seeing the facts of the world about him. . . . If the possibility of making a happy adjustment of oneself to his environment comes with the better appreciation of the order of nature, so much the better.

It is evident, however, that the enjoyment of the opportunities of mature life will not have been increased for those whose school geography was merely a study of words in a book, or of names on a map, rather than of meaningful facts of the world. Hence the intellectual no less than the practical value of geography will depend largely on the excellence with which it is taught (21:48-9).
SUMMARY

A very marked improvement in the condition of geography could now be noted. This improvement had had its inception in the report of the Committee of Ten in 1893. In the decade following, there was greater progress than that which had taken place in the generation preceding (1870-1892). Reports by committees and specialists were published and these aided greatly the reorganization then under consideration. Live definitions of geography were quoted. Objectives were quoted, discussed, and understood by many of the best teachers who had been endeavoring to obtain the most desirable objectives for use in their own classes (24:6-9). Textbooks of many new types, bearing little resemblance to one another, were introduced into school systems. The most outstanding authors of this period were Maltby, Redway, Hinman, Froebel, Parker, Beadle, Bartlett, Tarr, and McMurry.

We are convinced that the inhabitants of this earth have, by a process of evolution, adapted themselves to the earth. Explanation and description show that the relationship between characteristic data and an understanding of the facts of nature are helped immeasurably by observation. Subjective analysis was considered popular and modern as a mode of acquiring the prescribed objectives. Observation of nature led
to systematic, scientific research which attempted to explain how the earth reacted to certain physical phenomena. This attempt aided in making the study more concrete. Throughout this period the scientific aspect had been stressed more and more, until by 1900 a well-developed science of physical geography had come into being. It was a very difficult task to place social geography on a scientific basis similar to that of physical geography, for as yet the knowledge of social science was very limited. For this reason the physical side continued to be the outstanding method used (18:8-9).

An acquaintanceship with the region around one's home is "home geography." As soon as a child shows sufficient curiosity to examine his environment and to make comments about it, he is taking an interest in the life about him, and is actually learning what would be termed in the classroom home observational geography, despite the fact that the formal study does not take place for some years. As a study home geography deals with the occupations, the historic background, and the civic associations of any community. It does not have the vast scope of field geography, although its mode of expression and study are very similar. It should be taught very simply and should require as its objective, knowledge of the land, water, hills, valleys, brooks, rocks, soil, scenery, weather and seasons. It will be noted in the above list that more than half the topics considered are of physiographic
Davis' address was given at the close of this very progressive period, and yet, despite the progress noted, we find him commenting on the lack of mature development in geography:

The absence of a mature terminology appropriate to mature descriptions is one of the most potent signs that geography is not maturely developed (21:11).
CHAPTER III

DEVELOPING OBJECTIVES FROM 1902 TO THE WORLD WAR

Geography had now become an important educational unit in all elementary school curricula. It had become also a major subject in the secondary school, and it was beginning to be viewed with favor by college officials (8:487-9). Educationists and textbook writers helped too, in its struggle for popularity. Normal schools now included the teaching of geography in all their regular courses for teachers. Local, state, and national organizations were formed to foster interest and to promote research in geography and to learn the best methods, as well as the most desirable objectives, in its teaching.

(a) New Publications and Organizations

1. The Journal of Geography

New publications devoted exclusively to the study of geography appeared during this period to mark the growing importance of geography as a school subject. There was also the establishment of new geographical societies. The work of these societies was the publication of journals, periodicals, pamphlets, outlines, courses of study, and, in general,
any new material in the field of geography. Of all the new publications at this period the Journal of Geography deserves special mention, because it was planned not only to satisfy the needs of teachers and students in geography, but also to voice the sentiments of a great number of eminent geographers, teachers, and travelers. In addition each definite field of geography was in charge of a specialist who was constantly on the alert for suitable current material. In the first issue of the Journal of Geography (1902) the ideals and the objectives of the periodical were stated in the following words:

The Journal of Geography is planned to meet the needs of all the teachers and students in geography, in every grade and in every phase of special treatment. More than half our space will be devoted to original articles, from the pens of eminent geographers, teachers and travelers, with a constant attempt to furnish live and trenchant material in current fact and theory, and in the special problems helpful to the wide-awake teacher in the business of the classroom.

A very strong feature of the magazine will be the department called, 'Geography Current', in which an effort will be made to record in notes and brief articles the growth and change in all various special sciences and lines of research which furnish the bone of tissue for the body of General Geography.

Each definite field will be in charge of specialists in that field, who will keep a careful account of current growth and record it in signed notes and brief er articles. It will be the constant aim of these specialists to state the problems in easy terms, setting forth the important elements in an interesting manner, so that growing students who are not specialists may grasp the principles which furnish the common bond between the somewhat diverse lines of research possibly within the whole field of geography and so be furnished the materials for developing a wide range of interests, and a broad outlook upon the world (43:4).

The ideals of this journal have been so splendidly main-
tained that at the present day, after a lapse of nearly thirty years, it is still considered one of the finest geographical publications in the United States. This Journal, founded by Richard Ellwood Dodge, of Columbia University, was accepted as the official organ of the Association of American Geographers.

2. The Association of American Geographers

Among the most influential of all societies of geographers founded during this period (1902-14) was the Association of American Geographers established in 1904 by a group of professional geographers and scientists who were interested in kindred fields. In the headquarters of this society at Philadelphia, membership was so restricted as to include only those professionally interested. Its work was similar to that of the American Geographical Society and the National Geographic Society -- educational advancement, research work, publication of a journal, and lecturing. From this society developed the National Council of Geography Teachers which maintained minor councils in many states to carry on the work of the National Council. Crawford and McDonald pay the following tribute to this organization.

The Association of American Geographers was organized in 1904. Out of it developed, in 1914, the National Council of Geography Teachers, which now has numbers of state councils affiliated with it. The Journal of Geography is published in rela-
tion to the National Council of Geography Teachers, and is the official organ and leading professional journal for geography teachers in America. It is rendering a splendid service in informing teachers about new developments in the subject matter of geography, and also along the line of problems and procedures of geography teaching (18:11-12).

From a perusal of the foregoing we can readily understand how the cooperation of the Association of American Geographers and of the National Council of Geography Teachers has helped to make the Journal of Geography the leading official organ for the subject of geography in this country.

3. The Royal Geographical Society of London

After observing the definiteness with which the Association of American Geographers and the Journal of Geography stated their objectives, we are surprised at the vagueness shown by the Royal Geographical Society of London in its "Syllabus of Instruction in Geography," published the following year. This syllabus was divided into two parts, one of which was suitable for the elementary school and the other, for the higher schools. Part I states the three main functions of the elementary school to be:

1. The determination or ascertainment.
2. The expression.
3. The estimation or valuation (75:1).

These objectives are very general indeed in comparison with those of the Association of American Geographers, and they are more or less applicable to all educational training.
4. Work of the Chicago Principals' Association

In striking contrast with the broad generalities of the Royal Geographical Society is the work of the Chicago Principals' Association. During the same year (1903), this group undertook to ascertain what geography should be taught and what objectives the teachers should be instructed to seek. Their findings and recommendations, printed later by the Chicago Normal School Manual Training Press took the form of a course of study which was systematically graded and dealt explicitly with the material to be studied in each grade month by month. A cumbersome amount of library reading was required in the upper grades and no suggestion was made for either a maximum or minimum course. The chief criticism to be directed against the course was that it was too comprehensive (12:2-21).

5. The Commercial Geography Society of Paris

A few years later the Commercial Geography Society of Paris (1909) showed remarkable foresight by giving in a written report the following purposes as the reasons for the existence of their society. These were based on the assumption that geographical knowledge is useful to all individuals and races. In keeping with the title of their society, they considered geography chiefly from a commercial viewpoint. The
five purposes, as set forth by this Society, were:

1. To place science at the disposal of commerce, and to put theory into practice.

2. To aggrandize France by developing industry and commerce abroad.

3. To receive and sift information from all parts of the world, and store up facts which may be freely drawn upon by all who can turn them to good account whether for commerce or for theoretical study.

4. To extend the study of everything which promotes agriculture, manufacture, or trade, both at home and in the colonies.

5. To show the mass of people that they are interested in the products, export and import, of their own and other countries and that knowledge leads to foresight, and foresight leads to power (81:84).

We must admire the spirit of patriotism which animated the members of this Society in listing such objectives which aimed primarily to make the Society a help to all workers in France as well as in the French colonies. Apparently it was intended to aid only the French people, for it does not, in any way, express the spirit of internationalism which pervaded the societies of our own country.

6. The Geography Society of Chicago

The following year (1910) witnessed the organization of the Geography Society of Chicago. The constitution of this organization stated the reasons for its existence with even greater detail than did the Commercial Geography Society of Paris.

The objects of this Society are:

1. To stimulate the interest of the members of the society and the public generally in the study and
appreciation of the science of geography.

2. To promote inquiry and research into all subjects of geographical interest.

3. To promote exploration of unknown or little known regions, by recognition and assistance of travelers and explorers on behalf of geography; and

4. To publish or aid in publishing the results of such inquiry, research, or exploration.

5. To present the results of studies and researches by means of lectures and addresses, and by photographic and other exhibitions.

6. To encourage the development and improvement of cartography in America.

7. To correspond with other societies and to exchange publications with them.

8. To assist in building up in Chicago the best possible collections in libraries and museums of books and pamphlets, maps and atlases, photographs, and other illustrative materials bearing upon the science of geography.

9. To encourage the recognition and establishment of courses in geography instruction in our universities, colleges, and schools.

10. To encourage adequate geographic preparation for travelers, and to organize and conduct geographic journeys and excursions for members (33:12).

Here we may note with pride that the Society of our own city has the most altruistic aims of any of the societies organized during this period. They are so clear, concise, and positive that they do not require any interpretation.

7. Work of the National Education Association

This period saw a rapid development in the science of education and of educational theory in matters pertaining to geography. At the meetings of the National Education Association the newest ideas in the field of education were discussed and applied to the various school subjects. Not only
do we find a large number of the textbooks displaying a practical application of the theories set forth in books on education, but also do we find a large number of books for teachers on the methods of teaching geography. All of these books dealt with the desirable objectives to be sought in the classroom. In many cases also the authors of such textbooks wrote books on the teaching of geography, and in every case the textbook was the work of an author who had had actual experience, and one who had experimented with the materials in his own text. We shall now present the basic objectives popularized by the general trend of the times, as given in books on theory and practice, magazine articles, textbooks, courses of study, curriculum outlines, and manuals.

(b) Textbooks and Works on Method

1. McMurry's Special Method in Geography

McMurry's book, Special Method in Geography (1903), gave the teacher valuable aid in her geography classes for all grades from third to eighth inclusive.

The chief ideas discussed and illustrated in this book may be briefly stated as follows:--

1. Geography is a study of the earth as the home of man. Each important subject treated should contain a central idea illustrating this point of contact between man and the physical world.

2. Geography deals with man in his present physical, social, and industrial environment. It occupies the broad practical ground of everyday life as
it is.

3. Topics in pure science such as biology, physiography, meteorology, and in history are excluded from geography proper. Such topics, so far as they are germane to the common school work, belong to the course of study in natural science or history (56:Preface).

In giving special emphasis to the earth as the home of man and to the need for focusing all important subjects on this fact, McMurry simply restated ideas that had been permeating the teaching of geography since the time of Guyot. His expression is "each important subject treated." All subjects taught in geography should be important, or they should not take up time that could be used more advantageously elsewhere. We gather, however, that he means each large outstanding topic or unit. The unit system, as meant by McMurry, had not been developed at the time. His statement, "present physical, social, and industrial environment," is not in keeping with the idea now prevalent that geography should deal not only with the present, every day life, but also with the past and future. Stated in other terms, things that are not present to us, and that may never be present, have an effect on our geography consciousness. He excluded from geography topics pertaining to what he calls "pure science".

If any topic belonging to a related science should come up in the geography class, information concerning it should be given, at least enough to stimulate the minds of the pupils to seek further knowledge in that related science. Although the infringing topic may be classed as another science.
nevertheless, the correlation of studies permits delving into any related subject which bears closely on the geography lesson being presented. Apparently there is nothing new or outstanding in McMurry's book, but he should be given credit for the valuable aid given to the classroom teacher who is told what to teach, how to teach it, and the types of material for each grade. To the teacher who had several grades to teach this book must have proved of inestimable value.

2. McFee's Outlines Devices and Recreations in United States Geography

The strong interest that the teaching of geography had evoked is shown by the fact that in the same year (1903) that McMurry's Special Methods in Geography appeared, another text on the same subject appeared. This was Outlines, Devices, and Recreations in United States Geography by Inez McFee. This latter book contained less theory than the former, but it had more practical and vital suggestions for the teachers, who could use it with any text. Its material, too, was limited to the United States, while that of the McMurry text embraced the whole world, but the suggestions could be used with gratifying results in the study of any country. McFee's guiding principles, as stated by her, are as follows:

The chief aim has been to present the United States as a home of man, and to show the varied resources and advantages which each section of states offers to the people that dwell therein. The out-
lines may be used with any text, and it is hoped that the devices and recreations will appeal at once to the teacher who is searching for ways and means to enliven class (54:Introduction).

Suggestions and Devices for Lesson Plans:

1. Do not forget the close connection between geography and other studies, as reading, history, language, literature. Encourage pupils to read books of travel, stories of distant lands, descriptions of wonderful natural objects, and historical events.
2. Make good use of pictures, drawing, modeling and moulding.
3. Imaginary journeys of the teacher and class add vividness to description and give connection to ideas.
4. Encourage the pupils to make collections of woods, leaves, flowers, fossils, minerals, insects, etc.
5. Some physical geography should be taught in all schools (54:1-6).

Hints for Class Management:

1. Have a good amount of written work, such as compositions, short paragraphs on special topics, answers to questions, forming and filling outlines.
2. Dictate to the pupils a list of important rivers. Have them place an arrow after each name to denote which direction the river flows.
3. Try reciting upon topics.
4. When assigning the lesson, direct the pupils to read it through carefully; then take one paragraph at a time and write fully in their own words just what it tells.
5. Give each pupil the name of a state. At the next class period have them describe its climate, productions, resources, natural advantages, history.
6. Have the pupils study the lesson by writing a list of questions which shall bring out the various thoughts of the text.
7. When the class is called to recite, request the pupils to write what they have learned about the lesson.
8. The teacher should make good use of the pictures in the school geography; they are almost as valuable as the text.
9. Require much supplemental work.
10. When studying about a locality that is espec-
cially rich in its descriptive songs, the class 
may sing while passing to the blackboards, when 
exchanging papers (54:6-11).

McFee's suggestions and devices for lesson plans 
and hints for class management contain a wealth of ideas, 
capable of motivating any geography lesson, but some of her 
contributions have now become obsolete and old-fashioned; 
in the course of one semester the present-day curriculum 
does not have sufficient time to carry out, to any great 
extent, many of her ideas; in the course of several, much 
of her material could be used with profit. As a starting 
point McFee centered all the geography lessons of any dis­ 
trict around the important rivers of the district. This 
treatment was in itself unique, and aroused a vast amount 
of interest because it differed so widely from the accepted 
procedure of her time.

3. King's Elementary Geography

Neither McMurry nor McFee stressed observational geo­ 
graphy to the degree that King did. He believed that obser­ 
vational geography should be the earliest type of geography 
to which the child was introduced. From this early intro­ 
duction, used to arouse a spirit of inquiry in the child, 
there would develop a habit of geographical observation which 
would give the child accurate and vivid basal ideas upon which 
to build his knowledge of geography. This belief merits
respect since King was a man of vast experience not only in the field of geography, but also in the handling of pupils. In the Preface of his Elementary Geography, a Textbook for Children (1904), he gives the following quotation from the Report of the Committee of Ten:

'Observation should go before all other forms of geographical study and prepare the way for them; its object being (1) to develop the power and habit of geographic observation, (2) to give the pupils true and vivid basal ideas, and (3) to arouse the spirit of inquiry and thirst for geographical knowledge' (46:Preface).

He also makes use of the Report of the New England Superintendents' Committee on Geography:

'The teacher needs to keep constantly in mind that ideas gained from local objects and relations are the vital conditions for imagining distant conditions.

Pictures are used to recall past experiences with nature and human life and to stimulate to new thought' (46:Preface).

That he agreed with the statements of these two committees is evident from the fact that he used them as an authority. His attitude appears also in the order for the teaching of geography, which he gives in the Preface of his textbook.

The natural order, then, for children to pursue in the study of geography is:-
1. Field work, or observation of natural phenomena about the home and the school house together with study of pictures and oral recitation.
2. More field work, with reading and writing about the objects observed, or about similar objects.
3. Careful study, with use of comparison and reasoning to arrive at geographical truths; more reading, longer excursions followed by illustrated written work.
Children must first learn from observation of the world around them at home, this concrete object study should precede any and all study pertaining to definitions and abstract and didactic statements. His imagination will grow from a study of pictures along with his first year of the geography course with observation and field work.

Here home, concrete, and journey geography are made prominent features. A field, a park, a hill, a river, a prairie, is visited, described, pictured by the camera, and made real to the children, as a basis for further study, by an actual lesson in the field with the teacher.

After thirty years' study of children in school and at home, and after much experimenting in teaching geography, the author ventures to place before the public an elementary book prepared from the child's standpoint and in accordance with his growth and nature. The hope is that it may make children love geography not hate it (46:Preface).

According to King, before the child enters upon his school career, he is acquiring geographical impressions, even if he does not recognize them as such. Upon introduction to the study, the most natural path for him to follow would be observation of and comment upon already familiar geography data. Where actual observations cannot be made, oral composition should be used and the lesson should be conducted in a manner as similar as possible to that of a field trip. Excursions, first near at hand and then farther afield, impress most indelibly these first simple observations, which tend to become more and more complex as school life continues. Such early geographic training will develop a vivid imagination, a faculty which should be acquired before definitions and didactic statements are undertaken in the class. If this teaching
order were followed, it would be along the lines of the child's natural development and he would love a study introduced in such an easy, informal manner -- a manner quite opposed to the antiquated method of beginning the study of geography with the opening of a large textbook, a procedure which often frightens the child into believing the subject is most difficult and one in which he can never acquire any facility.

Even a cursory perusal of King’s textbook makes one aware that all his selections have been made in the interest of the pupil and not of the teacher. In every conceivable fashion known to an author who has an understanding of child nature, he has tried to instill in the pupil a love for geography. In his Preface we find these general objectives either expressed or implied:

1. To help teachers and pupils in a much-needed economy of time.

2. To increase the power of understanding.

3. To facilitate the work of learning.

4. To teach the correlation of nature study and of composition (119:Preface).

From the Directions to Teachers it is evident that the author urges the following objectives:

1. To make use of books for reading as well as study.

2. To gain practice in oral expression.
3. To train pupils to translate into their own words the words of the book.

4. To help the growth of the child's imagination by the use of pictures.

5. To note differences and to express dissimilarities as well as similarities in the places near home as well as those far away. (119: Directions to Teachers).

All these ideas were incorporated in the text, which proved to be one of the finest as well as one of the most revolutionary that had appeared since Guyot. For many years not only this text, but also King's geography readers, were used in the more progressive school systems.

Upon study we find that he looked with favor upon short outdoor excursions. It had been the particular contribution of McMurry to introduce the indoor excursions*, those that go far afield from the immediate vicinity of the school. McMurry excursions, however, were intended for older pupils than those to whom King's book was addressed.

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An "indoor excursion" in McMurry's phraseology is one made to a factory, an industrial plant, etc.; an "outdoor excursion", one made to a park, a lake, a forest, etc.
4. McMurry’s *Excursions and Lessons in Home Geography*

McMurry’s *Excursions and Lessons in Home Geography* was written with the purpose of showing the teacher the possibilities and objectives of an excursion. The book lists a number of excursions that could be undertaken by a teacher and classes in the third and fourth grades. He believes, however, that even younger children should be taken on these field observational trips.

In this book our purpose has been to give the subject matter rather than the method of managing the excursion, though occasionally hints are given on method (55:Preface).

Following is an outline of his second chapter:

**Excursions to Shops and Factories**

*Excursions to Observe House Building.*
- Excursion to a Blacksmith Shop.
- The Planing-mill of Ithaca, New York.
- The Cypress Sawmill at Palatka, Florida.
- The Warwick Pottery at Wheeling.
- The Akron Belting Company.

Outlines for the Treatment of Other Shops and Factories.

- A Foundry.
- A Cooper Shop.
- A Carpet Weaver.
- A Stone Quarry.
- A Brick Yard.
- A Fruit Store.
- A Grocery Store.
- A Bakery.
- A Shoemaker.
- A Tin-Shop.
- A Tannery.
- A Shoe Factory.
A Mill and Mill-race.
A Woolen Mill.
A Printing-office.
A Canning Factory.
A Furniture Factory.
A Department Store.

He described in detail certain excursions which he himself, no doubt, had taken alone. In giving his interesting data, he made it possible for the teacher and the class to look for similar things on their excursions. This book appeared only two years after the publication of *Special Method in Geography* and it was intended to emphasize the subject matter rather than the method.

5. Geikie's Teaching of Geography

The following year (1906) Sir Archibald Geikie, Director General of the Geological Survey of the United Kingdom and one time Murchison Professor of Geology at the University of Edinburgh, gives the first chapter in his book, *The Teaching of Geography*, to introductory aims in geography, which he then discusses at length. The following outline summarizes his discussion:

1. To present a distinct and a luminous picture of man's surroundings.

2. To depict the earth man walks upon, the air he breathes, the water he sails upon, the fields he cultivates, and all the living things that minister to his existence.
3. To focus our attention upon all the above aims and in so doing to increase our knowledge of the world upon which we live.

4. To trace the analogies and the contrasts of nature in other regions of the globe.

5. To compare the topography of one continent with that of another.

6. To show the effect of topography upon the development and distribution of human population.

7. To note the local details of mountains, valleys, hills, plains, rivers, and lakes as they appear in region after region.

8. To study the political progress of events, the migration of people, the conquests, the moulding of national character, and the national literature.

9. To contrast the climates of the globe.

10. To call attention to plant and animal life.

11. To train in mental discipline (32:Chapter I).

Geikie's objectives were similar to those of our own American geographers, but he stressed a new field which was to hold greater interest - that of political geography.

6. Snape's **Geographical Diagrams**

Snape, likewise an Englishman, had in his publication *Geographical Diagrams*, depicted the entire British Isles in a
series of maps, but in so doing he had merely given a new impetus to the interest in maps previously created by Guyot. The chief difference between Guyot and Snape lay in the preference of the latter for smaller units. Guyot's maps represented nations or large divisions of nations; Snape's, those of counties, boroughs, cities, towns, and school districts. His work containing 120 maps and diagrams with a list of questions attached to each one, appeared in 1907. At that time Snape was Senior English Master at King Edward VII School, Sheffield. His chief purpose in writing Geographical Diagrams was to make the child think in terms of maps.

To think in maps is a very important part of the training in modern geography study, and assistance in acquiring this faculty will thus be given to the student (79:Preface).

7. Archer, Lewis, and Chapman's
The Teaching of Geography

Archer, Lewis, and Chapman have given us the conception of social geography prevalent in 1910. The purpose of geography teaching was, to quote their own words,

Acquisition by the pupil of a familiarity with the working of geographical principles in concrete cases, and the creation of a more enlightened outlook on other peoples and on certain classes of public events (3:7).

In The Teaching of Geography they note that the approach and the treatment of geography may vary with the instructor, but that, no matter how the approach of one instructor may
differ from that of another, the results may be equally good. They do not claim that their book presents any new ideas on the teaching of geography but rather that it aims "to throw out some suggestions as to changes in teaching" (3:Preface).

The points of view from which Geography may be treated are:

1. As giving an account of the action of physical facts and laws on the productions required by Man;
2. As showing Man using those productions in accordance with economic principles;
3. As describing the races of men and their characteristics;
4. As showing something of their government. It is necessary next to consider which of these points of view is most capable of emphasis in various classes of countries. These classes are:
   1. Our own country.
   2. Other civilized States.
   3. Countries of civilizations unlike our own, as, for instance, most countries of Asia.
   4. The undeveloped parts of the world (3:25).

They did not exhaust all the possibilities of treatment in the introduction of a new topic, nor did they intend to do so. They simply illustrated the four ways that any new subject could be approached, however large or small the units. To an inexperienced teacher their book gave valuable aid; to an experienced teacher it offered a means of escape from the monotonous procedure of introducing the same subject in the same manner year after year.

8. Dodge and Kirchwey's

Teaching of Geography in Elementary Schools

A few years later (1918) in their textbook on the teaching of geography, Dodge and Kirchwey stressed a new idea which
they called the "Power to Do". This idea was very general, but it was a deviation from the old method of teaching content only, for it recognized the close relationship existing between all studies and the need of applying previously-learned facts and principles to the interpretation of new material and to the business of everyday life.

Dodge, Professor of Geography, Teachers' College, Columbia University, and author of A Reader in Physical Geography for Beginners, Dodge's Geographies, and Dodge's Geography Notebooks, had collaborated with Kirchwey, Instructor in Geography in the Horace Mann School and Teachers' College, Columbia University, in the writing of the Teaching of Geography in Elementary Schools. Their text declared that the aim of all geography teaching was the inculcation of the "Power to Do" in every pupil. The attitude of the authors is clearly stated in the following passage:

"Power to Do as an Aim in School Geography

Knowledge of facts or principles, however strong and complete, is of little worth unless the pupil has gained from his work the power to use these items. Usable items are merely bits of information which will occasionally come to the surface when a similar fact is mentioned. Information is not knowledge, for no one really knows a thing until he can make it clear to others or use it for his own improvement.

Hence pupils must gain from their school work the power to use facts and principles of geography in interpreting the geographical news items of the day, and to apply their knowledge in the reading of history and literature, of books of description or travel. Such reading, especially of the newspapers, will bring to their attention many so called facts in geography,
perhaps startling and awe-inspiring in character, which the average reader accepts because of his natural faith in the authority of printed words. A pupil should be able to test the accuracy and value of such facts as a result of his geographical training, and should have learned enough at least to be skeptical concerning materials that seem to overthrow the established principles he had taught in his school course.

A pupil should realize that geography is so vast a subject that it cannot all be represented in his school text. That geographic conditions change so rapidly that many of the details in his text of a few years back may be already out date. He should therefore be able to use works of reference, in order to keep up to date, and use the best. The chief sources of reference are atlases, encyclopedias, gazetteers, higher textbooks in geography, books of description, and commercial reports. To be able to use an atlas a person must know how to use an index, how to use latitude and longitude in locating a place, how to read map scales and the ordinary map symbols. A pupil should be introduced in his school work to the reference volumes in geography available in the local library, that he may know what is best for reference use and learn how to gather desired information quickly and accurately.

Finally, he should gain from his work in geography, more than from any other school subject, the power of thinking accurately and quickly and of testing the accuracy of his own or other peoples' thinking. Until nature study and elementary science are better organized and systematized than they are now, geography must remain the one organized science in the elementary school curriculum from the study of which the best training in scientific thinking may be secured. To think clearly and accurately is one of the most important results that can be gained from ones' education. A clear thinker will do his own thinking, will be less ready to yield to the will of others, will be able to gather seemingly unrelated facts into generalizations and to go out into the world and test new materials and use the parts that are valuable (25:12-14).

In their explanation of the "Power to Do" as an aim in school Geography, Dodge and Kirchwey give the clearest statement on the aims of geography of all the authors, whose work has been previously reviewed in this thesis. It is entirely in keeping with the trend of education and with the teaching
of geography at the present time, because modern methods say it is the duty of all educators first to inculcate in their pupils the ability to think clearly, concisely, and accurately, and then to test this ability in judgment by their thinking and that of others.

9. Sutherland's Theories

Sutherland, in *The Teaching of Geography*, devotes an entire chapter to the aims of geographical study. According to him, all subjects must, in a measure, contribute to the fulfillment of the general aims of education. In addition to these general objectives there should be specific values obtainable from an intelligent study of any subject of the curriculum in order to conform to a rational pedagogy. The values to be found in the study of geography are, according to Sutherland:

Adjustment to environment as an aim in geography; place adjustment; economic adjustment, political or social adjustment.

Introductory and correlative aims; geography holds a central position in science; it may be presented as an introduction to the natural sciences or as a unifying or correlating principle following the other sciences.

How much practical value has geography; the broad meaning of practical; cultural aim of geography; travel as a means of gaining culture; why geography can contribute to culture (81:80).

Man, declares Sutherland, is a social being; and, therefore, his interests are fundamentally social. Since things
and social are closely allied, man has an inherent interest in geography. Breadth in general scholarship is gained from its study; not only from the study of its usually accepted departments, but also from the glimpses which it affords into geology, physiography, meteorology, astronomy, oceanography, and ontography. These sciences deal with the forces which make and sculpture the earth. They show its present condition, they disclose the relationship existing between the organic and inorganic, they stress the needs of man and the use he makes of environment to satisfy those needs (81:20-6). He says:

The nature of the subject demands a broad sweep of knowledge on the part of the teacher and the chief sources of failure in geography instruction are due to a lack of breadth in general scholarship (81:53).

Sutherland claimed that the adjustment of the individual to his environment was threefold in character, economic, political, and social. The economic adjustment is shown best in the relationship existing between the people of a densely populated region and of a sparsely populated region. In other words, we may refer to it as the relationship which exists between areas of production and those of consumption. This situation is usually affected by both physiographic and geological conditions.

Thus it may be seen that one of the aims of geography is to trace out certain of these economic relationships or adjustments. And, indeed, this is
one of the most fruitful phases of geographical study (81:90).

Since the geography of a country is so vitally affected by this economic relationship, the tracing of these conditions will be found to be one of the most fruitful phases of geography study.

In addition to the adjustments above mentioned, there seems to be a political or social adjustment which plays its part especially in commercial geography. The legal commercial relationships which exist between countries have much to do in controlling the industries of the countries, and the tariff laws in any country have much to do with the manufacturing and transporting industries. To understand fully what people are doing in any country, and why they are so engaged, one must certainly take into consideration physiographic, economic, social and political conditions (81:91).

In order to understand how people are employed in certain countries, why they are so employed, what political and social adjustments are needed in commerce, and what part is played by tariff laws on the manufacturing and transportation industries, we must consider the importance of the physiographic, economic, social, and political conditions in all countries of the world. No subject in the curriculum deals with all of these questions as fully as does geography. Sutherland bases his position on the practical value of geography by quoting from Whitbeck.

'The primary aim in teaching elementary geography is to give facts that are likely to be useful in practical life; to differentiate between things which are fundamental and those which are only incidental; and so to impress the fundamental that they shall become a permanent possession of the pupil' (81:83).
After considering the statements of several educators, Sutherland says:

A consideration of the aims of geography teaching, as stated by educators, reveals the fact that they fall into two categories, viz: those who have for their object the disciplining of the mind, and, second, those whose purpose it is to acquaint the pupil with his environment and teach him its use. The aims which can be consistently included in the second category are rational and tenable; but those in the first, considered in the light of modern psychology, are irrational and untenable (81:85).

To substantiate further his views on the aims of geography, Sutherland quotes from an article published by Harris in the Forum of January 1902, and gives the primary objectives of modern education with reference to the elementary child.

'The branches of study pursued in the elementary schools are chosen for the purpose of securing two useful and reasonable ends only giving one as it pertains to geography. In the first place, they are chosen to give the child an ability to understand his environment and to come into a mastery of it, so that he may make it useful to himself. He is taught arithmetic in order that he may divide and conquer; in order that he may measure things and forces of his environment, and learn how to adapt one set of them to control and utilize another. He is taught geography in order that he may understand the causal relations existing between his habitat, or the place in which he lives, and other places, as well as other systems of things, and events of the earth.

On the other hand, a second reason for adopting a branch in the course of study is that it develops some faculty or power in the child, and gives him possession of himself in that respect; for one of the primary objects is to develop the intellect, the memory, the judgment and the heart' (81:82-3).

Later in writing of the aims of Dodge and Kirchwey as expressed by them in an article which appeared in the Teachers'
College Record of March 1901, Sutherland expressed his approval of their objectives, but adds brief explanatory notes to the four aims selected by them:

1. Knowledge - understanding geography conditions.
2. Power - ability to think clearly and accurately.
3. Interdependence - study of interrelations of peoples and individuals and independence of all.
4. Citizenship - ability to combat successfully with social and physical environment (81:82).

Finally, Sutherland sums up the aims of all geography teaching under four heads: (1) Introductory (2) Correlative (3) Practical (4) Cultural.

Geography, in this author's opinion, is the most important of all the sciences taught in the school curriculum because it is the first science presented to the child on entering school. All science has practical value although it is difficult to say how much, since it cannot be measured. Since culture is one of the general aims of all education, and since geography deals with man himself in this world of education it can be said that geography has a high cultural value.

(c) Courses of Study

1. Allen's Views on Objectives in Geography

Further views on objectives in geography appeared in the official magazine (1909) of the Rhode Island Normal School at Providence, which was edited by Lyman R. Allen, Geography
Instructor in the School. In a certain number (April 1902) he undertook to write on the subject of geography and worked out a very systematic course of study extending from the first grade through the ninth grade. The following quotations attempt to give all his expressed aims:

It is the aim of this chapter to find a natural course of study and suitable means of impression and expression to meet those demands for experience-getting, information-gathering, and relating. Since it may be read and judged from the viewpoint of many different texts and courses, it would seem unwise to assign the work rigidly to grades; yet the work is outlined by steps with distinct grades in mind and so stated as to be readily referred to them. This should help in adapting it to different courses. The succeeding chapter will offer suggestions as to ways of working, whatever text-book of course of study is prescribed (2:4).

The irreducible essentials of this course, from the teacher's viewpoint, may be summed up thus:

1. Intelligent, usable information of nature and man's living in the home, city or town, state, nation.
2. Definite ideas of the earth and its relation to the sun, relative to the effect on man's living.
3. The personality, or characteristics and usability, of each continent.
4. Man's doing and progress in dominance and utilization of world's resources, and his increasing brotherhood.

The formal work in geography, as thus outlined, is planned for practically four or five grades (grades 4 or 5 to 8). What precedes this is directed toward the understanding of the home environment. Provision has also been made for a possible ninth grade (2:12).

What to do and how to do it; what to have the children do and how to have them do it; how to use the subject in the development of the child or to lead the child to power in the subject; here are the teacher's real problems. They involve peculiar difficulties. So broad is the scope of the subject that almost anything may be taught and yet be rightly named 'geography'. This has led to confusion through the
doing of many different things, to indefiniteness of aim, and to changing emphasis. We need the conviction that the fundamental thought in geography is social life - the life of the people as conditioned upon environment - the world's work, those doing it, and where it is done (2:13).

A few definite principles may sum up what has been said:--
1. Choose first those things most interesting to the child; they may not be the simplest things - very likely they will be those which are lively, those which are familiar to him, those in which he can participate, those he can imitate.
2. Be a learner, a doer, enjoying with the child rather than learning from books.
3. Let the selection and order depend on your children and your place - not be the same for any two places or years. Seasonal changes, with incident changes of living, will be most nearly common to different times and places.
4. Expect no book to guide closely in this work.
5. Expect generally that country children will be most at home with 'nature', city children with elements of social life and human adjustment.
6. Encourage not mere recitation but all appropriate forms of expression.

The results of such work as this should be first attitude, then power, least of all, knowledge. We should have children alert to investigate, experienced in many things, ready to try to use books and maps for the sake of finding more, eager to know but unconscious of particular possession of knowledge (2:19).

A threefold aim should guide the work of the middle grades: it is primarily a world-ranging and world-arranging, wherein the child is to get some adequate idea of this living world, as if to provide pigeon-holes wherein all later items of information may be properly placed; the use of geographic tools is to be acquired; and a beginning is to be made in the natural process of finding and applying underlying the concrete things hitherto studied (2:19).

Allen's aims may be summarized as follows:
1. To arrange systematically the information that child-
ren have of the earth and its people.

2. To acquire a larger knowledge of our own country and state.

3. To create a desire to collect, arrange and use items for their own sake rather than for the sake of mere knowledge.

4. To gain greater facility in the use of books.

5. To promote a strong interest in the life of our own and other lands.

6. To attain keenness in investigation, reflection, and application, based on local observation.

7. To account for and to trace relations, causes and effects (2:26-7).

Allen's book shows an understanding and a knowledge of what teachers should require and pupils should obtain from the study of geography. In a very explicit manner he provides for maximum and minimum requirements; and he gives also definite helps, practical outlines of work, bibliographies, suggestions on methods and procedure, in other words, the "Do's and Don'ts" of the subject. His course is so modern that it could be followed with profit today. He considers nearly all the phases of geography now in high repute -- geological, physiographical, descriptive, physical, commercial, social, natural, observational, home, trip, field, pictorial, and map and diagrammatic.
2. Dodge and Kirchwey's Course in Geography in Horace Mann Schools

In 1914, the publication of Dodge and Kirchwey's Course in Geography in the Horace Mann Schools drew attention to the methods used in this experimental school, considered by many educators to be foremost in the teaching of geography. It emphasized giving the pupil an understanding of the more important geographical conditions of the world and their causes. To attain such an understanding "Why" became the most popular question - not "When," "Where," and "How," Dodge and Kirchwey claimed that a child should be given not only the knowledge of geography but also the power to use it in everyday life. In 1913, Dodge had enunciated this doctrine in his Teaching of Geography in Elementary Schools, by stressing the "Power to Do," and in this new course of study he again stressed it.

The main objectives sought in the Horace Mann School may be summed up under these four heads: (1) Knowledge (2) Power (3) Interdependence (4) Citizenship (24:6-9). Dodge and Kirchwey themselves observe:

We may say that our general aim in geography teaching is to give our pupils an understanding of the more important geography conditions of the world causally considered.

The leading aims of the course of study as a whole and of the several parts should be the imparting of a knowledge of geography, and the power to make use of that knowledge in daily life (24:5-6).
(d) Tendencies in Secondary School Geography

1. Dodge's Study

In 1908, at the annual meeting of the Association of American Geographers it was generally agreed that secondary school geography, as then taught, was chiefly physiographical, to which some laboratory exercises had been appended. It was agreed, too, that if commercial geography were taught at all, it was presented only incidentally and not as a part of the school curriculum. To remedy such a situation a syllabus was drawn up during the convention in which the needs, content, and possibilities of a more modern course were outlined. Resolutions were passed insisting that at least one year of geography should be required in all secondary schools and that the time should be given not only to physical geography, but to the other branches as well. There should be laboratory work and excursions too (33:22-3). Dodge, who was present at this meeting of the American Geographers, read a report on an investigation made by him for the purpose of ascertaining the types of geography that were being taught in our secondary schools and the years in which each specific type appeared. His report embraced forty schools, a rather small number from which to draw any definite conclusions; since he does not give the names of the schools nor their locations, it is impossible to determine the number of school systems represented, the
character of the institutions studied, or whether they were public or private. The distribution of geography courses, as found by Dodge in these forty American schools, appears in the following table. Geography, Industrial Geography, and Geology were the descriptive titles under which the courses given in these forty schools were listed by Dodge.

**TABLE I**

Distribution of Geography Courses as Given in 1914 in Forty of Our Leading American Schools

<table>
<thead>
<tr>
<th>Year</th>
<th>Physical Geography</th>
<th>Commercial and Industrial Geography</th>
<th>Geology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

*The above Table has been taken from Dodge's *Tendencies in Secondary School Geography*, page 23.*
It seems incredible that only these four types of geography were then being taught. It is possible, however, that field, observational, home, social, mathematical, and visual geography were also given attention, but were not listed separately by the schools considered in Dodge's study.

2. Tarr and Von Engeln's Laboratory Manual of Physical and Commercial Geography

Tarr, Professor of Physical Geography at Cornell University, and Von Engeln, Associate Professor of Physical Geography at the same institution, collaborated on some laboratory experiments in answer to the growing demand for material of the type which could be definitely followed by the student and which could be put into such form that all data relating to them could be recorded in a simple uniform style by the entire group. The laboratory manual which they prepared was copyrighted in 1910 and a new edition with slight additions and changes was published each subsequent year until 1916. The manual was very thorough in its treatment of physical geography but gave scant consideration to commercial geography. Many of the topics treated, such as ocean currents, tides, winds, etc., might be a vast help to ship captains or navigators, but this type of information scarcely justified the authors in calling their manual a "Laboratory Manual of Physical and Commercial Geography. The experiments given in the
Lesson

I. Shape and Size of the Earth.

II. World Maps.

III. Map Construction.

IV. The Mercator Map.

V. Determination of Direction, of Latitude and Longitude.

VI. Rotation and Its Effects.

VII. The Seasons.


IX. Common Rock-Forming Minerals.


XI. General Classification of Rocks.

XII. Classification of Igneous Rocks.

XIII. Classification of Sedimentary, Organic, and Metamorphic Rocks.

XIV. The Soil.

XV. The Construction of an Areal Map.

XVI. Construction of a Contour Map with Land Model.

XVII. Making a Cross Section of a Contour Map.

XVIII. Making a Cross Section and a Stream Profile from a United States Topographic Map.

XIX. Processes of Erosion and Deposition.
XX. Introduction to the Study of Land Forms.

XXI. The Mississippi Flood Plain and Delta.

XXII. Glacial-Lake Plains.

XXIII. The Coastal Plain.

XXIV. The Great Plains.

XXV. The Appalachian Plateau.

XXVI. The Central Plains Region

XXVII. The Area of Continental Glaciation in the United States.

XXVIII. Plains Cities and Their Environs.

XXIX. The Folded Appalachians.

XXX. The Crystalline Appalachians.

XXXI. The Appalachian Piedmont Area.

XXXII. The Lauretian Highlands.

XXXIII. The Rocky Mountains.

XXXIV. The Columbia Lava Plateau.

XXXV. The Great Basin Region.

XXXVI. The Colorado Canyon and Plateau.

XXXVII. Piedmont Valleys of the Pacific Slope.

XXXVIII. The Pacific Ranges and San Francisco Harbor.

XXXIX. Coast Line Correlation.

XL. Ocean Currents.

XLI. Tides.

XLII. The Atmosphere.
The aim of the Tarr and Von Engel Laboratory Manual is stated by the authors in the following terms:

It has been the aim of the authors of the Laboratory Manual, for which these pages are to serve as a teacher's guide, to produce a text which would in itself constitute a definite answer to both the 'why' and the 'how' queries. In other words, first, to make the purpose of each exercise so definite, concrete and practical, as to leave no doubt in the mind of either the student or the teacher as to its value from the practical, cultural and pedagogical viewpoints. Second, to provide instruction of such content and manner that its purport will be clear to the teacher who has not had previous training in laboratory geography; and to provide this instruction in such a form as will most facilitate the mechanical routine of class work (86:Introduction).
Attached to each experiment are pages of questions, some answers to which are to be found in class experiments; others are to be found elsewhere and filled in during the period of class instruction. Although these are entitled "experiments", many of them cannot be demonstrated and the answers would require extensive library research. Some of the so-called experiments consider the field of physical geography, but, for the most part, they involve physiography, chemistry, geology, and cartography. At the present time, few would be considered suitable for geography class instruction because the material is too cumbersome and too technical for high-school study. Few teachers, if any, have the vast store of knowledge required by the Manual, while even experienced teachers would be overwhelmed by the requirements. The objective, as stated in the Manual by the co-authors seems very plausible, but the Manual itself does not accord with such simplicity. Were the Manual to be used in an advanced class of physiography and geology, possibly of college level, it might achieve very fine results.


So difficult was the Manual that additional guidance was needed, and so Von Engeln, in 1913, wrote A Guide for Laboratory Teaching to be used in connection with it. The purpose and the content of this pamphlet were, in the words of the
author:

(1) To point out why laboratory geography should be taught, and on which phases of the subject the emphasis should be put; (2) to indicate how it should be taught; and (3) to give practical and particular suggestions for teaching with the Laboratory Manual, to the use of which it is a guide (87:Introduction)

The guide gave some help to those brave enough to attempt a project requiring the Laboratory Manual, and it is surprising to learn the number of teachers who sought its aid. Each year, for six successive years, a new edition appeared on the market; but work of such difficulty could not but harass the teacher as well as the pupils under his instruction, and so after 1919 no further editions appeared.

(e) Geography by Correspondence

So far no one had conceived the idea of teaching geography by correspondence, but in 1911, Ridgely evolved a correspondence course so definite in scope that it could be used as a course of study by any regular eighth-grade teacher. The bibliography in connection with it embraced the entire world. There was a marked difference in the lessons, both as to the degree of difficulty and to the type of material. It was intended for either graduate or undergraduate credit, and regarding it he has said:

This series of lessons is planned to follow the Illinois State Course in Geography for the Eighth year as outlined month by month (70:Introduction).
This course was a help to teachers who could not attend classes in the towns where they were teaching, and those who could not attend the classes conducted by Ridgely at the Illinois State Normal University; at this institution his correspondence lessons were used at the text in his regular classes throughout the year and at the summer sessions. His course called "How to Study and Teach Eighth-Year Geography" was later published in book form.

(f) Use of Geography Material

1. Stereoscopes and Lantern Slides

As late as 1910 there was no widespread use of the stereoscopes and of lantern slides in the geography classrooms. Doubtless the original cost of such apparatus and their bulkiness were prohibitive factors to their general use. To acquaint teachers and supervisors with these aids to visual education, Professor Ridgely, Professor of Geography at the State Normal University, Normal, Illinois, published a book which he called the Teachers Guide for the Use of the 600 Set. This "Set" referred to stereographs and lantern slides which the Keystone View Company wished to popularize. It was for this reason the company had asked Ridgely to write a book which would advertise its wares. In so doing, it hoped to make its equipment an integral part of all geography classrooms and to extend the cause of visual education.
The '600 Set' of Keystone Stereographs and Lantern Slides has been selected with the single purpose of placing within reach of all schools a series of pictures produced by the most skilful photographers and of the widest possible usefulness in the regular work of the school. The selection has been made with the greatest care in order that all parts of the world may be represented, and that a great variety of scenery, human life, plant life, and animal life may be pictured in many different environments, including country and city, valley and hill, plain and plateau, and mountains; tropical, temperate, and frigid regions, desert, grassland, and forest; river, lake, oceans; primitive scenes, historical places, literary landmarks, etc. (71:47).

These Keystone Stereographs and Lantern Slides are still in use in the schools in our city. Naturally, many additions and improvements have been made in the last two decades but they still remain an integral part of the well-equipped geography classroom.

2. New Uses of Maps and Globes

In 1913, Wiswell, School Libraries Inspector, New York State Education Department, published his textbook, Globes and Maps in Elementary Schools chiefly as a help to teachers. In it were found many interesting uses for maps and globes in the geography classroom. In his description of the uses of such instructional material, Wiswell employed particularly felicitous phraseology; in his work, he demonstrated very simply and clearly the uses to which maps and globes could be put in the schoolroom, and the ways in which the interest of the
class could be aroused. In his book the author gives several demonstration lessons and these are accompanied by an introduction and questions by the teacher and by the possible answers of the pupils. Being an idealist, he hoped that each pupil in the class might have a small individual globe, while the teacher had a larger one. His ideas are very fine, but for the amount of instruction to be given on individual globes, the average board of education would not consider the financial outlay justifiable. He clearly expresses his purposes in the following passage:

Every intelligent dweller on the earth, whose comfort and happiness from hour to hour and even whose existence depend on the relative positions of the earth and the sun, ought to have a general knowledge of the relations of those bodies to each other, and of the causes of certain remarkable phenomena which they exhibit. It is not well for the rising generations to pass their lives unappreciative in the presence of such stupendous creations. The mind expands in the study of the greatness and power which they evidenced. A correct conception of the world as a whole gives a clear understanding of the just relations of its parts. Therefore no child can justly be denied the early advantages of globe lessons; they will tend to make some geography lessons simpler, easier, and more interesting.

Very few of the facts indicated in these pages are to be given to the pupils; they are to be elicited from them. A distinction should be made between telling and teaching. There would be little or no advantage to be gained by any pupil in really committing the facts to memory and reciting them. The skillful teacher will first see that step by step the various conditions here described are illustrated by the pupils with a globe in hand, and as each step is reached will obtain from individuals correct statements of the facts observed. If the teacher has the power to make the lessons thoroughly enjoyable, so much the better. An unused globe may be an indication of some lack of preparation or of efficiency on the part of the teacher, and it is assured that he will
gladly free himself from the possibility of such a charge as he has opportunity (90:Preface).
SUMMARY

At the outbreak of the World War, the new objectives for the study of geography had been accepted by the more progressive geography teachers. Educationists, as well as teachers, acknowledged that aims could be general, primary, secondary, cultural, and practical. In the prefaces to their texts authors usually stated the relative importance of certain objectives with reference to their own type of material; in the matter of material they displayed surprising unanimity as to the procedure and objectives of teachers of geography and as to what teachers should seek when directing the study of geography.

Physical geography remained foremost in rank but was flanked by field, excursion, journey, observational, commercial, economical, visual, historical, and social geography. The latest innovation in the field of geography was the preparation of laboratory manuals, the finest of which had been published by Tarr and Von Engeln of Cornell University. Dodge of Columbia University, author of several textbooks and founder of the Journal of Geography, advanced a new idea, the "Power to Do", as an aim in geography as well as in all teaching. There was steady gain both in the importance and in the attention given to geography by the secondary school and by
the college. Maps still continued an essential part of all geography work. Ridgely, of the Illinois State Normal University, was a pioneer in the field of geography through his teaching of the subject by correspondence, and gave a course to teachers desiring an acquaintance with the most modern and up-to-date ideas on geography.

The National Education Association, the American Geography Society, the National Geographic Society, the National Council of Geography Teachers, and many state education associations and geography societies, as well as principals' and teachers' clubs, worked to assure the continued progress of geography and the listing of definite objectives.
CHAPTER IV

POST WAR DEVELOPMENTS

In 1918 the United States Bureau of Education conducted a survey in many of the cities and states and from the findings concluded that "geography is the most neglected as well as the most poorly taught of all the school subjects" (109:1). The same opinion was expressed by Smith in his Teaching of Geography. According to him, teachers, content to follow the path of least resistance, were accustomed to assign paragraphs or chapters to their pupils for study, employing no better procedure than that of having the students find answers to questions given at the end of the specified reading. They required no outside reading; and the lessons consisted in reciting the answers, usually verbatim, from the textbook. Neither initiative nor originality was expected from the teachers or the pupils. The more progressive instructors varied the procedure and added to the interest of the recitation by interpolating questions not asked from the book. Maps, globes, pictures, specimens, library readings, diagrams, stereopticans, projection machines, and the like had no place in the typical geography class; nor, in most cases, was a course of study in use, for, with a text to cover in a specified time, a course was not thought necessary. (761:4)
It is difficult for us to accept unreservedly the findings of the Bureau of Education and the opinion expressed by Smith, for we have noted considerable progress in the objectives of geography. We must bear in mind, however, that the results of the survey concerned rather the methods used in the general teaching of geography than the objectives sought. Immediately after the World War the tendency to stress methods became more noticeable. In the prefaces of their books most authors sketched the methods to be used in the teaching of their texts, but left little or no space for the listing of desirable objectives to be gained from that teaching.

(a) The Three Stages of Geographical Learning

The three stages of geographical learning are (1) the primary stage; (2) the academic or high school stage; and (3) the college and university stage. Each of these, although having the same aims, has a very different method and requires different equipment. During the primary stage a large supply of simple books, pictures, drawing materials, and exhibits should be at hand to offset the tendency to learn facts from the textbooks alone. Variety and fitness of illustrations broaden the elementary pupil's interests and outlook. Enthusiasm on the part of the teacher rouses the attention of a primary group and the members respond whole-heartedly to an able director. During these first years, geography should be
taught daily, and a generous allotment of time for this subject should be made by all grammar-grade curricula.

Secondary schools should enlarge the equipment available to the student. A separate room - a laboratory - should be furnished for this subject. Maps, globes, atlases, pictures, models, and slides of a more detailed nature than those found in the elementary school should be constantly in use. In addition, the cinema, cartographer's apparatus, museum exhibits (collected principally by the students), and a geographical library from which the student may take books and magazines, not only for use at the time of the lesson or during the laboratory period, but also for perusal at home if he so desires. A decidedly more extensive library should be accessible than the one available during the primary stage. Progress should also be shown in the material to be found there, since maturity of thought should accompany increase in years.

Geographical laboratories at the college level should have similar but more extensive equipment than that of the secondary school. For purposes of research the college student is left largely on his own initiative. The tabulating of results that follows original investigation characterizes the work at this period and the equipment should provide adequate means for such work (45:1-7).
(b) The Continuation School

Without doubt, the World War has helped to bring home to the different peoples of the world the nearness of their world neighbors. This fact is more easily recognized by the adult in the continuation school than by the pupil in the elementary or high school. We must agree, therefore, with Fairgrieve and Young, who contend that, if geography is to be taught in the continuation school at all, it should deal with the world in general and not with any particular or restricted area.

The chief objective of these schools must be the building of sound character. For the most part the students in these schools have had a limited and narrow existence, which, coupled with the need of their earning a living the rest of the week, is a decided handicap to overcome. Interest, too, will lag unless the proper stimulation is offered by the school. If geography is to be taught in this type of school, its scope, to have the greatest value, must embrace the world. Quoting from Fairgrieve and Young in the Geography Teacher 1919-22, we observe that,

Man today is a citizen of the world. The war has taught us that there are really no independent peoples, and the Continuation School will have failed in its mission if it does not in many ways drive home this fact. No subject is more fitted than geography for the presentation of such a lesson but the geographer cannot achieve his aim if he limits the scope of his inquiries to any one part of the globe (27:240).
Fairgrieve and Young have given us an excellent discussion of the need of geography in the day continuation school. This article considers particularly the adolescent and his needs.

The special aims of the Day Continuation Schools center around the fact that they will deal with young people during the period of adolescence; the object of these schools is the foundation of that type of character which leads to good citizenship. In a way this is the aim of all schools, but Continuation Schools will have special opportunities and difficulties (27:239).

With but eight hours a week in which to carry out their program, these schools should utilize every moment for instruction. This should be of a type to direct the thoughts of the adolescent toward a richer and more useful life. It should aid him not only to meet the special opportunities that arise, but also to surmount the difficulties that this period of life brings.

(c) Geography for Adolescents

1. Price's "Geography for Pupils Between 13 and 16 Years of Age"

Another author whose studies in the field of geography for adolescents we must now consider was Price. He, like Fairgrieve and Young, had felt the need of more mature treatment in the teaching of geography to older pupils. For pupils at the junior high school level he would combine the interrelationship of human activities with a study of the world.
When considering each separate continent, he would begin with the natural regions as units. In such a treatment of his subject he differs from Fairgrieve and Young, who, limited as to time in the continuation school, favor the study of the world in large units rather than in small.

In an article entitled, "Geography for Pupils Between 13 and 16 Years of Age," Price has listed the generally accepted ideas of teachers for pupils of the early adolescent period. Such ideas are the result of discussions held by teachers at their summer conferences and bear particularly upon the qualities that should characterize the course of study.

The purpose of this short article is to deal with some of the difficulties which teachers experience in connection with their schemes. At Summer Schools and Conferences the same questions regularly crop up. Schemes, Syllabuses, methods, the place of home geography, the treatment of physical geography and practical exercises are the subjects about which information is sought. It is generally accepted by teachers that:-

1. The course should cover the general outlines of the world, with special knowledge of the home district and the home country.

2. The study of the world, with natural regions as units, should come at the end of the course. The world should be covered first by a successive treatment of the continents.

3. The learning of carefully selected topographical facts is essential to give definiteness to the teaching.

4. The course should train pupils to imagine accurately the intersection of human activities and their topographical conditions.

5. There should be more mature treatment as the pupil proceeds through the course (65:9).
2. Roxby's "Scientific Treatment of Geography in Schools"

Roxby, whose official position of associate editor of the Geographical Teacher, the organ of the Geographical Association of Aberystwyth, gives weight to his words, has stated his ideas on the teaching of geography in his article, "The Scientific Treatment of Geography in Schools." This article deals particularly with the teaching of older pupils. In it he says:

(a) Our object in geography teaching is not merely to impart knowledge but includes also the training of the reasonable faculties and imagination of children and above all the development of a broad outlook.

(b) Although it is impossible to present the whole science of geography in schools it is practicable to handle geography data rationally and to relate the distribution of different phenomena scientifically during the last years provided the children receive a good preparatory training.

(c) Such a treatment should involve as much training of the children and thoroughness and precision as was entailed by the older system. The teacher should first select the facts very carefully but these should be driven home with complete accuracy (74:163).

It is impossible to present the entire science of geography in the schools, but, during the last years of school training in geography, it should be as practical and scientific as the early foundation of the geography experiences of the child will allow. Thoroughness, accuracy, and precision in the statement and treatment of facts should be the keynote of the scientific study. We do not wish to have the
teaching of geography consist merely in the imparting of knowledge, but rather in the development of a broad outlook, in which the training of the reasoning faculties and of the imagination are very essential.

3. Martin's "Geography in the Junior High School"

That all people do not live in the same way and that the earth differs in physical form over its surface are two concepts which the elementary pupil is sure to store up. Through a more detailed study of the world, the junior high school tries to give him an understanding of the interdependence of people. It does this by beginning at the causes of things and proceeding to the results. The elementary school, on the contrary, begins with the results and works back to the causes. Martin, a teacher of geography in the Junior High School of Cleveland Heights, Ohio, has summed up the aims and purposes of geography teaching in the junior high school by giving us some of the distinctive contributions of geography:

1. To describe and explain the relationships of man to his environment, but the study must be pursued as a science so that the knowledge of physical features, climate and natural resources which are determining factors in the relationships, may be definite and exact.

2. To examine and interpret adjustments which groups of people have made to the combinations of natural and environmental conditions that exist in the regions in which we live.

3. To explain why men use the land and its resources as they do.
4. To study the possibilities in the regions of the world for the utilization by man (53:252).

That the above objectives may be properly secured, she says, in her discussion of the essentials for a course of study:

The decision as to what should be included in a school course depends on our understanding of what a pupil should gain from his study of Geography. The desired result may be considered under three heads, first, knowledge of geographic facts and principles, second, the power and skill to use that knowledge, third, the attaining of desirable attitudes (53:252).

Most of our geographers have divided the desired results in the teaching of geography into two large classes, knowledge of geography, and power to use that knowledge; but Martin has introduced a third, the attainment of desirable attitudes. Such a result is, of course, very important and is not omitted from the objectives of other authors, for they have apparently included this idea under their second heading. Naturally, we are desirous that children should, in the study of geography, bring the world and its people into close proximity to themselves. It is equally desirous that, in so doing, they get a favorable attitude toward other people, not judging that another environment is less favorable than their own, because it is less familiar.

Comparing the objectives of the junior high school with those of the elementary school, we are impressed by their similarity. Geography, however, is treated with more detail
in the junior high school, where larger conceptions of the utilization of the world by man are emphasized.

4. Visher's Four Great Aspects of Geography Study

We may consider geography in its service to us, says Visher, from several standpoints: in the first place, the science learned in connection with it gives us a better understanding of our surroundings; secondly, the general addition of knowledge afforded by it widens our horizon; thirdly, the insight given to life's reactions and all they involve aids in the formulating of physical laws which govern our geographical surroundings; and finally, the study of geography tends to increase our educational background. To use the author's own words, we may sum up the aspects of geography under the following four heads.

Geographic study has four great aspects

(1) The selection of such facts, established by other sciences, as are helpful in understanding the earth environment.

(2) The augmentation of knowledge concerning the geographic environment.

(3) The recognition of life's responses, and ultimately, the formulation of principles and laws of life responses to the geographic environment.

(4) The use of geography for educational purposes (88:91).

In these four aspects of geography are found a number of desirable aims to be gained from the continued study of geography beyond the academic years. Since they are the outcome of university research, they are more scientific in their con-
notation and expression. We may reduce them, in a final analysis, to the earth, its people, their lives, their knowledge, and the laws and principles that govern them.

(d) Topical, Type, Problem-Project, and Unit Studies

1. Topical and Type Studies

About the time of the World War, geography, as well as other subjects in the curriculum, was affected by new methods in class procedure. These were known as topical, type, problem-project, and unit studies. Topics, as suggested by these studies, were numerous and of wide range. The procedure was in direct contrast to the old question and answer method. In these new studies, each student in a class had, as his assignment, a topic bearing upon the subject under discussion, but differing from those of his classmates. A carefully prepared and a definite assignment on the part of the teacher created interest in and enthusiasm for the new studies on the part of the pupil. These types of study reduced noticeably the number of topics to be covered by the individuals in a class.

2. Kilpatrick's Purposes for Using the Problem Project

The selection of a fitting problem for a class project entails both knowledge and discrimination on the part of the teacher. Projects so selected will, with proper motivation,
engender an enthusiasm on the part of the pupils. We have found that both co-operation and helpfulness are embodied in the social aims of education, and ample opportunity is afforded for their fulfillment in the problem-project method of research by continually working with one's fellow students (76:61-2). Kilpatrick, in the Teachers College Bulletin of Columbia University for 1918, had given four types of classified projects and the different objectives to be attained by them.

1. Where the purpose is to embody some idea or plan in external form.
2. Where the purpose is to embody some aesthetic experience.
3. Where the purpose is to straighten out some intellectual difficulty.
4. Where the purpose is to obtain some item or degree of skill or knowledge (76:62).

In the selection of a problem worthy of the consideration of the class, it is evident that the purpose should be in keeping with the needs of the class, as Kilpatrick has said. When a problem is selected to carry out but one of the purposes stated by him in its fulfillment all of his purposes may be carried out to some degree. The problem-project takes more class time than any other type of study, but it is so thorough in its results that they more than compensate for the time spent.

3. Lackey's Studies in the Principles of Geography

Lackey made a study of problem-projects with his geo-
graphy classes in the State Normal School at Wayne, Nebraska. After this study, he compiled a book of sample project problems containing also possible methods of attack and sets of questions. Preceding each problem he has a statement of the purpose of the problem together with a list of related problems, and following each, a suitable bibliography. His book is very carefully arranged and should be a great help to any instructor in the teaching of a geography problem-project. In his book, Studies in the Principles of Geography, Lackey claims that only by the problem-project method can we secure the following results:

1. Geography should seek to create in the children an abiding interest in how the peoples of different countries live - their important industries, their fine achievements, their pleasures, their leisure-time activities - and the reciprocal duties and responsibilities that exist between them and us.

2. It should give pupils a mastery of geographic facts and principles so that they will be able to explain the development of important industries, the location and growth of leading cities, and the interdependence of the peoples in different parts of the world.

3. It should give such a thorough training in the use of the tools of the subject - namely, maps, texts, reference books, government bulletins, etc. - that the pupils may become independent workers in the solution of geographic problems.

4. It should determine for the pupils whether or not a people are using wisely the resources nature has given them, how they may improve their opportunities, and what we may do to assist them.

5. It should produce a social orientation in the lives of the pupils such as will lead to a sympathetic study and understanding of peoples and races other than their own (124:Introduction).
Most of Lackey's aims have been stated by other authors, but in calling attention to the "fine achievements, pleasures, leisure-time activities" of others and the need of "social orientation," he emphasizes the human note in our relationship with other peoples of the world. With this in mind the student pictures himself in the life of his world neighbors, and the reaction that he would make in a like situation. The problem-project as carried out by Lackey has the possibility of creating much interest on the part of the students.

4. Smith's Teaching of Geography by Problems

Smith, a teacher in the Richmond Public Schools, is also a firm believer in the problem-project method of teaching geography. He says that geography provides knowledge applicable to life's varied problems and helps in their proper investigation, and that it fosters high ideals of patriotism, with all that they entail in the average citizen. In fact, the possibilities in the teaching of geography are limitless, for the vast number of outside reading and reference books make the solution of problems entirely a matter of research. No problem-project can, therefore, be carried out by the use of the class text only.

A glance at the Table of Contents in Smith's book will give one an excellent idea of the type of material which he uses to carry out his problems and to gain his objectives in
the teaching of geography.

Table of Contents

Part One

I Present Practice
1. Question and answer method.
2. Lines of least resistance.
3. Topography and cartography.
4. Type and topical method.
5. Topical organization presented.

II The New Geography
1. Regional rather than political geography.
2. Emphasis upon and limitation of material.
3. The world's needs.

III The New Type of Presentation
1. How a problem is selected.
2. Organization of topics.
5. Testing the problem.
6. Values attributed to the problem method.
7. Illustrations of problem types.
8. Minimum requirements of place geography.

IV Projects and Problems
1. The project is a vital factor.
2. How projects aid instruction.
3. The procedure illustrated.
5. Classroom materials necessary.
8. A study of Africa by the problem method.
9. The democratic tendency in geography.

V Other Aids to Instruction
1. Journey geography.
2. Stories and literature.
3. Correlation (76:Table of Contents).

His book, Teaching of Geography by Problems, brings out the principles involved in the teaching of geography problem projects. It contains also a series of problems entirely
worked out so that they can be utilized by any teacher. Few authors list the spirit of patriotism as one of the ideals of geography, but they all imply it when they mention the building up of fine citizenship and loyalty. According to Smith, a teacher may foster a lofty spirit of patriotism in vitalizing the subject of geography, for its possibilities are many.

Modern principles involved in teaching geography by problems and projects, and concrete examples of teaching the subject by means of these principles, and contained in this book. To teach geography by problems and projects requires materials other than the geography text. Among these materials, books of reference are necessary.

This book ought to prove helpful to teachers by assisting to vitalize the subject of geography. Since geography provides specific knowledge of inside application to life's problems and furnishes useful methods of investigation, and fosters a lofty spirit of patriotism, the possibilities of the subject are great indeed (76:Foreword).

5. Rose Clark's Unit Studies

Unit studies have now become the most popular method of presenting geography. Rose Clark, Professor of Elementary Education at the Wesleyan University in Nebraska, has compiled for the study of geography a series of units which are particularly adapted to the needs and interests of primary children. These will be found useful for the inculcating of business and social ideals, for the child’s world involves society as well as business. The author explains this relationship - the child’s world with that of business and society - in her book.
This book is made up of a series of units of study in geography. The units have been selected primarily to suit children's needs and interests; secondarily, to conform to business practices and social ideals. The child's world and the world and the world of business and society thus become identical - and that is one of the great purposes of modern geography teaching (Preface).

Her units, as given below, are very simple and logical. They follow one another in easy succession, from the introduction to the geography of everyday life to that of the world beyond the child's immediate neighborhood and horizon.

Contents -

Part I

A The Geography of Everyday Life
   Unit 1. Direction.
   2. Distance and Size.
   3. Surface Features in your Neighborhood.
   5. Soil, and Soil Formation.
   6. The Air.
   7. The Needs of Life.
   8. Our Town.
   9. Map Reading.

B The World Outside
   Unit 1. Indians, How they Live.
   2. The Arab, Life in the Desert.
   3. The Eskimo, Life in the Northland.
   4. The Swiss, and Life in the Mountains.
   5. The Dutch, Life in Coastal Lowlands.
   6. The Black Man of Equatorial Africa.
   8. The Ocean (Table of Contents).

After the first nine units are taught, the child should be able to apply the knowledge acquired through this study to that of lives and customs differing essentially from his own. Clark has given these units inconsiderable detail and any
classroom teacher should find this book a helpful guide to her work in geography.

6. McMurry's Four Standard Units of Instruction

This book, Four Standard Units of Instruction, by McMurry, is a clear, well-organized, and instructive text for the teacher's use, not only because of the projects it contains, but also as a pattern for making similar units. It deals rather with the method of presentation than with the statement of specific objectives, but, as has been said before, the authors of these times are giving more space to method than to the objectives of teaching. McMurry gives the purpose of his book in the following words:

The purpose of this book is to give teachers an introduction to the art of instruction through specific illustrations of organization and of detailed method (58:Introduction).

Since all teachers are students of education, and since the scientific objectives of education and geography are now better understood by the teaching body as a whole, method has become more and more important. This trend is a natural outcome of the science of education and appears in the teaching of geography. Full mastery of the materials of study are essential to the successful carrying out of McMurry's Four Standard Units of Instruction, for the aim of each unit in the collection of all the material necessary for its successful
McMurry thus states his aims in preparing so carefully these units of study:

In order to attain this purpose, the instruction must bring about full mastery of the materials of study and of the teaching situation presented by classes of children. Each of the four large units elaborately wrought out in this book is a campaign of study. Each aims to bring together into one natural, rational process of thought the materials of knowledge essential to a well-rounded unit of instruction. These four demonstrations of large, organized topics may serve as standards of carefully-planned instruction. They also suggest a similar treatment of other large topics (58: Introduction).

In his book he has listed four large projects: namely, New Orleans, The Salt River, Muscle Shoals, and the Panama Canal. These he considers as standard units of instruction. Instruction in geography should give the pupil ability to master the materials of study and to form judgments upon them.

To provide a complete exhibit of one of these large teaching units should be recognized as one of the most difficult and serious enterprises that an experienced teacher can undertake. To make a complete and successful job of one such topic presupposes, first, a complete practical philosophy of teaching; second, a thorough grasp of the subject; and third, an intelligent, sympathetic, and many-sided knowledge of children (58: Introduction).

The undertaking of one of these large units is a difficult and serious enterprise, and requires all the skill that an experienced teacher can muster. The teacher must possess both an intelligent and sympathetic attitude toward her pupils and a thorough grasp of the subject matter. To handle one of his topics McMurry says is a "Bold Enterprise". The purpose
of these fully prepared topics follows:

The Purpose of These Fully-prepared Topics.

When one of these large topics has been organized and developed satisfactorily, other teachers may appropriate it, master it, and handle it with success in the classroom. The purpose of working out big topics beforehand is to get them into such shape that they will be of immediate service to the rank and file of teachers. The use to be made by regular teachers of these fully-prepared topics is the main thing, the one purpose of all preliminary work (58:Introduction).

After using any of these completely developed units a teacher should have sufficient knowledge and ability to work out other units of study. McMurry wanted his work to help the rank and file of teachers.

The Project in Two Stages

The main purpose of this book, in demonstrating the merits of the big unit of study, is to portray on the colossal scale of these modern engineering accomplishments the two big stages of the pedagogical drama: first, the scenic objectification of the main idea; and, second, the great propaganda by which the idea is broadened to a universal meaning as a type (58:Introduction).

His units of study are large in scope, and all of them deal with colossal feats of modern engineering skill. It is hard to believe that so much detail is involved in the teaching of any of these projects. All the details, however, are so carefully worked out that they produce a perfect picture of the places studied. Later this procedure may be used in similar type studies.
(e) Elementary Geography

1. Branom's Research

Education is the means by which an individual learns to adjust himself to an environment where he may better his condition. Because geographical knowledge is a means to the same end, the aims coincide with the general aims of education.

In 1921 Branom conducted a research to learn the aims of the principal modern geographers, and concluded that the eleven given below embodied those of most of his fellow-scientists. These generally accepted aims are:

1. Usable geographical knowledge.
2. Enlightened outlook on the world.
3. Practical and cultural aims.
4. Knowledge of people and countries with adequate interpretations.
5. Geographical adjustment.
6. Training and cultural values.
8. Aesthetic enjoyment.
9. Vocational understanding.
10. Social and civic understanding.

Not only should a knowledge of geographic facts and principles be imparted, but also a certain growth of power,
sufficient to permit its proper use, should be fostered for after life when it will aid in the constant adjustments which daily life demands. Nowhere can one gain a more comprehensive view of the relation of man to his daily life than in the study of geography. Through this study he learns the principles and factors that govern his life as well as the lives of others. As a result, the lives of others both far and near take on a new significance, and the doings of men and public events become a reality to him.

Upon the teacher should rest such a feeling of responsibility that it should lead her to analyze all her work beforehand, so that she will have no doubt as to the objectives that are being sought. Any work, to be worth the time and labor spent upon it, should bring to the pupil a value commensurate with both. For each member of a class, results will vary in proportion to the mental acuteness and the degree of interest shown, and, moreover, the aim of the teacher and that of the pupil may not be the same in a given piece of work (5:63-71).

We find among our best teachers two distinct types of instructors: namely, the teacher who pays less attention to content than she does to the development of useful attitudes and powers through the wrestling with geography problems and the one who stresses the content and does not care about the method used in its acquisition. Speaking of these two types, Kranom, in his *Teaching of Geography*, says:
Teachers of one group believe that the object of the study of geography is the acquisition of a certain mass of definite organized material, useful in its application in later student life. Teachers of the other, realizing the impossibility of the pupils acquiring in a few years an encyclopedic mass of material which shall always be equal to the demands upon it hold that the purpose of geography teaching is to arouse in the pupil a desire to follow out each geographical lead to its logical end, to teach him where to seek geography information and how to use it, and to create in him an interest in all things geographical, - to give him, in short, a working knowledge of geography (5:65-6).

A course of study in the primary grades should take into consideration the interests and experiences of the average pupil. Work in the earlier grades should lead directly to that of the grammar grades, and they in turn to the work of the high school. Thus, there will be an unbroken chain to the college and university. If, at any time, a pupil must leave school to earn a living, the type of geography that he has studied should always prove a help to him. Branom emphasizes in these words the necessity of harmonizing theory and practice.

A course of study should be theoretically sound. During the present period of experimentation emphasis is being placed on actual results secured under ordinary school room conditions. It does not follow that all topics which "work" should be included in the geography curriculum. All topics selected, on the other hand, should "work" or be eliminated. A good teacher may succeed with a poorly selected topic, while a poor teacher may fail with a well adapted topic. Empirical experiences need to be carefully evaluated and checked in the light of a sound theoretical organization. In the last analysis the theoretical and the practical course of study, the one reinforcing the other, should be harmonized (5:75-6).
Subjective tests are often hastily prepared by the teacher; their grading, however, usually takes hours. The mood of the marker is a factor, too, and affects the marks considerably; and so educators now feel that grades given in subjective tests are not reliable criteria of scholarship. A number of teachers, given the same set of papers to mark, will never agree on the same grade for the same paper, and it frequently happens that what one teacher thinks is an excellent paper, another terms fair, and another, poor. This fact has been proved by experiments which show that such a system of tests is not dependable.

Objective tests on the contrary require time and care in their preparation. But they are easily corrected, and, since the students are either right or wrong the grade is quickly determined without undue labor. Anyone may check them and reach the same conclusion. As they are now available in many forms and for all grades they are coming more and more into vogue. Prejudice on the part of the teacher is entirely eliminated, and interest on the part of the pupil is evoked for he can see just where he stands with reference to the median of his class. Tests should deal with interpretative, factual, and place geography, for they afford an opportunity to try the student on both a problem and memoriter level.

Looking over the field of geography the teacher sees it as a whole and so naturally his objectives for such an expanse
are quite general, but each lesson must have a specific aim as the reason for its being. It may, as Branom says, include these four:

1. Certain facts.
2. Interpretation of facts.
3. The ability to use knowledge in a new situation.
4. Establishment of ideals (5:70).

Only a certain proportion of geographical facts can be remembered by an adult for a given time. Encyclopedic knowledge exists only in the case of an exceptional memory. Since there are so many types of people living under varied circumstances and working at numerous occupations throughout the world, a teacher can do little more than stimulate and arouse interest in a man's life and work. He should see that the geography to be absorbed by his pupils is suggestive, vital, and stimulating to the growing mind.

In our everyday life we are influenced by the opinions expressed in current newspapers, magazines, and books on travel and art. The cultural values derived from these do much to enlighten us and give us ability to recognize opportunity. Appreciation of the beauties of nature, respect for honest labor, insight into commercial relationships, realization of the brotherhood of man, vocational, social, and civic understanding, exist in the individual in proportion to the attitude he has acquired from his geography training (5:66-9).
Literature becomes tinged with a deeper meaning if the geographical background is properly developed. If the selection is a construction of the imagination and understanding of the physical factors involved—whether some aspect of nature, products, or places—will add to the appreciation. In reenforcing the geographical discussions the teacher may select pieces of literature in which the geographical factors are intimately involved. Geography, however, has much more to contribute to literature than literature has to contribute to geography (5:49).

It is possible for a teacher to stress, during reading periods, many of the geographical references in the lesson, often a story has a background which could be used to bring out many facts of a geographical nature. Sometimes the selection may be purely imaginative, but the principles and facts of geography that have gone into the author's words may make it well worth the pupil's analysis. An aspect of nature, a reference to products, a mode of travel, or a statement concerning familiar or unfamiliar places, if discussed from the geographical point of view, aids materially in the literary appreciation of the selection studied. Teachers desiring to correlate their geography work with their reading or literature, can select works that will have an interest for the class.

The use of a daily paper is a means of familiarizing the class with current events. Each issue of the average newspaper contains a wealth of live geography. Farming activities, market fluctuations, shipping news, railroads, weather reports, world disasters, explorations, elections,
government business - these and many others - may be studied with profit. It is now the custom for geography classes to subscribe to such weeklies as *Current Science*, *Current Topics*, and *Current Events*.

Another interesting use of the newspaper is to cut out the account of the outstanding event of each day, in printed or pictorial form, and paste it on a large calendar of the month made for that purpose. At a glance the pupils then see in review the month and its worth-while events. The worth of such a plan is readily seen, when one considers the undesirable articles in daily newspapers, magazines, and pictorials. The plan of keeping a record of worth-while happenings has the sanction of a person of no less importance than the President of the United States. A special secretary clips, condenses, and files all important news notes and pictures so that the chief executive can review them with a minimum of expenditure of time and energy.

2. Young's Procedure in Elementary-School Geography

Young, in his procedure in elementary-school geography, does not begin with the study of the home region. He selects instead large natural regions, such as the Mississippi Valley, the Rocky Mountains, and the Great Plains, and declares that the main facts concerning these natural regions should be
taught. These facts are bound to leave the child with geographic concepts from which will emanate ideas regarding the function of towns, ports, nations, and countries, together with the factors determining place and the conditions governing production. Physiography, dealing with the formation of land and water bodies, the powers of erosion, and the story of coal, occupies a prominent place in his outline. Last of all he would consider the home region, which he would have studied by means of maps, exercises, and practical experiments. His procedure in the teaching of elementary geography would follow these seven steps:

1. Natural regions, with the main facts to be taught about each.
2. Geography ideas, such as the functions of market towns, ports and capitolos, what constitutes a nation, a country, etc., what factors determine town sites, what conditions govern production and so on.
3. Leading facts and physical geography such as the formation of deltas and folded mountains, the erosive powers of water and ice, the story of the formation of coal.
4. The study of the home regions; each region will vary.
5. Various types of mapping.
6. Various types of exercises.
7. Experiments in practical geography (91:175-6).

If these seven objectives were accomplished in the classroom, there would then be no dull times, for the pupil would be assured of a variety of things from day to day. In his studies he would pass from natural regions to life in a village, a town, a city, or on a farm. These phases would in
turn be followed by a study of the physical facts of geography, the making of maps, the writing of exercises, and the performing of practical experiments. Such a method would keep the mind of the pupil keyed to a high pitch of interest.

3. Sweeting's Contentions

At the end of his elementary-school career, the average pupil of fourteen should have gained such a fund of knowledge that he should be able to observe any geographical phenomenon, to discuss it intelligently and to tabulate, in some form or other, the results of his observations. His ability to construct and to interpret maps should be equal to his understanding of atlases, statistical reports, tabulations and graphs. He should be able, likewise, to go to a library and to select the book from which to obtain the data he desires to use. Sweeting believes any normal fourteen year old pupil should be able to do the following:

1. To observe accurately.
2. To record observations in books or on maps.
3. To read maps; atlases, ordinances, statistics.
4. To use lists or tables of figures.
5. To draw and interpret graphs.

All these abilities of the pupil concern activities and remind one of Dodge and Kirchwey's outstanding objective for all pupils, "the power to do". Upon accomplishing the above objectives, any pupil of fourteen will, so Sweeting thinks,
know the following facts about the world and its people:

1. The chief crops and occupations of his own neighborhood with their distribution and market.
2. The main products of the world, their locality, markets and transport.
3. Similar information about their own country in more detail.
4. Climatic and other conditions under which men have to work in the world (83:454).

A geographical "set" is given to the mind of the pupil by years of training and practice along the following lines: the observing and selecting of facts; the gathering and tabulating of data; and the reading and constructing of maps, graphs, and tables of statistics. Such a set will later create in his adult mind an interest in the crops of his own district, in the effect of climate on crops, in the differentiating of products, and in all other factors that have a bearing on man's work in the world.

4. Winchester's Objectives

In a small handbook for teachers in which the study of geography for beginners is discussed, Miss Winchester seeks the same objectives as Sweeting. She states her aims in this simple fashion:

So our aim is twofold:—
1. To teach him to appreciate something of the physical environment in which he lives.
2. To develop in him a broad outlook and sympathy (89:Introduction).
One could enlarge considerably upon this twofold aim and divide it into many types of objectives. It is plain that Winchester intended this aim to apply to the study of geography in the elementary grades, for in the preface of her book, *The Teaching of Geography to Children*, she again points out that, because of the immaturity of the pupil, a teacher should be thoroughly conversant with psychology as well as with geography, in order to give him the kind of training that will fit him to earn his own living in after years.

From his very first lessons in geography, the pupil should gain such a keen interest in the world about him that he will never lose it. His early observations of the needs of mankind and of the world should give him such a lively interest in his lessons from day to day and should so quicken his imagination that he will, of his own accord, make use of the knowledge gained, and will apply the peculiar notations and language of geography to the study of maps and globes. This will foster the growth of his imagination and will lay a firm background for his future training in geography.

Geography can be made a very valuable introduction to the duties, the responsibilities, and the privileges of citizenship, if it is properly taught and clearly presented. The responsibility for such instruction and for such presentation rests with the teacher. Winchester, a teacher of many years' experience in the study of geography, sets up this claim for
the need of well-taught geography:

The claim is now being made for Geography that, rightly understood and rightly taught, it forms a most valuable introduction to the duties, responsibilities, and privileges of citizenship. It trains and develops the faculty of sympathetic imagination, without which it is impossible to appreciate other points of view or to put oneself in the position of other people living in environments unlike one's own. It can engender precisely that attitude of mind and outlook on life which will have to become far commoner than at present, if the democracies of the world are to learn the difficult art of collective living, and if the ideas underlying the League of Nations are to be translated into realities. But, while it is thus essentially a liberalizing and humane study, Geography is, at the same time, eminently 'useful' in the narrow and more utilitarian sense. Some knowledge of its principles, no less than of its data, is becoming indispensable for many professions. The Civil Service, the Consular Service, and almost all departments of industry and commerce is thus country stored to gain immensely by the sympathetic development of Geography as an integral part of the national system of education. A great need of our time is the evolution of a well planned but yet elastic system by which, on the basis of sound Geography and History teaching in the elementary and secondary schools, the problems of national and international citizenship and commerce can be seriously tackled in the new continuation schools and in the various branches of Adult Education, such as the Workers' Educational Association.

But, without a sound basis, no effective superstructure of this kind can be raised. From a wide experience, I am convinced that teachers readily discern, and often eagerly appreciate what a magnificent instrument they have in Geography for developing both the aptitudes and the visions of their pupils. But I know that they are frequently puzzled as to how the foundations should be laid. So considered, the problem of teaching Geography to children is a highly important one. Only those are really qualified to give advice on the subject who have at once studied intimately child psychology in relation to the subject matter of Geography, and themselves possess clear vision of what they want the children to make of Geography when they have become men and women (89:Preface).
Geography should be well taught for it holds a place of major importance in the duties, the responsibilities, and the privileges of citizenship. Without the training it gives in sympathetic understanding, it would be impossible to imagine an environment entirely different from that of the student. If the democratic ideals of the world are to withstand successfully the strain of collective living, the people concerned with the success of those ideals will need to know environments other than their own. To counteract insular tendencies we see the need for effective geography training in civil and consular service, politics, and like occupations. Winchester, having spent her life teaching geography to children of various ages and having been able to measure in some degree the results of this training, speaks with sound authority when she asserts that only those are capable of teaching geography, "Who themselves possess clear vision of what they want the children to make of geography when they have become men and women."

5. Adams' Aim of Education and Geography

Adams, Professor of Education at the New Hampshire State Normal School, claims that the outstanding aim of all education is social efficiency, and that no elementary subject contributes more to the fulfillment of this aim than does geography. He maintains that a good citizen must have a
knowledge of his environment, and that the best way to gain this knowledge is through the study of geography. It is indeed interesting to observe such a reaction to the study of geography on the part of a teacher of education. He says that his purpose in writing his little book is to inspire not only present day teachers of geography but also prospective teachers of geography with such enthusiasm that they will endeavor to make it more real, social, and human to their classes. Here we have his expression of the relationship existing between education and geography,

The aim of education is social efficiency, good citizenship. No other elementary school subject contributes more toward this aim than geography. A good citizen must have a knowledge of his environment. Geography affords this knowledge.

The aim of this little book is to give the teacher and prospective teacher a knowledge of the pedagogical principles which underlie the teaching of geography, to inspire enthusiasm for the subject, and to make it more real, more social, more human.

The book is written with a full realization that many excellent treatises on the teaching of geography with which one can find little fault. However, a word of criticism may not be out of place. (1) Books on the subject of Geography published ten years ago contain much that is valuable. Practically all of them, however, were written by advocates of 'mind training', 'formal discipline' and 'faulty psychology'. (2) Another class of books contains too much subject matter for the busy teacher to read. (3) Other books deal almost entirely with methods and 'set' lessons. In preparing 'Practical Methods for Teaching Elementary Geography I have tried to avoid all this (1) by excluding many things discussed in other books; (2) ignoring the 'disciplinary' value of geography; (3) by doing away with the 'cut and dried'
methods. On the other hand I have included a number of things not found in any other book on the subject of Teaching Geography, for example: (1) The evolution of geography in the public schools; (2) Time allotments; (3) General methods; (4) The Psychology of Geography; (5) Special methods; (6) Standard tests; (7) An outline course of study (Preface).

In his book he has included many facts dealing with the science of education as it applies to geography. It is, indeed, unique in such a treatment of the subject.

6. Hardy and Snowball's Teaching of Geography to Children Under Twelve Years

In the early years of his school life a pupil should be taught the symbols of geography as well as its peculiar notations and language. If the introduction to the subject is sufficiently interesting, these will be acquired mechanically and without any noticeable effort on the part of the pupil. Such an introduction should foster an interest in the subject. Imagination is an important factor in visualizing the inhabitants of the world, their mode of living, and their methods of obtaining the necessities of life, such as food, clothing, and shelter. Imagination helps, too, in gaining ideas of land forms and of vegetation. In their work The Teaching of Geography to Children Under Twelve Years, Hardy and Snowball cite these as important objectives.

Children under twelve years of age should not absorb geography as a sponge does water, but should be given the time and
the opportunity to grasp fully its meaning. Teachers must not, therefore, try to cover too much ground in its teaching, but must go slowly and thoroughly, remembering always that children of this age are very immature.

During the early years of school life, the aims in teaching Geography include:

(a) An introduction to the subject that will give it interest that is both immediate and capable of growing and developing.

(b) The stirring of imagination through observation and description of man's chief methods of obtaining food, clothing and shelter, of the main land forms, of the chief types of vegetation and climates.

(c) The giving of the means of learning the subject by teaching the reading of its peculiar notation, viz: maps and the symbols (40:3).

7. Reeder's Research

For years, the method of using textbooks in the teaching of geography has shown little or no change. Reading assignments in a basal text have played and still play so important a part in the mastery of the subject matter that any device to improve this method should be of assistance to the teacher and to the pupil. Reeder, who is connected with the Geography Department at Columbia University, attempted some research which took the form of a series of questions to aid the student in preparing his lessons. In addition he tried to learn if the value gained from these questions was sufficient to warrant their use. He did not intend them to be used, however, as a means of determining the quality of a student's reading.
To bring his investigation up to date he selected McMurry and Parkins' *Advanced Geography* and J. Russell Smith's *Human Geography*, which were then of recent publication, and set to work formulating questions. He states the object of this investigation as follows:

The object of the present investigation is to search for a technique which will improve the pupils' method of studying the geography textbook in the upper grades of the elementary school. While there has recently been a somewhat pronounced movement against too slavish adherence to textbooks, yet teachers recognize their value if properly used. Under almost any teaching method, the reading of assignments in the basal texts plays some part in connection with a given unit of subject matter. Any technique, therefore, which will improve such reading will be of assistance to teachers of geography.

For sometime objectively sourceable questions have been used to determine the quality of silent reading. Silent reading tests, however, have not been employed, except incidently, as a means of teaching. It appeared to the writer that the systematic use of such questions in connection with the reading of a text might improve the quality of study in geography, and the present investigation was undertaken to determine the truth or falsity of this theory.

For the purposes of this investigation, two geography text books were used, namely *Advanced Geography* by McMurry and Parkins, and *Human Geography* by J. Russell Smith (68:4).

In a book entitled *A Method of Directing Children's Study of Geography*, he has published the results of his investigation. In this book he has given complete sets of questions suitable to the content of the texts examined, and the results obtained in classes that have used them in preparing their geography lessons. The results have proved the worth of his work, for they have shown that the questions devised have been
very helpful to the student and have enabled him to retain more facts than when he studied without their aid.

8. Lobinger's Church School Plays

If, over a long period of time, a pupil studies geography from the standpoint of research only, it is to be expected that any change in the teaching procedure will be welcomed by him. Most geographers hold that world friendship is an important objective in their subject, and one of them, Lobinger, wishing to combine this with the play spirit, wrote a series of projects and plays for the Primary, Junior High, and Senior High Departments. He hoped that by having pupils engage in friendly and helpful enterprises, through the play spirit, he would help them in an intelligent understanding of the peoples of the world. The part that the Church School can take in such service is described in the following excerpts from his book:

This book is based upon the conviction that children and young people can most effectively help such causes as social service, Christian missions, and world-peace by becoming intelligent in regard to the people of other races and groups and classes, and by engaging freely in friendly and helpful enterprises for them. These are paths by which they enter into attitudes of genuine friendliness. When young people approach maturity with a reasonable degree of knowledge as to the mode of life and customs and culture and needs of other social or racial groups, and with a feeling of friendliness toward them, they have made their best contributions toward the achievement of world-peace and of the ideals of Christian missions and social service.
The present volume is an attempt to indicate how the church school may work toward this end. It deals with practical problems, with principles involved, and with suitable methods of procedure. It includes also a record of various projects in world-friendship, carried out under the author's leadership, by pupils of different age groups (51:Preface).

In the different plays throughout his book, we meet the people of many nations, and from them we learn the problems in their daily life, and their attempts at solution. Interest in their mode of life, their customs, and their culture, as well as in the needs of other social and racial groups, should foster a feeling of sympathy by which to uphold the ideals of Christian Missions and social service. These sentiments are brought out clearly in all the plays of Lobinger, and they furnish the teacher with a method of teaching that is both instructive, and entertaining.

9. Brigham and McFarlane's Essentials of Geography

At the close of 1925 three accredited textbooks for use in the elementary schools of Chicago were Essentials of Geography by Albert Perry Brigham and Charles McFarlane, Human Geography by J. Russell Smith, and Advanced Geography, by Frank M. McMurry. Of all these authors, Brigham and McFarlane alone gave space to objectives in the preface of their work. Smith and McMurry, as well as other authors of this time, had prefaces dealing with the method of presentation
to be used by the classroom teacher. Brigham and McFarlane considered these three things to be of prime importance in the early study of geography:

In an elementary textbook of geography three things are of prime importance, - that the facts and principles selected shall be the essentials of knowledge of the earth, that they be within the understanding of the young, and that they be set forth in an interesting manner.

To secure these ends a large section of this book is devoted at the outset to the ways of living and working, which differ in form but agree in principle among all men. This first section includes matter of the kind often called 'home geography'; but that caption is not used here, because real home geography must be developed by the teacher, who can readily apply it to any particular locality.

These first lessons of geography, telling how men work and live, are not only an essential part of the study, but they are designed to secure the pupils' interests in the lessons that follow. The child gains new appreciation of what he does and of what is being done around him when he learns that similar things are done in remote lands, and he takes in the facts of distant countries and of the earth as a whole because they appeal to his human interest (9:Preface).

Holding the interest of the elementary child in the geography class takes precedence over everything else while he is being instructed in the necessary routine of study. If he understands the objectives, he will learn the essential facts of the earth easily and pleasantly. Brigham and McFarlane strive to hold the interest of the child at the outset by showing him the various ways by which man lives and works. If a child takes a vital interest in the work and the lives of
people about him, he will naturally take an interest in the
work and the lives of people remote from him. His interest
in humanity will be aroused and because of this interest he
will enjoy learning the facts and the principles of life.

10. Parkins' Address

The next authority whose work we shall consider in this
discussion is Parkins, a member of the faculty of the George
Peabody College for Teachers, Nashville, Tennessee. The
particular work studied was his address, "Some Tendencies in
Elementary Education and Their Possible Effect on Geography". At the National Council of Geography Teachers which met at
Madison, Wisconsin, on December 28 and 29, 1926, he gave this
address as part of his presidential greeting. In it he con­
trasts the position of the teacher and the student in the past
and in the present.

Two decades or more ago teachers taught
geography to the children. Today (in all the
better schools) the children are taught geo­
graphy. The center of attention of the teacher
has been shifted from the subject taught to the
child being taught (64:31).

His words indicate a very happy change in educational
procedure; that of a shift from the subject to the child.
When a man, as conversant with geography as Professor Parkins,
calls attention to the needs of the child in the teaching of
geography his words should command respect. He infers, how-
ever, in his parenthetical aside that there are schools, even today, where teachers are still teaching geography to children. These, we hope, may decrease rapidly.

(f) Courses of Study

1. Isabelle K. Hart's Course

Any course of study to be helpful should contain proper objectives. It should also be the work of a committee composed not only of superintendents, supervisors, and principals, but also of classroom teachers since they deal with changing conditions from day to day. To function satisfactorily, a course should help any teacher, but it should aid particularly the beginning teacher, who relies upon it almost entirely for her procedure in the classroom. If it is simple, comprehensive, and concrete, its value to her will be inestimable, and it will be an inspiration to the experienced teacher as well. The aims sought should be clearly defined and should concern both education and geography. Suggestions, giving various methods for realizing these objectives by investigation and suitable presentation, should also be available in the course. With reference to the student, it should help him develop such a lasting interest in the subject that it will function in his later reading, particularly in that of current literature (38:14-25).
In our research beginning with the year 1870, we have found that the work of the Oswego Schools has been mentioned again and again. In 1925, Isabelle K. Hart, Supervisor of Geography, at the Oswego Normal School, published an extensive treatise on the study of geography in which she listed general as well as specific aims. Her general aims are as follows:

Geography Aims

In formulating the following specific aims for geography teaching, these general aims were kept constantly in mind:

1. That all education should tend definitely to make children efficient citizens of our country, a democracy.

2. It should also help children to know something about the vocations of the world and thus help them to choose suitable life work. (Geography can only serve in this respect to broaden one's outlook a little.)

3. It should make them as efficient and responsible as possible both in their work and in a wise use of their leisure time.

4. It should constantly train them in good habits of study. No attempt has been made to group the specific aims under these heads, for it is frequently true that one specific aim equally towards several general aims. But the relation of each specific aim to the general educational aims is readily apparent.

Note: The examples given with each aim are for illustration of the point, not by any means a complete list (38:25).

As general aims she stresses these outstanding ideas - citizenship, choice of life work, use of leisure time, and training in good study habits. As specific aims she lists the following:

I. To develop the habit of observation.
   A. From actual life.
   B. From pictures.

II. To develop the habit of making judgments based
on the child's own observations.

III. Through experience in making judgments, to help children to think quickly and to the point.

IV. To give a child experience in speaking before a class, especially in proving his point, so that his work will help him to speak easily and convincingly.

V. To give the child as many experiences as possible so that:

A. His own life will be enriched.
B. He may be better able to interpret the experiences of others.

VI. To create an interest in and an understanding of other people and nations; thus to encourage a spirit of friendliness among nations and toward our foreign born.

VII. To develop an appreciation of our need of the materials we use daily in providing ourselves with the necessities of life, and an appreciation of the labors of others in obtaining them and transporting them to us; thus to stimulate a respect for labor and a feeling of the interdependence of men.

VIII. To show the need of conservation of material and of power. The conservation of health and life may not seem to belong to the geography teacher, but the opportunities are as great here as in any other subject; the location of health centers and of pleasure spots has always been traditional geography. We can go a step further and show the benefit of these to man and the need of preserving them.

A. This creates an opportunity to do something ourselves; to learn what our government is about, what it does for us and what remains to be done.

IX. To help children appreciate the beauty of nature and the worth of natural agencies; this adds enjoyment for the child and is an opportunity for applied civics in the problem of preventing the mutilation of beauty spots near home.

X. To help the children appreciate the part that education has played in improving our natural environment, through improved facilities for communication, transportation, utilization of power, conservation of life and resource, government.

XI. To promote an intelligent interest in current events, books of travel and good magazines; thus to assist the child to make good use of his leisure time.

XII. For the same purpose to help children to use maps, graphs, atlases, indexes, encyclopedias, books.
XIII. To teach the child some of the activities of our government which affect our health and safety and, indirectly, sanitation, health protection, game and forest conservation.

XIV. To show that the form of government, the race, religion, are three important factors in the development of people. Children should recognize the simplest facts about the influence of these three factors.

XV. To train children to recognize and demand authority for statements and to know where to find it.

XVI. To develop initiative through problem solving.

XVII. To teach such outstanding facts of location, resources of continent, etc., as usage demands of the average man, and as will help the child to become an intelligent reader of current publications. These publications themselves become a useful guide in making the selection. The locality in which one lives exerts an influence upon the choice.

XVIII. To show that there exists a set of fundamental principles (nature laws) which control our environment; and to work toward an understanding of these principles and their practical applications, so that life responses in various regions may be better understood. (Many of these principles will become tools for use in solving problems). (38:5-12).

Since she has stated both general and specific aims, there can be little or no doubt as to her objectives. The noteworthy points in her specific aims are: observation, judgment, quick thinking, recitation experience, life enrichment, creative interest, understanding of other people and nations, appreciation of the labor of others, conservation of materials, power to do, civic problems, improvement of natural environment through education, current events, use of geography activities of government, love of research, initiative, and facts and principles of geography. Such specific aims as
these alone would justify her work, but the thoroughness with which she has stated the objectives in the elementary school wins further admiration and respect for it. She has taken each school year from the third up to the eighth and has divided it into two semesters. The work is planned for daily time allotments of one-half hour. A synopsis of her course with time allotments follows:

Synopsis of the Course With Time Allotment

<table>
<thead>
<tr>
<th>Home Geography</th>
<th>Third year, first half.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The World as a Whole</td>
<td>Third year, second half.</td>
</tr>
<tr>
<td></td>
<td>Fourth year, first half.</td>
</tr>
<tr>
<td>Type Studies in the United States</td>
<td>Fourth year, second half.</td>
</tr>
<tr>
<td>New York State</td>
<td>Fifth year, first half.</td>
</tr>
<tr>
<td>Our Possessions and our</td>
<td>Fifth year, second half.</td>
</tr>
<tr>
<td>Neighbors in North America</td>
<td>Sixth year, first half.</td>
</tr>
<tr>
<td>South America, Africa,</td>
<td>Sixth year, second half.</td>
</tr>
<tr>
<td>Australia</td>
<td>Seventh year, first half.</td>
</tr>
<tr>
<td>Europe and the Chief Colonies of Her Nation</td>
<td>Seventh year, second half.</td>
</tr>
<tr>
<td>Asia and a Summary of General Geography Principles</td>
<td></td>
</tr>
<tr>
<td>Our State and Nation in World Affairs</td>
<td></td>
</tr>
</tbody>
</table>

The first and second semesters of each grade have their own problems, but their objectives are stated so explicitly that their meaning cannot be misunderstood. As the child progresses from grade to grade, he meets these various objectives so that by the time he has reached the 7A semester he has encountered all possible objectives in the teaching of geography. After the 7B semester the author lists no new object-
ives, but she intends that those taught in the preceding grades will remain the ideals for the 7A, 8B, and 8A grades. Below is listed all of Hart's aims, semester by semester, as given in "The Geography Course of Study and Teachers' Manual for the Training School of Oswego State Normal School.

Grade III. First Term.

Specifications for the Term:

1. To lead the child to realize in a very elementary way that many persons, plants and animals contribute to his welfare.
2. To lay a foundation for later work by making his own environment appear as distinct and definite in his mind as possible for comparison and contrast later on.
3. To provide him with the tools for further study, such as knowledge of directions, ability to use a map and to make weather observations.
4. To encourage him to contribute to the success of the class by bringing related pictures, specimens, etc., thus letting him assume his share of responsibility and linking his school work to his home life.
5. To give him experience in expression through speech, writing, drawing, modeling, sand table work (38:12).

Grade III. Second Term

Special Aims

1. To lead the child's thought and experience out from his immediate environment into the great world; to help him to realize the size of the world and the variety of life conditions; borrowing a phrase 'To expand the child's space horizon'.
2. To interest him in the people of other lands.
3. To teach such types of primitive and civilized peoples as best serve to illustrate the fact that the life of man is dependent upon the form of his environment, e.g., Eskimo, Arab, Mexican, Indian, Kongo Negro.
4. To show how race and religion affect the life and progress of man, as illustrated by the Chinese.

5. To show how even these remote peoples contribute to our happiness and we to theirs.

6. To advance the 'tool' knowledge by teaching names of continents and oceans, shape of the earth, heat belts, map reading and etc.

7. To help the children to form good habits of study.

8. To provide abundant material for oral and written expression (38:27).

Grade IV. First Half

This term’s work concludes the survey of type regions begun in the previous term, and differs from that in three ways; it is marked by more independent study on the part of the children, with continued emphasis on habits of study; by advanced ability in map interpretation; and by a clearer conception of the relation between the earth and the sun.

The aims are the same as for the previous term, with the three given above, and the following: to teach the children the location of those countries which made the early settlements in our land - England, France, Holland, Spain - and to compare them with our own country as to the appearance, language and manner of life of their people, so that the children may understand the frequent references to these lands which they will meet in the following term (38:36).

Grade IV. Second Half

The children have now learned about several of the most interesting regions of the world, types of environment and civilization. This has made a good background for elementary work, especially a background for the study of our own country. Since the children know only about one type of life in our own land, that of their immediate vicinity, it seems wisest to give them as intimate a view as possible of other phases of life as found in other typical regions of the United States. We therefore devote this term's work to type studies of life in the simpler and more fundamental occupations of the country.
Another aim of the term's work is, by working from consequences to causes, to lay a foundation for the opposite and more difficult procedure—reasoning from causes to consequences—in later grades (38:37).

Fifth Grade. First Half.

Specific Aims of the Term.

1. Such acquaintance with the geography of the child's own state as will make him a more efficient child-citizen of that state, and later a more efficient adult citizen. (It must be recognized that a very mental catalog of miscellaneous place names and unrelated facts will not function in the child's present life, and will not be retained until adult age. A comparatively small number of places, so generally known that their names are frequently heard and are likely to be remembered through repetition, and a carefully selected list of facts and principles may be made, by a skillful teacher, to stand out strongly and interestingly.)

2. Sufficient skill in map reading so that the habit of looking up unknown places may be developed, with special emphasis upon use of atlas aids. This is in preparation both for future needs of his school life and his own adult needs.

3. Skill in using the scale of miles and in interpreting all the map signs with which the various maps are provided.

4. A knowledge of the characteristic kinds of work done in the various parts of the state, with such special, simple reasons for the location of an industry as are immediately due to geographical controls, e.g., natural resources, transportation facilities, water power or climatic factors, or influence of population density.

5. An elementary understanding of such state issues as are based upon the geography of the state, and are of importance in our own locality, where it is easy to explain the issues; e.g., water power development, drainage of swamp lands, reforestation and the relation between forests and stream flow, protection of wild life.

6. A knowledge of our state beauty spots, including an appreciation of their beauty, a knowledge of their location and interpretation of railway maps and read
maps to find out how to reach them. This should include the civic side of care of such places and improvement of others.

7. Ability to sketch rapidly the outlines of the state and locate accurately very prominent places and features (38:48-9).

Fifth Grade. Second Half.

Special Objectives

1. To teach what our outlying possessions are, how we obtained each, how each is governed, its value to our nation, our responsibilities to each.

2. To distinguish between state and territory.

3. To teach the different characteristics of the five zones and the names of the circles which separate the zones.

4. To help children to distinguish differences in map projections sufficiently to note whether parallels and meridians are shown by straight or curved lines; thus to read map directions accurately.

5. To give the children experience in finding the source of a river and tracing its course to its mouth.

6. To give a thorough understanding of technical terms used, so that children can explain in their own words, or with sketches, and can help formulate an acceptable definition, to be remembered.

7. To increase skill in pronouncing and spelling place names.

8. To increase skill in using index for looking up topics and particularly for aids in locating places.

9. To give experience in comparing areas and populations of various lands with those of United States.

10. To arouse interest in current events, particularly with respect to the places being studied, or already studied in previous terms, so that children will bring clippings for the bulletin board or oral reports for class discussion.

11. To teach meaning of density of population.

12. To teach tidal action and its effect upon harbors, without attempting to teach the cause.

13. To teach the effect of altitude upon climate.

14. To emphasize continually the difference between continent and country.

15. To review constantly the work of previous terms so that at the end of the present term the children will
know this term's work in addition to previous work; instead of merely in place of previous work.

16. To secure a working knowledge of latitude and longitude (38:67-72).

Sixth Year. First Half.

Special Objectives

1. The ability to study pictures will be stressed especially during this term, although the children should have had much experience in this field before.

2. The habits of raising individual problems which grow out of the study of the pictures or of the text and of research in solving such problems, should be particularly encouraged.

3. Both the desire and the ability to use intelligently the index, the appendix, supplementary readers and other reference books should be encouraged.

4. A wider experience in the use of latitude and longitude for locations should be provided for.

5. The relation between latitude and the position of the sun in the sky should be emphasized continually.

6. Another very important objective of this term is explained at length in the discussion of Africa. We may speak of it here as making the transition procedure from the 'effect to cause' method toward the 'cause to effect' way of thinking (38:84).

Sixth Year. Second Half.

1. To give each child experience in working out a project which demands particularly initiative and organization of ideas.

2. To help the children to think of European nations as the parent stock of our own people and to trace the effects of environment upon the predominant racial characteristics of the leading nations.

3. To develop carefully the idea of population density and the relation between great density of population and emigration from some lands to the United States.

4. To show how colonies are useful to their mother countries both in providing homes for the surplus population and in furnishing the raw materials.
natural to widely different environments.

5. To review the location and chief products of any colonies already studied.

6. To help children to realize some of the political difficulties lived by the geographical situation of nations imperfectly separated by natural boundaries and unequally favored as to outlet to the sea and as to deposits of valuable minerals, such as coal and iron.

7. To further the child's facility in the use of latitude in relation to climate and in location; also in the conventional matter of zones, as suggested in detail in the previous grades.

8. To further the child's conception of the wind belts of the earth and their importance to the life of man by a study of the prevailing Westerlies and their effect upon Europe; to show how the direction of the principal mountain ranges favors a fairly equitable distribution of rain.

9. To teach the relation between longitude and time. To show the part played by the rotation of the earth.

10. To teach the effect upon climate of an ocean to windward, and of strong, pronounced ocean currents.

Seventh Year. First Half.

1. To round out the child's knowledge of the world he lives in by study of the land masses and oceans not previously outlined.

2. To encourage individual research and interest in current events and current magazines, as well as in books of reference.

3. To provide, through problems, opportunity for organization of ideas, especially through comparison and contrast.

4. To increase the child's skill in the use of scientific 'tools' of the geographer, such as map symbols, latitude, longitude, limits of the zones, etc.

5. By means of a projected trip to Japan, to teach about the International Date Line, including the need for its establishment and the actual time changes made.

6. To give the children more practice in the application of geographic principles, particularly those applied to climate, its various causes and results, especially (1) the causes of the change of seasons, (2) reasons for the seasons in the southern hemisphere being
opposite to ours, according to the calendar, (3) monsoon conditions and (4) the effect of rainfall of a very great continental mass.

7. To present the elements of world production and world commerce in a unified way, bringing together hitherto unrelated producing and consuming areas to show the world point of view (38:103-104).

In the listing of these objectives semester by semester, Hart shows remarkable thoroughness. After completing the 7B semester she has made provision for a maximum course and a minimum course, and has given the classroom teacher considerable scope for finishing the task. Her objectives appear to be all-inclusive because those listed by authors of geography texts and reference books since 1870 contain nothing additional.

2. Ridgely's Course

After collaborating with a committee consisting of college instructors, school superintendents, and elementary teachers, Ridgely, Professor of Geography at the Illinois State University, announced a five year plan of study. His course would consist of five large units which could begin at the third grade and extend through the seventh or at the fourth and extend through the eighth. After the first year, the foundation of each year's work was to be laid in the preceding grade and was to be the natural outgrowth of the previous year's progress. The units, as selected by Ridgely, were (1) Home Geography, (2) Studies in World Geography,
(3) North America, (4) South America, Europe and Asia,
(5) Africa, Australia and World Geography. A short plan of the course as given by Ridgely in his book *A Five-Year Course of Study in Geography for Elementary Schools* follows:

The Plan of the Course

This five year course of study in geography is the result of many years of cooperative effort among normal school teachers, training school teachers, county superintendents, city superintendents, and teachers in the elementary schools of city and country. The course indicates in detail the work to be accomplished year by year. It is adopted for use in grades three to seven inclusive, or four to eight inclusive. The work of each year consists of a complete, important unit, a natural outgrowth of the preceding years' work. The general scope of the entire course is indicated in the following units for each year of the course (72:Introduction).

A comprehensive study of the region in which the pupils live is definitely and systematically outlined by Ridgely in his course of Home Geography. He hoped that information of permanent value concerning everyday occurrences would be given, for upon this the studies of World Geography for the second year were based. During this year topics dealing with the various races of the earth, their manner of living and the degree in which they are affected by geographic and climatic conditions are presented. Some overlapping will result from such a course, but this will not affect greatly the detailed study of the continents to be pursued in the latter years of the course.
In the third year of the course, the first detailed study of North America is presented. The United States is first considered, then Alaska, Canada, the far North Stretches, and finally, Mexico and Central America. At the end of this year the continents as a whole should be reviewed. In the following year the same type of detailed study is to be used for South America, Europe, and Asia. Opportunity is then afforded for a comparison of these countries with North America and its integral parts. Fundamental geographic controls are applied to the study of Africa, Australia, and the World in the fifth year of the course, and the final work in the elementary school should culminate in a further study of the United States, but this time for the treatment of world-wide relationships. Here we have Ridgely's outline:

The Course in Home Geography outlines a systematic, definite, comprehensive geography study of the region in which the pupils live. This definite study of the home locality gives information of permanent value concerning the common things of everyday experience and lays a foundation for concrete presentation of the geography of more distant localities.

Studies in World Geography for the second year is so outlined as to present concrete topics of study drawn from different parts of the earth to show how people of the earth live under a great variety of geographic conditions. Topics of human interest have been selected and so presented as to give a definite concept of the world-whole without overlapping in any large measure the systematic, detailed study of continents in the later years of the course.

The study of North America in the third year of the Course gives the pupils their first detailed study of a continent. Step by step the various regions of the United States and other countries of North America are studied. The continent as a whole receives definite
treatment at the close of the year's work.

The continental studies are continued in the fourth year of the course by a study of South America, Europe and Asia.

Comparison of these continents with North America and with each other gives an understanding of the relative importance of each.

In the fifth year of the course, Africa, Australia, and World Geography, there is a systematic development of the study of geography from the causal point of view. The fundamental geographic controls are worked out and applied to the study of Africa, Australia, and the World. The work of the year and of the entire course culminates in a final study of the United States in its world-wide relationships (72:3-4).

Since Ridgely is an authority in his particular field, and since his outline is the result of collaboration with elementary teachers and superintendents, we believe that it should prove both definite and concrete. As given, it does not appear cumbersome, and it is distinguished by a very logical sequence. The possibilities for sustained interest in the large units are great. Varied treatments, as well as devices to be used in its presentation, are left to the judgment of the teacher. On the whole it is a well planned and intelligently presented course.

(g) Block Diagrams

The use of the so called "Block Diagram" is very helpful in giving an understanding of the geological structure of the earth below its surface. Lobeck has given, in the following quotation, complete objectives for its use in the teaching of geography:
Purpose. — Block diagrams have a two-fold function: First, to present pictorially the surface features of the ground; and second, to represent the underground structure. Unlike maps, which represent the surface only, and geological cross-sections, which represent the structure only, a block diagram represents the surface and the structure at the same time. In addition to this, the surface view and structural view are placed properly with regard to each other, so that the reader can with the greatest ease, see wherein the topography is determined or affected by the formations beneath the ground.

Moreover, the block diagram does not attempt to portray all the confusing and distracting details, which the map, by its very nature, would have to indicate. The block diagram selects just those elements to which attention is to be directed. While to this extent, it is lacking in accuracy because it does not convey the whole truth, it is not therefore any more to be condemned than is any generalized and simplified statement which is later to be elaborated. It is by this elimination of irrelevant facts, and by the exaggeration of the pertinent ones, that the block diagram conveys to the reader a clear cut idea, clearly and easily apprehended because of the interesting manner in which it is presented, and readily retained because of the visual impression which has been produced.

A block diagram presents the relationship between the surface of the ground and the underground structure by representing an imaginary block cut out from the earth's crust. The top of the block gives a bird's eye view of the region, and the sides of the block its underlying geological structure. A block diagram thus gives a three-dimensional picture, whereas a map or a geological cross-section gives only a two-dimensional one. While this three-dimensional expression is immensely to be desired in bringing out the intimate relation which exists between surface form and the underground structure, it is occasionally helpful simply as a means of conveying to the reader the intricate nature of the surface forms themselves, a task which the best map sometimes fails to accomplish even for the proficient map reader.

A block diagram owes its value to the ease with which it can be understood. The reader makes immediate acquaintance with it because there is nothing unusual about it. No conventions are needed to represent the topography. No explanation is needed to indicate the
position of the geological cross-section. It carries the message directly to the eye and leaves a visual impression unencumbered by lengthy descriptions. Thus Fig. I shows how flat-lying bituminous coal beds, outcropping well upon valley sides of the Allegheny River are exploited by horizontal drifts, or tunnels, the coal being then sent by a chute to the barges lying below (50:Introduction).

No explanations are needed for block diagrams, because their message is carried directly to the eye. Thus they require no lengthy explanation of any kind. In fact, all knowledge of the underlying strata of the earth, that cannot be obtained by actual visit and observation, can be gained from this type of diagram.
SUMMARY

The World War did much to destroy our self-complacency for it brought home this fact, that, as a nation, we knew much less about world geography than we had supposed we did. We were startled to find how little we knew of the geographical conditions affecting our armies and camps, then so widely distributed over this country and over Europe. The armies found themselves hampered, even in the war zone, by this strange lack of knowledge among the combatants. The news of this lack reached our schools and aroused the authorities to take greater heed to the teaching of geography.

The need brought out new methods, and, as a result, the problem-project, type, topic, and unit methods became increasingly popular in our schools. Continuation schools, junior and senior high schools, colleges and universities undertook to meet the need for more and better geography teaching and to remedy the conditions made so apparent by the war. Some of the outstanding authors of these reconstruction days were: Fairgrieve, Young, Martin, Visher, Winchester, Kilpatrick, Branom, Lackey, Smith, Sweeting, McMurry, Ridgely, and Hart. Each promulgated new objectives in the teaching of geography, and these objectives seemed fraught with new meaning. These might be termed (1) world friendship, (2) use of leisure time,
(3) citizenship, (4) patriotism. Hart compiled the aims she deemed necessary as a result of her experience in the Oswego Schools, and applied them to the elementary school grade for grade. She did the greatest amount of the work undertaken during this period (1917 to 1925). Her work and the list of her objectives in the teaching of geography have been given in the preceding discussion of her work.

By the year 1925 the surface scars of the World War had begun to disappear; at the present we are concerned with the author's change in style, that of giving the detailed method to be used in teaching their books, but neglecting to list the objectives to be sought in that teaching. Apparently they assume that, if geography is correctly taught and clearly understood, its aims and results may be taken for granted.
CHAPTER V

PRESENT DAY GEOGRAPHY TRENDS

The post-war readjustments are now becoming things of the past, and new textbooks, stressing the social side of geography and its influence upon world citizenship and international consequences, contain a wealth of new ideas and vital facts. For the texts and the supplementary reading of the geography class, there has been developed a new style, which has made the study a pleasure because of its interesting manner of presentation. In all the schools - elementary through university - geography has become a more important part of the curricula and has attained a new significance for the student. Although geography had been an integral part of all standard elementary schools since 1870, it had never been presented in the attractive manner that has become characteristic during the past few years. The question, whether or not geography should be an important subject in junior high school curricula, has now been answered affirmatively. The senior high school had always taught geography, but, as a subject, it had never been accorded the place given to social studies in recent years. The colleges and the universities have created departments of geography and now offer varied courses, which include all phases of the study, while the more progressive universities give grad-
uate degrees in the subject.

Authors have abandoned the habit of putting long lists of objectives into their introductions or prefaces, choosing rather to include a few outstanding objectives of such a nature that they may be divided and subdivided into numerous definite aims in keeping with the trend of modern life. The use of supplementary geographical texts has become more prevalent, because educators now agree that geography should not be taught by means of a single basic text.

(a) Geographical Literature

A basic text is essential for the proper planning of geographic subject matter, but exclusive dependence upon one book deprives both teacher and pupil of a vast amount of pleasure. Success in teaching is attained through an acquaintance with all the literature available on the subject under discussion. Upon the teacher's judgment depends the method of procedure to be used with supplementary material. Shall she impart the needed information, shall one pupil give it, or shall all the members make the finding of it a class project? Although the material sought and the time available for its study are factors to be considered, in any method of procedure, educators in general agree that the exclusive use of one tends to become monotonous. All methods, therefore, should be used in the proportion necessary for holding the interest of the
class. The use of supplementary material is to be commended for giving pupils a fund of general knowledge, since textbooks are usually confined to material of a limited field. Then, too, this habit not only adds to the pupil's vocabulary, but also gives him practice in observing the various ways in which authors present their material. If the habit of research is inculcated at this time, it bodes well for the future of the student, since it establishes a feeling for subject matter and fixes the habit of weighing it pro and con. These, in turn, lead to a better type of citizenship. It is not too much to say that the ideal of world citizenship is given impetus at this time. Despite the momentous results to be achieved through this form of reading, the use of supplementary material should be quite recreational. It is the wise teacher who tries to make it so for all her pupils (50:105-123). Her task is made easy because books on travel, exploration, industry, commerce, and fiction are now available for students of all ages. Educators have written many books relating to peoples, their occupations, and their homes, and from these a wealth of geographical data can be obtained.

One of the finest examples of present-day geography teaching is the Social Geography Series by Branom and Ganey. According to Sadlier, the publisher of this series, the pupil is lead to understand these two facts: first, "how man has solved the problem of using his hands and brains; and, second, how he
has solved the problem of working with his fellow men.

(b) Elementary Geography

1. Smith's Home Folks

J. Russell Smith in his Home Folks, A Geography for Beginners, gives the elementary pupil an entirely new approach to the study of geography. This approach seeks to aid the pupil in his early attempts to become acquainted with a geography textbook, and with the study of geography itself. In his text Smith compares the life of the country child with that of the city child, and, in so doing, gives the student the role of both children by a series of clever comparisons. Since all civilized people live in a city, a town, a village, or a country community, Smith describes certain outstanding aspects of all of these, and, in so doing, gradually introduces the child to his own environment. The book consists of a series of problems, the principal motivation of which is to learn how the people of these communities adjust themselves to their environment and earn their living. In the introduction to his text, Smith brings to the teacher's attention the so-called "New Plan" and shows wherein his book differs from other elementary textbooks in geography.

This book for beginners presents a new way to begin the study of geography. It does not attempt to describe the United States or any other country as a group of land areas or as political divisions. Instead it tells how some boys and girls live in the
country and then how some boys and girls live in the city. It also gives a description of the country village and the country town. We all live either in the country, the city, the village, or the town. By describing some aspects of life in these type places, this book introduces our own country and the study of geography.

The book might be considered as a series of problems - the problems being to discover how people live and make a living in each of these typical places (77:To Teachers).

This text, written in the language of the child, acquaints him with his own world. It contains many new and interesting facts which are enhanced further by numerous pictures selected by the author. "Seeing is believing" seems to have been the principle that guided Smith while writing this book because it contains more illustrations than in any other geography of its type. For its proper use, he urges that the children be allowed to examine the pictures carefully, and then that they be tested to find whether or not they have gained the proper impressions from them. Pictures constitute quite as important a part in this text as does the written material. The author also gives the teacher his concepts for teaching this book in these words:

This book introduces the child to his world. Therefore, it deals with many new facts, objects, processes and ideas. To every child there will be many new things which he cannot see in reality, yet seeing is believing. Pictures aid visualization. This is a book of visual education. It contains more pictures than any other geography book of its class. The pictures have been selected with the greatest care. Many of them have been especially drawn so that their educational value and interest might be enhanced.
Many persons in a position to know, are convinced that the illustrations in geography texts are not used as much as they should be.

Teachers are urged to see that each child who uses this book examines each picture, knows what it shows, and can tell about its relation to the story. The pictures are an integral part of the text (77: To Teachers).

Children become greatly attached to this text, for the pictures are new, educational, and interesting. They are reproductions of things with which no normal child can fail to be impressed. Many pupils will gain more by studying the pictures than they will be reading the printed matter. To the pupil familiar with the English language the pictures will prove helpful, to the child unfamiliar with the language they will prove even more helpful, and to the lazy child, they will prove most helpful of all, since they will intrigue his interest and give him a desire to study the printed material.

The three outstanding aspects of geography for beginners as discussed in Smith's book are:

Part I. The Farm Home.
Part II. Life in a Large City.
Part III. A Truck Farm Neighborhood.

By skillful comparisons and by imaginary trips, child life in the country, in the city, and on the truck farm is presented to the pupil in an interesting and easy manner.

A striking contrast to Smith's method is that of Packard and Sinnott in their text Nations as Neighbors, for they con-
sider nations in the light of neighbors and do not stress only the pupil's environment.

2. Packard and Sinnott's *Nations as Neighbors*

A spirit of internationalism pervades the text, *Nations as Neighbors*. The objectives of the authors, Leonard O. Packard and Charles P. Sinnott, are found in the preface of the book and are stated as follows:

1. To prepare our citizens to take an intelligent action upon all questions pertaining to our relations with other nations.
2. To promote good citizenship and to help in the development of higher national ideals.
3. To understand and appreciate the contributions which each nation makes to the world's welfare.
4. To stress the necessity of conserving great national resources and of appreciating the dependence of one part of our country upon the other parts as well as the interdependence of the great producing regions of the world.
5. To emphasize the dependence of the life and occupations of any locality upon the resources of the natural geographic regions of which it is a part and upon its accessibility to the resources of other regions.
6. To treat with considerable fullness the resources, industries, commerce, and relationships of the leading nations of the world (61:Preface).

Since the telegraph, the telephone, the cable, the radio, and the other means of communication have reached such a high point of perfection, nations the world over have been brought into a closeness of relationship, wholly inconceivable two centuries ago. The words of Louis XIV, "The Pyrenees no longer exist", have become literally true. No longer can the
pyrenees, the Alps, or those great masses of gray, tumbling water, the oceans, act as barriers to communication. This closeness makes it necessary to train our citizens for the relationship into which they are now entering with the rest of the world, and to prepare them to take an intelligent interest in questions which may grow out of this new state of affairs. Since each nation contributes something to the welfare of the world, an understanding of and an appreciation for this contribution will help to create a feeling for world citizenship as well as for higher national ideals.

Nations as Neighbors calls attention to this fact, also, that because of the increase in population, there is need for conserving the great natural resources of the nation, so that commerce and industry may make a maximum contribution to man with a minimum amount of labor and loss.

To stimulate and to clarify thought the authors have equipped their book with many helps for study; and to vitalize the reader's concepts, especially in matters of detail, they have also equipped it with a bountiful supply of pictures, detailed maps, graphs, and diagrams. The inclusion of these aids and devices has been made with the hope that, through them, the pupil may become better acquainted with man, his needs, and his relations to the rest of the world. The objectives of both authors and publishers are given as follows:
It has seemed advisable both to the authors and to the publishers to equip this book to the fullest extent with helps to study, such as maps in color and in black and white, illustrations, and suggestive questions to encourage and clarify thought. Every effort has been made to secure a bountiful supply of photographs that really illustrate; of detailed maps, graphs, and diagrams, that clarify and vitalize the reader's concepts in matters of detail; and comprehensive maps and statistical tables for ready reference.

This is a book which children really enjoy. Such deviation from the usual geographical nomenclature as is found in their title Nations as Neighbors compels interest in the contents of the book. Used either as a text or as supplementary reading material, Nations as Neighbors commands respect and should accomplish, in the average class, the author's hopes. Its sole defect is that of language which is neither as simple nor as attractive to pupils as that of the Branom and Ganey series.

3. The Branom and Ganey Series

A very clear and modern treatment of geography has been given by Branom and Ganey in their Social Geography Series. These are, at the present time, the most popular of all the geographical texts used in the elementary schools of our city. The authors have divided them into three sets termed the Four Book, Five Book, and Three Book, Series. The topics treated in the Four Book Series are of (1) 'Home Lands and Other Lands,' (2) 'Western Hemisphere,' (3) 'Eastern Hemis-
phere,' and (4) 'Our World'; in the Five Book Series, (1) 'Home Lands and Other Lands,' (2) 'North America and the United States,' (3) 'Canada, Latin America and Europe,' (4) 'Asia, Australia, and Africa,' (5) 'Our World'; and in the Three Book Series, (1) 'Home Lands and Other Lands,' (2) 'The Hemispheres,' (3) 'Our World.'

Social efficiency and good citizenship - two outstanding aims in all good education - are the motivating forces in these books for elementary pupils. Consideration for the child and his problems has been shown by the authors through their method of introducing subjects which will develop a proper outlook on life, together with ideals, appreciations, habits, attitudes, and skills. We feel that Branom and Ganey had in mind the needs of the child and sought the easiest way for him to accomplish the study of geography, when they gave expression to their aims in the following words:

In writing these series of geographies, the idea has been kept constantly in mind that the chief aim of education is for complete social efficiency and good citizenship. The child has been considered at every step, because after everything has been said and done, it is the child in whom we are interested. Subjects are of importance only in so far as they furnish those experiences which will enable boys and girls to develop the right ideals, appreciations, habits, attitudes, skills, and knowledges needed for life.

The function of modern human geography is to show how the activities of man are influenced by the natural environment. Climate, surface, soil, water bodies, minerals, plants, and animals are the chief physical factors which make up the natural environment. These physical factors, influence the
activities of man. They help to determine what he does. Sometimes it may seem that man pays very little attention to his natural environment. However, if we study more closely, we see that the physical factors influence his activities to no small degree. As man makes progress and increases in knowledge, he learns how to adjust himself better to his natural environment with the least difficulty (6: To the Teacher).

Man's activities are influenced by his natural environment, and so it is the function of modern human geography to show how climate, surface, soil, water, minerals, plants, and animals constitute or affect man's natural surroundings. Man, so it seems, pays little or no attention to his environment, but when we make a study of man and his surroundings, we cannot fail to be impressed by this fact, that man earns his living according to the physical factors of his environment. As man increases in knowledge, he learns to adjust himself more satisfactorily to his environment.

This series of Brannom and Ganey geographies is easily adaptable and can be fitted to any course of study. It is organized on the single cycle plan which prevents the presentation of the same material along identical lines. The treatment of certain regions given later in the series is not the same as that already given, because the authors very wisely shift the emphasis and so open up new vistas of knowledge. Food, clothing, and shelter, vital alike to man and to nations, should not be the only aspects studied in the study of geography but those showing how man has co-ordinated brain and hand
and how he has solved the problem of working in peace and harmony with his fellow men. These are two social aspects which the pupil will see very readily from these books.

(c) The Junior High School

1. The Selection of Geography Material for Junior High School

In adolescence, the pupil develops an interest in life and in people that is rarely found in earlier or later years. He seeks new relationships, delves into the reasons for existing forces, and, in particular, studies the problems of other people. At this period of his life, geography should have a special significance for him, as a splendid outlet for these intellectual, emotional, and volitional characteristics. In the junior high school, therefore, special attention should be given to geography (48:137-8). At the meeting of the National Council of Geography Teachers, held at Madison, December 25, 1925, Lackey gave the following reasons for the need of geography in the life of the adolescent:

At this crucial and strategic period geography offers a rich assortment of material designed especially to promote a sympathetic attitude and understanding of peoples in specific natural environments as they go about their daily quest for the necessities and luxuries of life (48:140).

In selecting geography material for the adolescents of the junior high school, it is essential that it be of a nature to fill this "crucial and strategic period" of their
lives and give them such a sympathy for and an understanding of other people, that pupils will neglect their own interests for the well-being of others. Geography material, suited to the adolescent, offers a rich field of possibilities, and seeks to develop in the pupil an interest in people of other environments, in their daily duties, and in their quest for the necessities of life. Lackey's address shows an insight into trials and tribulations of the adolescent as he seeks those things in school life which will command his lively interest.

2. Gosling's Purposes of the Junior High School

Gosling offers us a somewhat more detailed program for the junior high schools, although, in its essential points, it is similar to that of Lackey. Writing of the purposes of the junior high school, Gosling declares:

It is to offer programs of studies which will be suited to the varying needs of boys and girls in their early adolescence; to assist them to develop the right attitudes toward life and its problems; to take into account their budding idealism and their emerging religious concept; to acquaint them in an elementary way with the social, the economic and the political problems which they must soon face in the world and outside of school; and to inculcate in them by theory and practice the principles of good citizenship (48:139).

When the young child first enters the elementary school, he does not differ from others in his class, for all newcomers know little or nothing of school. On the contrary, the
pupils who enter junior high school show marked differences, some of which are background, home environment, knowledge, health, and habits. It becomes, therefore, the duty of the junior high school to minister to the varied needs of the pupils who enter its portals and to see that they develop the right attitude toward life. At this school level, we find pupils possessed of a marked idealism and an active interest in religion. At this time, also, they have their first real contact with the social, economic, and political problems, which they must solve when their school days are over. The junior high school should foster civic ideals, which will result in good citizenship and not in theory. Such training makes the junior high school an important factor in building up that bulwark of the nation, a splendid class of citizens. The function of the junior high school is, therefore, of great importance.

3. Fish's Research

Geography, once admitted to the curriculum of the Junior High School, had to be measured so that its educational values might be worthwhile, and its course of study so organized as to meet the pupils' needs. Expert opinion was necessary in order that the subject matter be selected on the most scientific basis possible, for due to lack of time and to different methods of procedure books had often been recommended that did
not meet the pupils' needs. Fish made a detailed investigation to determine:

1. The aims of teaching geography as set forth by expert opinion, i.e., by authors of leading textbooks, by teachers of geography, by courses of study, by writers of magazine articles and professional men in education.

2. The content of geography as found by:
   (a) A detailed analysis of geography textbooks.
   (b) An analysis of the type of questions asked by geographers in their textbooks for review exercises and practical study (28:315).

When determining the aims of geography teaching as expressed by experts, Fish did not limit herself to geography textbooks alone, but included courses of study, magazine articles, and books on education. She sought, too, the opinion of teachers of geography. From the table which follows, we find that in thirty-nine geography textbooks, fifty-six different aims were listed by the authors, and these comprised ten and eight-tenths per cent of the total number Fish had discovered in her research work. One will be surprised to learn that there are fewer aims given by the authors in their textbooks than there are to be found elsewhere. In a series of eleven magazine articles there was found a total of one hundred twenty-nine different aims, which was twenty-four and nine-tenths per cent of the total number of listed aims. The following table gives the frequency of the sources, the number of the aims, and the percent of the total number of aims for each source.
<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Each</th>
<th>Number of Aims</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography Texts</td>
<td>39</td>
<td>56</td>
<td>10.8</td>
</tr>
<tr>
<td>Books on Teaching Geography</td>
<td>16</td>
<td>82</td>
<td>15.8</td>
</tr>
<tr>
<td>Professional Books on Education</td>
<td>14</td>
<td>89</td>
<td>17.2</td>
</tr>
<tr>
<td>Courses of Study</td>
<td>12</td>
<td>93</td>
<td>18.0</td>
</tr>
<tr>
<td>Miscellaneous Sources</td>
<td>12</td>
<td>69</td>
<td>13.3</td>
</tr>
<tr>
<td>Magazines</td>
<td>11</td>
<td>129</td>
<td>24.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
<td><strong>518</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

After making her investigation Fish classified her results and later published them in tabulated form in the *Journal of Geography*, (1926-27). In her article entitled "Aims and Content of Junior High School Geography", she says:

A classification of the various aims gathered from expert opinion was set up by defining each class objectively. The aims were grouped according to ten classes and a table of frequency was made. Another frequency table was made to take care of the sources of aims (28:315).

* The above Table has been taken from Olive C. Fish's "Aims and Content of Junior High School Geography", *Journal of Geography*, 1926-7, Page 319.
After collecting the aims from various sources, Fish decided to classify them. She made this classification by defining each class objectively, and followed it with a count showing the number of times certain types had appeared in the total number of aims. Psychological, and social aims, and those of judgment were found to have the greatest frequency; the first-named making up more than half of the aims given. A glance at the following Table will give the frequency and the per cent of the aims according to the classification of Fish:

**TABLE III**

Classification of the Aims of Teaching Geography*

<table>
<thead>
<tr>
<th>Aims</th>
<th>Frequency</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Psychological Aims</td>
<td>329</td>
<td>63.5</td>
</tr>
<tr>
<td>Development of Habits</td>
<td>24</td>
<td>4.6</td>
</tr>
<tr>
<td>Development of Skills</td>
<td>23</td>
<td>5.4</td>
</tr>
<tr>
<td>Development of Abilities</td>
<td>27</td>
<td>5.2</td>
</tr>
<tr>
<td>Development of Attitudes and Ideals</td>
<td>19</td>
<td>3.6</td>
</tr>
<tr>
<td>Development of Appreciations</td>
<td>41</td>
<td>8.0</td>
</tr>
<tr>
<td>Development of Imagination</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Geography as a Means of Giving Facts and Principles</td>
<td>62</td>
<td>12.0</td>
</tr>
<tr>
<td>Growth in Judgment Making</td>
<td>116</td>
<td>22.4</td>
</tr>
</tbody>
</table>
TABLE III (continued)
Classification of the Aims of Teaching Geography *

<table>
<thead>
<tr>
<th>Aims</th>
<th>Frequency</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Discipline</td>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>Total Social Aims</td>
<td>179</td>
<td>34.6</td>
</tr>
</tbody>
</table>

In addition to the objectives obtained and these have such practical values as the development of skills, habits, abilities, appreciations, mental discipline, and the like, (see foregoing table), Fish found other aims which she could not include in this table but which were given by authors as aims of geography. Because of their general nature, she found these were more difficult to classify. Understanding of human relationships, world-mindedness, and culture are the outstanding features of this classification, and the three have as their sum a number equal to nearly half of the total frequencies.

*The above Table has been taken from Olive C. Fish's "Aims and Content of Junior High School Geography," Journal of Geography, 1926-7, page 317.
TABLE IV
Classification of the Aims of Teaching Geography*

<table>
<thead>
<tr>
<th>Aims</th>
<th>Frequency</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Propaedeutic Aims</td>
<td>10</td>
<td>1.9</td>
</tr>
<tr>
<td>Geography as a Means of Enriching Experience</td>
<td>20</td>
<td>3.8</td>
</tr>
<tr>
<td>Understanding of Human Relationships</td>
<td>41</td>
<td>8.0</td>
</tr>
<tr>
<td>Preparation for Citizenship</td>
<td>19</td>
<td>3.6</td>
</tr>
<tr>
<td>World Mindedness</td>
<td>35</td>
<td>6.7</td>
</tr>
<tr>
<td>Social Efficiency</td>
<td>29</td>
<td>5.8</td>
</tr>
<tr>
<td>Culture</td>
<td>35</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Studying the data compiled by Fish to determine whether the educational values of geography are sufficient to warrant it a place in the curriculum of the junior high school, we concluded that they are. Because of the foregoing aims, geography should hold a very important place in junior high school education and in schools where high standards prevail it is accorded such a place.

*The above Table has been taken from Olive C. Fish's "Aims and Content of Junior High School Geography," *Journal of Geography*, 1926-7, page 318.
(d) High School Geography

1. Report of the National Council Committee on High School Geography

In a conference held at Peabody College for Teachers, April 1 and 2, 1927, the Southern Council of Geography Teachers indorsed in full the report of the Committee of the National Council on High School Geography which had been held the previous September. Some of the members of the National Council were Boening, Supervisor of Junior High Schools, Baltimore, Md.; Buzzard, State Normal University, Normal, Illinois; Packard, Teachers' College of the City of Boston, Massachusetts; Shields, Columbia University, New York City; Thralls, State Normal School, Indiana, Pennsylvania; and Parkins, George Peabody for Teachers, Nashville, Tennessee. The last-named had served as chairman of the National Council Committee and so was conversant with its work. Upon his return to Peabody College, he held a meeting of the teachers at which the following objectives in the teaching of geography which had been discussed previously at the National Council were fully indorsed and accepted:

Knowledge Objectives:

1. Knowledge of the economic activities of the pupils' own community and his country at large.
2. A knowledge of the major economic activities of the various peoples of the world, stressing the relations of the work of the individual to the world's work, thus dignifying the work and assisting the child.
in his choice of a life career by helping him to find his own personal interest.

3. Knowledge of the immense potentialities of our country and of the numerous opportunities which it offers for vigorous, thoughtful men and women.

4. Knowledge of the extent and ways in which environment promotes well being.

5. Knowledge of the nations of the world and of their interdependence and of the necessity of their living together as a world family.


7. Knowledge of the specific usefulness of the various maps employed in school work, home, public libraries and the business world.

8. Knowledge of the sources of first hand geographic data, with specific usefulness of each type, and of the important centers conducting geographic investigation, exploration and publication (16:211).

The National Council had considered the objectives of geography under these three headings, knowledge, habit, and appreciation. In his report Parkins left them under these original groupings, for it would be a difficult task to separate one objective from the others, because all are so closely related in thought. Knowledge of the activities of his own community is always of vital importance to any individual, and knowledge of his own country is of supreme importance to every patriotic boy and girl. Next to the work of his own community and country, a knowledge of the work of other races and of its relation to his own life is vital, because it may help the child in choosing his own career. The choice of life work is always important to the individual. A subsidiary to these three outstanding ideas of home community, country, and the world, is the knowledge resulting from the proper use of maps,
globes, and library books dealing with geographic investigation, exploration, and publication. Following are the habits to be acquired from the objectives previously mentioned:

Habits:

1. The habit of 'sizing up' situations with an interest in discovering their geographic aspects.
2. The habit of using geographic tools such as books of reference, pictures, graphs, verbal material, specimens, in seeking information on the topic at hand and to develop the ability to assemble data, weigh facts, draw conclusions and express opinions.
3. The habit of applying geographic principles whenever practicable, in the interpretation of problems and events of current interest.
4. The habit of suspended judgment.
5. The habit of reading geographic literature in leisure time (16:211).

All knowledge attainments will be in proportion to the habits acquired in the process of their acquisition. One attains geography knowledge by living, reading, and studying geography. In so doing the habit of 'sizing up' situations with the idea of discovering their geographic content should soon become a part of one's makeup. Proper habits in the use of such geography tools as reference books, pictures, graphs, maps, globes, and specimens, should become fixed. Correct methods of seeking information, assembling data, weighing facts, drawing conclusions, and expressing correct opinions should also become inherent in the true student of geography. If one has acquired good geography habits, the application and interpretation of problems of current interest will become
second nature to him. Finally, the habit of reading good literature in leisure time will complete the task of getting the best results that can be obtained from the teaching of geography. Closely allied to the knowledge and habit objectives in this study are the appreciation of what geography means to the world in general and to the individual. Parkins has succeeded in reducing these appreciations to eleven in number and has stated them as follows:

Appreciations:

1. An appreciation of the fact that we are living in an age characterized by rapid changes in man's relation to his physical environment, to society, to the state, and to the world.
2. Sympathetic appreciation of the elements of the physical environment which helped to explain the work and play activities of man in specific environments.
3. An appreciation of the fact that in a country as large as ours with problems peculiar to sections playing a large part in national politics, a spirit of tolerance is essential to state and national stability.
4. An appreciation of how the physical environment necessitates the interdependence of people and nations as man's wants become more numerous.
5. An appreciation of the way in which the physical environment may handicap or significantly encourage a country to take place in world affairs.
6. An appreciation of the interest geography gives to one's reading.
7. An appreciation of our resources and potentials in comparison with those of other nations, of our accomplishments with theirs, of our economic and social conditions with theirs.
8. An appreciation of the great need of the conservation of our natural resources, and our cooperation with other nations in establishing a world conservation policy.
9. An appreciation of the value of good government as a factor in the utilization of the resources of an environment.
10. An appreciation of the obligations of the United States as a world power and a member of the great family of nations has to all peoples.


An appreciation of the content of geography will result from the proper application of its knowledge and habit objectives. From these objectives, too, there should be an appreciation that this is an age of rapid change in all of man's relations to his environment, i.e., to the community, to the state, and to the world. In any community, large or small, a sympathetic attitude and an earnest consideration of the problems peculiar to it play an important part in the stability of that community as well as to the state and nation. A spirit of tolerance aids, too, in understanding the handicaps or misfortunes of others. Man's wants become more numerous as civilization advances, and these have their effect upon the interdependence of peoples and nations, for they acquaint one with the liabilities as well as the assets of nations. An understanding of this interdependence encourages nations to take part in world affairs for world betterment. An appreciation of the interest which geography imparts to reading makes us choose certain types of current literature for reading. This interest, in turn, gives us an insight into social and economic problems and the cooperation needed in a world conservation policy. It stresses, too, the need of good govern-
ment, the obligations of our own nation as a world power, and the great value of geography in making travel profitable and interesting.

From the knowledge objectives we believe that a student will unconsciously find himself applying the habit objectives of geography to all material brought within his ken. This practice will lead to an understanding of the value of world knowledge and this will serve satisfactorily as an objective until regular habits and appreciations become fixed. As none of these objectives can be independent, a mutual dependence of objectives is essential to an effective mastery of geography.

(e) College and University Geography

1. Geography as the Core Subject of the Curriculum

Because students of social science at the University of Illinois were unable to grasp the fundamental relationship of man to his environment, the teachers of economics there insisted that geography should become a prerequisite for their courses. As a result of this insistence, geography has now been made an entrance requirement at many universities. The authorities at the University of Pennsylvania deemed it necessary to combine the study of geography with courses in commerce and industry; those at Columbia University, on the founding of the School of Business inaugurated a department of geography. This subject was then made a prerequisite for later
work in their business subjects because they believed that economics, foreign trade, banking, and commerce need a foundation of geography. At this university, too, the department of Sociology included a study of man and his environment. In discussing geography as presented in American Universities, Renner, of the Teachers' College, Columbia University speaks thus admiringly of its status at the University of Chicago:

The University of Chicago has established a great school of geography in which to train thoroughly professional geographers, but in addition, there has been worked out at that school a system of minor sequences of courses in geography to furnish students in other lines with a basic grasp of man's fundamental relation to his world, a thing which offers promise of giving an underlying principle to education. Thus we see our colleges and universities coming to the realization of the fundamental and necessary character of geography (69:75).

In the study of sociology, economics, foreign trade, banking, commerce, and other studies connected with schools of commerce and business, students having a background of geography are found to have a broader concept of their studies and a better understanding of their work than those without such a background. This basic concept of man's fundamental relationship to the world is a vast help in all later college or university work. The Universities of Illinois, Pennsylvania, Chicago, and Columbia, have made geography a requirement for admission to some of their colleges. The University of Chicago has gone farther in this study than any other university and offers courses intended to train professional geographers.
2. College and University Summer Courses

The following is a list of summer courses scheduled by prominent schools throughout the country in 1926 as published in the *Journal of Geography*. The names of the courses were given also, but they have been omitted as they are unnecessary here, but the number of courses given by each university or college has been obtained. This list is intended primarily to show the importance that geography has attained in higher education. The facts, as compiled by the editors, follow:

### TABLE V
Summer Courses in Geography June - August, 1926

<table>
<thead>
<tr>
<th>Name of College or University</th>
<th>Place</th>
<th>Number of Courses Given</th>
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</thead>
<tbody>
<tr>
<td>University of Colorado</td>
<td>Boulder, Colorado</td>
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</tr>
<tr>
<td>Idaho State Normal</td>
<td>Lewiston, Idaho</td>
<td>4</td>
</tr>
<tr>
<td>Chicago Normal College</td>
<td>Chicago, Illinois</td>
<td>6</td>
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<tr>
<td>University of Chicago</td>
<td>Chicago, Illinois</td>
<td>19</td>
</tr>
<tr>
<td>Northwestern University</td>
<td>Evanston, Illinois</td>
<td>5</td>
</tr>
<tr>
<td>Illinois State Normal</td>
<td>Normal, Illinois</td>
<td>19</td>
</tr>
<tr>
<td>University of Illinois</td>
<td>Urbana, Illinois</td>
<td>2</td>
</tr>
<tr>
<td>Indiana State Normal</td>
<td>Muncie, Indiana</td>
<td>9</td>
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**TABLE V (continued)**

Summer Courses in Geography June - August, 1926

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<th>Number of Courses Given</th>
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<tr>
<td>University of Kansas</td>
<td>Laurence, Kansas</td>
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<tr>
<td>State Teachers College</td>
<td>Pittsburgh, Kansas</td>
<td>11</td>
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<tr>
<td>Western State Teachers College</td>
<td>Bowling Green, Kentucky</td>
<td>6</td>
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<tr>
<td>State Normal College</td>
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</tr>
<tr>
<td>University of Minnesota</td>
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<tr>
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<td>Ithaca, New York</td>
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<tr>
<td>Columbia University</td>
<td>New York City</td>
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<td>Ohio University</td>
<td>Athens, Ohio</td>
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<tr>
<td>Oberlin College</td>
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<td>Miami University</td>
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<td>University of Pennsylvania</td>
<td>Philadelphia, Pennsylvania</td>
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<tr>
<td>University of Pittsburgh</td>
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<tr>
<td>Pennsylvania State College</td>
<td>State College, Pennsylvania</td>
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<tr>
<td>George Peabody College for Teachers</td>
<td>Nashville, Tennessee</td>
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<td>Abilene Christian College</td>
<td>Abilene, Texas</td>
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<tr>
<td>Southern Methodist University</td>
<td>Dallas, Texas</td>
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TABLE V
Summer Courses in Geography June - August, 1926

<table>
<thead>
<tr>
<th>Name of College or University</th>
<th>Place</th>
<th>Number of Courses Given</th>
</tr>
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<tbody>
<tr>
<td>Sam Houston State Teachers College</td>
<td>Huntsville, Texas</td>
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<tr>
<td>University of Wisconsin</td>
<td>Madison, Wisconsin</td>
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<tr>
<td>Milwaukee State Normal School</td>
<td>Milwaukee, Wisconsin</td>
<td>3</td>
</tr>
<tr>
<td>State Normal School</td>
<td>Whitewater, Wisconsin</td>
<td>6</td>
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The foregoing list is taken from the Journal of Geography for the year 1926, pages 193-8.

In support of our statement regarding the importance of geography in college curricula, we see from the data just given that a total of thirty-one colleges and universities, widely distributed in area, gave two hundred sixteen courses in geography during the summer sessions of 1926. This should be ample proof that the universities have become more and more "geography conscious" since the World War.

3. Reading Purposes in Geography

Reading, which is one use of leisure time, enables the pupil to live at any period of time and to undergo all manner of adventures and experiences. It does not seem unreasonable
to suppose that he will enter into the life of his own community as well as regions more remote. Ability to use a book is a process of development. By means of this ability he knows where to look for the proper answers of all questions. Grasping the principal thoughts in any given selection involves the power to balance ideas with the ability to note existing relationships. Imagination is an important factor in visualizing what has been read, and most children seem to have unlimited powers along this line despite their limited experience. This power often surprises adults by its extreme vividness. To ask questions continually about anything and everything is natural to a child, and no child has ever developed naturally without asking questions. Such a tendency is a much-desired aspect in the education of youth (42:321-30).

Hutson, of the University of Pittsburgh, gives us the following list of desirable reading purposes in geography:

1. Reading as a 'mode of living'.
2. To find an answer to a particular question or a narrow group of questions.
3. To grasp the principal thoughts of a selection.
4. To visualize a situation.
5. To raise questions, to discover problems.
6. To raise questions, to discover problems, when that is the pupil's conscious aim.
7. To induce the ideas gained from reading to associate themselves with as many items in the reader's past experience as possible.
8. To memorize the facts in the typical geography textbook.
9. To comprehend the organization of an article so as to be able to indicate the relations between the various ideas by an outline.
10. To draw conclusions from data or statements (42:322)
Knowledge of other places and of other people may be gained in various ways and some of these are, (1) by actually meeting people who have traveled and who have the ability to describe their experiences, (2) by observing other modes of living by means of the cinema, (3) by visualizing books of travel. The best means of gaining geography data, however, is through the reading of books, magazines, or newspapers. A child may traverse vast areas of the world by no other means than his imagination. Such ability demands proper selection of books to be read during his leisure time. Books will quicken his understanding of other people and of their modes of living. Through them he can project himself into the lives of others, and can find solutions to the problems confronting them. Because his interest is aroused, his mind will grasp vividly the principal thoughts of a selection. Any information that he cannot gain from the reading, he will endeavor to obtain from his parents, from other boys and girls, or from his teachers. When given a list of questions to answer, he will find it a stimulus to careful thought, provided the answers are sufficiently interesting to his inquisitive mind. The active, young mind constantly compares the things read about with the experiences of everyday life. Later in his elementary school career, he should be able to make topical outlines of the important facts of his geography reading. Once having grasped the facts and the principles involved, he
should be able to draw satisfactory conclusions, correctness of which he can verify with the aid of his teacher. In listing the reading objectives to be gained from geography, Hutson has covered every point of importance as well as all the logical steps of learning.

4. The Humanizing of Geography Knowledge

Orata, of Ohio State University, in stressing the humanizing effect of geographical knowledge, has endeavored to show that the study of geography centers around the relationship of man to his physical environment. He states that:

It is the aim of the study of geography to give an understanding of physical conditions and natural resources as the material basis of social development by showing the relationships that exist between man and his physical environment. To this end the study of geography must (1) lend environment; (2) lead to the discovery of geographical principles which would make man aware of a possible modification of his behavior for better adaptation; (3) make people realize that differences in temperament, character, and achievement result, in part, if not very largely, from differences in natural environment - such realization helping to promote a sympathetic understanding of people in that it affords a key to the explanation of characteristics and attitudes of different peoples that are likely otherwise to be misunderstood; (4) the study should make men of different races and nations conscious of the fact that each race, however backward it might be, has contributed and will continue to contribute to the sum total of human welfare which we call civilization (60:281).

No new objectives for the teaching of geography were advanced by Orata in this article. The idea of race-consciousness, however, has taken on a new significance. Men of all
races contribute to civilization no matter how backward they may be and each race, in its own way, gives something to the sum total of human welfare.

5. The Necessity of Accurate Knowledge About Places

Any teaching of geography would be inadequate without the inclusion of definite and specific place relationships. Since all geography content deals with the location of places on the earth's surface it should follow that they be included as incidental items, and not as main facts. For all important places, the name, location, and any outstanding geographical data should constitute an adequate amount of knowledge. "What is it?" "Where is it?" These are the two questions that have made geography so unpopular because there are no vital associations called up by them and there is a strain on the memory through the learning of unrelated facts. If we follow the plan of Ridley in this matter we would have the following sequence:

1. Name, including pronunciation and spelling.
2. Location, to be given with sufficient fullness and accuracy to enable another person to find it promptly on the map.
3. Such geographical facts as the importance of the place warrants. This should include, as a minimum one or two items of sufficient value to justify the name in a selected list of places for use in the elementary school or junior high school.

Frequently, when conversing with others, we are astounded
At the mispronunciation of geographical names that we feel all should know. This fault usually results from careless pronunciation in the geography classroom. Not only should accurate place pronunciation be stressed, but also should place spelling be considered of sufficient importance for class discussion. Location should be the next step in the teaching of place geography, together with some geographical data of sufficient importance to the discussion. Ridley has covered thoroughly these three needs in an article appearing in the *Journal of Geography* (1926) entitled "The Necessity of Accurate Knowledge About Places." In teaching place geography, the old-fashioned method of learning places by the column has been discarded, and the modern method teaches those place names which arise in the course of class work. Many places will be taught incidentally during the years allotted to geography study and few places, if any, will be taught formally.
SUMMARY

At last socialized geography has come into its own in the elementary school! This fact has been proved by Smith, Packard and Simnott, and Branom and Ganey, the five outstanding authors of this period in the field of elementary geography. Although the objectives have remained practically the same as those previously listed, they have taken on new life and coloring, and their meaning has taken on an entirely new significance and a sympathetic understanding. In the junior high school, Lackey, Gosling, and Fish have agreed that the adolescent boy and girl are passing through a critical period in their lives, but they find that individual differences due to home environment and training, will develop into right attitudes, ideals, and principles of good citizenship, through the proper application of the study of geography. In the senior high school the objectives in the teaching of geography have been classified by Parkins under three heads - knowledge, habit, and appreciation. In our colleges and universities, Renner, Orata, and Ridley have shown the need for geography, its valuable effect on character building, and in its application to other studies in the curriculum. When we consider all the opinions advanced by experts in the field of geography since 1870, we cannot fail to notice that objectives have budded, blossomed and borne fruit during this period of more
than sixty years. Although some of the objectives have become
old-fashioned and even obsolete, new ones of greater value
have taken their places. They have this added significance;
they may be analyzed so that their contribution to the present
day aims of geography is apparent.
CONCLUSIONS

Increasing Tendencies in the Objectives of the Teaching of Geography

1. To lessen memory work.
2. To develop powers of observation, judgment, understanding, and imagination.
3. To give poise by means of individual class presentation.
4. To awaken a desire for future study.
5. To inculcate the power to do.
6. To teach geographical terms incidently.
7. To give ability to read a map.
8. To impart a general store of facts and principles.
9. To enhance the artistic and educational values of geography by means of illustrations.
10. To train in scientific methods of investigation.
11. To use as a means of entertainment.
12. To make correct use of leisure time.
13. To train in good citizenship.
14. To keep notebooks only to emphasize the spirit and the method of scientific work.
15. To receive and to analyze information from all parts of the world.
16. To encourage pupils to read books of travel,
exploration, stories of distant lands, magazines, and current newspapers.
17. To lessen the amount of written work.
18. To require supplementary reading in the course of the regular class work.
19. To make imaginary journeys to places inaccessible to the pupils.
20. To arouse a spirit of inquiry and a thirst for geographical knowledge.
21. To give more time to field work.
22. To encourage pupils to use their own words for those of the book.
23. To give practice in oral composition.
24. To train in mental discipline.
25. To note likenesses and contrasts.
26. To present a distinct and a luminous picture of man's surroundings.
27. To note the political progress of events.
28. To think quickly and accurately.
29. To give facts useful in everyday life.
30. To trace social, political, racial, religious, commercial, and industrial relationships.
31. To build character.
32. To explain man's use of land and its resources.
33. To instill an appreciation for geographical literature.
34. To develop a broad outlook and a sympathy toward mankind.
35. To train in good study habits.
36. To give some vocational guidance.
37. To help pupils appreciate the beauties of nature.
38. To develop initiative.
39. To promote an intelligent interest in current events.
40. To train pupils to seek authoritative statements.
41. To show the need of conserving natural resources.
42. To prepare our citizens for an intelligent participation in all questions pertaining to other nations.
43. To encourage, stimulate, and clarify thought.
44. To draw conclusions from geographical data.

Decreasing Tendencies in the Objectives of the Teaching of Geography

1. To emphasize map drawing.
2. To recite verbatim from the book.
3. To bound countries, states, rivers, etc.
4. To use a single textbook.
5. To read aloud from textbooks during the class hour.
6. To locate unrelated lists of cities, mountains, islands, bays, capes, inlets, peninsulas, etc.
7. To study the physical structure of the earth.
8. To find answers to lists of questions at the end of each chapter studied.
9. To have the entire class work on the same problem at the same time.
10. To stress a country rather than its people.
11. To learn statistical tables of information such as the quantity of exports and imports.
12. To accept but one author as an authority.
13. To connect nature study and geography.
14. To consider geography as a description of the earth's surface.
15. To learn by rote the states and their capitals, as well as countries and their capitals.
16. To give definitions of geographical terms such as mountain, hills, rivers, capes, bays, gulfs, peninsulas, inlets, islands, etc.
17. To teach formally geographical terms.
18. To explain the laws of natural phenomena.
19. To teach mathematical geography.
20. To keep notebooks as storehouses of miscellaneous facts.
BIBLIOGRAPHY


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The thesis "Changing Objectives in the Teaching of Geography, 1870-1930," written by Francesca Lichter Urbancek, has been accepted by the Graduate School of Loyola University with reference to form, and by the readers whose names appear below with reference to content. It is, therefore, accepted as a partial fulfilment of the requirements of the degree conferred.

John W. Scanlan

Austin G. Schmidt, S. J.

May 11, 1935

May 2, 1935