Education and Training in Contemporary Cartography

Edited by

D. R. Fraser Taylor

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Carleton University, Ottawa, Canada

JOHN WILEY & SONS

Chichester · New York · Brisbane · Toronto · Singapore

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Library of Congress Cataloging in Publication Data:

Main entry under title:

Education and training in contemporary cartography.

```
(Progress in contemporary cartography; ) Includes index.
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1. Cartography—Study and teaching 1. Taylor, D. R. F. (David Ruxton Fraser), 1937——. II. Series.

GA102.5.E38 1985 526'.07 85-3160

ISBN 0 471 90305 1

British Library Cataloguing in Publication Data

Education and training in contemporary cartography—(Progress in contemporary cartography)
1 Cartography
1 Taylor D R Fraser II Series
526 GA105.3

ISBN 0-471-90305-1

Printed and bound in Great Britian.

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Preface

Cartography is an emerging and dynamic discipline which is in a process of rapid change. Some of these changes in theory, techniques, and practice have been outlined in the two earlier volumes of this series. These include the impact of the computer; remote sensing; new communications technologies; and the attendant theoretical, conceptual, and design challenges. Cartography is changing so rapidly that it is difficult for cartographers to keep up. The educational challenges are enormous in a situation where the knowledge base required is rapidly expanding and the half-life of existing knowledge is diminishing equally rapidly.

The purpose of this book is to define and examine emerging trends in cartography and to consider ways in which these challenges can be met. Cartographic education and training for the emerging information society clearly must be different in both structure and content from what is currently in place. The need for continuing education will take an increasing significance. In my view, a 'New Cartography' is emerging which demands new and innovative educational responses. This is a theme which is developed in the opening chapter of the book.

The book is divided into three parts: Part I considers emerging trends and challenges; Part II looks at specific responses to some of these challenges; Part III looks at cartography in the developing nations. Julius Nyerere once observed that whereas some nations strive to reach the moon, others (like his native Tanzania) are trying to reach the village. At first glance the relevance of cartographic developments in the post-industrial societies, such as the United States and Canada, to developing nations, such as those of Africa, might seem very limited indeed. The basic problems of development are immense but in my view a New Cartography may have even greater importance in developing nations than in Europe or North America. New data collection technologies such as remote sensing may give information vital for survival in a timely and continuously updated fashion. The analytical power of cheap and easily transportable microcomputers may help decisionmakers in problem-solving in a way that inaccessible and expensive mainframes never could, and new telecommunications technology may help disseminate information more efficiently than existing technologies. A New Cartography may be more appropriate for developing nations than traditional

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cartography, especially in situations where existing cartographic products are inaccurate, outdated, or non-existent. New technologies may allow cartographers in developing nations to 'leapfrog' over existing approaches in a way which will make their products of more direct utility to development problem-solving.

Many individuals have helped make this book possible and as editor I should like to acknowledge their assistance. Carleton University has provided an academic environment and a resource base which has been invaluable to me. The support of the Ontario Arts Council is also appreciated. The contributors have come up with what I think are some excellent and thought-provoking chapters. The compilation of a book with authors who are widely separated geographically is not easy, and I would especially like to thank Barbara George, Elise Rafuse, and Carol Baker for their help in the research, editing, and production of this volume.

In my thinking about a New Cartography I have had the benefit of comments from colleagues from all over the world, too numerous to name individually. All of them have been most helpful. The final responsibility for errors, shortcomings, or omissions in this volume lies entirely with the editor.

Ottawa, October 1984

D.R.F. TAYLOR

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