#### BY

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# PREFACE

This book has been prepared as a basic treatise on American secondary education as a whole, just as "The Junior High School, Enlarged Edition," and "The Junior-College Movement" are intended as basic treatises of the two recent major innovations in American secondary-school organization. Through these three books the author has endeavored to provide a comprehensive fundamental treatment of this division of our educational system. Other books now in the field which "The American Secondary School" most nearly resembles are those usually bearing the name "principles of secondary education." This work is, however, more inclusive than are those bearing this title, the widened scope being achieved without enlarging the volume and also, it is hoped, without sacrificing fundamental phases of topics ordinarily dealt with in books of this kind. Among the topics treated to which it has not been customary to accord more than minor consideration, if they are treated at all. are the secondary-school organization as it relates to size and distribution of high schools, rural secondary education, vocational education, and other types of secondary education: adaptations to differences in ability among pupils: educational and vocational guidance: allied (extra-curricular) activities; community relationships; problems relating to the teaching staff; the school plant and costs. The judgment is ventured that a basic treatise on secondary education is not complete unless it deals with these as well as with topics usually included, namely, the history of secondary education. pupils, aims, relationships to schools above and below, reorganizations like the junior high school and junior college, European secondary education, and the curriculum.

The differences between this and other treatises in the field do not relate solely to scope. There are differences also in the nature of treatment and in organization. The intent has been to afford both a fairly complete picture of the present secondary-school situation and of the trends or dynamics of secondary education. To this end, there is a substantial ballast of fact disclosing the present practices and opinions and recent shifts with respect to them. To facilitate the interpretation of these facts there is frequent resort to graphic methods of representation. Much thought has been given to the organization of the content, with the aim of transmitting to the reader a coherent and systematic understanding of the whole subject. The organization is well illustrated in the sequence of chapters. The book begins with a brief treatment of the development of American secondary education; it proceeds with a consideration of the pupil, then of the purposes of secondary education and its relationships to elementary and to higher education, and then of the organization of secondary schools, the curriculum, guidance, and the extra-curriculum: the final chapters turn to the problems of the staff responsible for carrying on the work, and to material considerations: that is, the plant in which the work is carried on and the financial responsibilities involved. The effort at effective organization has also been extended to the content within the chapters. This may be illustrated in the distribution of materials pertaining to European education. These have been placed, not in separate chapters where they are customarily found, but at points within related chapters where significant contrasts and similarities with our own schools will be made more apparent and therefore more functional in the reader's understanding of secondary-school problems.

"The American Secondary School" is intended as a textbook in courses in "secondary education," or principles of secondary education, in colleges, teachers' colleges, and uni-

#### PREFACE

versities. Most of the materials in it have been put to the test of classroom use with more than fifteen hundred students taking such a course in the University of Minnesota. Its preparation as a basic treatise in the field should make it serviceable also for individual readers who desire to secure a comprehensive view of the secondary school, for high-school teachers' meetings, and for reading circles where a volume is needed for those at work in schools on this level.

Among those who contributed most to the volume by helpful criticism while making use of the materials in instruction or otherwise are Professors J. Orin Powers, Percival W. Hutson, and James M. Hughes, at this writing respectively of George Washington University, the University of Pittsburgh, and Northwestern University; Dean Oliver L. Troxel of the Municipal University of Wichita, Kansas; Mr. Grayson N. Kefauver, instructor in secondary education in the University of Minnesota; and Mr. Charles W. Boardman, principal of the University High School, University of Minnesota. Professor Fred Engelhardt of the University of Minnesota has made helpful suggestions at many points, but especially concerning the chapter on plant and costs.

Acknowledgment is made of the courtesy of authors and publishers in permitting the making of quotations which contribute materially to any claim to merit the book may have. The writer is under obligation for privilege to quote from books and monographs published by the Bruce Publishing Company, The Century Co., D. Appleton and Company, Funk & Wagnalls Company, Ginn and Company, Houghton Mifflin Company, The Macmillan Company, and Public School Publishing Company; from monographs and bulletins issued by the Department of Education of The University of Chicago; Teachers College, Columbia University; the University of Iowa; the University of Minnesota; the University of Wisconsin; the Board of Education, Denver, Colorado; from Research Bulletins of the National

Education Association: from Yearbooks of the National Society for the Study of Education; and from a book privately published by its author. Dr. Walter J. Gifford. Educational and other periodicals from which materials have been drawn are the American Journal of Psychology, American School Board Journal, Educational Administration and Supervision. Educational Research Bulletin (of the Ohio State University), Educational Review, Elementary School Journal, English Journal, General Science Quarterly, Journal of Educational Psuchology. Journal of Educational Research, Journal of Home Economics, New Republic, School and Society, School Review, and Teachers College Record. Full reference to the sources drawn upon is usually given at the ends of the chapters in which quotations are made: the use of the Arabic and Roman numerals in cross references is explained after the manner of reference described in the footnote on page 1 of this book.

Drawings for the many figures were prepared in the Medical Art Shop of the University of Minnesota.

LEONARD V. KOOS

# CONTENTS

CHAPTER	PAGE
I. THE DEVELOPMENT OF AMERICAN SECONDAL EDUCATION	
I. RECENT RAPID GROWTH IN AMERICAN SECONDARY E.	DU-
CATION	1
II. THE FOUR HISTORICAL TYPES OF SECONDARY SCHOOL	OOL 15
A. The Latin Grammar School	16
B. The Academy	20
C. The Public High School	
D. The Extended Secondary School	
II. SECONDARY-SCHOOL PUPILS - PHYSICAL AI	ND
MENTAL GROWTH	49
I. Adolescence as a Period of Growth	
II. Physical Growth of the Adolescent	
III. PSYCHOLOGICAL DEVELOPMENT IN THE ADOLESCENT	
IV. THE MEANING FOR SECONDARY EDUCATION	91
III. SECONDARY-SCHOOL PUPILS — VARIATION AND SELECTION	
I. Variation among Pupils	99
II. THE FACTORS OF ELIMINATION	
III. IMPLICATIONS FOR SECONDARY EDUCATION	
III. AMA MACATACAN I CAN DAGOTALIAN A LID CONTROL I I I I I	110
V. THE AIMS AND FUNCTIONS OF SECONDARY ED	U-
CATION	_
•	
I. RECENT REFORMULATIONS OF AIMS	
II. Sources and Methods of the Present Formulation	
III. The Aims	152
IV. The Functions	
V. THE SIGNIFICANCE OF SUCH A FORMULATION	167
VI. IDENTITY AND DIFFERENTIATION OF AIMS AND FUNCTION	ONS
for Junior and Senior High Schools	170

CHAPTI	ER	PAGE
v.	RELATIONSHIPS TO ELEMENTARY AND HIGHER EDUCATION	175
	I. SIGNIFICANCE AND NATURE OF THE COMPARISON OF AIMS AND FUNCTIONS	175 177 183 190 193
VI.	SECONDARY-SCHOOL ORGANIZATION: SIZE AND DISTRIBUTION OF HIGH SCHOOLS	201
	I. DESCRIPTION OF HIGH SCHOOLS BY SIZE AND DISTRIBUTION	201 208
VII.	SECONDARY-SCHOOL ORGANIZATION: JUNIOR HIGH SCHOOL AND JUNIOR COLLEGE	220
	I. JUNIOR-HIGH-SCHOOL REORGANIZATION	220 236
	MOVEMENTS	$\begin{array}{c} 244 \\ 247 \end{array}$
VIII.	SECONDARY-SCHOOL ORGANIZATION: THE RURAL-HIGH-SCHOOL PROBLEM	270
	I. PRESENT LIMITATIONS OF RURAL SECONDARY EDUCA- TION	270
	EDUCATION	278
IX.	SECONDARY-SCHOOL ORGANIZATION: VOCATIONAL EDUCATION	299
	I. THE MOVEMENT FOR VOCATIONALIZATION	299 305 324
. X.	SECONDARY-SCHOOL ORGANIZATION: OTHER TYPES	339
	I. SPECIAL-TYPE HIGH SCHOOLS	339 343 352

# CONTENTS

CHAPTER	PAGE
XI. THE SECONDARY-SCHOOL OFFERING: GENERA CONSIDERATIONS	
I. RECENT TRENDS IN SUBJECTS TAKEN	. 365
XII. THE SECONDARY-SCHOOL OFFERING: TH ACADEMIC SUBJECTS	E . 386
I. ENGLISH II. THE SOCIAL STUDIES III. SCIENCE IV. MATHEMATICS V. FOREIGN LANGUAGE	. 400 . 414 . 428
XIII. THE SECONDARY-SCHOOL OFFERING: TH SPECIAL SUBJECTS	_
I. THE MANUAL ARTS II. HOME ECONOMICS III. AGRICULTURE IV. COMMERCIAL SUBJECTS V. MUSIC VI. ART VII. PHYSICAL EDUCATION	<ul><li>. 466</li><li>. 476</li><li>. 487</li><li>. 489</li><li>. 495</li><li>. 499</li></ul>
XIV. THE SECONDARY-SCHOOL OFFERING: THE PROGRAM OF STUDIES	_
I. Types of Programs of Studies	. 526 н . 539
XV. EDUCATIONAL AND VOCATIONAL GUIDANCE.	. 559
I. THE DEMAND AND NEED FOR GUIDANCE II. THE MEANS OF EDUCATIONAL AND VOCATIONA	L
GUIDANCE	
XVI. ALLIED ACTIVITIES	
I. A PROMINENT FEATURE OF THE MODERN SECONDAR SCHOOL	

CHAPTER	PAGE
II. THE VALUES ASCRIBED TO ALLIED ACTIVITIES	<b>5</b> 85
III. Obstacles to Achieving the Values Claimed .	<b>5</b> 88
IV. THE PRINCIPLES OF ORGANIZATION, ADMINISTRA-	
TION, AND SUPERVISION	590
V. Types of Allied Activities and Organizations .	595
VI. PRACTICES IN ORGANIZATION AND ADMINISTRATION	597
VII. ATHLETICS	606
VIII. PUBLICATIONS	609 614
X. THE DEAN OF GIRLS	616
XVII. COMMUNITY RELATIONSHIPS	625
- a ::	
I. COOPERATING ORGANIZATIONS	625
II. PURPOSES AND MEANS OF HIGH-SCHOOL PUBLICITY	628
III. SERVICE TO THE COMMUNITY	631
XVIII. THE HIGH-SCHOOL STAFF	637
I. Staff Problems	637
II. THE TEACHING LOAD	637
III. THE SUBJECT DISTRIBUTION OF THE TEACHING	
LOAD	646
IV. TIME SPENT IN COOPERATIONS	654
V. THE TEACHERS' TRAINING AND EXPERIENCE VI. OTHER PROFESSIONAL RELATIONSHIPS OF HIGH-	657
SCHOOL TEACHERS	666
VII. SALARIES OF TEACHERS	679
VIII. THE PRINCIPAL	682
IX. Unsolved Staff Problems	687
XIX. THE SCHOOL PLANT AND COSTS	693
I. Housing and Equipment	693
II. THE HIGH-SCHOOL LIBRARY	713
III. THE COST OF SECONDARY EDUCATION	721
APPENDIXES	,
A. LINES ALONG WHICH STANDARDS HAVE BEEN	
SET FOR THE CLASSIFICATION OF HIGH SCHOOLS	741
B. STANDARDS FOR ACCREDITING SECONDARY	
SCHOOLS OF THE NORTH CENTRAL ASSOCIATION	
OF COLLEGES AND SECONDARY SCHOOLS	742
INDEX	747

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# THE DEVELOPMENT OF AMERICAN SECONDARY EDUCATION

# I. RECENT RAPID GROWTH IN AMERICAN SECONDARY EDUCATION

Two major concerns of the chapter. In a general volume purporting to deal with American secondary schools in a comprehensive way, it is desirable to give early some notion of their present scope. This can best be done, it is believed, by setting forth and considering facts pertaining to their recent growth. This concluded, it will be appropriate to enter upon a treatment of the educational background out of which the present secondary-school situation has developed. The first chapter, therefore, is concerned with (1) the recent growth of present-day secondary education in this country and (2) its background.

The remarkable recent growth in numbers. The recent rapid growth of our secondary schools is a matter of frequent comment. Not, however, until one tries to put the growth in definite numerical terms does its astounding nature become

Note. In this text Arabic numerals in parenthesis refer to items in the Selected References at the end of each chapter. Roman numerals in parenthesis preceding the Arabic numerals refer to the chapter in this book to which the reference is appended.

apparent. If the beginning point of the recent period over which the development is to be studied is 1890 and the subsequent points for consideration are a decade apart up to 1920, the number of public high schools reporting to the United States Bureau of Education is seen (Table I) to have mounted from approximately 2500 in the first period to

Table I. Number of Public and Private Secondary Schools, Instructors, and Pupils enrolled from 1889–1890 to 1919–1920 <sup>1</sup>

CLASSES OF SECONDARY SCHOOLS AND ITEMS	1889-1890	1899-1900	1909-1910	1919-1920
Public high schools				
Number of schools re-				
porting	2,526	6,005	10,213	14,326
Number of instructors .	9,120	20,372	41,667	63,258
Number of pupils	202,963	519,251	915,061	1,857,155
Private high schools and academies		1	1	_,=,==,===
Number of schools re-				
porting	1,632	1,978	1,781	2,093
Number of instructors	7,209	10.117	11,146	14,946
Number of pupils	94,931	110,797	117,400	184,153
All secondary schools	,			107,100
Number of schools re-				
porting	4,158	7,983	11,994	16,419
Number of instructors .	16,329	30,489	52,813	78,204
Number of pupils	297,894	630,048	1,032,461	2,041,308

approximately 6000 by 1899–1900, to over 10,000 by 1909–1910, and to more than 14,000 by the close of the period considered. The number of teachers in these schools increased from more than 9000 at the opening to well over 63,000 — about seven times as many — at the close of the thirty-year period. The most astonishing proportionate increase is in the number of pupils, which in the three decades climbed from 202,963 to 1,857,155 — more than nine times as many

<sup>&</sup>lt;sup>1</sup> From Table 1 in "Statistics of Public High Schools, 1921–1922," United States Bureau of Education Bulletin No. 7 (1924), p. 2, and Table 1 in "Statistics of Private High Schools and Academies," United States Bureau of Education Bulletin No. 60 (1923), p. 11.

#### THE DEVELOPMENT OF SECONDARY EDUCATION

at the end as at the beginning of the period considered! For the school year 1921–1922 the total enrollment in public high schools was 2,229,407.

The increase for the thirty-year period for private secondary schools reporting was as follows: in number of schools, from 1632 to 2093; in number of teachers, from 7209 to 14,946; and in number of pupils, from 94,931 to 184,153. For all schools, public and private, the increase in number of pupils mounted from somewhat less than 300,000 to more than 2,000,000.

The growth as compared with the growth of the total population and the growth in higher education. Although the gross figures just cited are impressive, comparisons with the increases in total population and in enrollment in higher education are much more so. Such a comparison has been made available by the Bureau of Education, and the results are reproduced in Fig. 1, in which the index numbers were arrived at by dividing the population or enrollment for some year under consideration, say 1902, by that for 1890, the initial year for the computations made. Thus the index number for any year is the percentage which the population or enrollment in that year is of the population or enrollment in 1890.

The rapid increase of our population during the period considered is a matter of frequent comment and wonder. The same may be said for the growth of enrollment in higher institutions, which is here seen to be much more rapid than the population. But the increase is even more marked for enrollment in secondary institutions, manifesting, indeed, a notable acceleration.

The extent of gain on the population. A more accurate measure of the gain on the population is afforded by a computation of the percentages of that portion of the population fourteen to seventeen years of age, inclusive, represented by those enrolled in secondary schools (Fig. 2). The use of this as a measure of the extent of popularization of secondary

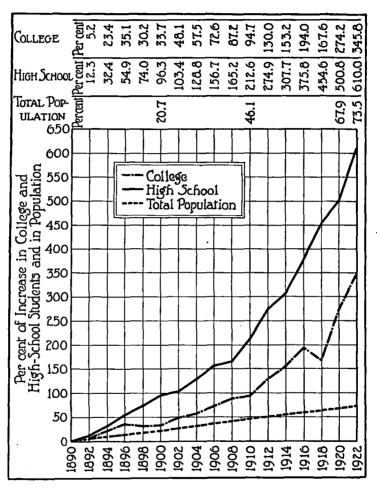


Fig. 1. Percentages of increase in the United States of the total population, high-school enrollment, and college enrollment. (After Fig. 1 in Frank M. Phillips's "Statistical Survey of Education, 1921-1922," United States Bureau of Education Bulletin No. 38 (1924), p. 8)

### THE DEVELOPMENT OF SECONDARY EDUCATION

education is preferable to the figures frequently used, the number in a thousand of the population represented by the secondary-school enrollment,—because it shows the approximate proportion of those of normal age for the four high-school grades who are in high school. These percentages

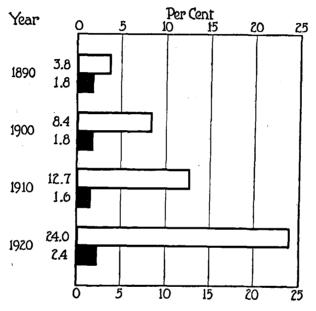


FIG. 2. Percentages of population of the United States from fourteen to seventeen years of age in 1890, 1900, 1910, and 1920, represented by the enrollment in public and private secondary schools. (In outline, public high schools; black, private high schools and academies)

for public high schools for the census years used (1890, 1900, 1910, and 1920) are, respectively, 3.8, 8.4, 12.7, and 24.0; for private high schools and academies, 1.8, 1.8, 1.6, and 2.4; for all secondary schools, 5.6, 10.2, 14.3, and 26.4. They portray a remarkably rapid popularization during the thirty-year period represented, for public high schools and for all secondary schools.

It must be borne in mind that, because of the difficulty of securing reports from all schools, the computations are conservative: if all schools had reported, the percentages would all have been larger — by how much it is impossible to state with complete accuracy. Some suggestion of the extent of discrepancy may be obtained by comparing for the year 1921–1922 the figures on enrollment in public high schools as already cited on a preceding page with those published by the United States Bureau of Education as being reported to it by state departments of education. In the former case the number was 2.229.407 and in the latter, 2.873.009.1 The difference is largely attributable to the fact that the state departments secure reports from a larger number of schools than does the Bureau of Education, to which local school authorities do not so much feel the obligation to submit the data requested. If to this larger enrollment is added that in private secondary schools for the same year, the total in all secondary schools is seen to have been well over 3.000,000. When the enrollments in public high schools as gathered in these two ways are turned into percentages of the population normal for the four high-school years, they become approximately 28.4 and 36.6, disclosing a difference between the two bases of 8.2 per cent of the population fourteen to seventeen vears of age, inclusive. A similar computation for public high schools on the latter basis for 1923-1924 gives an approximation of 38.8 per cent. If to these are added the figures on private secondary schools for the same year, this percentage would run well over 40 per cent of all children of these ages.

An era of public secondary education. It is obvious from the materials already canvassed that the growth we have seen is for the most part restricted to public high schools. Just how large this dominance of public schools is may be seen in the percentages of all public secondary schools and of all secondary-school pupils in public schools for the year-points

<sup>&</sup>lt;sup>1</sup> Table 1, United States Bureau of Education Bulletin No. 31 (1924), p. 2.

### THE DEVELOPMENT OF SECONDARY EDUCATION

used in presenting the foregoing data (Fig. 3). The proportion of public secondary schools to the total of all secondary schools reporting to the Bureau of Education rises from 60.8 per cent for 1889–1890 to 75.2, 85.2, and 87.3 per cent at the end of the three ten-year periods. The percentage of pupils who are in public high schools mounts from 68.1

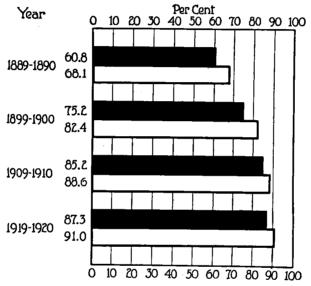


Fig. 3. Percentage ratios of public high schools and pupils enrolled in them to all secondary schools and secondary-school pupils reported.<sup>1</sup> (Black, percentage of schools; in outline, percentage of pupils)

at the opening to 91.0 at the end of the thirty years. The percentages continued to rise after 1920, since in 1921–1922 the percentage for schools was 87.7 and for pupils, 92.3. The whole period was one not only of public-high-school dominance, but of *increasing* public-high-school dominance. We are in an era of public secondary education.

Interest should attach to some special consideration of the status in recent years as to number of private high schools

<sup>&</sup>lt;sup>1</sup> Table 1, United States Bureau of Education Bulletin No. 7 (1924), p. 2.