

II. Conditions Which Have Had Influence in Determining the Different Plant Societies at Winnetka.

1. Soil Conditions. Chemical nature of soil. Physical nature of the soil. Stability. Porosity. Capacity for obtaining water. Capillarity. Deliquescence. Capacity for retaining water. Amount of soil-water available for plant uses. Tenacity. Injury done by cracking of clay soil. Ease or difficulty with which roots enter soil. Differential weathering of boulders in the soil. Acid excretions from roots of plants.

Questions, such as: What are the soil conditions most favorable for plants? What plant adaptations can be traced to soil conditions?

2. Atmospheric Conditions. Chemical nature of the atmosphere. Physical nature of the atmosphere. Water of the atmosphere. Movements of the atmosphere.

Questions: What constituents of the atmosphere are used by plants? How are these obtained? What influence does the amount of moisture in atmosphere have upon transpiration? Influence of air movements. What plant adaptations can be traced to atmospheric conditions?

3. Heat Conditions. Average temperature during growing season. Extremes of temperature in air and soil.

4. Light Conditions. Total amount of light received in various situations. Direction of light.

Questions: What differences in the plant societies may be due to differences in heat and light conditions? Significance of the distribution of the delicate mosses? Vernal habits of forest herbs? Account for layers in the vegetation of the forest. What difference in structure between plants grown in shade and those grown in direct sunlight?

III. History of the Different Plant Societies of Winnetka as it is Related to the History of the Topographic Features.

1. The original flora of each topographic feature.

2. The topographic changes which have brought about the present flora.

3. Changes going on at present which will influence the flora found at Winnetka. (a) Change from steep to gradual slopes. Increased stability of soil conditions. Accumulation of humus. (b) Widening of ravines. Increased exposure to heat, light, and wind. (c) Deepening of ravines. Lowering of underground water level in slopes. (d) Formation of wider flood planes, deltas, etc. (e) Filling in of swamps and undrained depressions.

4. The probable future of the flora associated with each topographic feature of the region.

Department of History and Literature

Emily J. Rice

The purpose of the courses in history and literature is to give special training in the selection of subject-matter suitable for use in elementary and secondary schools and the philosophy of methods of teaching these subjects. With this end in view, opportunities are offered for the study of historic material and for independent research and investigation of principles on which the teaching of history and literature is based.

The courses in this department are closely related to those in geography, art, dramatic expression, economics, and social science. The geographical laboratory is

supplied with physiographic maps which will aid students in the interpretation of political and social data. Particular attention will be given to local history, and excursions in the city and vicinity will be made the basis for a study of economic and social conditions.

The department is supplied with a good collection of pictures, tools, and implements of primitive people, and with illustrations of the development of the industrial arts. The course includes a study of typical stories of different nations and periods of history; principles of presentation of these stories to children; relation of

literature to history and art; observation of model lessons; and the writing of stories.

Ancient civilizations will be studied in connection with the growth of the industrial arts, architecture, painting and sculpture, social life and government. The relation of geography to history and of occupations to social life and government will be brought out. The art and literature of each people will be studied as sources of knowledge, and the development of art will be an important feature of the work.

The growth of mediæval and modern civilization will be considered, including the history of the United States. The development of social and political institutions will be traced and a special study made of colonial industries.

I. Methods of Historical Study. Relation of history to present social conditions. Adaptation of subject-matter to stages of individual experience. Analysis of periods of history. Outline of course of study. Analysis of methods of study. Sources of history. Relation of geography, literature, art, and sociology of history. Special value of particular periods to history in a course of study.

References: *Studies in Historical Method*, Mary Sheldon Barnes. *Methods in History*, Macy. *Methods of Teaching History*, Hinsdale. *Methods of Teaching History*, Ed. by Stanley Hall. *Talks on Pedagogics*, Parker. *School and Society*, Dewey. *Course of Study in History and Literature*, Rice.

II. Ancient Civilizations—Egypt. Geographical conditions governing the development of primitive people. Nest-places of history. Egypt as type. Relation of structure and climate to development of people. Influence of building material of country upon its architecture. Principles of construction illustrated by the Great Pyramid. Early sculpture and painting in Egypt; its industrial arts. Plan of an Egyptian temple. Religious ideas as expressed in temples and tombs. Advancement of architecture, sculpture, and painting. Literary remains.

References: *History of Art in Ancient Egypt*, Perrot and Chipiez. *Egyptian Ar-*

chæology, Maspero. *A Thousand Miles Up the Nile*, Amelia Edwards. *Pharaohs and Fellahs*, Amelia Edwards. *Conscience and Religion in Egyptian Art*, Petrie.

Greece—the Homeric Age.—The Iliad and Odyssey as sources of our knowledge of early Greek history. Relation of Mycenæan art to the Homeric poems. Agamemnon's palace. Industrial arts of the Mycenæan age. Social life in the time of Homer. Mythology. Place of the Iliad and Odyssey in the history of literature.

References: *The Mycenæan Age*, Menatt. *Cult of Greek States*, Farnell (mythology). *The Golden Bough*, Frazer. *Schliemann's Troy*, Burckhardt. *Gods of Greece*, Louis Dyer.

General view of Greece: Scenery, structure, climate, and productions. Effects of Greek geography upon its people in character, industries, and institutions. Special study of Laconia and Attica. What Greece stands for in history and on what basis its history should be studied.

Oriental ideas of government, Egypt as type. Government of the Homeric age. The Spartan theory of government. Spartan education. The Athenian government. Athenian education. The conflict with Persia and what it meant to history.

The Ionic type of Archaic sculpture. The Doric type. Early Greek painting. Greek vases. Effects of Persian wars. Persian ideas of life compared with Greek ideas. Architecture of the great age of Greece; the Parthenon; the Propylæa; the Erechtheum. Characteristics of the people shown by their building. The sculpture of the Parthenon. Other Athenian sculpture. Olympia and its contests. Delphi and Eleusis. Characteristics of the age of Pericles. Contrasts with our own age and lessons for it.

The Alcestis of Euripides. Origin of the drama. The Greek theatre. Later Greek sculpture. Causes of decline of art. Roman architecture. Pompeii.

References: *Greek History*, Busolt. *Handbook of Greek Sculpture*, Ernest Gardner. *The Art of Phidias*, Waldstein. Frazer's *Pausanias*. *Mythology and Monuments of Ancient Athens*, Harrison and Verrall. Von Rohden's article on Greek vases in Baumeister's *Denkmäler*. *The Greek Theatre*, Moulton. *History of Greek Sculpture*, Murray. *History of Greek Sculpture*, Lucy Mitchell.

Excursions in Greece, Diehl. *History of Greece*, Grote. *History of Greece*, Curtius. *Greek Education*, Davidson. *History of Greek Art*, Tarbell. *Pompeii*, August Mau.

III. The Renaissance. Characteristics of period and value of study. Causes of another great period of art and literature. Feudalism and its influences on later times. Industrial conditions of feudal ages. Early Christian and Byzantine art.

Italy in the fourteenth century. Buildings of Florence. Sculpture and painting of Florence in the fourteenth century; the fifteenth century. Influence of Greek art. Relation of art and political history.

Causes of the power of Venice. Architecture of the city. Venetian painters of the fourteenth and fifteenth centuries. Causes of the decline of Venice.

The great names in the art of the sixteenth century. Influence of these artists upon later times. Causes of decline of art. Changes in industrial conditions. Influence of Italy upon France and England. The middle ages in a course of study. Connection with English and American history. The discovery of America.

References: *The Renaissance in Italy*, Symonds. *Handbook of Painting*, Kugler. *Italian Painters*, Morelli. Berenson's *Florentine Painters of the Renaissance*, *Venetian Painters of the Renaissance*, *Central Italian Painters of the Renaissance* and *Lorenzo Lotto*, Michael Angelo, Symonds. *Vasari*, Ed. by Hopkins and Blashfield. *Makers of Florence*, Mrs. Oliphant. *History of Mediæval Art*, Goodyear. *Discovery of America*, Fiske. *History of America*, Payne.

IV. History in Elementary Schools. Relation of historic industries and the handwork of children. The building instinct of children. Place of the study of historical architecture, sculpture, and painting. Modeling and painting in school. Value of tracing growth in art. Literature and art as a basis for the study of history. Study of pottery in school. Adaptation of history for children. Dramatization of stories for children. Value of the Iliad and Odyssey. Adaptation of periods of history to different grades. Special value of Greek history. Place of Roman history in course of study; of the Renaissance.

Methods in constructive work connected with history. Sociology in course of study. Observation of social environment. Methods of obtain-

ing data in regard to present social conditions. Relation to study of local history. The field excursion in history.

V. Development of the Industrial Arts. Necessities of primitive labor: Food, clothing, shelter. Development of inventions. Tools and implements of savage and barbaric life. Houses and home life. Spinning, weaving, and sewing. Early language and writing. Mythology. The geographical conditions of America which influenced its aborigines. Life of savage tribes of America; their industrial arts. Life of lower barbarians. Location of tribes in country. Influence of environment. Primitive religious ideas. Folk-lore. Regions of America best adapted to develop primitive inhabitants. The country of the Aztecs. Industries developed. Comparisons with other tribes. Industrial arts, social life, government, and religion. The country of the Incas; their industries, social life, government, and religion.

References: *Primitive Culture*, Tylor. *Houses and Home Life*, Morgan. *Man Before Metals*, Joly. *Origins of Invention*, Mason. *Woman's Share in Primitive Culture*, Mason. *Discovery of America*, Fiske, Vol. I. *History of America*, Payne. *The Aztecs*, Biart. *Some First Steps in Human Progress*, Starr.

VI. Relation of Industries to Social Life and Government. Local history. Value of study of immediate environment. Appearance of locality before its settlement. Chicago as type. Story of Marquette and Joliet. Story of La Salle. The settlement at Starved Rock.

Beginnings of English occupation. Fort Dearborn. Industries of early Chicago. Settlement of region around the city. Growth of village. Excursions to historic sites and museums. City life compared with village life.

References: *La Salle and the Great West*, Parkman. *The Fergus Papers—Waubun*, Mrs. Kinzie. *The Story of Tonty*, Catherwood.

Colonial History. Story of the Pilgrim settlement. Appearance of country. Occupations developed. Relation of these to geography of country. Methods of work. Village life. Comparison of industrial arts with those of our own time. Growth of colony. Cause of settlement and influence of industrial condition of England upon colonists. Similar study of the Puritan colony.

Appearance of an old Virginia plantation. Character and history of colonists. Geography of country. Occupations of people. Relation of these to geography of country. Industrial

arts. Comparisons with New England. Influence of occupations on institutions. Growth of colony.

Kind of country found by French colonists. Character of colonists, and history of settlement. Appearance of a typical colony. Occupations developed. Houses, home life, and industrial arts. Social life and government. Comparisons with New England and Virginia.

The New England town-meeting. Its origin and history. Its influence. Spread of colonies, and beginning of the representative system. The old Virginia county. Colonial legislatures.

Conditions in England which led to settlements in America. Industrial changes in England. Origin and growth of the representative system. Comparisons with Oriental, Greek, and Roman types of government. Effects of English ideas of government upon English colonies.

The government of France in the Old Régime. Causes which led to colonization. Character of colonists. Influence of country upon occupations and institutions. The French in the Mississippi Valley.

Differences between the French and English colonies in extent of territory, population, religion, relation with the Indians, military strength, and government. Causes of conflict between them. The Seven Years War. Relation of geography to conflict. Frontier lines.

References: *English Colonies in America*, Doyle. *English Colonies in America*, Lodge. *Beginnings of New England*, Fiske. *Old Virginia and Her Neighbors*, Fiske. Parkman's works. *Civil Government*, Fiske. *American Political Ideas*, Fiske. *American History Told by Contemporaries*, Hart.

Industrial Development of the Nation. Causes of struggle with England. Literature of the Revolution. The study of wars in history. Geographical basis of study of wars. Meaning of "Critical Period." The Federal Convention.

Early relation to foreign powers. Gradual gaining of independence. The westward movement of people. Routes of travel. Effects of geography. Frontier lines. Influences which have tended to strengthen the Union.

Inventions and their influence. Belated industries and regions. Present industrial condition. Relation of industries to institutions. Relation of institutions to development of literature and art. National problems.

References: *History of the United States*, McMaster. *History of the United States*, Schouler. *History of the United States*, Henry Adams. *The Critical Period*, Fiske. *Rise of the Republic*, Frothingham. *Influence of the Frontier*, in *Herbert Year Book*, 1899.

Geography

Zonia Baber Wallace W. Atwood

The work of this department in the Summer School has been so planned that two great ideas, prominent in modern geographic thought, may be emphasized. One of these ideas deals with the influence of geographic environment upon man; the other with the evolution or continual change of that environment. A full and sympathetic appreciation of our natural surroundings cannot be attained without a knowledge of their history and an understanding of their influence upon the settlement and development of the region.

In the *Study of the Continents and Islands* it is proposed to give a broad, comprehensive view of the great land masses of the

earth, picturing the chief physical features of each and showing how these physical features together with the climatic conditions influence the settlement and development of the different geographic provinces of each continent.

Throughout the work of this course, sand and chalk modeling will be illustrated, and their use in the teaching of geography shown. The political and commercial phases of geographic work will also receive due consideration.

The study of *Geographic Processes* will deal with the changes which land-forms are continually undergoing. These changes will, so far as possible, be studied in the