THE TEACHING OF GEOGRAPHY IN SECONDARY SCHOOLS

ISSUED BY THE INCORPORATED ASSOCIATION OF ASSISTANT MASTERS IN SECONDARY SCHOOLS

FIFTH EDITION

CAMBRIDGE
AT THE UNIVERSITY PRESS
1967
CONTENTS

List of Illustrations ........................................ page v
Foreword .................................................... ix
The Central Committee ....................................... x
List of Corresponding Members ............................ xi
Non-Members who have contributed ....................... xv
Preface ................................................................ xvi
Acknowledgements ........................................... xx

1 The Place of Geography; Historical Development and Trends
   Development in the Nineteenth Century, 2; Twentieth Century Progress, 7; Developments since 1944, 9; The Future, 13

2 The Aims and Scope of Secondary School Geography
   The Modern Concept of Geography, 14; Secondary School Geography, 17; School Geography Courses, 20

3 Schemes of Work
   Some Fundamental Considerations, 25; Organisation of Material, 28; Geography or Geographies?, 40; The Importance of the Type of Pupil, 49; Availability of Teaching Aids, 54; The Influence of External Examinations, 55; Correlation with other Subjects, 55

4 Teaching Methods
   General Considerations, 58; Class Teaching, 59; Pupils' Written Work, 83; Observational Geography, 89; Sample Studies, 92; Individual Work and Group Work, 94; Programmed Learning, 97; Specimen Lesson, 99

5 Sixth-Form Geography
   The Specialist Course, 112; The General Course, 137

6 Examinations
   Internal Examinations, 140; External Examinations, 150

7 Equipment
   The Geography Room, 164; Furniture and Fittings, 173; Storage, 177; Projection Facilities, 180; Other Geography Room Equipment, 187; Geography Museums, 204; Pupils' Equipment, 205; Geography Libraries, 208; Teaching Geography in Ordinary Classrooms, 210
CONTENTS

8 Field-work ... page 211
  Principles, 211; Terminology, 213; Provision of Time for Field-
  Work, 213; Day or Half Day Exercises, 214; Field Day-
  Programmes, 229; Organisational Aspects of Day Exercises, 233;
  Field Courses, 238; Local Surveys, 246; Postscript: Field-Work
  and Geography, 247

9 Exhibitions, Societies and Foreign Travel 248
  The Geography Exhibition, 248; School Geographical Societies,
  252; Ship Adoption, 255; Foreign Travel, 258

10 The Geography Master 262
  Introduction, 262; The Training of the Geography Master, 263;
  The Qualified Teacher, 265; Keeping up to Date, 266; Conclusion,
  267

11 Geography and Careers 268
  The University-Trained Geographer, 268; The non-graduate Geo-
  grapher, 274

12 Geography Teaching Overseas 277
  Introduction, 277; Different Approaches, 278; Syllabuses, 280;
  Geography Teaching in Individual Countries, 281

Appendices
A Specimen Syllabuses 287
B A Bibliography of Method 321
C Sources of Teaching Material 339
D Organising Field-work 381
E Making Arrangements for Foreign Travel 386
F Organisations of Interest to the Geography Master 388
G Addresses of Book Publishers 391

Index 393
LIST OF ILLUSTRATIONS

FIGURES

1 Example of a completed blackboard map page 61
2 Looking across a Norwegian fiord 62
3(a) Africa 1946 66
(b) Africa 1966 67
4 Tracing a contour on a model 69
5 Teaching contours by block diagram: cuestas 70
6 Teaching contours by block diagram: glacial valleys 71
7 A display board for details of the daily weather 90
8 Sketch map to show why Montreal is an important town. The outline 100
9 The place-names are added 102
10 Arrows indicating the flow of the trade of Montreal are inserted 103
11 The map is prepared for the pupils to put into their notebooks 104
12 Blackboard work: specimen lesson on the reversal of the seasons 106
13 Geography room plan. A Grammar–Technical school for over 700 including over 120 in the sixth form 165
14 Geography room plan. A girls’ High school with nearly 700 pupils including 88 in the sixth form 166
15 Geography room plan. A Grammar school for over 800 boys including 180 in the sixth form 167
16 Geography room plan. Girls’ Comprehensive school for over 2,000 pupils including 175 in the sixth form 168
17 Geography room plan. A Grammar school for over 800 boys. There are 210 in the sixth form including the full two-year ‘Advanced’ level course in Geography 169
## LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Number</th>
<th>Illustration Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Detail of a staff table incorporating storage space</td>
<td>176</td>
</tr>
<tr>
<td>19</td>
<td>Ranging poles</td>
<td>194</td>
</tr>
<tr>
<td>20</td>
<td>Offset pole</td>
<td>194</td>
</tr>
<tr>
<td>21</td>
<td>Optical square</td>
<td>195</td>
</tr>
<tr>
<td>22</td>
<td>Clinometer</td>
<td>196</td>
</tr>
<tr>
<td>23</td>
<td>The sextant</td>
<td>197</td>
</tr>
<tr>
<td>24</td>
<td>The theodolite</td>
<td>200</td>
</tr>
<tr>
<td>25</td>
<td>View from M.R. 477525 looking up the Nantlle Valley</td>
<td>215</td>
</tr>
<tr>
<td>26</td>
<td>Page from Field Log Book of compass traverse</td>
<td>216</td>
</tr>
<tr>
<td>27</td>
<td>A sketch map based on compass traverse observations</td>
<td>217</td>
</tr>
<tr>
<td>28</td>
<td>Field sketch: looking southwards across the head of the valley towards Ebbw Vale</td>
<td>218–19</td>
</tr>
<tr>
<td>29</td>
<td>Horrowthorns Farm, near Coleford, Gloucestershire</td>
<td>220</td>
</tr>
<tr>
<td>30</td>
<td>A sketch map of Clayton village</td>
<td>221</td>
</tr>
<tr>
<td>31</td>
<td>Coleford</td>
<td>222</td>
</tr>
<tr>
<td>32</td>
<td>Coleford, Detail of centre</td>
<td>223</td>
</tr>
<tr>
<td>33</td>
<td>Titsey Hill to Limpsfield Common—changes in scenery</td>
<td>224</td>
</tr>
<tr>
<td>34</td>
<td>Woodland study</td>
<td>225</td>
</tr>
<tr>
<td>35</td>
<td>Transect survey. The diagrammatic assembly of material observed on a transect survey is a useful exercise producing a document that can be the basis of much fruitful analysis of relationships</td>
<td>228</td>
</tr>
<tr>
<td>36a</td>
<td>Merstham and Nutfield Expedition</td>
<td>231</td>
</tr>
<tr>
<td>36b</td>
<td>Land-use strip map</td>
<td>232</td>
</tr>
</tbody>
</table>

## PLATES

1 Wooden model for teaching contours following page 192
(a) The assembled model
(b) The model opened to show the ‘300 ft.’ contour
(c) Drawing in the ‘300 ft.’ contour on a map

vi
LIST OF ILLUSTRATIONS

2 (a) Wheat harvesting near Portage la Prairie (The Lockwood Survey Corporation Ltd., Toronto)
   (b) The St Lawrence Seaway near Montreal (National Film Board of Canada)

3 (a) View of Montreal showing the docks and St Lawrence River (Photographic Surveys (Quebec) Ltd.)
   (b) The docks and business quarter (George Hunter, Toronto)

4 (a) 'The Weather Station'
   (b) Instrument for measuring the angular height of the sun

5 (a) A geography room in a new school (head of Geography Department, Queen Mary's Grammar School, Walsall)
   (b) Geography laboratory looking south (head of Geography Department, Northgate Grammar School, Ipswich)

6 (a) Special furniture (Council of Industrial Design)
   (b) Geography room table (Council of Industrial Design)
   (c) Map Chest (head of Geography Department, Sydenham School, London, S.E. 20)

7 (a) Geography Room in a rather older building (head of Geography Department, Albright County Secondary School for Girls, Oldbury, Worcs.)
   (b) Reference Library (head of Geography Department, Queen Mary's Grammar School, Walsall)

8 (a) Geography Laboratory looking north (head of Geography Department, Northgate Grammar School, Ipswich)
   (b) Simple surveying instruments (F. A. Vincent)
FOREWORD

The Teaching of Geography was first published in 1935 and since then there have been three new editions and five reprints of existing editions.

A new committee has now carried out a complete revision of the whole work, taking into account recent developments in Secondary education and new techniques in teaching the subject. It is hoped that this fifth edition also will achieve a wide circulation and exert an important influence on the theory and practice of the teaching of Geography in Secondary schools of all types.

In the preparation of this book the Association has again had the good fortune to be able to draw on the devotion, knowledge and experience of many members and friends to all of whom it expresses its grateful thanks.

May 1967

A. W. S. Hutchings
Secretary, Incorporated Association of Assistant Masters in Secondary Schools
THE CENTRAL COMMITTEE

D. J. Cadman
Stratton School, Biggleswade, Bedfordshire

R. Cole
Formerly of T. P. Riley School, Bloxwich, Walsall

L. H. Elliott

W. C. Middlebrook, Editor
Nottingham College of Education, formerly of Bancroft’s School, Woodford Green, Essex

J. C. Parrack, Chairman
Leek High School, Leek, Staffordshire

T. W. Randle, Secretary
Penistone Grammar School, near Sheffield, Yorkshire

R. A. Ransome
The Grammar School, Chipping Norton, Oxfordshire

W. N. Teale
Nantwich and Acton Grammar School, Cheshire

A. Walker
The Padgate College of Education, Fearnhead, near Warrington, Lancashire, formerly of Ashburton Secondary Boys’ School, Croydon, Surrey

R. G. Willetts
Whitchurch Grammar School, Cardiff, Glamorgan
LIST OF CORRESPONDING MEMBERS

J. Ashton
Formerly of Wirral Grammar School for Boys, Bebington, Cheshire

G. F. Baker
Huish's Grammar School, Taunton, Somerset

J. R. Bartlett
St Julian's High School for Boys, Newport, Monmouthshire

D. C. Beresford-Williams
Exmouth Grammar School, Devonshire

P. Bryan
Cambridgeshire High School for Boys, Cambridge

D. D. Brumhead
College of Adult Education, Manchester 2

D. J. Butterworth
Woking County Grammar School for Boys, Surrey

B. Carlson
Bilborough Grammar School, Nottingham

J. H. Chapman
Leek High School, Leek, Staffordshire

R. P. K. Clark
Ford Castle, Berwick-on-Tweed, Northumberland

D. W. Cloke
Crownhill School, Plymouth

J. R. Cooper
Formerly at Howardian High School, Cardiff

J. Corley
Braintree County High School, Essex

C. E. Crawford
Crewkerne School, Crewkerne, Somerset

S. St Clair B. Crawford
Grammar School, Ripon, Yorkshire

J. A. Dawson
Quarry Bank High School, Liverpool
LIST OF CORRESPONDING MEMBERS

A. L. Dennison
Kingston High School, Hull

G. A. Dunn
Truro County Grammar School for Girls, Cornwall

G. S. Easton
Dinnington Secondary School, near Sheffield

B. J. Edwards
Queen Mary’s Grammar School, Walsall

J. I. V. Ennis
Epsom College, Surrey

J. A. Evans
Ilford County High School for Boys, Essex

G. V. Fancourt
Royal Grammar School, Colchester, Essex

D. G. Ferguson
Leyton County High School for Boys, London, E. 10

M. Gray
Formerly at Brookfield Comprehensive School, Kirkby, Liverpool

L. H. Hadlow
Burnage Grammar School, Manchester

A. D. Hammersley
Formerly at Barrow-in-Furness Grammar School for Boys, Lancashire

P. J. Hart
Formerly at Ifield Grammar School, Crawley, Sussex

T. Hodgson
Formerly at King James I School for Boys, Bishop Auckland, Co. Durham

D. Holly
Croesceiliog Grammar School, Monmouthshire

G. H. Hones
Harvey Grammar School, Folkestone, Kent

R. W. A. Hope
Beaufort School, Bournemouth, Hampshire

E. A. Hutchinson
Henry Mellish School, Bulwell, Nottingham

J. Inch
Wufurun College of Further Education, Wolverhampton

xii
LIST OF CORRESPONDING MEMBERS

R. W. Jackson
Ysgol Dyffryn Nantlle, Penygroes, Caernarvonshire

L. V. Kelly
Grammar–Technical School, Barry, Glamorgan

H. Mountford
Simon Langton Boys' School, Canterbury

W. A. Moyes
A. J. Dawson Grammar School, Wingate SO. Co. Durham

D. Ord
Pelham County Secondary School, Wimbledon, London, S.W. 19

W. A. G. Pace
City of Leicester Boys' School, Leicester

R. E. Parkinson
White House Grammar School, Brampton, Cumberland

R. Parsons
Grammar–Technical School, Caerphilly, Glamorgan

R. G. P. Perry
Friends School, Saffron Walden, Essex

T. Procter
Bushey Grammar School, Hertfordshire

W. D. C. Rees
The Grammar School, Rhyl, Flintshire

D. Riley
Thornbridge School, Sheffield 12

J. I. Robinson
Hamond's Grammar School, Swaffham, Norfolk

T. S. Rowland
High School for Girls, Douglas, I.O.M.

R. M. Sheldon
Formerly Worsley Wardley Grammar School, Swinton, Lancashire

R. E. H. Smith
Coloma Teachers’ Training College, West Wickham, Kent

P. S. Southern
Nelson Tomlinson Grammar School, Wigton, Cumberland

J. Spurway
The Grammar School for Boys, Falmouth, Cornwall
LIST OF CORRESPONDING MEMBERS

L. M. Stamp
Strodes School, Egham, Surrey

P. W. E. Stowe
Rickmansworth Grammar School, Hertfordshire

E. J. Tatford
Portsmouth Technical High School, Hampshire

A. J. Thomas
Barry Grammar-Technical School, Glamorgan

I. F. Tilbrook
The Grammar School, Chipping Campden, Gloucestershire

G. A. Vincent
Trinity School of John Whitgift, Croydon, Surrey

R. A. L. Whitaker
Salford Grammar School, Lancashire

H. C. Wilks
George Green's School, London, E. 14
NON-MEMBERS WHO HAVE CONTRIBUTED

R. Allison
College of St Mark and St John, London

Miss M. Bates
Rockingham Road Secondary School for Girls, Kettering, Northamptonshire

T. W. Brown
Headmaster, King's School, Gloucester

Miss M. Crawford
Rutherford High School, Newcastle upon Tyne

F. F. Cunningham
The Simon Frazer University, British Columbia

E. Evans
Department of Geology, National Museum of Wales, Cardiff

C. E. Fitchett
College of St Mark and St John, London

L. J. C. Hodge
Formerly Sheffield City Grammar School

J. James
The Principal, College of Further Education, Barry, Glamorgan

P. Johnson,
National Audio-Visual Aids Centre, London, S.E. 27

Mrs D. Martin
Copnor Modern Girls' School, Portsmouth

R. W. Pepper
Eltham Green School, London

Dr H. Robinson
Regional College of Technology, Huddersfield, Yorkshire

A. G. Terry
Latymer Upper School, London, W. 6

D. B. Walshaw
Northgate Grammar School for Boys, Ipswich, Suffolk
PREFACE

Many of the changes in the structure of Secondary education in Britain provided for in the Education Act of 1944 have now become a reality. The freedom which our education authorities enjoy to place their own interpretation on the various clauses of the Act has led to considerable diversity among the Secondary schools in different areas of the country. In whatever ways local schemes differ from one another in detail, however, the accepted and inescapable fact is that Secondary education now means the education of virtually all children between the ages of 11 and 15 years and of smaller though increasing numbers up to the ages of 16, 18 or 19 years.

The present committee was therefore confronted with a situation radically different from that in which the pre-war editions of this book were prepared and also different in many ways from that during the period when work was proceeding on the preparation of the third edition. Up to the time of publication of that edition in 1952 most education authorities had adopted the ‘triptite’ system of Secondary education recommended in the Spens Report of 1939. Before 1952 the amount of specialist teaching of Geography in Secondary Modern schools was much more limited than it has since become, while in the few Secondary Technical schools the position of Geography did not differ markedly from that in the Grammar schools. Comprehensive schools had been started by some authorities but were in their infancy, and there was little experience of their problems of teaching organisation or syllabus construction on which to draw. The committee of that time therefore adopted the wise course of bringing the material of the second edition thoroughly up to date and of adding currently relevant matter, including a chapter on the teaching of Geography in the Secondary Modern school.

Circumstances have now changed greatly, and as a result a more drastic revision than any previously carried out has clearly become imperative. The present committee, appointed for this purpose and representative of Comprehensive, Modern, Bilateral, Grammar and Independent Secondary schools scattered about the country, has received much indispensable information and advice from many other members of the Association who volunteered to act as corresponding members. In addition, several non-members of the Associa-
PREFACE

tion have given most valuable assistance. In accordance with the collective views of both Central Committee and correspondents, modifications have been made in the arrangement of the chapters and, to a greater extent, in their content. The purpose of the book is unchanged; it seeks to put the combined wisdom of many experienced and successful Geography masters at the service of all who have any kind of interest in the teaching of Geography in Secondary schools. The methods and the apparatus described are well tried and it should be readily practicable to make use of them in any properly designed and equipped Secondary school. The committee realises that many Secondary schools do not fall within this category and that in these cases teachers may, in attempting to follow the advice given, be compelled to improvise. While it is not claimed that improvisation is always or necessarily a bad thing, it is to be hoped that sufficient pressure can be brought to bear on the authorities concerned to eliminate the necessity for it so far at least as the essential elements of the subject are involved. In the Preface to the second edition it was stated that: ‘In official circles the value of Geography is being increasingly recognised, and the Board of Education has officially sanctioned the construction of rooms specially designed and equipped for the study of Geography.’ Unfortunately many education authorities did not at that time take advantage of this sanction, and even today, although officially approved plans for both the design and the equipping of Geography rooms are available, there are many Secondary schools without this provision, and many others in which the provision is inadequate.

The basic plan used in previous editions of the book is largely retained, but the greater part of the text has been entirely rewritten. Among the changes to which attention may be drawn are the inclusion of a number of syllabuses actually in successful use, illustrating several ways in which the requirements of Secondary school courses may be met; an extended section on the use of radio and television broadcasts; an introduction to the methods of programmed learning; and an entire chapter on field-work. Now that the General Certificate of Education has achieved a position of relative stability, in contrast to the speculation and controversy which surrounded its introduction in 1951, the whole subject of examinations has been restored to the main part of the book with a chapter to itself. There are still many uncertainties, of course, in the external examination field; the high hopes held out of beneficial effects from the Certificate of Secondary Education have not been unmuddled with misgivings. Two other former appendix sections have been included as chapters in the new
Preface

dition. That on the Training of Teachers has been enlarged and re-entered 'The Geography Teacher', whilst that on 'Geography in After-school Life' has been completely recast as 'Geography and Careers'. Lastly it has been found possible to include once again a chapter on Geography Teaching in Overseas Schools.

Today the rapid and accelerating change so often spoken and written about is having and will continue to have a profound bearing on our subject. Many facets of this change are discussed in the book, but two perhaps call for mention here.

Almost every aspect of education has been the subject of recent enquiry and report. Perhaps the most noteworthy fact which emerges is that the two reports of the Central Advisory Council for Education (Crowther, 1959, and Newsom, 1963) both recommend strongly that the clause in the 1944 Act providing for the raising of the school-leaving age to 16 should be implemented not later than 1969 or 1970. Now that this recommendation has been accepted by the government, and assuming the age of commencement of the Secondary stage to remain as at present, all Secondary schools other than some Independent schools must devise five-year courses for the bulk of their pupils, starting in 1966. On the one hand, the uncertainties which at present bedevil the work of Geography teachers in Secondary Modern schools will very much reduced, and they will be able to plan their courses on a much sounder basis than at present. On the other hand, the fact must be faced that new problems and a new challenge have arisen. The universal five-year course cannot be successful if the fifth year is thought of by the pupils concerned as just an extra year's schooling to be endured. The building up of the curriculum as a whole, and the detailed planning and co-ordination of the various subjects within it, must be carried out with the world outside the school constantly in mind. Pupils must be helped to become citizens not merely of the world as it is but of an improved world which they themselves can make, if enough of them possess the knowledge, the desire and the will to bring this about. Properly presented, Geography has a big part to play in the achievement of such an outcome.

The other, and very different, facet of change on which comment is appropriate is the virtual disappearance of colonial empires and the concomitant rise of independent states, particularly in Africa and South-east Asia. From the geographical point of view it is clear that political and social factors are going to come more and more into the foreground as influences on the ways of life of these people. Geographical determinism, in so far as the controlling factor is
Preface

physical environment, will, even in the less developed parts of the world, come to have less and less validity. We can still paint a broad and simple picture of the major natural regions of Africa; but within each region the contrasts are growing with variations in the development of political institutions and alignments, and with differences in the technical achievements of the inhabitants of the independent states which make up the region. The patterns and commodities of trade may also be caused to deviate from what may seem to be their natural forms in the same way as is already the case in Europe. These changes have begun inevitably to affect the approach to the teaching of the Geography of many parts of the world.

The committee is deeply indebted to Mr J. A. Morris, who read through the manuscript and offered much valuable advice. Whilst this has resulted in many improvements, the committee of course, bears full responsibility for any defects the book may still possess.

The grateful thanks of the Committee are also accorded to Mr T. W. Randle, who has carried out the arduous and exacting duties of honorary secretary with unfailing enthusiasm and judgement; and to Mr W. C. Middlebrook, who, as editor, has given ungrudgingly a great deal of his time to this responsible task, made no easier by the verbal idiosyncracies of the other nine co-authors.  

J. C. Parrack
Chairman

Acknowledgements

Among many individuals and organisations whose help has been invaluable, particular reference must be made to Dr T. W. Freeman of Manchester University and officials of the Durham and Birmingham University Appointment Boards for information in connection with the chapter on careers; to the B.B.C. and Associated Rediffusion for help with television and sound broadcasting topics; to the Secondary Schools Section Committee of the Geographical Association for access to its portfolio of Geographical Room plans, and also to the Principal of Nottingham College of Education for allowing the Central Committee to hold some of its meetings there.

For permission to reproduce photographic material we should like to thank the Council of Industrial Design; George Hunter, Toronto; the Lockwood Survey Corporation Ltd. (Toronto); the National Film Board of Canada and Photographic Surveys (Quebec) Ltd.