

THE SCALING OF TEACHERS' MARKS AND ESTIMATES

By

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FOREWORD

THE publication of this book reflects a belief, which I share with Dr McIntosh, that the scaling of teachers' marks will have an established and permanent place not merely in educational research but in many departments of everyday educational practice. We used the technique on a large scale in our Dundee investigation on Selection for Secondary Education, and our experience left us both with a conviction of its practical possibilities—a conviction that has been greatly strengthened by the results of later researches by Dr McIntosh, Dr Walker and Mr Mackay.

Estimates of pupils' attainments in school subjects are needed for a multitude of practical educational purposes; and it is part of my educational faith that the assessments of the teachers provide the best guide that is, or ever will be, available as to the *order of merit* of their pupils in these attainments. But, unfortunately, the standard and scatter of marks vary from teacher to teacher and from school to school; and while teachers' assessments may be improved in this respect, it is extremely doubtful whether they could ever be steadied to such an extent that they could be used with assurance as a basis for the serious decisions involved in selection for secondary education or the award of Leaving Certificates. If these premises are sound, there is no escape from the conclusion that teachers' marks should be used for such purposes, but only if they have been scaled in such a way that the estimates of different teachers are comparable.

Scaling has already been employed in practice to a considerable extent, particularly in selection for secondary education, but one suspects that it would have been more widely used but for two relatively groundless fears. The first is that this is a tool that can be handled only by the expert mathematical statistician: the second is that a prohibitive amount of laborious calculation is involved. The present volume should do much to dispel these fears. It gives a simple explanation

of the basis of scaling, and clear and definite instructions as to the best ways of making the calculations. Now that such a work is available there should be little difficulty in the use of the technique by the staff of an Education Office, the headmaster or the class teacher.

The book is, however, much more than a statistical primer giving instructions for the use of methods that are already well known: it is an important contribution to educational research. In the hands of Dr McIntosh and his colleagues, new and improved scaling procedures have been evolved—procedures that have passed the acid test of extensive use in actual practice. New fields for the application of scaling methods are opened up; and headmasters and class teachers who study the authors' suggestions will find their reward in increased interest in their work and fuller satisfaction that they are carrying out their important task of adjusting the education they provide to the varying talents and needs of their pupils.

WILLIAM MCCLELLAND

PREFACE

THE ideas developed in this book have their origin in McClelland's "Selection for Secondary Education." In that book a clear case was presented against the use of teachers' estimates for the purpose of selection unless they were made comparable from school to school.

These ideas were further developed in the Report of the Scottish Advisory Council on Secondary Education. Here the scaling procedure was suggested for use in an examination scheme for the award of the Leaving Certificate and, again, on the discussion of marks and terminal reports, it was suggested that school examination marks should be made comparable by some method not aiming at "statistical impeccability, but rather something reasonably valid yet easily workable by the busy teacher in the school."

We have attempted to attain the Advisory Council's objective. No deep knowledge of statistics is required for the understanding of our methods. Chapter III on "A Little Statistics" will, we hope, give all that is necessary for the understanding of the techniques we have devised: it is an attempt at statistics without tears.

We should like to emphasise also that our methods are not merely theoretical but have been adopted in practice both in education offices and in a large junior secondary school. The needs of the administrator and "the busy teacher in school" have been in the forefront of our minds all the time.

We wish to acknowledge our indebtedness to Mr McClelland for writing the foreword, for the keen interest he showed in our work and for the many helpful suggestions which he made. Mr W. F. Lindsay, Assistant Director of Education for Fife, read the manuscript in its various stages and offered many constructive criticisms. We also received much help regarding the layout of the book from Mr S. Stewart, Educational Editor of Messrs Oliver & Boyd. For illustrative materials in Chapters VII and VIII we are indebted to Midlothian Education Committee.

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