2 Economics and the Production Benefits of Education

Economists of education should find at least one good reason to feel quite pleased about, and perhaps several to be rather alarmed by, the evidence which continues to accumulate from such intercountry, inter-disciplinary studies as the ones recently undertaken by the IDS for their collective research project on qualification and selection. The idea of the measurability of the production benefits of education has by itself, at least for the infant discipline of the economics of education, proved to be the very engine of progress! Thus in 20 years, we have had data put together by now-standard procedure, for perhaps 20 countries of the three worlds, to provide the basis for calculating these benefits through the comparison of the 'average life-time age-earning profiles' of groups of persons of different levels of schooling. What can be more pleasing than that all this has caused (or at least been accompanied by) a growing intellectual interest in the relationship between education and economic productivity among management theorists, psychologists, sociologists and indeed educationists in general.

The IDS studies are, therefore, important primarily because they help to expand the methodological options for deciding upon the central question involved in the relationship between education and productivity: how does the employer who, after all, has to value it and pay for it, actually identify it? Economists know only enough of this question to be able to set down the boundary conditions, so to say. They know, for example, that whatever be the employer's perception, he can be quite wrong about the relationship, and if he pays a higher wage to the better-educated whose productivity has not improved, then he has paid the extra out of his own pocket. They can also prove that the market does not allow the employer to make this kind of mistake for long, and that eventually, there is always retribution. However, in the short run, and therefore at almost every important point of decision concerning hiring or fixing the pay, it is the employer's 'opinion' about the relationship that matters.

It is because of this, if not for any other reason, that we must learn from the psychologists, the sociologists and the plain educationists what they have been able to find out, sometimes only by conversing with the poor unsophisticated employer who holds the trumps in his hand. But there is also one other thing, almost always,

which should make economists feel a little diffident in this matter. Economics will not teach the poor employer not to make mistakes, even if he were eager to learn. Particularly if, for example, certification either through schooling or in-service training did indeed add to productivity (though in different ways and by different degrees), and if, nevertheless, the employers chose to back their 'opinions' and always prefer school graduates to apprentices, then neither they nor the economists would ever find out what they were missing! Economists of the day can also not see far enough ahead to advise on how productivity might be related in the long run to education. Today they need to ask others, perhaps because they can no longer claim the vision (or afford the foolhardiness) of an Alfred Marshall, who of course foresaw it all and said, 'our aim should be to add the scientific training, in which the countries of Western Europe are ahead of us, to that daring and restless energy and those practical instincts, which seldom flourish unless the best years of youth are spent in the workshop' [1927: 208].

The IDS studies, or similar ones, even when not foolproof in their own terms (very few primary studies can afford to be, the data being either too raw or too cooked), still raise some doubts about past and current measurement of the production benefits of education, because, in the first place, similar doubts have been raised by economists themselves long before the conversation between the other social scientists and the subject had started. Arrow [1968] suggested, it may be recalled, that 'while this type of calculation has proved to be an exciting beginning of analysis, it clearly overlooks some important elements'. Anticipating his later filter theory, he made the point that 'those with more education are surely abler'. The consideration of the relative ability factor led to the use of the so-called G-factor for discounting the rates of return to education. It remains an unknown so far as the tools of economics are concerned and can only be hopefully given alternative arbitrary values for carrying out sensitivity tests. If, as the IDS studies over five countries suggest, employers tend to use the certificate, not even for identifying differential ability as Arrow suspected, but actually for the convenience of short-listing alone, then the average life-time earnings profiles tell even less, whatever the correction made on account of the G-factor.

Finally, Arrow also spoke of a second aspect of educational input, its quality, 'This', he said, 'is a matter of major importance for educational expenditure policy: what are the returns to improved education? For this purpose, it might be desirable to classify incomes according to the expenditures on the education of the individual rather than the number of years in school'. If employers were found to be aware of the importance of looking at the quality of the education imparted whether in school or out of school, then we would expect them to hold the opinion, as the IDS studies indeed found them to, that certificates did not, as a matter of course, imply enhanced productivity. But if they had made their recruitments on the basis of a) shortlisting first by the criterion of the certificate, as a matter of convenience, and b) then weeding out the suspects in the list through other probes (class background, interview etc), the earnings profiles would still match the different educational levels in broadly the way the economists had expected, without their also suspecting that they told rather less now about the relationship between education and productivity.

All in all, these and other similar studies, particularly when they span many countries, and use the tools of other social sciences, alert the economists of education at least to the possibility that their sums might in part have been done wrong, and might therefore have to be done all over again. Presented with such intimation, only the bravest among them can afford to rest content, determined to take no notice of mere gossip that seeks to undermine the trusted tool of rates of return to education fashioned with such care over two long decades!

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