

THE SIXTEENTH YEARBOOK

OF THE
NATIONAL SOCIETY FOR THE STUDY
OF EDUCATION

PART I
SECOND REPORT OF THE
COMMITTEE ON MINIMAL ESSENTIALS IN
ELEMENTARY-SCHOOL SUBJECTS

BY
I. B. WILSON, W. S. GRAY, C. F. MUNSON, J. H. HOSKINSON, F. N. FREEMAN
H. C. PRYOR, W. W. CHARTERS, W. S. MONROE, G. M. WILSON
W. C. BAGLEY, ERNEST HORN, L. W. RAPEER

Edited by GUY M. WHIPPLE, Secretary

This Yearbook will be discussed at the Kansas City Meeting of the
National Society, Monday, February 26, 1917, 8:00 P. M.

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Published February, 1917

First printing 3000
Second printing 1000, 1918
Third printing 1000, 1920

**Composed and Printed by
The Public School Publishing Company
Bloomington, Illinois**

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This Yearbook is the 1916 report of the Committee of the Department of Superintendence of the National Education Association on Economy of Time in Education.

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TABLE OF CONTENTS.

REPORTS OF INVESTIGATORS CO-OPERATING WITH THE COMMITTEE ON ECONOMY OF TIME OF THE DEPARTMENT OF SUPERINTENDENCE OF THE NATIONAL EDUCATION ASSOCIATION

	PAGE
EDITOR'S PREFACE	7
CHAP.	
I. INTRODUCTION	9
H. B. WILSON, Chairman of the Committee and Superintendent of Schools, Topeka, Kansas	
II. THE RELATION OF SILENT READING TO ECONOMY IN EDUCATION	17
WILLIAM S. GRAY, The School of Education, The University of Chicago	
III. LIBRARY AND SUPPLEMENTARY READING BOOKS RECOMMENDED FOR USE IN ELEMENTARY SCHOOLS	33
O. F. MUNSON, Superintendent of Schools, Rock Springs, Wyoming	
and	
J. H. HOSKINSON, Student, University of Chicago	
IV. HANDWRITING	60
FRANK N. FREEMAN, Assistant Professor of Educational Psychology, University of Chicago	
V. A SUGGESTED MINIMAL SPELLING LIST	73
HUGH CLARK PRYOR, Principal of the Boulder Training School and Instructor in Education, University of Colorado	
VI. MINIMAL ESSENTIALS IN ELEMENTARY LANGUAGE AND GRAMMAR	85
W. W. CHARTERS, School of Education, The University of Missouri	
VII. A PRELIMINARY REPORT OF AN INVESTIGATION OF THE ECONOMY OF TIME IN ARITHMETIC	111
WALTER S. MONROE, Professor of School Administration, Kansas State Normal School, Emporia, Kansas	
VIII. A SURVEY OF THE SOCIAL AND BUSINESS USE OF ARITHMETIC	128
G. M. WILSON, Professor of Agricultural Education, Iowa State College of Agriculture and Mechanic Arts	
IX. PRESENT-DAY MINIMAL ESSENTIALS IN UNITED STATES HISTORY AS TAUGHT IN THE SEVENTH AND EIGHTH GRADES	143
W. C. BAGLEY, Director School of Education, University of Illinois	
X. POSSIBLE DEFECTS IN THE PRESENT CONTENT OF AMERICAN HISTORY AS TAUGHT IN THE SCHOOLS	156
EARNEST HORN, State University of Iowa.	

TABLE OF CONTENTS—Continued

XI. MINIMAL ESSENTIALS OF PHYSICAL EDUCATION AND A SCALE FOR MEASURING RESULTS OF PHYSICAL EDUCATION	173
LOUIS W. RAPEER, Professor of Education, Pennsylvania State College	
CONSTITUTION OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION	198
MINUTES OF THE DETROIT MEETING OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION	200
LIST OF ACTIVE AND HONORARY MEMBERS OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION	193
FINANCIAL REPORT OF THE SECRETARY-TREASURER OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION	203
MEMBERSHIP IN THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION	205

EDITOR'S PREFACE

The publication of the first report of the Committee on Minimal Essentials in Elementary-School Subjects as Part I of the *Fourteenth Yearbook* of the Society and the publication of the report of the Committee on Standards and Tests as Part I of the *Fifteenth Yearbook* met with such welcome as to indicate that this method of disseminating the reports of important committees in advance of the meetings at which they are to be discussed was endorsed both by members of the Society and also by large numbers of the educational public who purchase single copies of various parts of our publications through commercial channels. The present Part I of the *Sixteenth Yearbook* will be appreciated, we hope, as evidence of the continuation of the policy just mentioned. It appears not unlikely that other committees and organizations of men professionally active in various aspects of educational endeavor will be glad to make similar use of the Society's avenues of publication in the future.

G. M. W.

CHAPTER I

INTRODUCTION

HARRY B. WILSON

Superintendent of Schools, Topeka, Kan.

This monograph contains the second printed report of the Committee¹ of the Department of Superintendence on Economy of Time in Public Education. The first report was issued as the *Fourteenth Yearbook of the National Society for the Study of Education, Part I*, under date of 1915, and was the subject of discussion at one session of the National Society for the Study of Education and occupied one half-day session on the Department of Superintendence program at the meeting of the Department at Cincinnati, in 1915.

Interest in the report on Minimal Essentials at the time of its presentation and further interest² in the same, as evidenced by

¹The Department Committee was first created in response to a resolution offered by Professor Suzzallo at the Department meeting at Mobile calling for a committee from the Department to cooperate with the Council Committee on Economy of Time in Education. The committee as originally appointed by Superintendent C. E. Chadsey, then President of the Department of Superintendence, was as follows: Calvin N. Kendall, Indianapolis, Chairman; John H. Francis, Los Angeles; E. O. Holland, Louisville; C. S. Meek, Boise; F. E. Spaulding, Newton. The committee was gradually changed, by resignations and by the addition of members, until it came to be organized as it now stands: Harry B. Wilson, Topeka, Chairman; John H. Francis, Columbus; Frank E. Spaulding, Minneapolis; Frank E. Thompson, University of Colorado; O. I. Woodley, Marshall College; J. F. Bobbitt, University of Chicago; V. A. C. Henmon, University of Wisconsin.

²Three states—Minnesota, Iowa, and North Dakota—have been at work in an effort to determine the eliminations which should be made from the subjects of the elementary curriculum and to formulate the content of each subject of study in the elementary curriculum. In March, 1914, the Department of Education of the State of Minnesota issued *Bulletin 51*, which was a report of the Committee on the Elementary Course of Study to the Minnesota Educational Association. In November, 1915, a committee of the Iowa State Teachers' Association made a report on the *Elimination of Obsolete and Useless Topics and Materials from the Common Branches*, and again in November, 1916, a similar committee issued a positive program of recommendations with reference to the essentials of the subjects of the elementary curriculum.

correspondence and the sale of the *Yearbook* since that time (2165 had been sold in June, 1916), together with our own conviction that the first report was essentially preliminary, led us to the unanimous conclusion that a further report on Minimal Essentials should be made before attention was turned to a consideration of other means of economizing time. While it was hoped to complete the additional statement on Minimal Essentials one year ago, it was found impossible to finish the investigations with sufficient care within that time.

Further report is made here on every subject treated in Part I of the *Fourteenth Yearbook*, and in addition, a preliminary report is presented on Physical Education. Reports on Music, Drawing, and Elementary Science are also in process of preparation, but could not be completed in time for inclusion with this formulation.

The following reports are concerned primarily with the social value of the content as a basis for instruction in the subjects treated, but the relation to economy of time of the reduced content is indicated where possible. It is believed that economies will result not only by reason of the reduced content, but also by reason especially of the vital functional character of the content, making possible greater interest and larger motive for its mastery.

The Committee and Coöperating Investigators are agreed that the guiding principles for determining the Minimal Essentials in the Elementary-School Subjects as stated in the *Fourteenth Yearbook, Part I*, are sufficiently satisfactory that a reformulation of them is unnecessary here. They recognize, of course, as do a number of the formulations following in this report, that the details of the minimal essentials will vary according to the particular outcome or outcomes of elementary education which are emphasized.

Following the Introduction, Chapter I, there are ten chapters presenting reports on reading, handwriting, spelling, grammar, arithmetic, history, and physical education.

A committee of seven on "Adjustment of Educational Work with Reference to the Needs of the Times," created by the North Dakota Educational Association, issued reports in 1908, 1909, and 1911, which, while not resulting from the work of the Department Committee, are worthy of attention in any effort to determine the minimal essentials in elementary-school subjects.

Chapters II and III deal with reading. In Chapter II, on Silent Reading, Mr. Gray discusses the importance and economy of silent reading in elementary school instruction. He sets forth statistically the greater use and value of silent reading as compared with oral. The study shows the grades in which the greater emphasis should be placed upon training children in silent reading and criticizes the reading texts in use at the present time from the standpoint of the omission of graded material adapted to the development of silent-reading ability. It also suggests the type of material which should be provided from grade to grade in developing ability in silent reading and also the methods to be employed in using the types of material suggested in developing silent-reading ability. Chapter III reports the results of an investigation by Mr. Munson and Mr. Hoskinson made for the purpose of determining the prevailing practice regarding the use of library and supplementary-reading books in the different grades of the elementary schools in fifty American cities, representing different sections of the country and school systems of different sizes. The library books and supplementary readers are listed separately by grades. All books were eliminated which were recommended fewer than five times. The total books listed are 817 library books and 95 supplementary readers, making a total of 912 books.

Chapter IV, on handwriting, is an addition to the report of two years ago on the same subject by Mr. Freeman. Upon the basis of the scoring by a trained grader of the papers from one school in each of the 55 cities studied two years ago, the writer discusses general variations in practice and the significance of these variations for the problem of economy. The general conclusion is reached that at least a quarter of the children from the sixth grade up have, under present conditions, sufficient skill in writing to make it more profitable for them to spend the handwriting time either in perfecting some other formal subjects in which they are deficient or in studying some content subject. It is suggested that there are reasons for believing that even a larger proportion of pupils than one-fourth may be expected to eliminate themselves from the formal handwriting class in the grades above the fifth. The results of one study of the effect of different time allowances are presented with

the idea primarily of suggesting to others the trial of a similar experiment. The one experiment shows that the pupils who spent fifty minutes per week made as much gain as those who spent twice as much time.

In Chapter V, Mr. Pryor, who discussed the Minimal Content and Time in Spelling in the report of this Committee two years ago, presents the results of his investigations to determine definitely what and how many words should be included in a minimal spelling list. His report indicates the twelve lists which were examined in determining the list presented and shows the method by which the words in the suggested list were determined. A total of 1,479 words, distributed throughout the grades from the second to the eighth, inclusive, is presented.

The Minimal Essentials in Elementary Language and Grammar are discussed in Chapter VI. After suggesting the five points of view from which the minimal essentials may be attacked, the report presents a descriptive view of several studies of the language errors of children, eight of which deal with oral errors and four with written errors. The aim of this report is to describe and illustrate a method of constructing a grammar curriculum on the basis of the errors of children. The studies directed by Mr. Charters himself are discussed and described in greater detail than the other studies mentioned. Upon the basis of the errors discovered in the writing and speaking of the children in the schools studied by him, the facts were determined which must be taught in order that the pupils may correct errors in their speaking and writing. These facts are arranged in a grammar curriculum.

Chapters VII and VIII are concerned with arithmetic. In Chapter VII, Mr. Monroe shows that materials selected for the course in arithmetic will vary according to the purpose of teaching arithmetic. After defining the guiding aim in arithmetic, the author proceeds to a study of several much-used texts in arithmetic, with a view to compiling a list of the arithmetic problems which arise in human activities and which possess a sufficient degree of utilitarian or socializing value to justify their being designated as minimal essentials in realizing the purpose in teaching arithmetic. The type of problem which is considered valuable and useful is

illustrated, as is the type which is considered not essential. The results of applying the standard and classification to four arithmetic texts are given in tabular form. Chapter VIII presents a survey of social and business usage as a basis for determining the amount of arithmetic needed in the actual affairs of social and business life. The investigation gathered 5036 problems actually solved by 456 different persons living in 18 different cities. It was found that the problems throughout were brief and simple, requiring chiefly the more fundamental and more easily mastered processes. But few problems of an abstract nature were reported. This study by Mr. G. M. Wilson indicates that, aside from the drill processes necessary to the mastery of the fundamental operations, the teaching of arithmetic should be organized about a series of large problems concerned with fundamental human interests,—problems that the pupils will later need to solve in the actual business and social affairs of life. The study seems to warrant the conclusion that the necessary work in arithmetic can be mastered in much less time than is now ordinarily devoted to it.

Chapters IX and X are concerned with the Minimal Essentials in American History. In Chapter IX, Mr. Bagley presents the results from the completion of the study projected in his preliminary report in the *Fourteenth Yearbook* two years ago. For the details of methods and materials in reaching his conclusions, the reader is referred to *Bulletin 16 of the School of Education, University of Illinois*. This report confines itself to a summary of the names and topics that were found to be common to all of twenty-three books, together with additional names and topics common to at least three-fourths of the books. Some topics not found in three-fourths of the books are also included. Chapter X attempts to determine whether the present content of American history is satisfactory if an important purpose in teaching history is to make pupils more "intelligent with respect to the more crucial activities, conditions, and problems of present-day life." The method of attacking this problem is clearly set forth by Mr. Horn and the conclusion is reached "that the present elementary and high-school courses of study in history are in very serious need of reconstruction from the standpoint of this aim in teaching history."

Chapter XI presents a report on Physical Education, a subject not included in the Committee's report in the *Fourteenth Yearbook*. This formulation by Mr. Rapeer defines physical education, suggests its aims, discusses its needs and utility, and shows the relation of physical education to other phases of school activity. It presents certain essentials of physical education which have been selected by unscientific experience but endorsed by leaders in the field, and suggests a tentative scale for measuring children for health and general physical development. The report frankly recognizes that no satisfactory scale is yet available for measuring physical efficiency, and maintains that no minimal essentials can yet be scientifically determined.

With our present knowledge of social needs and of the subject matter which should fit our pupils to go forth to do the world's work so equipped as reasonably to meet these needs, your Committee feels that the following statements go about as far as is now possible. These formulations will be suggestive and influential in determining practice. Ways should be found of evaluating the results of the best types of practice as they take form from time to time. Within a few years, another statement³ on Minimal Essentials

³In addition to this report and the one of two years ago, the Committee has made statements of progress from time to time through its chairman and other members. See *N. E. A. Proceedings* 1912, p. 510 ff.; *N. E. A. Proceedings* 1913, p. 217 ff.; *N. E. A. Proceedings* 1914, p. 206 ff., and p. 390 ff. From the inception of its work, the Committee has had no thought of issuing reports or statements which were merely a compilation of opinions. Their earliest effort consisted in enlisting the cooperation of a number of persons who were interested in various phases of the problems of Economy and Efficiency, who possessed such institutional relations as made it possible for them, by reason of their training and work, to undertake the careful direction of fundamental investigations of such problems as they might become responsible for from time to time. As a means of developing a working point of view and of determining the lines of procedure and of parceling out the work, a meeting has been held in the month of November each year, beginning with 1913, by the Department Committee and Coöperating Investigators. At these meetings, also, reports of progress were made by the investigators having problems in charge, that such criticism as they should have might be made. Except for criticism of this type, the report by each investigator has been published as completed, the investigator alone being responsible for the form and content.

Persons who have assisted your Committee in this cooperative relation are as follows: Dr. Lenoard P. Ayres, Russell Sage Foundation; Director W. C. Bagley, University of Illinois; Professor W. W. Black, Indiana Uni-

should make further recommendations possible. Your Committee hopes to find some way of issuing the reports in Drawing, Music, and Elementary Science, which are still in process of development. There is need, also, of treatment of the subjects of cooking, sewing, manual training, and other forms of hand work.

At a meeting⁴ in November, 1916, held in Chicago by the Department Committee and Cooperating Investigators, it was determined that the following large problems should be attacked next in the interest of furthering the program with reference to economy and efficiency: (1) The Problem Organization of the Curriculum and the Problem Attack in Teaching, with Particular Reference to the Scope and Limitations of the Problem as a Basis for Organization and Teaching; (2) The Outcomes of Elementary Education which Should Result from Successful Instruction Based upon the Minimal Essentials of the Curriculum. The first problem is very closely related to the one which has been dealt with in the reports on Minimal Essentials. The task involved in this problem is that of turning about upon the minimal essentials with a view to organizing the same, so far as is possible in each of the various subjects of study, into that series of problems which constitutes the whole of

versity; Professor Samuel W. Brown, Ohio State University; Dean Otis W. Caldwell, University of Chicago; Dean W. W. Charters, University of Missouri; Dean L. D. Coffman, University of Minnesota; Mr. S. A. Courtis, Supervisor of Educational Research, Detroit; Mr. Arthur W. Dunn, Specialist in Civic Education, United States Bureau of Education; Professor Frank N. Freeman, University of Chicago; Professor David R. Gebhart, Peabody College for Teachers, Nashville; Dr. W. S. Gray, University of Chicago; Professor Henry W. Holmes, Harvard University; Dr. Ernest Horn, University of Iowa; Professor J. F. Hosie, Chicago Normal College; President W. A. Jessup, University of Iowa; Superintendent R. G. Jones, Rockford, Illinois; Director Charles H. Judd, University of Chicago; Professor Walter S. Monroe, State Normal School, Emporia, Kansas; Professor Hugh C. Proyer, University of Colorado; Professor Louis W. Rapeer, Pennsylvania State College; Dr. C. W. Stone, State Normal School, Cedar Falls, Iowa; Professor George D. Strayer, Columbia University; Principal J. W. Withers, Harris Teachers College.

Although your Committee has held four meetings in Chicago, attended by from eighteen to twenty-five people, all of these meetings have been held without any expense whatever to the National Education Association; those attending have defrayed their own expenses, oftentimes by taking speaking engagements en route.

the content of each subject, and then of indicating the procedure in instruction upon the basis of this problem organization.

Other problems of large and vital importance in relation to economy and efficiency are numerous. Their treatment should be attempted as quickly as persons can be interested who will attack them fundamentally and scientifically.

(Signed) H. B. WILSON, *Chairman.*

JOHN H. FRANCIS,

FRANK E. SPAULDING,

FRANK E. THOMPSON,

O. I. WOODLEY,

J. F. BOBBITT,

V. A. C. HENMON,

Committee.