

BOOK REVIEWS

EDUCATIONAL PROGRESS

Resources for Education

An Economic Study of Education in the United Kingdom, 1920-1965. By John Vaizey and John Sheehan. Pp. viii+176. (London: George Allen and Unwin, Ltd, 1968.) 35s. net.

THIS book brings up to date and presents in even more readable form the analysis first made by Professor Vaizey ten years ago in *The Costs of Education*. For this very necessary work he has had the help of the Nuffield Foundation Resources for Learning project and in particular of Mr John Sheehan. This collaboration is more than accidental, for if Professor Vaizey is right in the forecasts which he has made recently of the financial resources likely to be available to education during the next ten years, then a much more serious attempt to assess the cost-effectiveness of different educational procedures is clearly essential, however difficult; and the Resources for Learning project is one of the few enquiries which is seriously concerned with the question of how education can do a better job for more pupils with the same money.

Professor Vaizey usually has been right. The publication of *The Costs of Education*, by using the method of calculation at constant prices, revealed to non-economists in the educational world that proportionately our expenditure on education in real terms had scarcely risen between 1922 and 1955. This revelation no doubt played a considerable part in creating the climate of opinion which has made possible the phenomenal growth in education's share of the gross national product (GNP) in the past ten years (a rise of nearly 2 per cent compared with a rise of less than 1 per cent in the preceding twenty years). His strictures on the statistical services of the then Ministry of Education have helped us to get the enormously improved statistics of today. When therefore he warns us that the period of continuous educational expansion and improvement, based on a rapidly growing share of a reasonably quickly expanding GNP, is coming to an end, we ought to take the warning very seriously.

The book under review is, however, not a prophecy but an analysis of what has happened in the past. It predicts the future only by implication. Those who assume, for example, because the Government has renewed a pledge, that the school leaving age really will be raised to sixteen in 1973 might usefully ponder the economic causes which led to a Labour government introducing legislation to raise it to fifteen in 1931, a Conservative government promising to raise it in 1933, and the actual raising being postponed to 1947. The technique of calculation at constant prices dispels a remarkable number of myths in educational thinking. Professor Vaizey shows, for example, that the "savage cuts" in education imposed by deflationary governments intent on economy have meant very small real cut-backs in standards, for falling prices have almost entirely offset smaller money resources: similarly, "massive expansion" in inflationary periods has often been overtaken by rising prices. The

discontent of the teaching profession at declining status cannot fairly be related to declining economic status. Teachers are not relatively worse off than before the war. In fact, the rise in their average earnings during the past twenty years has, in real terms, been well above the average rise of male earnings.

One very important conclusion of the book is that there has been a switch in the allocation of resources within education, very marked in the past ten years, away from primary education, the most startling beneficiary being further education. "This," say the authors, "represents a massive switch of educational expenditure towards the older age groups and, by implication, in the direction of those with social and educational advantages. In other words, what has actually happened flies in the face of the Newsom and Plowden Reports, and supports the Robbins Report."

Of course it was inevitable, because primary education was universal and secondary education beyond the age of fifteen was not, that as the proportion of the age group staying on in secondary education or admitted to higher or further education increased, the proportion of total resources devoted to primary education would fall. The authors recognize this as an inevitable feature of expanding educational systems, but, looking around with the eye of the observer rather than that of the statistician, it would be hard not to agree with their implication that this process has been exaggerated in Great Britain during the past ten years. It is not, recent figures have shown, in average teachers' salaries that primary education has fallen behind: it is in buildings and staffing ratios. Here the most cursory observation reveals, what the figures indicate, a condition of near affluence in higher and further education, decent respectability in secondary, and near poverty in primary. Yet this is not the apparent will of the people as expressed through their political parties, which vie with each other in "giving priority to primary education", nor in accord with the balance of professional educational opinion.

Indeed, the final impression conveyed by the book is that during the whole of the period surveyed the state of education has been more nearly related to fluctuations in the birth rate or in the general economic situation than to any consciously willed national policy. The only exception would appear to be the very rapid expansion of higher and further education during the past ten years.

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VICTORIAN VIEW OF SCIENCE

History of the Inductive Sciences

By William Whewell. Part 1: Pp. xxxii+394. Part 2: Pp. xii+488. Part 3: Pp. xiv+614. (Cass Library of Science Classics, No. 7.) (London: Frank Cass and Co., Ltd, 1967. First published 1837.) 315s. the three parts.

The Philosophy of the Inductive Sciences

By William Whewell. Part 1: Pp. xxxii+708. Part 2: Pp. xiv+701. (Cass Library of Science Classics, No. 5.) (London: Frank Cass and Co. Ltd, 1967. First published 1840.) 252s. the two parts.

WHEWELL's works enjoyed among British scientists of the nineteenth century an authority which by modern standards they do not at all deserve. This is no isolated phenomenon; nearer to us, the pseudo-philosophical writings of Jeans and Eddington have also been praised beyond measure by contemporary critics. The unavowed reason for the popularity of this type of literature is always the same; it offers a shallow, snug and reassuring picture of science as *ancilla theologiae*. The details of the picture cannot help changing with time, but the conclusion remains; indeed, it is a foregone conclusion. Changes in literary fashion are also reflected by the genre: our own