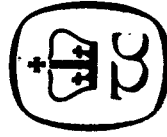


**A HISTORY OF EDUCATION
IN THE TWENTIETH CENTURY WORLD**

W. F. Connell

A HISTORY OF EDUCATION IN THE TWENTIETH CENTURY WORLD

W.F. Connell



TEACHERS COLLEGE PRESS
Teachers College, Columbia University
New York

Published simultaneously in the U.S.A.
and Australia by Teachers College Press
and the Curriculum Development Centre

© Curriculum Development Centre 1980

ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION
MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR
BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING
PHOTOCOPY, RECORDING, OR ANY INFORMATION STORAGE
AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING
FROM THE PUBLISHER.

Library of Congress Cataloging in Publication Data

Connell, William Fraser

A history of education in the twentieth century world

Includes index

1. Education - History. 2. Education

Philosophy. I. Title.

LA11.C66 370'.9'04 78-2947

ISBN 0-8077-8024-3

Edited by Beth Cooper

Designed by Chris Makepeace

Typeset in Australia by G.T. Setters Pty Ltd, Kenthurst, N.S.W.

Printed in Australia by Griffin Press Limited

ACKNOWLEDGMENTS

A large work on a wide canvas written over a period of many years incurs innumerable debts which are impossible to acknowledge in detail. Some, however, are of particular importance. I am especially grateful to the University of Sydney for providing financial support and research assistance, the University of Illinois for a period as an associate in the Center for Advanced studies and as a George H. Miller Visiting Professor, the University of Cambridge for a fellowship at Wolfson College, and the University of London for accommodation as a Visiting Scholar. The co-operation of the librarians in each of these institutions has been superb. To several research assistants I am greatly indebted, particularly to Sonja Standley who for several years worked on the project with great zest, and to Wendy Edgar who is responsible for many of the photographs and illustrations which appear throughout this publication. Betty Johnson has been invaluable in organising the secretarial side of the venture. Helen Connell has been responsible for the onerous job of proof reading, and Vija Sierins has supported it throughout with many suggestions, translations, and the compilation of the index. My academic colleagues in various countries have been most helpful with patient advice and criticism, particularly Professor D. Spearritt, Dr R. Petersen, and Dr Phillip W. Jones, at the University of Sydney, V. Aransky of the U.S.S.R. Academy of Pedagogical Sciences, Professor B.O. Smith of the University of Illinois, and Professor R.W. Connell and Dr P.M. Selkirk of Macquarie University; but above all I value the contribution of the many graduate students whose company I have greatly enjoyed and who have provided continuing intellectual challenge and exchange in successive seminars during the past twenty years.

FOREWORD

In this major work of scholarship and interpretation, Emeritus Professor Connell has produced a landmark in historical and comparative study of modern education. He adds immeasurably to our understanding of the nature, role and significance of educational theory and practice as it has evolved and changed through the twentieth century. The book is a significant contribution to the base of knowledge and understanding of contemporary education in its social and historical setting. This knowledge and understanding need to be built up by research and critical scholarship if effective practice, including curriculum development, is to occur. The Curriculum Development Centre is pleased to publish this book by one of Australia's leading educators and a foremost scholar in comparative and historical studies.

The canvas of the book is remarkable and Professor Connell has chosen to approach his subject by identifying and analysing major developmental themes, ideas and movements. Education and the social, political, economic and cultural forces working on it, are examined from a world-wide perspective. The rise of progressive education, educational change in communist countries, main trends in theory and research, the emergence of new patterns of education in developing countries and trends in teaching practice and curriculum development are among the wide array of themes which are examined in depth, as well as breadth.

Material in the book is organised into three sections: the educational awakening that occurred in the early years of the century; educational changes and aspirations between the two world wars; and educational expansion and reconstruction in the period since 1945. Within each section, particular trends and themes are analysed in individual chapters.

A general overview chapter introduces the whole work and each section is summarised through a review of major themes. The contents are carefully

organised for study and reference purposes, supported with comprehensive reading references and index and illustrated by charts, diagrams and drawings of eminent educators. Thus, although the subject matter is vast it has been marshalled into a readable text which the Centre believes will be attractive to a wide audience. The whole study is a substantial, comprehensive interpretation of one of the most impressive of modern human achievements — the world-wide creation of organised, universal education.

Few writers could have encompassed the width of coverage of this book. Professor Connell, however, has gone far beyond a broad overview. Each topic is handled with depth and lucidity based on the author's mastery of the field. Thus what is most distinctive about the book is the combination of breadth of understanding and interpretation with exact scholarship; what is most fascinating about it is the author's demonstration of the centrality of education in the life and culture of all societies bent on their own change and development. The reader of this book will be left with an indelible impression of the interweaving of educational thought and practice with the main trends of modern life.

The book will be of value to all those involved in teaching, lecturing, educational administration, research and development who need to understand the overall shape, directions, achievements and frustrations of the field in which they are studying and working. Because it is written in a non-technical language the book will also be of interest to anyone outside professional education who wishes to understand the direction and impact of educational change in the contemporary world.

M. SKILBECK
Director.

CONTENTS

Acknowledgments	v	
Foreword	vi	
List of Figures	viii	
List of Tables	ix	
INTRODUCTION — Education in the Twentieth Century	1	
PART ONE — Educational Awakening c. 1900-16	17	
Introduction	18	
Chapter 1— Education for Social Efficiency: The Development of Education from the 1890's to 1914	23	
Chapter 2— The Herbarians	53	
Chapter 3— John Dewey and Education for Democracy	71	
Chapter 4— The Beginning of a Science of Education	91	
Chapter 5— Progressive Educators Before World War I	117	
PART TWO — Educational Aspiration 1916-45	151	
Introduction	152	
Chapter 6— World War I and Post-war Educational Reform	155	
Chapter 7— Education in the U.S.S.R., 1917-40	195	
Chapter 8— Makarenko and Education for a Collective Society	227	
Chapter 9— The Totalitarian Interlude: Education in Japan, Italy and Germany, 1919-39	243	
Chapter 10— Individual Development and Social Recon- struction: The Contribution of the Progressives and the Educational Psychologists in the 1920's and 1930's	269	
Chapter 11— Education in Underdeveloped Countries and Colonial Territories, 1900-40: China, India and Africa	305	
PART THREE — Educational Reconstruction and Expansion 1945-75	331	
Introduction	332	
Chapter 12— Remaking Secondary and Tertiary Education in Europe, U.S.A., and Japan, 1945-75	335	
Chapter 13— Trends in Educational Research and Curriculum Development	371	
Chapter 14— Educational Revolution in Developing Countries 1950-75: India and Africa	397	
Chapter 15— Education in Communist Countries 1945-75: U.S.S.R. and China	425	
Index	457	

LIST OF FIGURES

1.1: United States of America: Drop-out of Pupils in the City School Systems, 1909	28	12.6: West Germany School System, 1975	345
1.2: Japan: Simplified School System, 1900	35	12.7: England: School System, 1975	352
1.3: Japan: Trends in Enrolment, 1870-1970	36	12.8: United States of America: Ratio of School Enrolment to Population 5-17 Years of Age, 1889-1968	355
1.4: United States of America: School System, 1900	37	12.9: United States of America: High School Graduates as a Percentage of 17 Year-Olds, 1900-70	355
1.5: England: School System, 1905	40	12.10: United States of America: School System, 1975	356
1.6: France: School System, 1902	43	12.11: Japan: School System, 1970	359
1.7: Germany (Prussia): School System, 1901	46	12.12: Great Britain: Numbers in Full-time Tertiary Education, 1900-70	362
2.1: Rein's Moral-Historical Curriculum for the First Eight Years of Schooling	58	12.13: United States of America: Total Enrolments of Students in Higher Education and Enrolments in Junior Colleges to 1970	365
2.2: Herbartian Formal Steps	60	14.1: India: School System, 1970	403
5.1: Progressive Country Boarding Schools	129	14.2: India: Increase in Enrolments and General Population Increase, 1901-70	404
6.1: United States of America: Number and per cent of Population Age 14-17 in Public Secondary Schools, 1890-1959	192	14.3: World: School Enrolment c.1900. Percentage of Total Population Enrolled in Primary and Secondary Schools	421
6.2: United States of America: Trend in Percentages, of High School Enrolments by Subject Groups in Last Four Years of School, 1900-50	193	14.4: World: School Enrolment c.1970. Percentage of Pupils of Primary and Secondary School Age Enrolled (approximately 6-17 Year-Olds)	422
7.1: U.S.S.R.: School System in the NEP Period, 1921-28	202	14.5: World: Literate Proportion of Population over 15 years of age, 1970	423
9.1: Japan: Material in Textbooks on Morals by Year of Textbook Revisions	248	15.1: U.S.S.R.: School System, 1975	437
9.2: Nazi Germany: School System After 1938	260	15.2: China: Growth in Primary, Secondary, and Tertiary Enrolments, 1905-65	448
12.1: Sweden: Comprehensive School Organisation, 1975	337	15.3: China: School System, 1975	453
12.2: France: Langevin-Wallon Commission Proposals, 1947	339		
12.3: France: Reform of Education, 1959	341		
12.4: France: School System, 1975	343		
12.5: France: Growth of the School Population	344		

LIST OF TABLES

4.1: Significant Transfer of Training Experiments, 1901-33	111-12	14.3: Africa: Addis Ababa Conference Targets and Achievement, 1960-61, 1965-66	416
6.1: English Public Schools and Selected Professions	189	14.4: Africa: Addis Ababa Conference Targets and Achievement for Kinds of Second Level Enrolments, 1960-61, 1965-66	416
7.1 Literacy in the Russian Empire and the U.S.S.R.	197	14.5: Africa: Enrolments in Selected Countries, 1970	418
7.2: An Integrated 'Method of Complexes' Curriculum in Primary Grades in the U.S.S.R.	204	14.6: Africa: Estimated Total Enrolment, 1950 and 1970	419
11.1: Population of India: 1951 Boundaries	311	14.7: World and Regions: Enrolment Ratios by Level of Education, 1970	420
12.1: England and Wales: Percentage of Pupils in Various Types of Secondary Schools, 1950-75	349	15.1: U.S.S.R.: Number of Students Attending Kindergarten, General Education, and Higher Education, 1940, 1960, 1970	429
12.2: In Nine Countries: Secondary School Graduates as a Percentage of their Age Group, and Tertiary Education Enrolments as a Percentage of the 20-24 Age Group	360	15.2: U.S.S.R. and Central Asia: Educational Level of Population Aged 10 Years and Older	431
14.1: Africa: Enrolment in Schools in the Principal Colonial Territories, 1950	407-08	15.3: RSFSR: General Ten-year School Timetable in Hours per Week, 1975	436
14.2: Africa, Latin America, and Asia: Enrolment, 1958 and 1963, and Enrolment Objectives 1965 and 1970, by Level and Region	415		



INTRODUCTION

Education in the Twentieth Century

Ellen Key (1849-1926), a Swedish writer and teacher, who in 1900 wrote *The Century of the Child* dedicated to 'all parents who hope to shape the new man in the new century'.

SUMMARY

Education at the End of the Nineteenth Century

- (i) The Provision of Education
 - (ii) Curriculum
 - (iii) Methods of Teaching
- ### Three Periods of Education
- (i) Educational Awakening c.1900-16
 - (ii) Educational Aspiration, 1916-45
 - (iii) Educational Reconstruction and Expansion, 1945-75

Education and the Twentieth Century Revolution

- (i) The Politicising of Education
- (ii) Education for Individual and Social Betterment
- (iii) From Instruction to Education

The twentieth century has been a time of profound revolution, and education has played an increasingly important part in fostering and shaping the transformation.

In many countries, changes have involved the forcible overthrow of existing authority and the destruction of selected aspects of traditional practices and cultures. Education, in such cases, has often been brought deliberately into the service of the new society to widen, deepen, and perpetuate the revolution. In many other places, profound changes have occurred through the process of silent social revolution.¹ Industrial development, scientific and technological progress, and increasing urbanisation have brought substantial changes in social organisation and cultural habits. In these societies material comfort has increased, and measures to secure the welfare of all have been considerably extended. In this transformation, education has played a central role. It has been required to interpret the new forces of the twentieth century and their effects to the young people growing up within them, it has taken on the task of searching out and providing the intellectual and social knowledge and skills by which the understanding, maintenance, and extension of the revolution can be achieved, and it has succeeded in raising human aspiration for more education and the better social and economic conditions that go with it.

Schools from kindergarten to university lie at the centre of a modern society's educational efforts. Obviously there are many other educational influences at work, but, in the twentieth century, the school is the one educational institution that has been deliberately set up on a large scale and fostered by much public and professional effort. Its programs, its organisation, the educational processes within it, the theory behind it, its association with related institutions such as youth organisations, and its impact on social, cultural and political life, together form a large and important body of material about the growth and development of contemporary human society. This is the subject of this book. It is an

¹ The phrase is used as the title of one of the most widely read histories of recent education in England: G.A.N. Lowndes, *The Silent Social Revolution*, Oxford University Press, 1967, 2nd edn, 1969.

effort to show, by studying the work of schools, the part that education has played in moulding the mind of the twentieth century and in transforming itself incidentally in the process.

EDUCATION AT THE END OF THE NINETEENTH CENTURY

(i) The Provision of Education

At the beginning of the twentieth century formal education for the majority of people in the world scarcely existed. Three-quarters of the world's population were in agricultural countries where the educational changes of the past thousand years had made no significant impact on them. It is probable that in 1900, 70 per cent of all the inhabitants of the world over fifteen years of age and 95 per cent of those in underdeveloped countries were illiterate. The continuing intractability of the problem of merely achieving literacy was shown by the fact that, half a century later, in 1950, the figures were respectively about 44 per cent and 64 per cent, and, in 1970, 34 per cent and 50 per cent.¹ In some countries, such as Iran, India, and China, where illiteracy was rife, there was also a well-developed literate culture of long standing, but, at the beginning of the twentieth century, it was still confined to the very few. Japan alone of the such countries had made substantial advances in the latter half of the nineteenth century and was a much studied example to the rest of Asia.

In the more developed and industrialised nations of North America, Western Europe, and the British colonies of Australia and New Zealand, universal education was well established. Six or more years of compulsory primary education for all children was common by the beginning of the twentieth century, a substantial expansion of public secondary education was under serious consideration, and a restricted but growing system of tertiary education was in operation. In the U.S.A. about 72 per cent of the age group 5-17 were in school in 1900, in England 64 per cent, and in Australia 52 per cent.

In Europe and Latin America primary and secondary education were not necessarily sequential. Primary education was for the masses, and, although, in some higher primary schools, it might extend upward for two or three years into the secondary level, it did not prepare pupils, except a few outstanding ones, for a full secondary education. Primary education was terminal and separate from secondary education; if it led to anything it led to some form of lower level vocational education. The two systems, primary and secondary, were based on and helped to maintain

social class differences. Primary education was usually free and compulsory, secondary education was available to those who could pay, and it had its own system of preparatory schools separate from and parallel to the primary schools. The preparatory and secondary schools trained the children of a middle and upper class elite to move eventually into positions of professional or managerial responsibility.

The school systems of North America were structured differently. There, as a general rule, primary education was the first stage, leading to secondary education; the numbers completing a full secondary course, however, were still small, and attendance at high school was related to social class. Despite the claim by a school administrator that '... it is the children of the plain people, in city and country, who are crowding our school-rooms today...'² the masses were not staying on to complete the high school course. In 1900 the proportion of secondary school pupils in the U.S.A. was higher than that in any other country, but the drop-out rate was still extensive and was not determined solely by educational considerations. For many years to come both the opportunity for a full secondary and for a tertiary level education, and also the level of achievement and of measured intelligence reached by students were to be associated with such socio-economic status factors as the place of residence, the kind of occupation, income, and aspiration of a student's parents.

The nineteenth century saw the establishment in Germany of a comprehensive system of technical schools which in the last quarter of the century attracted the attention of educators and public-spirited citizens in many other countries. Technical and commercial education was meagrely provided for outside of Germany, but in countries where commerce and industry were expanding or well-established, such as France, England, the U.S.A. and Japan, there was much discussion, and, by 1900, a modest effort to develop more facilities for technical training. Tertiary education, for both professional and general studies, was also on the move. Universities and teachers' colleges particularly had multiplied in the last quarter of the nineteenth century in all the developed countries. Universities continued, however, to provide for an elite selected competitively from secondary schools; and teachers' colleges, though less selective, were, in the future, to look to the secondary schools for their entering students.

¹ UNESCO, *Statistical Yearbook*, 1963, Table 1-3, and 1970, Table 1-4. The figures do not include China, North Korea, or North Vietnam.

² Charles R. Skinner, State Superintendent in New York, 'The Best Education for the Masses', Presidential Address, National Education Association, 1897, p.53, quoted in E.A. Krug, *The Shaping of the American High School 1800-1920*, University of Wisconsin, Madison, 1969, p. 175.

By 1900, it had become clear to educators in the most developed countries that secondary schooling was the most critical area of education. The nineteenth century had solidly established universal primary education. Further progress in technical, professional, and all forms of higher education depended on the effective organisation of the secondary level of schooling. The rethinking of the functions and the means of securing a rapid expansion of secondary education became, therefore, the most widely discussed task for educators in the early years of the new century in the industrialised countries of the world. In the underdeveloped countries there was little movement at either the secondary or tertiary level.

(II) Curriculum

In content, primary education in all countries was designed to produce pupils who had command of the fundamental processes of literacy and numeracy, and who were persons of good character, honest, hard-working, and patriotic. The program of studies and the ideal of character were both somewhat limited, but, by the turn of the century, had already started to expand. The rigid and restricted ways exemplified by the English payment by results system of the latter half of the nineteenth century had begun to dissolve, and a richer view of the function of the primary school had for some time been slowly coming into being under the influence particularly of the Froebelian and the child study movements.

In secondary education the traditional curriculum of classics and mathematics had not yet been broken down; it had, however, been under threat for half a century. The virtues of the traditional curriculum were that it provided mental training and that it was the basis of a liberal education. Other subjects might offer interesting and useful information but were not admitted to have the fundamentally educational qualities of the classics and mathematics. To displace them, new subjects had to demonstrate that they could offer as sound an intellectual training, and as comprehensive an entry into the culture. By 1900, science and modern languages, both native and foreign, were establishing their claims. History, too, was becoming increasingly important. It was beginning to be thought of as a source of intellectual training, and also as an efficient vehicle of nationalism and moral education. In the U.S.A. the tradition had been eroded much further than in Europe. In Asian countries the established curriculum had begun to feel the impact of western thinking, and, notably in India and Japan, was steadily being remodelled to take in the more recent tendencies in Europe and America. One of the most recent of these interests was the wider development of secondary and post-secondary technical education.

(III) Methods of Teaching

Methods of teaching in primary and secondary schools assumed that schools would be divided into classroom groups of pupils of approximately the same age, and that pupils would be taught together in each of these groups. Techniques of classroom teaching for groups of thirty or so children that, in exceptionally crowded schools, might range up to one hundred were the special concern of the educators in the nineteenth century while primary education was rapidly expanding. By 1900, teaching typically proceeded on the view that the teacher's principal task was to manage a classroom efficiently, that, in doing this, he should be able to instruct his pupils clearly, methodically, and thoroughly in a group, that the pupils should be directed by the teacher in what they learnt and how they learnt it, that the principal sources of the information should be the teacher and the textbook selected by the teacher, and that they should accept and reproduce the ideas and knowledge prescribed for them in a quiet and well-disciplined manner.

The classroom of 1900 was meant to be a still and orderly place where the teacher's voice predominated. It should not be thought, however, that this pattern of teaching went unchallenged. Progressive education which did more than any other movement in the twentieth century to undermine the received orthodoxy and to introduce a radically different view of pupil-teacher relationships did not spring suddenly into being in the first decade of the century. It had important forerunners of several kinds who worked in the later nineteenth century to modify the existing mould and to introduce more flexible procedures. Early in the century, Pestalozzi, and later Froebel had laid both a theoretical and practical foundation for educational reform which many educators had expanded by their various interests, in practical and manual work, in studies of children's play and growth, in encouraging non-book learning, in substituting problem-solving for memorisation, or in widening the range of subjects studied in school. In such ways innovative schools and teachers helped slowly to build up a climate of expectation which would enable their twentieth century successors to take bolder and more concerted steps to break out of the prevailing pattern.

Of the forthcoming changes there were two harbingers.

First, an interest developed during the last quarter of the nineteenth century in the application of systematic psychological theory to education. Herbart, early in the century, had started the trend with a theory of learning and teaching based on the association of ideas; his German successors in the second half of the century developed it and applied it carefully to classroom practice. At the same time Wundt had put experimental psychology on the map, and several of his students had

begun to interest themselves in educational psychology. So far had the tendency progressed that in 1889 a well-known encyclopaedia stated firmly that psychology was the 'chief source of the principles or laws which make up the science or theory of education'.⁴ In that same year, John Dewey published a textbook on *Psychology*, and started to move into an exploration of educational problems that was to continue throughout his long career and was to provide many of the basic ideas for the educational reformers of the twentieth century. The upsurge of interest in experimental psychology, the systematic application of psychological ideas and findings to educational practice by some leading educators, and the willingness of many teachers to seek for a connection between their methods of teaching and the course of their pupils' development, were important late nineteenth century anticipations of the first quarter of the twentieth century.

Secondly, the nation-state in western countries had, during the course of the nineteenth century, replaced the church as the principal educational authority. Church schools continued to flourish in most countries, but the principal task of providing the money and the educational facilities for mass elementary education, and for a good proportion of secondary and tertiary education had, by 1900, fallen to the public authorities. Education had not yet become a matter of great and continuing public importance. Occasionally, communities would divide excitedly on educational questions, and national elections might involve important educational issues, but, by and large, about 1900, the leading politicians and public figures did not give much time or thought to education. It had, however, come firmly into the public domain. As the nation's needs changed, so they could be translated into new educational developments; as public attitudes changed, so, too, they could be reflected more readily in school programs. Increasingly, in the twentieth century, as new ideologies came into play, as rivalries between nations intensified, as the growth of technological society called for higher levels of educational competence, there was an interest in the more effective provision of education by public authorities. By mid-century education had become a major public concern. The political, social, and economic effects of public education were widely seen and painstakingly, if not always accurately, calculated, and the impact of public control on the provision and conduct of schools had become an important part of the educational history of the twentieth century.

THREE PERIODS OF EDUCATION

In the course of the twentieth century, education has passed through three recognisable stages:

(I) The Educational Awakening, c.1900-16

From the 1890's to World War I there was a general stirring in educational theory and practice. The impelling forces of industrial expansion, middle class ambition, and nationalism had begun to direct attention to the possibility of making more extensive use of education to promote these rising interests. New tasks were explored, fresh approaches to education were canvassed, and reforms, usually modest and conservative, but occasionally radical, were introduced to meet the new situation.

(II) Educational Aspiration, 1916-45

The second period began about the time John Dewey wrote his classic statement of educational faith, *Democracy and Education* in 1916, and continued until the latter years of World War II. The trends of the first period were consolidated, and the conflict between mass and elitist education was heightened. The optimism that flowed from World War I, and the fundamental re-examination of social, political, and economic questions brought about by the depression of the 1930's were a challenge and stimulus to educators. It became a time of heady aspiration in which ideals were formulated, the relationship of education to society carefully scrutinised, and a wealth of new practices and experiments introduced which began to put into operation wide and substantial changes in the objectives, content, and methods of teaching.

(III) Educational Reconstruction and Expansion, 1945-75

Following World War II there was initially a period of solid reformulation, as ideas expressed in the 1920's and 1930's were built into new structures to cope with the insistent demands of the mid-century. It was an era of planning in which the world's underdeveloped areas emerged rapidly into national consciousness and sought to use education as a means of developing social cohesion and economic strength. The second part of the period was characterised by continued expansion in both developed and underdeveloped countries, and by a wide range of projects to reconstruct school curricula in an effort to match the revolutionary changes that were occurring in science, in technology, and in social organisation.

⁴ A.E. Fletcher, (ed.) *Sonnenschein's Cyclopaedia of Education*, Sonnenschein, London, 1889, p. 290.

EDUCATION AND THE TWENTIETH CENTURY REVOLUTION

Education throughout most of human history, has been concerned principally with handing on an established intellectual and moral tradition, with adjusting conservatively to new circumstances, and with preparing young people to earn a living. Twentieth century education is an animal of a different colour. It has not abandoned its conservatism entirely, but it has sought more actively to question and to break with established traditions. Its task has been not only that of preservation but also that of criticism and reconstruction.

In an age of revolution, old information and old principles lose their relevance, old standards fade, and old forms of organisation become inappropriate. Even basic methods of thinking come under challenge. The schools, since the beginning of the century, have entered into their new role with varying degrees of consciousness, ability, and zeal. Where political revolution has been abrupt, they have quickly applied themselves to teaching the ideas, producing the kinds of persons and qualifications, and supporting the aspirations that would further the cause of the new society. Where revolution has been more gradual, they have remodelled their curricula, often slowly and reluctantly, to take account of and to provide a more satisfactory interpretation of the new trends, they have expanded their activities to the cultivation of the whole person of their pupils in the changing society, and they have encouraged the hopes and ambitions of a steadily increasing number of young people to seek, through education, for individual advancement and general social betterment.

In educational method and through the pattern of their organisation, schools have tried to meet the demands of the new era. Their role, in consequence, has been both destructive and creative. The teaching, for example, of scientific method and the techniques of literary and historical criticism, the provision of a richly varied primary education and of comprehensive secondary schools, and the vast widening of educational opportunities have been solvents of established modes of living and thinking. On the other hand, the association that has been encouraged between intellectual and practical activity has given a new dimension to social and cultural life, the link that has been forged between political aims and educational processes has been a significant factor in shaping the various kinds of mass society that have flourished in the twentieth century, and the general lifting of the cultural level achieved by the extension of education has created, in many nations, a new consciousness of human possibilities and has raised expectations of higher standards of social welfare.

It has not, however, been a case of unbroken progress. Several factors have produced delays and difficulties.

Teaching in schools has been imperfect and uneven. Ambitious aims have been frustrated by imperfect instruments. Frequently, worthwhile reforms have been proposed only to founder because teachers were inadequately prepared to put them into practice or the public were not ready to accept them.

Inspiration has faltered in the face of inescapable routine. The teaching profession has always been inclined towards order and system, and has not usually looked with favour on innovations that upset established practice. The tendency to resist the new and to put a brake on change was reinforced in the course of the twentieth century with the vast enlargement of educational responsibilities. The very considerable growth in the scale of educational organisations was accompanied by bureaucratic procedures and controls that sometimes, because of their great range, could speedily implement widespread reform but generally tended to slow progress down and inhibit the introduction of radical change. Large educational institutions tended to place an emphasis on stability and promotion by seniority. Their concern was for the efficient maintenance of day-to-day administration, and they had little time or money to spare for innovation.

Some political and social trends which were responsible for substantial educational change proved also, in some ways, to be inhibiting. Nationalism, for example, a powerful spur to development in both western and ex-colonial countries, gave to education under fascism a one-sided emphasis that crushed several other promising developments. The search for equality of opportunity stimulated the spread of education, but also, in many countries, led to a uniformity in school programs in an effort to avoid discrimination, and to a great dependence upon prescribed syllabuses and examinations to ensure fairness in the selection of students for further education.

From time to time, also, reaction has set in. American business interests, the demands of Russian planners, the predilections of French literary intellectuals, the attitudes of African nationalists — all, in some ways, radical influences — have at times effectively and conservatively protected their own interests to the detriment of the advances cherished by some contemporary educators. But, by and large, the teaching profession has steadily remodelled its procedures and the content of its curricula to match, and sometimes to outpace, the general movement of the century, and education has managed to play an interestingly varied role in the continuous reconstruction of society.

Throughout the century there have been three basic and related trends:

- a politicising of education;
- a concern with betterment through education;
- a reorienting of the educational process from instructional work to an interest in the cultivation of a wider range of human behaviour.

(I) The Politicising of Education

The politicising of education passed through three phases:

- (a) Solidarity was the object of the first phase. The efforts to make good Americans out of a wide range of European immigrants, the use of the imperial rescript of 1890 in schools to unite all Japanese in loyal obedience to the emperor, the national day celebrations, memorial services, patriotic songs, literature, and history texts of England, Australia, France, Italy and of almost every nation were designed to instil common sentiments and attitudes which would cement the people of a particular country together into a common allegiance. Cubberley, writing in 1909 on changing conceptions of education in the U.S.A., expressed the current position very well: 'the task is thrown more and more upon the school of instilling into all a social and political consciousness that will lead to unity amid diversity, and to united action for the preservation and betterment of our democratic institutions'.⁵ The school's task of building conviction in the young generation was intensified during World War I, and again, in response to the various political revolutions of the inter-war period and the independence movements in developing countries after World War II.

Nationalism was the strongest force making for solidarity and the one most assiduously cultivated in schools. The national rivalries of the early twentieth century prompted educators to devise ways to increase their pupils' knowledge of their own country and determination to further its interests. Intellectually, by increasing the national content of the school curriculum and emotionally, by patriotic speeches, symbols, displays and ceremonies, pupils were bound to their own nation. In the two world wars and the period between them, nationalistic teaching grew to excess. Again, in the 1950's and 1960's, new nation-states, released from colonialism and needing to build new ties and loyalties, enlisted the help of the schools. In consequence, there

was much seeking after appropriate local material for the curriculum, and an enthusiastic cultivation of indigenous and patriotic music, songs, and ceremonies.

In the process of securing the loyalty and devoted service of the population to the particular way of life or political party that was in power an elaborate apparatus of persuasion was set up. The school, and often associated with it, a youth organisation, were at the centre of the operation. The twentieth century, with its variety of revolutionary movements and competing ideologies, became an era of persuasion in which the resources of education were substantially and often ingeniously involved. Mao Tse-tung, whose country 'put politics in command' and became one of the most thoroughly committed to the saturation of education by politics, summed up the position when he declared: 'Not to have a correct political view is like having no soul, and, therefore for Chinese youth, the basic aim of education is to serve proletarian politics'.⁶

- (b) Social, economic, and political justice was the object of the second phase of the politicising of education. It is closely related to the second major trend of education in the twentieth century, that concerned with general betterment. Most social welfare and general betterment policies had political overtones, if not active political associations.

Social efficiency was a much discussed aim of education in the first half of the twentieth century. It usually meant three things: that pupils should grasp the essential ideas and understand the civil organisation of their country, that they should have an adequate and sufficiently flexible general and vocational education to fit them to become useful citizens, and that, as good citizens, they should be aware of the weaknesses and strengths of their society and be prepared to help make it work as efficiently as possible. To achieve the last objective, that of advancing the public welfare, pupils must be in a position eventually to act as good and efficient citizens. There must therefore be adequate opportunity to prepare for and to provide service to society. The search for equality of opportunity became the principal feature of this phase. Initially it was important to

⁵ E.P. Cubberley, *Changing Conceptions of Education*, Houghton Mifflin, Boston, 1909, p. 55.

⁶ Mao Tse-tung, *On the Correct Handling of Contradictions Among the People*, *The Question of the Intellectuals*, pocket edn Foreign Language Press, Peking, 1967, p. 202.

provide universal primary education. In developed countries this was largely achieved soon after the beginning of the twentieth century. As civilisation multiplied its complications, however, and it required more time and greater maturity to come to an elementary understanding of it, the new century found that its task was to provide universal secondary education.

At the beginning of the century primary education was regarded as the form and level of education suitable for the mass of pupils; secondary education was for the elite. Already, however, substantial moves had been made in the U.S.A. to make the high school into a normal continuation of the elementary school. The development of six-year elementary schools, the establishment of junior high schools in 1909-10 and their subsequent growth in popularity helped considerably. Nevertheless, until World War I, secondary education in the U.S.A. was far from universal and was popularly regarded as being principally concerned with the preparation of students for entry to tertiary colleges. In Europe, secondary schools tended to be fed by their own preparatory schools, and secondary and primary schools operated, for the most part, as two separate systems with a small amount of transfer between them.

The proliferation of the middle class, particularly the growth of the education-hungry salaried and professional middle class, brought larger numbers of interested pupils to secondary education. By the 1920's middle class educational expectations were beginning to be shared by many individuals in the lower classes, and the great twentieth century transformation was beginning. Education was starting to become a mass phenomenon. It was leaving the stage of primary education for the masses, and secondary and higher for the elite, and was entering the period in which it was to be the general expectation of everyone that they should have the opportunity of as much education as they could manage and might wish to avail themselves of. The transformation was not brought about quickly or easily. There was a long and often bitter struggle between the advocates of elite and mass education, the elitists groundlessly fearing that a loss of quality would accompany an increase in quantity.

The critical battles were fought over secondary education in the developed countries. The colonial administrators of underdeveloped countries tended to reflect the controversies of the developed countries, and, on the occasion of independence or revolution, their successors were inclined to opt for as much mass education as they could afford.

The obvious socio-economic class bias of secondary schools was initially broken down by admitting pupils of high ability from the primary schools; gradually, entry was extended to all pupils who could profit by a secondary education; and evidence of their ability to profit in this manner was demonstrated by selective entrance examinations. In due course all pupils proceeded automatically to some form of secondary level schooling, and in some countries, types of secondary schools were multiplied to cater for the variety of abilities and interests that followed the increase in number of pupils. By the 1940's serious questions were being asked about the allocation of pupils into different kinds of secondary schools.

Discussion on the most suitable means of providing opportunity for all pupils to receive secondary education grew in intensity up to about the 1960's.

Soon after World War II, in the 1940's, tertiary level education began to expand rapidly, and the consideration of wider opportunities for tertiary education vied in interest with that of the discussions in secondary education. By the 1970's the question of whether to establish sufficient facilities for universal secondary education in developed countries was settled; the matter, however, of the most appropriate content for secondary education was not. Nor was it yet clear what form wider opportunity in tertiary education should take.

It had, by then, become apparent that providing universal facilities did not necessarily equalise educational opportunities throughout the community. Discrimination and expectation were also important factors. Sex, social class, and race were important determiners of the amount and kind of education received by individuals in most countries. Educational opportunities for girls were restricted, in comparison with those available for boys, in some places by an active policy of discrimination, and in others, effectively but less obviously, by society's lower expectations for girls.

Similarly, and especially in the colonial territories, the native population received an education inferior to that of the white colonisers and were thought to be less capable of profiting by equal educational facilities. Lower socio-economic status was also a handicap to children: there was less ability to pay when fees were required, there was less ambition to progress up the educational ladder, the children were less favoured in health, nutrition, sleep, clothing, study and recreational circumstances, and, generally speaking, their educational facilities were inferior. Lower class children, in consequence, had a somewhat restricted

opportunity to succeed. Middle class children, on the other hand, tended to receive more encouragement from parents and from the circumstances of their environment.

Attempts to compensate for inferior educational opportunities, and to ensure that available educational opportunities were used to the best advantage, were begun in some countries early in the century by associating some social welfare services with the schools. Thus, in England national legislation enabled educational authorities in 1906 to provide for hot midday meals for necessitous children, and, in the following year introduced a national school medical service. Before the end of World War I several educational authorities in the U.S.A. and in England were employing school psychologists to test children and, in due course, to develop guidance services for schools. The early educational psychologists began to accumulate data about individual differences among children that was extended and enriched in the 1920's and 1930's by their successors. It was not, however, until the 1940's that it became widely realised that differences in children's school performances were closely associated with their social and cultural environment. The full subtlety of the discrimination was gradually revealed and documented by educational sociologists in a large number of studies in many countries during the 1940's and subsequently. The matter then became very much an open political issue.

In order to provide genuine equality of educational opportunity it was necessary for a governmental authority to intervene with measures to improve the social and cultural condition of the disadvantaged. In essence, it meant an abridgement of liberty in the interests of fraternity. The social solidarity, in pursuit of which education was already engaged, had to be extended from something largely emotional and sentimental, to the practical reform of social relationships and conditions of living. Education thus became inescapably involved in a general program of social reform, often halting, piecemeal, and reluctantly entered into by conservative governments, but sometimes willingly and systematically undertaken by governments which welcomed the growing trend toward collectivism that marked the course of the twentieth century.

(c) The reconstruction of society was the object of the third phase of education's marriage with politics. John Dewey in 1916 had announced 'the reconstruction of man in society' as the aim of the educational revolution that he was trying to achieve. His fellow progressives in Europe and the U.S.A. seconded his efforts with a

variety of programs that would encourage pupils to inquire into current social practices, to examine their own role in society, and to build up knowledge, habits, and attitudes that would make them into dedicated and responsible democrats. In reconstructing their own views, the pupils would also be taking part in the reconstruction of society.

If it was possible and desirable to teach pupils to examine their society critically and think of ways in which some aspects of it might be improved, why should not schools play a more active part in the process of social change? By teaching pupils to formulate their ideals for society, and by involving them in practical operations that would help to bring the ideal closer to realisation, schools could contribute directly to the reconstruction of society. *Dare the Schools Build a New Social Order?* was the title of a widely discussed book by a leading American educator in the early 1930's. It brought to notice the dramatic extension of the role of education during the first three decades of the twentieth century — from unappreciated Cinderella pursuing the humdrum work of elementary instruction to possible fairy godmother bringing a new civilisation into being.

The transformation was not a dream. It could be seen to be actually happening. The schools were not, unaided and alone, building up a new society, but they were, at least, giving vigorous aid to the process. The nursery schools of Deptford, for example, were slowly changing the child-rearing practices and the health habits of the slum parents in East London; primary and secondary schools in most countries had opened a new range of activities and recreational interests that were causing a widespread change and enrichment of later adult interests; the technical schools of Germany had been instrumental in building a powerful industrial nation and in rebuilding it after World War I, and Kerschenscheider's special version of them in Munich had combined solid citizenship with technical proficiency; the universities had been doubling the output of scientists in every decade since the beginning of the century, affecting by this and by their research the face and nature of the current technological revolution; the universities had also, by the 1930's, begun to establish substantial faculties in the social sciences from which came critical and constructive work that affected the general climate of the times and was sometimes responsible for engineering new governmental social policies and practices. For the most part these were indirect and unsystematic influences that the schools exercised on society, and, obviously, they were not generated uniquely and solely by the educational