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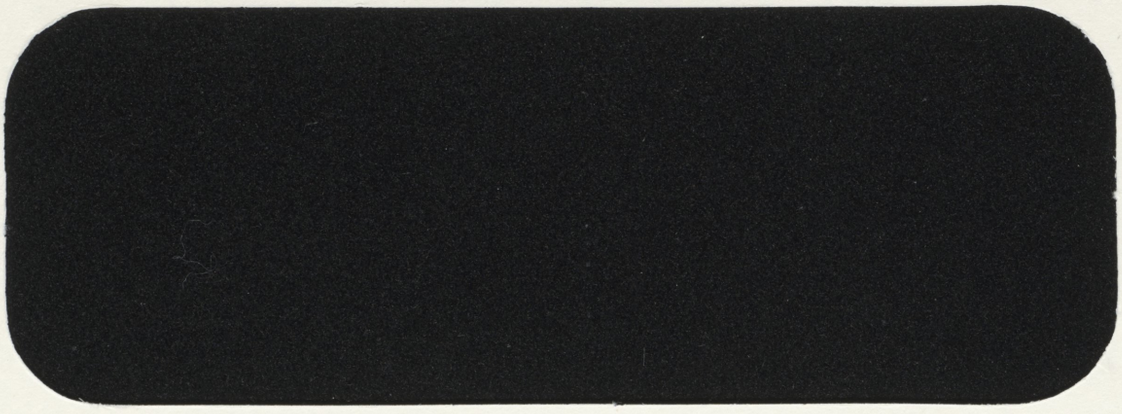
# Screening, Deschooling and Developing Countries





# Screening, Deschooling and Developing Countries

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# SCREENING, DESCHOOLING AND DEVELOPING COUNTRIES

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**ABSTRACT**

This paper is concerned with the "screening hypothesis" of schooling and the issue of deschooling for developing countries. Initially the mechanics of the screening hypothesis are described and it is argued that if the hypothesis is accepted, deschooling is a next possible step. This leads to a very brief survey of Reimer's book *School is Dead.* In the second half of the paper recent data from Northern Nigeria are presented which indicate (a) a recent slowing down of primary enrolments, (b) a decline in, already poor, secondary school examination results, (c) an inability to promote formal technical schools as a base for technical training. Turning to the employment sector, data are presented from a sample of Nigerian textile workers which show that while both the unschooled and the primary school leaver start off at the same rate of pay, the unschooled worker falls progressively behind. Similar data, and conclusions, are also presented from a survey of small scale industry workers. Although both these results support the productive rather than the screening role of schooling, caution must remain since it may be that the schooled belong to a different ability group from the unschooled. Finally it is argued that in Nigeria the ideas of the deschoolers may have more relevance at the secondary school level, partly because the actual results of these have been so poor and partly because the existence of thousands of, at least partially, trained workers in the small scale sector suggests that alternatives to formal schooling do exist.

From the optimistic view of schooling as "investment in human capital formation" and "the engine of economic growth" to the present debate surrounding deschooling is a great leap and one which must be perplexing a large number of people, not least those versed in the economics of education. This essay is an attempt to survey this movement and to analyse, in part, its relevance for low-income, low-schooling countries.

Although the resurgence of interest in the relationship between education and growth in labour productivity was initiated by Professor Schultz's presidential address to the American Economic Association in 1960 (Schultz 1961), it was the early work of Professor Denison which really placed education at the centre of the discussion of economic growth (OECD, 1964).

The "finding" that between 1929 and 1957 increases in education had "accounted" for 23 per cent of the increase in economic growth in the United States obviously had great propaganda value, and it was easy to overlook that this estimate was based on the dual assumptions of the productive role of schooling and its measurement via marginal productivity theory. This view of education, as a process of skill acquisition, is also central to the operation of manpower forecasting. Here, it is assumed that for each occupation there is a unique level of skill necessary, and these skill requirements are then directly translated to schooling requirements. Finally, proponents of rate of return analysis, while not initially assuming the productive role of education (at least for private returns), do explain the existence of wage differentials based on schooling differentials as being the result of directly productive schooling. Only recently have these types of interpretation been contested, and particularly with regard to the developing countries.

One line of argument of those who are not convinced of the directly productive role of schooling concludes that although schools are poor providers of useful skills, the malfunctioning of the labour market which distorts private and social benefits increases rather than decreases the demand for schools. This is because the increasing availability of schooling directly breeds further demands as those with a limited amount of education begin to get squeezed out of, or away from, jobs considered only recently as appropriate to them. At the same time, those workers safely within occupational groupings are prone to raise entry requirements for further recruits in an attempt to restrict entry and raise their own status. Finally, once there is a reasonable supply of school graduates relative to the demand for them, employers realise that years of schooling and the accompanying qualifications represent a straight forward "screen" for occupational selection. Schooling is therefore seen as necessary by students, existing workers and employers. None of this however proves that schooling is useful in a productive sense. In fact, it appears to be anti-productive as the resources needed for the schooling effort are to a large extent wasted. Consider a simple example. Occupation A has been staffed by primary school leavers for the last ten years. Gradually the situation develops where there is a surplus of secondary school leavers and employers find that these graduates are also applying for vacancies in occupation A. Employers, naturally, choose the best qualified. Sooner or later workers in occupation A decide that they will allow entry only to secondary school leavers. As the chances of a primary school graduate securing employment diminish, there is an increased demand for secondary schooling (and also, as a feeder, for primary schooling). The same job is being performed but the performer now has more schooling. The problem arises because although this inflation of schooling is wasteful from

the point of view of society's use of resources, the extra schooling is worthwhile to the individual – without it he could not enter this occupation. The implicit assumption in this line of argument is that occupation A is performed no better by a secondary than by a primary school leaver. This of course begs the question.

A compromise position is taken by those observers who, while still denying the directly productive role of schooling, are not prepared to view schooling and its corresponding qualifications as merely screening devices, but argue that it is the socialisation process of the school which is important. Whilst not necessarily accepting this view, Blaug presents it as follows, "Primary education . . . encourages such traits as punctuality, obedience, respect for authority all of which are valuable traits to employers in unskilled and semi-skilled occupations" (Blaug, 1973, p. 35). Thus, children do acquire productive skills in school, but these are not of the cognitive or mechanical type.

In a recent article, Wiles (1974) has presented five possible reasons for the widespread finding that non-vocational higher education yields additional earnings. These are:

*a.* The degree is an external test, vastly expensive to society but very cheap to individual employers.

*b.* The degree course confers social status.

*c.* Insistence on a degree is a restrictive practice by many trade unions.

*d.* The degree course forms character and that is a type of human capital.

*e.* The degree course exercises the mind and develops it like a muscle.

Very generally *a, b* and *c* could be combined into the screening hypothesis, thereby denying any productive role for schooling; *d* is part of the socialisation argument, while it could be argued that *e* is a directly productive result of schooling. (Wiles orders them in terms of importance as *b, e, c, a, d.*)

Recently a counter-attack has been made on the screening hypothesis in the name of the human capital school by Layard and Psacharopoulos (1974). While these authors do not completely rule out the screening hypothesis they do challenge its quantitative importance: "no sane person would deny that the idea had some truth in it. What is needed is an estimate of the share of (earnings) differentials due to it." Three findings concerning earnings differentials, they maintain, are not consistent with the idea that educational qualifications merely act as a selection screen.

*a.* A number of rate of return studies show that the returns to dropouts are higher than those to completers (allowing for differential ability between

the two groups). This they say is devastating to the hypothesis unless it states that employers use years of schooling rather than certificates as the screen.

*b.* If educational qualifications merely act as a sorter which leads to initial earnings differentials based on schooling differences, then one would expect these differentials to fall with age as employers come to have better information about their employees' real productivity. Numerous studies of earnings profiles deny the existence of such a fall.

*c.* If qualifications are simply a screen, why, they ask, don't employers, singly or jointly, devise and operate an alternative one. Rather than arguing that there is no reason to do this since it is already done at no charge by the school system the argument may be put that it would be worthwhile since the employment of, say, a university graduate immediately involves the payment of a large premium. If a "high ability" 18-year-old could be selected and employed, this would save expenditure on the premium.

All three points however are open to further debate. Point *a* is supported only by very selective data (and all from the United States). Point *b* ignores the differential amounts of on the job training, and point *c* appears to argue that the high ability 18-year-old will not attain university graduate level earnings, even though his productivity may be as high as the graduate's – an odd position for the marginal productivity–human capital school.

The implications of the screening hypothesis are of course enormous for educational policy. Educational courses are expensive and if they simply test "raw" ability then this could be done much cheaper by straightforward aptitude tests or some equivalent. The consequence of devising and operating such tests would then be a decrease in the demand for schools. This brings us to the subject of deschooling.

In the book, *School is Dead,* Everitt Reimer argues for the abolition (or non-setting up) of schools but for the extension of education. His first argument is a purely financial one – no country in the world can afford the education its people want in the form of schools. On the other hand he states that "to ignore popular demands for education is not only morally indefensible, it is politically impossible" (Reimer, 1971, p. 17). Schooling is educationally unsuccessful: "In 1960, half the children who entered school in Latin America never started the second grade, and half the second graders never started the third" (Reimer, 1971, p. 17). Although three-quarters of the children therefore did not learn to read, they did learn how unsuited they were to school and how stupid they were. This helped them to accept the greater privilege and power of the deserving minority. The problem, Reimer continues, is not that this is a winners' world but that the school emasculates even the minority of winners. To do well in school is to learn to beat the

system, and this is a breeding ground for future exploiters of society. In the last 50 years schools have grown from minority to majority institutions in terms of educational provision. "As late as the turn of the century schools were still a minority institution and all who were not suited for them had other educational options" (Reimer, 1961, p. 19).

In a chapter titled "What Schools Do" four functions of schools are set out: custodial care, social role selection, indoctrination, and education as the development of skills and knowledge. The first three are performed because of the way schools are organised and the fourth function is performed only as a residual. With annual recurrent budgets of only £20 in Brazil and £10 in Nigeria per primary school place, the size of this fourth function must be very small. Since, it is argued, schooling is educationally inefficient and socially divisive a new form of education is required. The answer which Reimer produces involves "networks" of things and people, or as Illich describes it more graphically "learning webs" (Illich, 1971, Ch. 6). Children will learn by:

a. open access to libraries, museums, farms and factories;

b. informed exchanges between learners of similar ages;

c. personal advertisements to attract learning partners for mutual advantage;

d. publication lists of freelance "educators at large" who may be consulted at will.

Such a system would be paid for by each individual receiving an educational voucher or an account at an "education bank" and payments made when a specific educational service is used.

This, very briefly, is the line taken by deschoolers. It is not anti-educational but anti-schools when schools are defined as "institutions which require full time attendance of specific age groups in teacher-supervised classrooms for the study of graded curricula" (Reimer, 1971, p. 35).

What is the relevance of this debate to developing countries who for the past 20 years or so have been convinced that the acquisition of skills through schools and other forms of formal educational institutions is very necessary for economic development?

In discussing schooling in developing countries we will limit ourselves here to concrete examples from Nigeria and in particular, Northern Nigeria. This area is especially interesting because of the slow development of schooling in the past and the present attempt at rapid acceleration. Around 1970 primary and secondary school enrolment ratios in the three far north states (North West, North East, Kano) were less than one-tenth of those in

the south. However, in the last decade there have been enormous attempts to bridge the gap. Between 1966 and 1970 the six northern states increased primary enrolment by 30 per cent, the southern states by 13 per cent. At the secondary school level respective increases were 122 per cent and 73 per cent. The provision of schooling in the northern states is therefore being rapidly generated; however two discouraging trends are developing. First, the rapid supply *and* demand for primary schooling in the late 1960's are not being continued at the same pace in the early 1970's. Secondly, although secondary school enrolments have rapidly expanded, "good pass" rates have been declining.[1] Whereas in the southern states "good" secondary passes were around 30–40 per cent in the mid 1960's, the northern states averaged around 20 per cent and the three far north states, 14 per cent. By 1971 this latter percentage had fallen to below 8 per cent. In North West State, candidates increased over 1969–71 from 295 to 475 while "good passes" fell from 34 to 31! During the 15 years of educational planning in Nigeria since the Ashby Report, the only sector, apart from primary schooling, which has not achieved planned targets has been technical training. Total enrolments in all northern states in 1970 were 1030 as opposed to a planned target (in 1964) of 5000. The picture of schooling in northern Nigeria is then:

*a.* a rapid increase, from a very low level, of primary enrolments in the late 1960's followed by a slowing down;

*b.* a rapid increase, again from a very low level, of secondary enrolments together with a decline in, already comparatively poor, results;

*c.* a great inability to promote formal technical schools as a base for technical training.

From *a* and *c* one could conclude that the demand for schooling is not as great as has been assumed and from *b* that, at the moment at least, the secondary schools are not being educationally successful.[2]

Turning from the education sector to employment in the last two years,

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[1] "good" passes are defined as passes at the Division 1 or II level of the West African School Certificate – the traditional requirement for entry to sixth form.

[2] Alternative interpretations of *a* as suggested to me by Peter Williams are (i) over-age pupils who enrolled in large numbers in the early 1960's may now have been catered for and recruitment might now be reflecting a more normal pattern; (ii) the children in urban areas might be largely enrolled so that the task of enrolling additional children might grow progressively more difficult as one faces the problem of taking schools to less and less densely populated areas.
Neither of these two views however appears to me to be particularly persuasive since total primary enrolments in the north are running at a level of only around 12–15 per cent of the relevant age group. If the percentage was, say, 60 as in the southern states the argument would appear more valid.

two major surveys have been made in the northern states – one (made by the author) relating to the modern sector and the other to the small scale sector.[3] Data collected from 4000 textile workers in Kaduna in 1972 show that, for whatever reason, completion of primary schooling has over the last decade become the main prerequisite for employment, 70 per cent having completed this level. Only 13 per cent of the workers have had no schooling. The question is whether this entry requirement has been used simply as an aid to sort through the large number of job applications or whether schooling has been viewed in a productive way. Since this cannot be accurately answered without a detailed analysis of management decisions, we must turn to the earnings data. All workers recruited to the daily paid operatives category, whether primary school graduates or not, start at the same level of pay. The question therefore regarding the productive role of schooling is whether the primary school graduates increase their earnings at a faster rate than the unschooled. If so, then there is some evidence of the productive role of schooling. Average earnings of both groups at age 18 are £140 a year; at age 25 years earnings are £172 and £258, and at age 30, £196 and £371 for the unschooled and primary school leavers respectively. From 30 years onwards, this differential is maintained. The productivity argument would appear to prevail. However, caution must be maintained since it may be the case that the school leavers are of a different ability group than the unschooled. That is, even if the primary leavers had not gone to primary school, they may still have earned more than the other group simply because they are more able in ways which schooling does not affect.

The evidence from a survey of small scale establishments in Kano City in 1972 points in the same direction. As part of the survey, 397 self-employed workers, from welders to calabash carvers to hat weavers, were interviewed. Of these, 269 had had no schooling and 74 had terminated their schooling at primary level. Average annual earnings for the two groups were as in Table 1.

Again there are obvious earnings differentials and since all were self-employed there is no way of explaining this via the screening hypothesis. Again, we must reserve total judgement because of possible ability differentials between the two groups. Also it is worth bearing in mind that not only do earnings appear to be associated with level of schooling but also with years of work experience. And further it has been shown by the author that in terms of earnings (and therefore productivity), experience can compensate for

[3] This survey was directed by Dr N. Khawaja and Mr R. Reichenbach, formerly of the Department of Economics, Ahmadu Bello University, Nigeria. I am grateful to them for access to the raw data.

TABLE I

Average Annual Earnings by Age and Schooling Level (£)

| Schooling Level | Age groups | | | | |
|---|---|---|---|---|---|
| | 15–20 | 21–25 | 26–30 | 31–35 | 36–40 |
| No School | 96 | 138 | 145 | 133 | 130 |
| Full primary | 124 | 163 | 127 | 189 | 213 |

Source: see text.

lack of schooling (Hinchliffe, 1974). If therefore, as Reimer says, the costs of schooling are too high to enable universal schooling in low-income countries, then even if one can show a productive role for schooling this is not an overriding argument for its provision if it can be compensated for by another, cheaper system of education. To some extent the apprenticeship system as it operates in West Africa does involve Reimer's networks of things and networks of people. However, from an economic viewpoint, educational systems should be judged not only with respect to costs but also with respect to time – that is, how long it takes different systems to achieve the same ends.

The key operative assumption behind Reimer and Illich's writings is that learning existed before the introduction of schools and could again do so after their abolition. The statement, "Literacy has in fact always run well ahead of schooling" (Reimer, 1971, p. 32), misses the point, for as Foster (1971) has argued, it is still true that the majority of literates have always acquired these skills in school. Again, the argument that 50 years ago when schools were minority institutions those not suited for them had other educational options is historically suspect and is particularly suspect for today's low income countries. Again we may instance Northern Nigeria. As previously stated, Western schooling came very late to this region relative to the south due to hostility from the local Moslem rulers. Only since independence in 1960 when as the colonialists moved out it came to be seen that schooling equalled jobs did the demonstration effect take place and the demand for schooling occur. At the same time, there did exist an alternative form of learning, Koranic instruction, and this certainly was widespread and perhaps universal. To the deschoolers this could perhaps be seen as a network of people and on a par with the earliest form of teaching – the sophist philosophers of Ancient Greece with whom Reimer appears to sympathise. During the last decade, as we have seen, primary schools have developed, and it is difficult to see why this should have occurred unless they were perceived of as offering something which Koranic instruction (or

indeed any other forms of existing instruction) did not. Reimer's other educational options, which would be capable of teaching a child literacy in Nigerian or the national language, do not exist.

Up to this point discussion has concentrated on the first level of learning. What can be said about the second? Here at the operational level it is rather easier to sympathise with the deschoolers. The cost of secondary schooling, the unemployment and frustrated aspirations, and often the irrelevance of curriculum suggest that alternatives are worth looking for. In Northern Nigeria, 8 per cent pass rates should be of sufficient incentive to indicate this. Some of the alternatives for breaking out of the primary-secondary straight jacket have been put by Professor Callaway (in a much more detailed and realistic way than the deschoolers), and it is useful to paraphrase his ideas in a single paragraph:

Non-school learning webs could, and do, comprise of programmes of literacy, apprenticeship and other forms of on the job training, continuing education for those with professional qualifications, and extension programmes in farming and small scale sectors. Clearly farmers, artisans and small scale industrialists cannot teach their children and apprentices practical skills which they themselves do not possess. Therefore assistance to farmers and masters will have spread effects. Generally it has been found that tangible incentives must be built into the learning complex. There is little learning for learning's sake. Where vocational training has known outcome with wage paid jobs there has been success. But where training is given without being tied to specific jobs, with the intention that trainees find opportunities within traditional family farming and other small scale rural enterprises, there has been only limited success (Callaway, 1971, p. 38).

It is well to remember that out of the surveyed 397 self-employed workers in Kano City, 269 had had no schooling. Similarly in another survey of small scale industry, this time in Western State (an area of relatively high schooling levels) of the 13,592 workers surveyed, 6033 had not completed primary schooling and only 1478 had had formal schooling beyond primary level. Only 21 had had formal technical schooling. Aluko (the director of this survey) comments on these findings: "The fewness of the number of those with technical training in schools, colleges and universities, belies the emphasis on technical education as a means of indigenous industrialisation. The survey shows that entrepreneurship in the present state of the Nigerian economy is inversely proportional to the amount of formal education that the individual receives" (Aluko, 1972, p. 9). It is certainly striking that 99.85 per cent of workers have had their training, limited as it may be, outside the formal school system. This surely must be interpreted as a success of learning webs. Also, the fact that 9367 expressed a desire for

further technical training via short courses suggests that further webs could profitably be created.

What general conclusions can we draw from the above, often conflicting analysis? First, apart from the neglect of differential ability considerations, it has been shown in the modern and small-scale sectors that primary schooling is associated with higher earnings, and since both the unschooled and the primary school leavers enter these labour markets at the same level, it could be strongly argued that schooling is therefore directly productive. Also, it is doubtful whether in developing countries alternatives other than primary school do exist for teaching literacy. Certainly if they had been available in Northern Nigeria, schools would not have expanded as they have done in the last decade. Whether primary schools are the best place for seven years of continuous education is another question. If it could be accepted that instruction in reading, writing and numeracy is the only domain of the schools, then it may be possible to shorten courses substantially, reduce the employment significance of the leaving qualification, and counter to some extent Reimer's argument over elite formation.

With respect to the secondary schools, there are two salient pieces of evidence. Of the people with skills, very few have learned them formally, therefore non-school learning is *possible.* Looking at the results of the general secondary schools described earlier, together with considerations of finance, it may also be *preferable.* This however is too sweeping. Reverting to Wiles' scheme presented earlier, possibility *e* that non-vocational schooling "exercises the mind and develops it like a muscle," surely holds some truth. While decision-making, evaluation, presentation of arguments and the like can be learned while actually at work, there is still a case for these skills being learned formally and systematically. Perhaps if these objectives could be more rigorously defined, curricula could be more carefully designed to meet them. At the more traditionally defined vocational level, there are again skills which necessitate formal instruction and a theoretical base. These could often be taught more efficiently than at present, but again a period of formal instruction is very often necessary.

There is today a growing disenchantment, particularly in developing countries, with existing school systems. This disenchantment is at many levels: the irrelevance of the primary school curriculum, the frustrations of unemployed secondary school leavers, the westernization of universities, etc. The solution is not the full package of deschooling, which is neither practical nor relevant. Rather it lies in the remoulding of the systems and particularly in a preparedness to utilise, and make more efficient, those forms of education which at present take place outside the schoolroom.

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