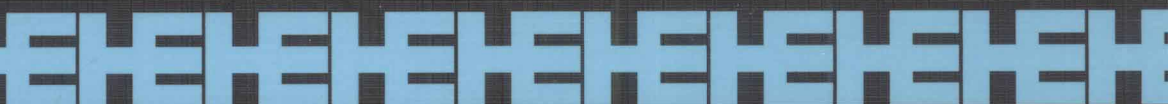


**HANDBOOKS IN ECONOMICS 26**

# **HANDBOOK OF THE ECONOMICS OF EDUCATION**

**VOLUME 1**

**Editors:  
Eric Hanushek  
Finis Welch**



**NORTH-HOLLAND**



# **HANDBOOK OF THE ECONOMICS OF EDUCATION**

## **VOLUME 1**

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## INTRODUCTION TO THE SERIES

The aim of the *Handbooks in Economics* series is to produce Handbooks for various branches of economics, each of which is a definitive source, reference, and teaching supplement for use by professional researchers and advanced graduate students. Each Handbook provides self-contained surveys of the current state of a branch of economics in the form of chapters prepared by leading specialists on various aspects of this branch of economics. These surveys summarize not only received results but also newer developments, from recent journal articles and discussion papers. Some original material is also included, but the main goal is to provide comprehensive and accessible surveys. The Handbooks are intended to provide not only useful reference volumes for professional collections but also possible supplementary readings for advanced courses for graduate students in economics.

KENNETH J. ARROW and MICHAEL D. INTRILIGATOR

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## PREFACE

There are many ways to date the development of the economics of education. In the 17th Century, Sir William Petty began writing about the valuation of lives in terms of the productive skills of individuals – a precursor of human capital considerations. Adam Smith followed a century later with direct consideration of the organization and finance of education. Yet, the more natural dating is much more recent with the development and legitimization of the study of human capital lead by Gary Becker, Jacob Mincer, and T.W. Schultz. These initial forays have, however, been followed by a torrent of recent work.

The initial human capital contributions focused largely on differential wages of individuals as they related to skills. And, the most natural way to identify differential skills was the amount of schooling by individuals. The continuing power of this early work is seen easily by the myriad of analyses that simply note that they ran a “Mincer earnings function” – with no need to explain or to cite the original source.

The field has developed and expanded in a number of directions for the past half century. The work on the impacts of schooling on observable outcomes – labor market returns, health, and more – has grown. Increasingly detailed and sophisticated analyses have pushed the questions asked and the interpretations of existing work. For example, how does the social return to education relate to the private return? Does the growth of nations relate to schooling?

The economics of education has also reached back in the direction of understanding what goes on in schools. What factors influence the quality and outcomes of schools? How does institutional structure influence outcomes? How does finance interact with the level and distribution of outcomes?

While each of these questions entered the discussion early in the modern history of the economics of education, the recent explosion of work has introduced new developments and new approaches in each of these areas. Indeed, the standards of analysis have changed dramatically as the various subfields have developed.

Part of the explosion is undoubtedly related to the new availability of relevant data. Many countries have developed regularly available large surveys of households along with a variety of “outcome” measures. Extensive panel data sets on labor market outcomes have grown in the U.S. and increasingly in other countries. Administrative data on school operations are increasingly accessible to researchers. These sources of data are being cleverly exploited to build new knowledge about the economics of education.

The heavy influence of governments in educational policy has also contributed. Governments at all levels enter into many supply decisions – and they frequently look for analyses and evaluations that will guide their decisions.



These conditions have induced a complementary growth in the number of researchers working in the economics of education. The upsurge in Ph.D. theses related to education issues is remarkable. Similarly, while the field was once very skewed to work in the U.S. – again related to the availability of U.S. data, this is no longer the case.

One implication of this growth is that the field is rapidly developing and changing. The chapters in these volumes were designed to cover the broad range of existing research and to suggest productive lines of development. They do that. But even the relatively short production lags in these volumes imply that a number of new and exciting works are only hinted at in the chapters. In short, there is much more work to be done as this field unfolds.

A variety of factors went into the selection of authors of these chapters. Quite clearly, a fundamental requirement was that the authors had to be leaders in the intellectual development of the various topics. But, beyond that, authors were selected because they had a point of view, one designed to provoke thought and new work.

The ideas put forward here are likely to be challenged in further work. And, some may not survive such challenges. The idea is not to write the final word on any of these topics, because each is the source of lively current debate. The idea instead is to provide an intermediate assessment of dynamic research areas in order to push the research further. Perhaps the success will be judged by the intensity of future challenges to thinking in each of the areas.

The development of *Handbook* chapters is not an easy task. Blending existing work into a picture that at once categorizes the current position and simultaneously pushes research forward takes skill, insight, and simply a lot of hard work. We wish to thank each of the authors for conscientiously confronting the enormity of their assigned tasks.

The effort was also aided by the editorial and production team that has developed in the *Handbook* series, not the least of which includes the general editors of Kenneth Arrow and Michael Intriligator. It also includes Valerie Teng and the others at Elsevier. We also wish to thank the Bush School of Government and Public Service at Texas A&M. They generously hosted a conference where early versions of these papers were presented.

Eric A. Hanushek  
Finis Welch  
July 2006

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