

Distance Teaching for the Third World

The Lion and the Clockwork Mouse

Michael Young, Hilary Perraton,
Janet Jenkins and Tony Dodds

Incorporating a Directory of
Distance Teaching Projects

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DISTANCE TEACHING FOR THE THIRD WORLD

A Lion having laid down to take his repose under the spreading boughs of a shady tree, a company of Mice scampered over his back and waked him. Upon which, starting up, he clapped his paw upon one of them, and was just going to put it to death, when the little suppliant implored his mercy, begging him not to stain his noble character with the blood of so small and insignificant a creature. The Lion, touched with compassion, instantly released his little trembling captive. Not long after, traversing the forest in search of his prey, he chanced to run into the toils of the hunters, and not being able to disengage himself, he set up a loud roar. The Mouse, hearing the voice, and knowing it to be the Lion's, immediately repaired to the place, and bade him fear nothing, for that he was his friend. Instantly he fell to work, and with his little sharp teeth gnawed asunder the knots and fastenings of the toils, and set the royal brute at liberty.

(One of the Fables of Aesop)

PREFACE

We have all four been employed for up to seven years, either full time or part time, by the International Extension College. This is the bond between us, and the common experience that has shaped the book. That being so, we should say a little about the college, its origins and its work.

At a stretch, it dates back to 1962 when one of the authors, Michael Young, urged the establishment of an Open University in order to add to the educational resources of Britain. These were then, at the level of higher education, strained to the limit. The essence of the plan, put forward in that form for the first time, was that broadcasting and correspondence should be brought together with face-to-face teaching to produce a new kind of institution for part-time adult students. There was no immediate response to the plan. So, a year later, the National Extension College was established in Cambridge as a pilot for such a university.

When the Open University was eventually created by the British government the National Extension College continued to exist, working at different levels and teaching different students. Once both had demonstrated their promise the next step was to consider how the same basic techniques could be adapted to the needs of countries in the third world. This in its turn led to the International Extension College (IEC) which also has its base in Britain. Its main purpose is to provide advice and support on distance teaching for education in the third world. It provides courses on the subject at the Institute of Education of London University for professionals from overseas.

The first decision taken seven years ago was that, despite the precedent of the Open University, higher education would not be a major concern of the IEC. The developing countries are generally well endowed on that score. The people crying out for attention are elsewhere. This accounts for the fact

that, unless the Open University or another institution has made specific advances in technique that can be copied lower down, almost nothing is said in this book about higher education for people other than teachers. Nor, for that matter, is it about the large subject of distance teaching for technical training, although the remarkable work of the Venezuelan National Institute of Educational Co-operation is mentioned.

IEC is a resource centre that can be drawn on by any government or body in the third world that wishes to make use of distance teaching or, if already doing so, change what is being done. Each of the consequential assignments for which we have been asked to take responsibility has, inevitably, influenced our way of looking at our subject. The most telling experience has certainly been gained in setting up the three overseas colleges we have set up for the governments of Mauritius, Botswana and Lesotho - the Mauritius College of the Air, the Botswana Extension College and the Lesotho Distance Teaching Centre - and the one that we helped establish for the training of teachers at the University of Lagos - the Correspondence and Open Studies Unit. One of us, Tony Dodds, also spent many years engaged in adult education in Tanzania and was involved in the early days of that country's radio study campaigns.

We have, however, done our best in this book to stand back and review the experience of other institutions besides those four, drawing on the literature in general as well as on the consultancy and other work we have done in, for example, Ghana, Pakistan, Sierra Leone, Turkey and Latin America. (1) Apart from the exclusions we have mentioned already we have been concerned with the main uses to which distance teaching can be put, in teacher training, in support for schools, in formal education out of schools and, above all, in non-formal education. The main plea of the book is for a new form of institution to which we have given the name 'radio college'.

Three basic views have guided the work of IEC, and also the book. The first is that the traditional methods of education, with a single teacher in a classroom, offer an inadequate solution to the educational problems of the world and that distance teaching can do something to get education to people who would otherwise lack it, or to offer a better education to people than they would otherwise receive. This is because of the economic case for it where large numbers of students are to be served. Distance teaching is generally more useful for offering education to the many than to the few. It is particularly relevant to the poorest countries where, as a World Bank Education Sector Working Paper put it: (2)

the rapid expansion of educational systems has been accom-

panied by rapid increases in the proportion of public expenditure devoted to education. While the acceptable percentage will vary from country to country, any proportion much over 20% begins to impinge upon the needs of other sectors and services and limits further increases in educational expenditure to the rate of growth of GNP and public revenue.

The second and more general view is that the resources, and the know-how, of the world need to be shared. There is now expertise in various countries on the planning of radio schools, the running of learning groups, the writing of correspondence lessons in agriculture, the organisation of distance teaching colleges and so forth. The experience can seldom be transferred direct: a pattern of organisation that suits Botswana is probably wrong for Mauritius. But anyone has a better chance of getting it right if he knows what others have done than if each starts from scratch. Just as there is scope for sharing experience so there may be for sharing teaching materials. At the very least, it is easier for a Mauritian teacher of woodwork, say, to write a good course in the subject if he has already seen a similar course written for another country or another culture. One of our first moves was to set up a resource centre to encourage and facilitate the sharing of experience.

The third view is that the Western system of education is out of gear with the needs of many countries that have inherited it. Following writers like Dumont, Foster and Coombs we suggested in our first report that in many African countries (3)

an emphasis on academic subjects imported from Europe is linked to a reverence for academic qualifications. Both have at best a limited relevance to the lives that most students are going to live. They do nothing to equip them to change and improve conditions in the rural areas where most of them are destined to stay. There is little emphasis on technical and vocational subjects or on rural skills, and the pattern of teaching makes few conscious efforts to train students to solve by themselves the practical problems they are likely to face in later life. Subject always to national priorities, we hoped to show how distance teaching could be used to offer an education for the majority of people who would live out their lives in a village and not for the minority who would make their way through ordinary schools to the town. This was not because we had romantic notions about the inherent superiority of village over town. We wanted to show that distance teaching, like the Mouse of our sub-title, is a creature of comparable power to the Lion of the orthodox educational system.

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This book is a review of some of the work that has been done in the past and a proposal about what might be done in the future. The review has one inevitable limitation. Apart from the four African colleges associated with IEC, we have necessarily had to rely largely on published reports, and many of these are now out of date. All we can say is that as far as we know we have used the most up-to-date information that has been published about the institutions we have referred to.

Many people have helped us build up the International Extension College and so gather the ideas contained in this book. They are too numerous to mention all of them individually. But we would like to express our special thanks to our colleagues in the institutions we have been closely linked to - Kenneth Noyau and his staff at the Mauritius College of the Air, Solomon Inquai and his staff at Botswana Extension College, Kenneth Tsekoe and his staff at the Lesotho Distance Teaching Centre together with Paud Murphy, Yinka Olumide and his staff at the Correspondence and Open Studies Unit of the University of Lagos, Dick Freeman and his staff at the National Extension College, Cambridge, and Professor Peter Williams, Hugh Hawes and other colleagues in the Department of Education in Developing Countries at the London University Institute of Education. We also could not have gained any momentum without the support of Donald Chesworth, now Warden of Toynbee Hall in London, of Frank Sutton and Mel Fox of the Ford Foundation, and of David Anderson, now Managing Director of the Commonwealth Fund for Technical Cooperation.

NOTES

- 1 See the directory of distance teaching projects, pp. 162 ff., which consists of a list of institutions, a brief description of their work, and a selective bibliography.
- 2 World Bank, 'Education Sector Working Paper', p. 21.
- 3 Dodds et al., 'One Year's Work', p. 9.

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IMPASSE?

'Education for all' still has a fine ring to it. It is a creed that has been embraced by the unlikely trio of Gladstone of England, Nyerere of Tanzania and Gowon of Nigeria, and millions of others besides. And yet in the last few years it has been under attack, in rich countries and in poor, for its failure to meet the hopes and expectations that the prophets of educational expansion had aroused. 'School is dead', say some, 'school ought to be dead', say others, 'school is irrelevant', say yet more. Amid these voices ever-increasing millions of children are trying to get into school. Their aspirations are in contrast with the current fashion to decry education and all its works.

Many of the contemporary criticisms of education have obvious force. So has the case for education, and for its expansion. Nyerere described its liberating potential when he said: (1)

Man can only liberate himself or develop himself. He* cannot be liberated or developed by another. For Man makes himself. It is his ability to act deliberately for a self-determined purpose, which distinguishes him from the other animals. The expansion of his own consciousness, and therefore of his power over himself, his environment, and his society, must therefore ultimately be what we mean by development.

So development is for Man, by Man, and of Man. The same is true of education. Its purpose is the liberation of Man from the restraints and limitations of ignorance and dependency. Education has to increase men's physical and mental freedom - to increase their control over themselves, their own lives, and the environment in which they live.

* We, too, have used the word 'he' throughout the book although we almost always mean 'he or she'.

The ideas imparted by education, or released in the mind through education, should therefore be liberating ideas; the skills acquired by education should be liberating skills. Nothing else can properly be called education.

In other words, education is to do with power. People without education are at the mercy of those with it, who can use what they know to their advantage and to the disadvantage of the ignorant around them. Education is a means of gaining power, and hence freedom, something that should be everyone's right and not simply the right of the better-educated minority. On this showing the case for expanding education is a simple egalitarian one. While education alone will not transform the world, or the life of most of those who get it, the provision of education to only part of a community, or part of the world, reinforces relative deprivation. The case for improving education is that the new attacks on it in the 1970s have revealed its inherent weaknesses. For a juster world we need to expand education and at the same time to improve it, using any appropriate tool.

The need to expand education has become so much the new orthodoxy that it is easy to forget how recent a phenomenon it is. A century ago most people in every continent had not been to school. Enough was the informal education they received from parents and grandparents, from craftsmen to whom they were apprenticed, from friends. Within literate cultures schooling was the privilege of the few; in other societies there were no schools in the sense that we use the word. Jomo Kenyatta, forty years ago, described almost nostalgically how Gikuyu education fitted the needs of society. (2)

The first and most obvious principle of educational value which we see in the Gikuyu system of education is that the instruction is always applied to an individual concrete situation; behaviour is taught in relation to some particular person. Whereas in Europe and America schools provide courses in moral instruction or citizenship, the African is taught how to behave to father or mother, grandparents, and to other members of the kinship group, paternal and maternal. Whereas European schools in Africa provide training in nature study, woodwork, animal husbandry etc., much of which is taught by general class instruction, the tribal method is to teach the names of particular plants, the use of different trees, or the management of a particular herd of sheep and goats or cattle. After this the child is left free to develop his own initiative by experiments and through trial and error to acquire proficiency.

The strengths of that system of education lie in the way it is rooted in the rich Kenyan soil. Its curriculum - a word no

3 Chapter 1

one would have used - had to do with the everyday life and needs of the Gikuyu culture and economy. But an informal system of education of this kind does not meet the needs of a rapidly changing society in which an appeal to traditional knowledge or ways of thought will no longer solve all the problems to be faced by a child as he grows up. Traditional, informal systems of education assume that change is a slow process and that values and ways of doing things will change only a little from generation to generation. As the streets of Nairobi have been extended and its towers built ever higher, like those of countless other cities, so it has become ever more obvious that the road to status and power lies through the schoolroom. While we may mourn the informal system of our forefathers, and try to regain some of its benefits, the appeal of the formal is such that governments cannot resist public demands for its expansion.

Curiously, it seems right to talk about a single system of education. For one of the oddities of a world that is 'Incorrigibly plural' (3) is that education looks alike wherever you go. If you go to Murree in the Himalayan foothills you will see the same crocodile of children in school uniform, walking beside the school chapel tower, as by a rice field in Guyana or between cashew-nut trees in Tanzania. And it is not only the trappings that are similar: the essentials are too. Kennedy's 'Latin Primer' used to be one of the keys you needed to unlock university doors at Ibadan in Nigeria and at Mona in Jamaica. Today the English 'School Mathematics Project' textbooks are used in many different countries. Almost anywhere you go you will find children in class sitting at similar desks, going through the same routines, and often learning the same material regardless of its relevance to themselves. The strength of the colonial model of education has outlived the rule of the colonial powers. These striking similarities mean that the same criticisms are now being made of education in the West and in the third world; in both, schools are condemned for their irrelevance, for their archaic curricula, for their alienating effects and for their role in perpetuating inequality.

THE SIZE OF THE PROBLEM

The third world is in far worse plight than the rest. Along with the problems of quality it shares with the West, it also faces ones of quantity of a quite different order. Most rich countries already have ten or twelve years of compulsory education and are now concerned about its quality. But in the third world there are simply not enough schools to go round.

Not even enough poor and inadequate schools. This is how Nyerere described the problem in talking about Tanzania's achievement in its first ten years of independence in expanding primary-student numbers from 486 000 to 848 000: (4)

Yet these achievements must not blind us to the terrible fact that almost the same proportion of our children now as in 1961 fail to find a place in primary school. We have provided primary school places for only about 52 per cent of the children of primary school age - that is how far we are from our objective of universal primary school education!...

And it is absurd to think that passing resolutions at TANU Conferences, or asking questions in Parliament can solve this problem. There is no short and simple answer to it. Yet it would be criminal if we allowed our failure to be enveloped in a cloud of self-congratulation about what we have achieved in education. Those children without school places must remain as a real challenge to us for the future.

Part of Tanzania's response has been to create a distance teaching programme on the huge scale needed to train teachers for universal primary education.

Nyerere's desire to expand education is echoed in all the development plans of the third world. At the same time it presents a new problem different from that faced by countries like England and the USA when, a century ago, they began to move from offering primary education to half their children to making it universal. Both these countries achieved a sort of educational revolution over the fifty years from 1870 to 1920. In 1870 only about half the children in England went to primary school; illiteracy was still so common that over a quarter of the women married then could not sign their own name in the marriage register. By 1920, 86 per cent of the children between 5 and 14 were in school and primary education had long been compulsory. Similarly, in the USA the proportion of children between 5 and 17 in school went up from 54 per cent in 1870 to 83 per cent in 1920. In both countries the figures crept up over the half century and in the USA the impact of education was reduced by having a very short school year: in 1870 the school year lasted only 19 weeks and the average child attended for only 11 weeks in the year.

But there are important differences between that and what is now being sought in the third world. Demography made it easier in England and the USA in the last century than it is in the third world now. In England in 1870, 23 per cent of the population was between 5 and 14, and the proportion had dropped to 19 per cent in 1920. Over the same half century the 5 to 14 US age group fell from 25 per cent to 21 per cent

of the population. In 1971, in Botswana, for example, the same age group made up 29 per cent; 26 per cent in Tanzania were in the same age group and there is little reason to think that this proportion will fall at the rate it did a century ago in England and the USA. The developing countries are trying to move more quickly - to achieve in a decade or two what took half a century in the West.

Their quantitative problems are made greater, too, by a wish to offer education to adults as well as to children: Nyerere has argued for it on the grounds that the benefits can be felt in society straight away without waiting for a generation of school children to grow up. The problems are also aggravated by a general determination in the third world to expand education at all levels, primary, secondary and tertiary, all at once. By comparison, in the West there was a greater concentration upon primary schooling until the point when it became universal. Only then was there a sharp expansion of secondary education, and only when that was complete came the sharp expansion in tertiary education.

Already many educational budgets are absorbing between 20 and 30 per cent of government budgets and it is difficult to see how they can expand further without cutting into other, and perhaps equally vital, services. Unless GNP, and with it government expenditure, can grow more rapidly than the increase in population, then it is impossible to meet the continuing demand for education by using traditional techniques. There simply is not the money available to finance universal secondary schooling, for which a demand will arise as soon as we are anywhere near achieving universal primary education - itself an objective that is already straining budgets, resources and administrative capacity to the utmost.

Then there is the fact that the third world cannot bear with inequality as comfortably as the West used to. In England at the end of the nineteenth century it was possible to hold down expenditure on education because it could be provided more cheaply for the working class than for the middle and upper classes: different types of education were seen as appropriate for children according to their future status in life. The belief lived on into the present century: this conversation took place in the 1940s: (5)

I saw the headmaster, and I said 'We've got this form with all these schools down, and we don't know anything about any of them.' 'Well', said the headmaster, 'what's his father's job?' 'He's a lorry driver.' 'Well, then you'd better be sending him to Mill Cross.' 'Mill Cross? Why, is that the best school?' 'No, it's not, but it's the best school for you'. 'How do you mean, it's the best school for me? Where would you send your lad?' 'Oh, I'd send *my* lad to Marburton College

Throughout the world today, with minor exceptions like the fee-paying 'public' schools of Britain or the segregated schools of South Africa, it is widely assumed that all children have a right to the same quality of education. Of course they do not all receive it. So the real educational crisis for the third world is about expanding the schools at an unprecedented rate and changing them at the same time. In expanding education the third world is trying to do more with less. But its problems are by no means only quantitative. They are also qualitative.

THE BANKING CONCEPT

A fundamental criticism has come from Paulo Freire. He claims that much education is a process of 'banking', or transferring banks of information from the near omniscient teacher to the empty minds of his students. Freire was a literacy teacher in Brazil; in contrast with orthodox literacy teaching where teacher and students work through a primer, he developed a process based on dialogue. In discussion with his students, Freire and his colleagues identified key words of importance to them - 'favela', a slum, or 'tijolo', a brick, for example - and then used the syllabic units of these words to make others. In this way, from the very outset, illiterate adults were reading and writing words of their choice, rather than words chosen by the primer-writer. And they were using words that reflected the central concerns of their lives. (6) Underlying Freire's work is a belief that education is a process of increasing one's understanding and ability to control the world, rather than a process of mastering a fixed body of subject-matter. While his theories, and his practice, were worked out in teaching adults to read, the ideas behind them are relevant to a broader critique. In contrast with Freire's views, the orthodoxy has been that there is an organised body of knowledge teachers already possess and which students need to master. The hidden assumption is that the set of knowledge an individual needs will correspond with the set defined by the teacher, or the syllabus, although either is a necessarily arbitrary part of the universe of knowledge.

A consequence of this view is that the teacher deserves profound respect and that the printed word, being the source of the teacher's authority, the very repository of the subject-matter of education, deserves the greatest respect of all. This view of the teacher is symbolised by the Italian habit of referring to professors as 'the barons'. If the belief in authority within the school spills over into a more

general respect for authority outside then education tends to become no more than support for the status quo. It was an uneducated child who shouted that the emperor had no clothes.

But our objection to the banking process is not on political grounds alone. Burgess's analysis of higher education in Britain - at the opposite end of the spectrum of educational privilege from literacy teaching in Brazil - has shown that its organisation and methods of teaching are not dissimilar. On this view, then, the educational revolution we are seeking will have its impact on education in the wealthiest countries as well as in the poorest. Burgess argues that, in contrast to the view of education enshrined in the division of subjects between orthodox university faculties, there is an alternative view of the purpose of education. (7) He suggests that Popper's description of the processes of scientific method and discovery is a better guide to education than learning organised into 'subjects'. Popper has proposed that the scientific method does not involve arguing from general theory to particular example but is more in the nature of problem-solving. He suggested that all scientific discussions start with a problem (P_1), to which we offer some sort of tentative solution - a tentative theory (TT); this theory is then criticised, in an attempt at error elimination (EE); and as in the case of dialectic, this process renews itself; the theory and its critical revision give rise to new problems (P_2). (8)

Popper's view of scientific discovery is therefore that science proceeds by making new hypotheses to solve problems, and by seeking to prove them false to find the errors in them, so that science and learning are seen as being in a process of continual change. The attempt to disprove hypotheses, rather than to make new inferences from theory, is the method of scientific advance. If this is the way in which science proceeds, in its efforts to increase man's understanding of the world, then it would seem appropriate for us to adopt similar methods in education and concentrate not on passing on accumulated banks of fact, but on the solution of problems. To put the argument the other way round, if education is to help people solve problems, then they must learn the methods of doing so.

Of course this does not mean that we can eliminate the content of education and invent a fact-free curriculum. Many problems cannot be solved, if at all, without access to the accumulated experience of mankind. But the kind of knowledge we are likely to need may lie beyond the limits of traditionally defined subjects. If our educational system is to offer people a guide in their ordinary life then it must move from reliance on the accumulation of information and become based on procedures for solving problems, to give people a chance of