

EDUCATION IN DEVELOPMENT

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THE PURPOSE OF this article is to examine three sets of proposals for the development of education: *Education for Development* (Zambia, 1976); *Report of an Investigation into the Possibilities for Educational Development in Rhodesia-Zimbabwe after a Political Settlement* (Atkinson *et al.*, 1978); *A Programme for National Development* (Whitsun Foundation, 1976). In order to establish criteria by which to judge the proposals, the opposing viewpoints of development theory and underdevelopment theory are analysed; examples of development in Kenya, Japan and Cuba are used to illustrate the contrasts and also to highlight the role of education. Two key factors which emerge from the analysis are the emphasis given by the plans for education to skills development and the emphasis given to institutional arrangements designed to shape public perceptions of the functions and role of education in the total national effort. The approach to education and to development suggested by the Whitsun Foundation is seen as coming closest to providing adequate guidelines in these directions.

SOME EXAMPLES OF DEVELOPMENT THEORY

Theories of development take a fundamentally optimistic view of man's capacity to assert control over physical resources and by so doing to become master of his economic destiny. Singer (1971, p.53) points out that up to the time of the Second World War the giants of economic theory—Adam Smith, Ricardo, Malthus, Marx, Schumpeter, Jevons and Keynes—were unanimous, though for different reasons, in their view that economic growth in the more developed countries would slow down and then come to a standstill. The facts of post-war economic development have been far different:

It is surely one of the most dramatic reversals in the history of human thought that at present we have thrown overboard the belief in a coming stationary state for the developed countries and replaced it by a picture of a possibility of indefinite progress, whereas all the 'dismal' elements have become transferred in our thinking from the mature developed countries to the underdeveloped countries. (Singer, 1971, p.54)

Far from coming to a standstill, progress has become a built-in feature and the expectation of miracles of economic growth is a characteristic of the economic life of the industrialized world.

As we shall see, it is the great gap between the built-in development in the more advanced countries and the apparently hopeless stagnation of the underdeveloped nations which attracts the distinctive attention of the underdevelopment theorists; but that is to jump ahead. In essence, while acknowledging the enormity of the problems confronting the poorer nations, economists with a

development perspective do not see these problems as being intractable. For example, Bauer (1971) argues against the idea that the poorer nations are locked into their position of disadvantage by a vicious cycle of poverty. The cycle-of-poverty theory states that the poor nations are poor because they are poor; they lack precisely those features, such as the capacity to save, the capacity to exploit profitable investment opportunities, the presence of wide markets, reserves of specialist skills, and so on, which are what is needed for them to break out of their entrapped condition. Such a theory, in Bauer's view, ignores patently obvious historical facts. In all parts of the world—Latin America, South East Asia and West Africa—there are impressive trade statistics at hand at least to refute any suggestion of stagnant production. Bauer (p.24) cites details of Ghana to illustrate the point: cocoa production rose from nothing in 1890 to 300,000 tons per annum in the 1930s and to 400,000 tons per annum, all from African-owned and African-operated farms, by the 1960s; total imports and exports, valued at less than £1m annually in 1890 were to be measured in tens of millions by the 1930s and rose to £100m by the 1950s; numbers of children in school rose from 3,000 in 1890 to 500,000 in the 1950s; transport in the 1890s was by jungle path, canoe and human portage, whilst by 1930 there was substantial railway mileage and an expanding road system. And nor was the growth purely in such tangible physical and material forms. Bauer refers to 'psychic income' accruing from such things as the falling death rate and the rise in life expectancy.

Elvin (1971) argues that chief among the explanations for the continuing trend of economic growth has been the progressive refinement of the concepts relating to the process of development, together with an increased understanding of appropriate procedures to set dynamic processes in motion. The simplistic idea of the Truman era was that the developed countries should simply pass on to the less developed some of the benefits they have enjoyed; this meant allowing them the benefits of increased capital, more consumer goods, expert advisers and agreements to offer education and training in the donor country. While such a policy succeeded in the case of the post-war recovery of West Germany and Japan, results with poorer nations were bitterly disappointing. Elvin (p.8) pinpoints the contrast thus:

Whereas what the countries of Europe needed was mostly an injection of capital and a renewal of equipment, what was needed in the under-developed countries was something more like an economic revolution, in the extreme case a transformation of a subsistence into a cash economy or of a mediaeval into a modern agriculture.

The idea of investment in human resources, arising from Schultz's analysis of the contribution of education to the economic development of the United States and the application of these ideas by Harbison to manpower needs in West Africa, was a crucial step forward in our understanding of how such a transformation may be given some momentum (Elvin, p.10). Next came Myrdal's insistence that it was futile to look only at economic factors; if there was to be any transformation, then culture, belief-systems and social institutions must be examined, understood and taken into account (Elvin, p.12). In the sphere of education, Beebey emphasized fundamentally important issues: any hope of advance must rest pre-

eminently on the capability of the teaching force to carry out what is expected of it; in consequence of this there could be little chance of speedy, dramatic progress in education, since the training of an individual teacher is a process which extends over some ten to fifteen years within the existing educational system. How could one adjust the quality or the quantity of human talent except by relatively small progressive steps when output is so closely related to the input in both its qualitative and quantitative dimensions?

Increasingly, then, the complex nature, and the interdependence, of the various factors contributing to development came to be recognized. Literacy schemes which succeeded in one area failed in others where communities, having different perceptions of their own needs, could not see the relevance of the particular scheme offered to them. Education and literacy, though key factors, are not more important than, and cannot function independently of, other schemes for rural transformation; rural development itself is unlikely to take place without changes in class and family structures and in the institutionalized systems of land tenure. Thus multi-dimensional, multi-disciplinary planning is now seen as essential. This growth in conceptual understanding of the problems of underdevelopment leads Elvin to the optimistic conclusion that we will gradually learn how to apply our new understanding and that, in response, economic progress will continue its steady advance.

Singer (1971) is even more decisive in his faith in the capacity for continued progress. It is the brain-power of individuals and communities which drives progress, and unlike the stock of other consumable resources, brain-power has limitless potential. Through the systematic pursuit and application of research man will continue to find technical solutions to his problems. Consequently, Singer argues that 'pre-investment' in high-level research is essential for any country which wishes to improve its standards of living. His long-term recipe for development (p.60) is that certain percentages of the national income should be spent as follows:

7.0-8.0	per cent	on	education
1.5-2.0	"	"	research and development
0.5	"	"	training of scientific personnel

The human output of such investment must itself be put to productive effect, and Singer (p.60) specifies five key channels: trained workers for industry; business administrators and technicians for both the public and commercial sectors; the creation of widespread basic literacy; the creation of formal institutions of secondary and higher education; and, most important of all, the supply of trained teachers. Basically, Singer argues, underdeveloped countries have failed to make progress because they have not followed such a prescription and have under-invested in the development of home-grown brain-power. Reliance on imported experts and imported technology, unless for very limited specific purposes, is likely to 'perpetuate the disadvantages of underdevelopment'. The experts move on and the technology is unlikely to be well adapted to the conditions of the less advanced countries.

Thus theorists of development economics place their faith in the resource-

fulness of human beings, in their capacity to seek help, to give help, to use help wisely and, ultimately, in their capacity to solve communal problems.

THE PERSPECTIVE OF UNDERDEVELOPMENT THEORY

The formulation of a specific theory of underdevelopment is relatively recent. Its distinctive feature is that it is diametrically opposed to development theory in that it does not regard underdevelopment as being caused by an absence of those economic factors which have brought about development in the Western industrialized nations. Rather it postulates that those same features which bring about progress in the industrialized world operate to the disadvantage of the underdeveloped economies. In fact, far from development in one part of the world having a positive spill-over effect on the others, the growing wealth of the rich countries is perceived as arising from their exploitation, in many subtle ways, of the weak position of the poorer countries.

The theory runs thus. Underdevelopment, as defined in the theory, is not a natural and inevitable phase in the history of any society, but is a 'discrete historical process due to the penetration of modern capitalistic enterprises into archaic structures' (Furtado, 1973, p.41). The situation of a metropolitan power, rich in capital and expertise, coming into contact with a more primitive society sets up a system which perpetually operates to the advantage of the capitalist interests. Initially the capitalist base is entirely external to the 'colony', and is situated at the metropolitan centre. Investment in the colony is made for the specific purpose of producing a particular commodity which is needed at the metropolitan centre. But unlike the case of the progressive development of the Western countries, the profits of this investment are not re-invested in the country of origin but are exported to the metropolitan centre. The weakness of the peripheral colony is emphasized by two further dimensions. Firstly, in its external relations with the metropolitan power it is at a disadvantage because it is a producer of primary products where the laws of supply and demand are open to fluctuations and the buyer can frequently influence the price according to what he is prepared to pay. By contrast, the colony must buy manufactured goods the prices of which are fixed in terms of production costs and are much less open to negotiation. Added to these disadvantages of instability and weak bargaining power is the fact that the advanced state of research in the industrialized countries enables them to produce synthetic substitutes for the raw materials of the primary producers.

The second weakness arises from trends which develop within the peripheral economy. Arising from the export of the surplus capital, patterns of production tend to be monocultural and monopolistic, with minimal linkages with other sectors of the domestic economy; consequently, as there are no other forms of development taking place, there is a perpetual oversupply of labour which enables capitalist producers to pay wages only marginally above subsistence and which are certainly inadequate to cause any marked effect on the standards of living or purchasing power of the employees. The earliest forms of industry take the form

of import substitution. This brings into being a small group of semi-skilled operators whose loyalty to the system can be bought:

All that has happened is that a new industrial 'enclave' has been established in the economy, but without any tendency to set in motion a chain reaction of investment and employment which will eventually make it burst out of the enclave and transform the economy as a whole. On the contrary, the society has been 'locked into' its subordinate role in the international capitalist system by new means. (Leys, 1975, p. 18)

The new class now has a vested interest in the *status quo* and no economic take-off comes about. The new manufacturing class is able to establish a local monopoly, protected from outside competition by import duties. Furtado makes the point that the choice of industrial enterprise will most certainly be one where competition with external manufacturers is favourable to the capital interest of the private manufacturer; and, from a development point of view, such a criterion is dysfunctional when compared with the possibility of establishing local industries which respond realistically to the real needs of the community for manufacturing goods which will have maximum linkage and transformational effects within the local economy.

It is processes such as these which could appear to present Third World policy-makers with only two options. Either they must be prepared 'to play a very subordinate role in the international capitalist system, with little benefit to the majority of the people', or 'They must seek an independent role in an alternative system of poorer but non-capitalist countries, a role which promises less but which might be capable of fulfilling its promise' (Leys, p. 24). Leys considers that the third option (and perhaps the only particularly attractive one), that of a Japanese-style take-off to progress, is no longer open; and Streeten (1971, p. 420), cites no fewer than twelve subtle disadvantages (among them the population explosion and the brain-drain) suffered by the underdeveloped countries, which serve to explain why any such take-off is unlikely.

KENYA: THE SUBORDINATE CAPITALIST ROLE

The thesis of Leys's book (1975) is that the case of Kenya typically fits the theory of neo-colonial underdevelopment and this interpretation is endorsed by Tuqan (1976), and by the writers who contribute to Court and Ghai (1974). Leys argues that although Kenyatta and Mboya were not the tools of foreign capital, 'they were collaborating closely with it', and that the introduction by Mboya of the policy document, 'African Socialism and its Application to Planning in Kenya' in 1965 (and which Kenyatta described as Kenya's economic Bible), was a 'pure statement of bourgeois socialism', skilfully adapted to appeal to, and to serve the interests of, the newly created capitalist class (Leys, 1975, p. 221). Moreover, the pattern of this neo-colonial underdevelopment had been carefully designed in the days prior to independence. The hand-over in Kenya was carefully stage-managed by the Colonial Office. Private enterprise, including the ownership of large estates, was to continue, but was to be managed so as to allow Africanization without the destruction of the capitalist base. Leys (p. 27) argues

that it was the prime importance given to 'an efficient transfer of power to a régime based on the support of social classes linked very closely to the foreign interests which were formerly represented by the colonial state' which set the framework for the stagnant pattern of underdevelopment that has characterized the subsequent decade. It is these features of a carefully managed hand-over leading to a dualist economy, in which a thriving but narrowly based wage-sector co-exists with a stagnant subsistence sector, that make the Kenyan case of special relevance to Zimbabwe.

The relationship between overall development attitudes and specific policy decisions taken in education is well illustrated by Tuqan's analysis (1976) of patterns of investment in various kinds of education in Kenya. He identifies three features which are germane to my argument:

- (1) The priority given to expansion at secondary and higher levels had its origin in the survey, *High Level Manpower Requirements and Resources in Kenya 1964-1970*, and the emphasis given to this document by the Ominde Commissioners in their *Kenya Education Commission Report, 1965*. This policy Tuqan (pp. 103, 113) calls the 'manpower error'. It had the effect of confirming the public view of education as the means of escape from rural poverty, it exacerbated the problems of unemployment among school leavers, and did nothing to assist in the transformation of rural life.
- (2) Investment planning in Kenya was characterized by gross imbalances. For example, the 1970-4 Development Plan allocated 43 per cent of its development expenditure to secondary education and only 0.003 per cent to primary-school expansion (Tuqan, p.90). Expenditure on higher education came next to that on secondary. Formal technical education was grossly underprovided (only K£788,000 of the total K£8m for secondary education), while the Harambee Village Polytechnic Schemes received no subsidization whatever. Rural-urban imbalances can be illustrated by the fact that only K£2.5m was specifically set aside for rural development against K£25m for local government development in Nairobi alone. Tuqan comments that such imbalances completely ignore the well known fact that rural investment brings about a far greater return in terms of increased employment opportunities.
- (3) Education at all levels—university, secondary, primary, and even in the Harambee schools—is characterized by rote learning and certificate mania (Tuqan, p.115), and by a low level of teacher quality such as to preclude the successful implementation of the New Primary Approach and of Nuffield Science, both of which were well conceived schemes for fostering the kinds of mental flexibility needed for any development breakthrough.

In such a situation, where the whole structure of public investment and policy favours the urban cash sector, it seems quite clear that there is no alternative but for public opinion to view education not as a means of acquiring skills for self-employment or for self-improvement within the rural environment, but as a means of escape from poverty through the hope of urban employment. Yet ultimately there can be no national escape from poverty via this route since the output from the schools is already greater than the capacity of the employment market to

absorb it. What is needed is an imaginative investment programme which can build new institutions for training, production and earning a living within the rural environment. Only by bringing about such a change in the visible opportunities for self-improvement can the public be persuaded to see education as an aid to improving life in the country, rather than as a means of escaping to the towns. Tuqan (1976, p.114) quotes Anderson: 'The best assurance for a stimulating and constructive educational system is to surround it with a society that has vigorous impulses toward change and initiative. Schools alone are weak instruments for modernisation; but when well supported, they are powerful'. Consequently, Tuqan argues, there should be a major re-channelling of investment to the intermediate and agricultural sectors of the economy.

Within education itself, investment should concentrate on the training of trainers: 'It is high time that educational aid confined itself to supporting schemes aimed at the training of teachers of teachers, particularly in those sectors where internal resources are either inadequate or totally lacking' (Tuqan, 1976, p.123). In particular, Tuqan cites the following types of training where local inadequacies are most urgently in need of redress:

- (a) science and technology teacher-trainers;
- (b) planners of both development and education;
- (c) trainers in lower-level occupations such as carpentry, tailoring, plumbing, electrical maintenance—such trainers were urgently needed to man the Harambee workshops;
- (d) trainers of middle-level service personnel in such fields as agricultural extension, health, nutrition, family planning and citizenship;
- (e) trainers in research methods and techniques.

One may note that while both Tuqan and Ghai (1974) would appear to concur with Leys's interpretation of neo-colonial underdevelopment in Kenyan politics, neither accepts that the only alternatives are a perpetuation of mass poverty under the existing system or a revolutionary overthrow of all existing institutions. As has been described, Tuqan recommends a much more widely based and balanced investment policy, while Ghai argues for determined efforts to improve the quality of teaching offered within the system of formal schooling.

Leys (p.20) warns us against the too ready belief that, because capitalist models are unlikely to be able to lead to a general increase in standards of living, we should turn to the assumption that socialist revolutionary alternatives necessarily offer better prospects. He suggests instead that we should look closely at the strategies that have been employed by the more successful countries in their march towards self-sustaining growth.

JAPAN: THE DEVELOPMENT MODEL REALIZED

Geertz (1973, p.44) argues that Japan and Java share many characteristics: both are heavily populated islands; in both, agriculture rests on 'labour-intensive,

small farm, multi-crop cultivation centering on wet rice'; both had a strong cultural traditionalism dominating social life in the nineteenth century. Furthermore, by about 1870 each had reached roughly the same stage of rural productivity and of rural-urban population balance. Yet during the following half-century the Japanese economy took off while the Javanese economy stagnated, or 'involved'.

The key feature in the Japanese take-off seems to have been the complementary development of the rural and manufacturing sectors. Geertz points out that, in both countries from about 1830 onwards, there were steady increases in agricultural yields. In Japan, agricultural improvement can be said to have launched the industrial take-off: peasant production was taxed for investment in manufacturing. However, there were benefits to the peasant farmer once industrialization got under way:

The industrial sector then re-invigorated the peasant sector through the provision of cheap commercial fertilisers, more effective farm tools, support of technical education and extension work and eventually, after the First World War, simple mechanisation as well as by offering expanded markets for agricultural products of all sorts. (Geertz, p.48)

Thus although agriculture in Japan did not change its character from its traditional peasant base (in contrast to Java where agriculture was capitalized on the foreign-owned plantations), nevertheless it was enabled to receive increasingly effective technico-capital injections in the form of increased irrigation and land reclamation, improved use of seeds, fertilizers and agricultural methods. All this led to rising productive efficiency, not only in terms of yields per hectare, which also occurred in Java, but also in terms of yields per unit of labour, which did not occur in Java (Geertz, pp.45-6). This meant that while the rural areas were producing an increasing food surplus, they were also producing a genuine labour surplus, which the expanding urban manufacturing industries were eager to employ. Geertz points out that the two distinctive features of the Japanese take-off as against Javanese stagnation were a powerful indigenous élite (as against a foreign-based élite in Java) and a capital-intensive manufacturing system (as against the option of the Dutch capitalists to invest in large-scale plantation agriculture). We can also note as apparently crucial the complementary advance of the twin agricultural and manufacturing sectors in Japan; the rising productivity of the rural peasants that brought with it increased prosperity and stability, a stability greatly facilitated by the capacity of the expanding manufacturing sector to absorb the surplus population; the increased rate of urbanization, bringing with it a marked demand for qualities of independence and a flexibility of life-styles and value-systems; and the locally based character of all these initiatives. The isolation from foreign influences, particularly from any colonial influences, led to a tremendous increase in the value and potential of the existing human capital.

CUBA: BREAKING THE UNDERDEVELOPMENT STRANGLEHOLD

Whereas Japan's drive to take-off can be satisfactorily explained in terms of development theory—that is, by considering the relationship between investment

choices and the resultant growth—Cuba's breakthrough is the classic case of a revolutionary attack on constricting capitalist institutions. O'Connor (1973, pp.299, 309) argues that the revolution was not, initially, primarily ideological. He points out firstly that the central power-group in the successful Castro military victory was made up of non-communists, and secondly that at the time of the take-over there was no clear pre-determined ideologically based economic and social policy. This interpretation enables O'Connor (p.299) to argue that the adoption of extreme socialist solutions, involving as they did the replacing of existing institutions, was a pragmatic response to the realities of the pre-revolutionary economy:

During the twentieth century the island's economy acquired the significant characteristics of monopolistic capitalism, chief among which was the cartelization of markets. Monopoly controls blanketed Cuba's social economy and blocked the fulfilment of the island's true economic potential by wasting land, labour and capital, and other economic resources.

He goes on to point out (p.299) that the 'social revolution was rapid, relatively peaceful and was defended by the vast majority of the Cuban people'.

The Cuban example has relevance because this description of the pre-revolutionary economy bears some similarity to what has already been described in connection with Kenya and to what will be considered when we turn to Zimbabwe. What we notice in the case of Cuba is that policies in education made a deliberate and dramatic break with the past; far from being allowed to continue in accordance with existing attitudes and practices, priorities in education were completely re-thought; education was to be totally subservient to, and totally in step with, the new social ideals. From Jolly's account (1971) of Cuban educational strategies we may note the following:

- (a) The constraint of finance and even of plant would be disregarded. Education would simply use to the maximum the resources which existed; police stations, refugee properties, printing presses—all were used in the service of education.
- (b) Attitudes of long-term commitment to the new state were regarded as more important than the possession of skills. Highly paid expatriates were not encouraged to stay.
- (c) Adult education, because of its quick returns in terms of labour and production, was given top priority. Schools were closed for a whole year (1961) to concentrate on adult literacy.
- (d) Special urban-rural exchange schemes were worked out for teachers. These operated as a form of incentive while at the same time there were in-service components designed to build and maintain teacher quality.
- (e) Agricultural projects, rural housing schemes and health programmes, together with the adult literacy campaign, were all conceived as being part of a nation-wide scheme of rural development.

Jolly (p.228) comments that 'If education reform is to succeed, it must be made part of more fundamental changes in the whole society'.

The case of Cuba illustrates that neither schools alone, nor words alone, can change the perceptions and therefore the demands of the consumer. If people are to be changed, are to be persuaded that they should want different things (such as pre-vocational as against academic schooling), then visible institutions which demonstrate the advantage of the intended change need to be brought into being. The Cuban arrangements for their teachers were particularly instructive in this regard. It was important that the teachers were made to feel that they had a crucial role to play and important also that they should continue to develop their skills. A key feature was the arrangement concerning rural-urban reciprocity for schooling and teachers. The cities would provide boarding accommodation for rural children and, also in the cities, there would be teachers' centres where rural teachers could come to relax and to learn. City teachers would get experience in the country through having to spend their first year of teacher-training under tough rural conditions and by being given opportunities to attend part-time courses, with their families, at the best holiday resorts. As part of the literacy campaign, each literate urban student was required to accept responsibility for teaching one rural illiterate; this he would do by living and working in the rural environment with his pupil.

The point that emerges with particular clarity from the Cuban example is that though much was torn down, there were detailed schemes to construct alternative social institutions and human skills.

CRITERIA FOR ASSESSING PLANS

An appendix to this article contains point-form summaries of criteria for the assessment of plans for educational development taken from four different sources. A consideration of the criteria set out in the appendix, together with those drawn up by Singer (see above, p.161) and Tuqan (see above, pp.164-5) and those which have emerged from the study of particular cases of development, leads to a synthesis of five generalizations:

- (1) *Education plays a relatively minor role in development planning as compared with broad economic considerations.* By and large, development theorists would argue that it is the investment mix which is crucial and that, in particular, rural transformation probably has a higher priority than education. Galbraith (Appendix, (b)) emphasizes the prime importance of the administrative infrastructure.
- (2) *Non-economic factors are important.* This view is emphasized by Galbraith (Appendix, (b)), by Streeten (Appendix, (c)), by Senghor (Appendix, (d)) and by the example of Cuba. Streeten refers to the need for 'attitude-breaking incentives' and to the need to transform certain key institutions such as land tenure. However, as Senghor's list of prerequisites (Appendix, (d)) so strongly suggests, an understanding of the cultural factors at work is essential before any prescription can be formulated. The strength of the revolutionary

approach to development would seem to be the more direct consideration it gives to non-economic factors. The transformation of public perceptions takes priority over short-term economic benefits.

- (3) *A conservative approach to development will emphasize pragmatic planning as against ideology.* The need for accurate prior information, for realistic assessments of feasibility, and for a commonsense but decisive approach to the selection of priorities is given high importance by development-orientated theorists such as Lewis (Appendix, (a)) and Galbraith (Appendix, (b)). In contrast, revolutionary approaches such as those adopted by China, Cuba and Tanzania will insist on the paramount importance of ideological considerations.
- (4) *The most direct influence exerted by education is in the range of training it provides.* Singer (see above, p.??) and Tuqan (see above, p.??) emphasize respectively the need for high-level research and the need for schemes to service all levels of commercial, technical and productive enterprise. Clearly the itemization of such a range of needs, together with the emphasis given to the quality of teacher education, implies recognition of the importance of a satisfactory broad educational base to underpin all subsequent courses of training.
- (5) *Policy choices and qualities of leadership on national issues are far more vital than is educational policy itself.* As can be readily seen, the first three generalizations made above are relatively independent of specific educational policies, while successful decision-making in education itself is closely related to the extent to which education has been conceived by leadership as part of the socio-economic whole. However, this fifth generalization oversimplifies the true position. The concept of leadership itself should not be narrowly conceived as being an attribute characteristic only of an élite oligarchy; rather, for development to take place, there is a need for leadership at all levels, and the realization of leadership potential is very closely related to education conceived either as a quest for excellence or as an experience in participatory democracy.

From these five generalizations for overall development planning, a more particular set of criteria against which to assess the three proposals for educational development can now be stated:

- (a) Coherence in the relationship between national and educational policy.
- (b) The pragmatic as compared with the ideological strengths of the policy.
- (c) The strength of the skills-production dimensions of the programme.
- (d) The potential of the programme for effecting a transformation in public perceptions of the role ordinary people can play in education and development.

These criteria will now be applied to three sets of recent proposals for education development in our part of the world. These three examples have been chosen because of their contrasting emphases, and in each case aspects isolated for comment are deliberately selective. It is not intended to do balanced critical justice to any of the proposals as a whole; rather, certain aspects of each proposal are highlighted for the purpose of comparison. I believe that the features selected are in fact representative of the spirit of each proposal and that a sustained critical analysis of each as a whole would demonstrate this. What follows, however, does not purport to be the kind of holistic, balanced assessment which would be needed to justify such a claim. Instead, differences between the three proposals are sharpened so that each is made into an image of a possible alternative path into the future.

ZAMBIAN PROPOSALS: A REVOLUTIONARY OPTION

In 1976 the Zambian Government produced a document of some 80 closely printed pages arranged in eight chapters which went into every aspect of the proposed new system in considerable detail. The document was labelled a 'draft' proposal (Zambia, 1976) and it invited public debate on the proposals. That public debate has since taken place, and the 1976 document has in fact been superseded by the document *Educational Reform: Proposals and Recommendations* (Zambia, 1977). I have chosen to refer to the 1976 document because it has avowedly revolutionary intentions, because a revolutionary alternative for Zimbabwe must be considered as a fairly strong possibility, and because the actual framework for educational development (see Figure 1, taken from Zambia, 1976) seems worthy of serious consideration, even if much else in the document is not helpful. The chart in Figure 1 shows two parallel frameworks for progress through the educational system, one entitled, 'Full-time education: Study and work', and the other entitled, 'The world of work: Continuing education, work and study'. This second framework contains two bands, one of which is an unbroken band labelled 'Workers and in-service education', suggesting that for some of Zambia's work-force this is the only form of education that will be available. The first band of the 'World of work' framework, however, parallels very closely the structure set out in the framework for 'Full-time education'. Each is seen as consisting of four stages, the last three of which, basic education, second and third stages, are common to both. Connecting arrows between the two frameworks indicate that people who have completed any stage beyond basic education in one framework can move to the next stage in the other framework if they desire. Between the two frameworks are three boxes labelled 'Z.N.D.'. These indicate that at the completion of any of the educational stages in either framework people will be required to contribute to the Zambian National Service.

To illustrate the revolutionary nature of the proposals several points need to be highlighted. The present educational system is judged to be inadequate because it provides 'only a single track bound for one destination', and because it 'breeds individualism, elitism and class consciousness', whereas the proposed plan makes education 'part of the vanguard of the Humanist revolution'. The one

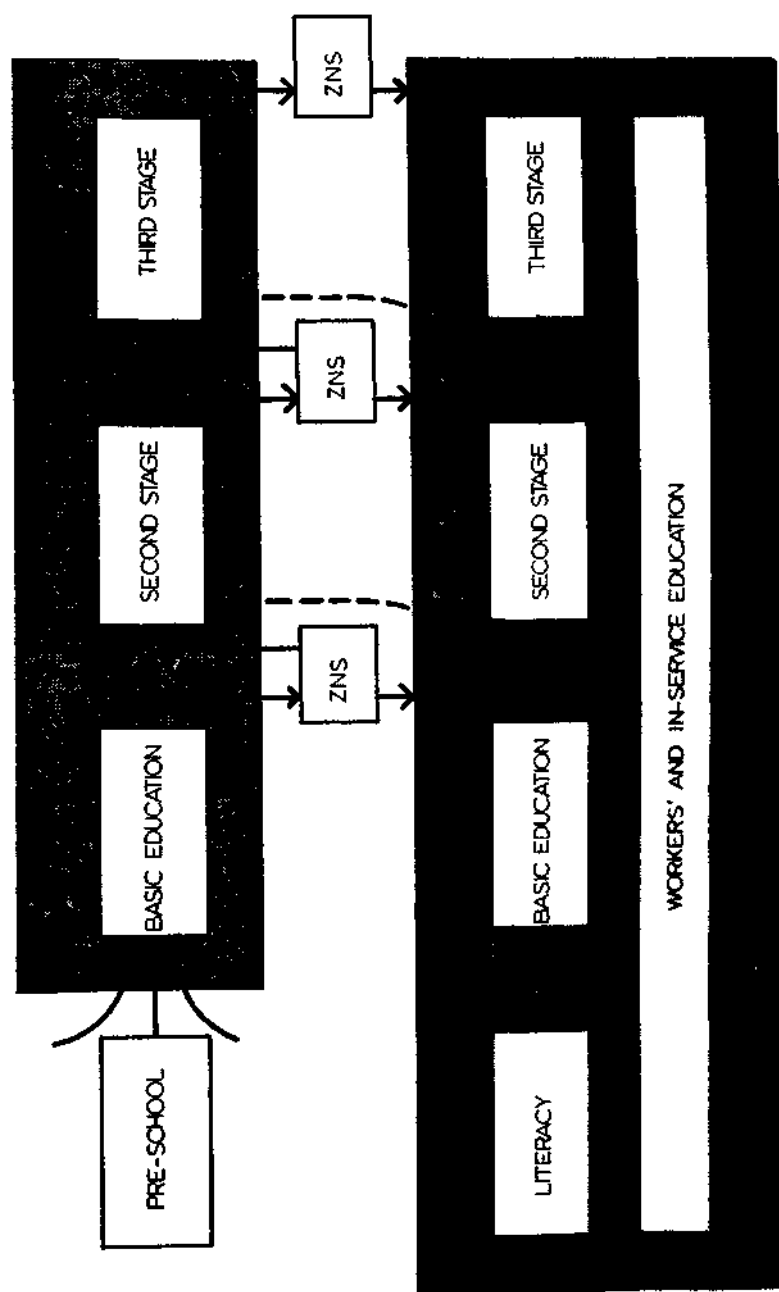


Figure 1: ZAMBIA: STRUCTURE OF NATIONAL EDUCATION PROPOSED IN 1976.

aim of education will be 'to develop the potential of each citizen to the full, for the creation of a Humanist Socialist society, and for selfless service to humanity' (Zambia, 1976, p.1). The major theme of the proposal is summed up as follows:

The combination of study and work is the main theme of Education for Development . . . no student will be exempt from work, since work will be a part of his studies. And no worker will be exempt from continuing to study, because society will insist that study is part of a worker's duty. (Zambia, 1976, p.2)

The structure of the proposed school system differs radically from the existing pattern. Basic education is conceived of as being a ten-year course which falls into two distinct parts. In the first of these, extending from Grade 1 to Grade 7, schooling will consist of 4 terms each of 10½ weeks with a curriculum based on a core of subjects, political education and productive work. However, for the final three years of basic education there is introduced an organizational feature which continues throughout the second and third stages. This is the idea of 'rotation': the year is divided into 4 terms each of 12 weeks. Alternate terms are spent 'in school' and 'out of school'; out-of-school consists of components of work, various forms of guided study, and participation in study groups, all of which components have to be assessed. Second-stage education consists of a diverse range of programmes which include secondary schooling, primary teaching, nursing, agriculture, trade training and business studies. All these alternative forms of second-stage education have Grade 10 as their entry point, and all lead, after two years of 'rotational' study, to certification which provides entry into third-stage education. Third-stage education builds a diploma pattern onto the range of certificates offered at second-stage.

Teacher education would need to be restructured. Teachers of Grades 1-7 would do a three-year course built around only one year of college residence; this year would be preceded by a supervised year of 'pre-training' in the schools and would be followed by a supervised final year in the schools. Teachers of Grades 8-10 would have two years in residence with a third year following the same pattern as that described above. Certificates for teachers of Grades 1-7, and diplomas for teachers of Grades 8-10, would be awarded not by the University through its scheme of association (which would in effect be discontinued) but by the Zambia Examinations Council. The University would provide a degree-structure designed to take not only its own four-year students, but also certificate and diploma holders who would be enabled to pursue appropriately differing paths to the award of a university degree (Zambia, 1976, p.58).

Assessment. The great strength of the proposal lies in its transformational impact. The idea (prevalent in all countries but examined in this study in the case of Kenya) that education is a race for a certificate which will then act as a passport for escape from manual work in the rural areas, could surely not survive the successful implementation of the Zambian draft proposal. The inter-relationship between study and work has been embodied so decisively in the new institutional structure that new perceptions of this relationship must surely become part of the public cultural capital.

However, in terms of the remaining three criteria established for judging educational programmes, I would consider the Zambian proposal to have serious weaknesses:

- (a) In terms of coherence, I would judge that there is a danger of a considerable credibility gap between the brand of revolutionary humanism which underpins this document, and the more liberal, Christian-based and individual-orientated brand of humanism which Kaunda (1973) has been articulating over the last decade and a half.
- (b) In terms of the relationship between ideology and pragmatics the proposal is glaringly weak. It runs into the danger identified by Galbraith (1964, p.73), that 'There is a tendency for a plan to become not a plan but a list of all the things that everyone would like to have done . . . Specification of the things of strategic urgency is lost.' The plan does not give any indication of the severe difficulties which face its rapid implementation, of the strategy to be adopted or of the priorities which will apply in those many situations where practical possibilities will conflict with ideological demand.
- (c) Particularly in the case of teachers, the proposal is weak in the attention it gives to realistic programmes of skills development. As one reads the document one becomes more and more aware of the highly complex demands such an educational structure will make on teachers. These new demands can be listed. Teachers will: teach normal classes; master various kinds of distance-teaching techniques in order to supervise the work of those on the out-of-school programmes; undergo national service; contribute to programmes of continuing education; be fully involved in the programmes of productive work which form part of the school curriculum; be mobilized as volunteers to contribute to the literacy campaigns; be expected to develop new curricula and new teaching materials; and be involved in in-service programmes which will draw on their expertise as resource advisers, and as experts in the setting of educational objectives and methods of evaluation. And all this, we remember, will be meaningfully performed by teachers who have, in the case of primary teachers, done only one year of full-time residential training!

Ironically, I would judge that the Zambian model has greater potential if applied in Zimbabwe than it has in Zambia. If it were adopted here it would presumably form part of a Marxist-orientated total programme, in which case the transformational strength of the proposed structure would be exploited, the gap in ideological credibility would be overcome by the advent of an entirely new revolutionary philosophy, and the shortcomings of the lack of strategy and the poor attention to skills development could be rectified.

ZIMBABWE: A CONSERVATIVE OPTION

In May of 1978 four professors in the Faculty of Education at the University of Rhodesia published their *Report of an Investigation into the Possibilities for*

Educational Development In Rhodesia-Zimbabwe after a Political Settlement (Atkinson *et al.*, 1978). The report fills some 70 typed pages and is arranged in 16 chapters which examine every facet of the existing educational system from pre-school to higher education, including such aspects as non-formal education and curriculum development. Also included are chapters on the historical background of education, the purpose of the study, the principles which emerged and a final chapter summarizing the recommendations of the four professors.

There are four aspects of the report which I wish to highlight. The first of these springs from the professors' realistic appraisal of the existing system. Chapter 3 of the report identifies three long-standing traditions in Rhodesian education; one of these is the high standards of excellence which have been achieved, both in African and in European education. One of the major principles which, in the view of the professors (p.11), must be preserved as the new Zimbabwe adopts an integrated system of non-racial education, is the preservation of these high standards: 'Educational standards at all levels should be as high as possible, in keeping with the circumstances of a meritocratic society'. For example, the professors recommend that the quality of the teaching force should continue to be given the highest priority. They also suggest (p.62) that the University should maintain its autonomy and its standards of excellence but should seek to enhance its value to the wider national community by developing lines of research which are relevant to local needs; by making a deeper study of African culture and, based on this study, by developing Afro-centred curricula which are inter-disciplinary; and by expanding its scheme of association to training institutions of various kinds.

The second point of interest is the recommendation that the keynote of any future planning should be a clear-sighted pragmatism which places emphasis on the adoption of particular strategies applied to the various sectors of the educational system. The strategy for the development of primary education that they recommend (p.24) is that the lines suggested by the Lewis-Taylor Committee should be pursued and that a rate of expansion which does not threaten existing standards should be adopted. In secondary schooling the recommended strategy for expansion is to increase the intake by 5 per cent a year. More interesting is the strategy by which the idea of service to the nation is introduced; entry to secondary schooling is to carry with it the compulsion to complete the course, thereby developing to the full skills which can be beneficial to the nation. An important strategy to control the rate of racial integration and the preservation of standards is the fee-paying structure which the professors recommend. They envisage high-fee-paying and low-fee-paying schools; thus the high standards of the better schools will be maintained. Additionally, strict zoning is to be applied (p.20), the effect of which is that integration of the races within the schools will 'take place smoothly and naturally at the same pace as local communities themselves become multi-racial'. Finally, a detailed strategy for curriculum development is proposed; this includes expanding the function of the Ministry's Educational Development Unit, developing new lines of curriculum support within the Faculty of Education, establishing curriculum centres attached to the teachers' colleges and the encouragement of teachers' centres.

The third and fourth features which I wish to comment on are closely linked. The idea of transforming public perceptions of the role of education does receive some rather minimal attention. Most importantly, considerable importance is attached to the expansion of the non-formal system. A Ministry of Training and National Development, with regional adult education centres concentrating not only on courses which promote economic development but also on courses of a cultural nature aimed at enriching the quality of rural life, is proposed. Also emphasized (p.60) is the fact that teaching-learning networks need to make full use of all available media, including correspondence texts, radio and television. Other recommendations which would have some transformational effect are the proposals (p.63) for substantial bursary and scholarship schemes to ensure that the secondary schools are made accessible to the most talented pupils and the suggestion that capital should be made available to establish training institutions at rural growth points.

However, the overriding feature of the report would seem to me to be its failure to give explicit emphasis to the need to transform public perceptions of the role of education, and in particular it ignores the need to make education more accessible to the ordinary person. In fact, when judged from the point of view of their transformational impact, some of the very features which have been described above as exhibiting positive planning can now be seen as dysfunctional. For example, the recommendation that present levels of teacher quality should control the rate of primary expansion, and the discrimination between high- and low-fee-paying schools, taken together, will be seen by the public as being designed to maintain the *status quo*; a feeling of exclusion from the system which provides economic benefits will continue to be predominant. In particular one may note the emphatic tone in which the professors insist on the maintenance of certain barriers:

A maximum entry age of six-plus years should be rigidly enforced for entry into the primary school (p.58).

A maximum entry age of thirteen-plus years should be rigidly enforced for pupils awarded places in Form I (p.59).

Boarding places should be awarded to candidates in order of merit (ibid.).

All candidates should be tested for their suitability for secondary schooling during Grade 7 (ibid.).

The point to be made about these rules of exclusion is not that any form of control of age and merit levels is undesirable, but rather that the report gives no emphasis to the urgency of the need to expand provision to meet public demand or to the urgent need to provide alternative tracks, along the lines of the Zambian proposal, to those who do not meet the stringent entry requirements. In fact one could point out that the recommendation (p.57) to expand entry to Form I at the rate of five per cent a year must surely be based on an error. At present some 70 per cent of children gain entry into Grade 1 in the primary schools. Some 50 per cent of these reach Grade 7. Let us now make a number of assumptions:

- (a) that the rate of population increase is 3.5 per cent a year;
- (b) that the rate of provision of Grade 1 places is 1 per cent a year above the rate of population increase;
- (c) that the rate of provision of Grade 7 places is 1 per cent above the rate of increase of Grade 1 places.

The first point arising from these assumptions is that with Grade 7 places expanding at 5.5 per cent a year (i.e., $3.5 + 1 + 1$), an allowance for an increase of only 5 per cent a year in the number of secondary school places means that the percentage of primary school-leavers who find places in the secondary school would in fact decline, at least until the primary school system had ceased to grow. Any more rapid increase in the primary system would make the discrepancy even more glaring. It is worth noting that at the assumed rate of expansion it would take 30 years to achieve full entry to Grade 1 (100 minus 70 at 1 per cent a year); only when this has been achieved would the provision of secondary places begin to catch up.

It seems clear that such targets could not possibly be accepted by any public whose opinion was consulted and the fact that such targets are proposed (albeit by implication) suggests that the four professors have ignored the particular transformational dimension that can make education a potent force in the economic development of the nation.

Assessment. On balance, in spite of the recommendation to diversify the non-formal system of education, the plan put forward by the four professors is overwhelmingly weak when viewed from its failure to transform the public view of the relevance of education to everyday life. As a consequence of this failure it is weak also in that its cautious, conservative approach is out of step with priorities set by the Government which has come to power since the achievement of Zimbabwean independence. The most useful function of the report may turn out to be the fact of its influence on policy during the year in which Zimbabwe was ruled by Bishop Abel Muzorewa's Interim Government; the tight controls on educational standards probably helped to stabilize minority White opinion which was anxious for some assurance that there would be no dramatic changes in the quality of educational provision.

Yet these major shortcomings of the report should not be allowed to obscure the strength of some of the specific arguments. As an example of pragmatic planning the report offers a valuable model; even where one may disagree with much of its message, it is exemplary as an illustration of the extent to which development planning should devote attention to the precise strategies which can be used for the implementation of the recommended policies. In the area of skills development the report specifically highlights the importance of teacher quality and of home-based research, and gives general encouragement to the diversification of skills training.

WHITSUN: BALANCED INVESTMENT FOR TRANSFORMATION

The Whitsun Foundation was incorporated in Zimbabwe in August 1975 as an independently funded organization with the intention of stimulating economic growth by conducting data-collecting research, analysing the country's economic needs in the light of this research and drawing up an operational programme which itemizes specific projects for investment support (Whitsun Foundation, 1976). Whitsun is thus not specifically concerned with education, but it has published *Data Bank: Education and Training* (Whitsun Foundation, 1977) which includes a chart (see Figure 2) showing the kind of structure for education which the Foundation considers appropriate to the country's development needs. Figure 3 sets out the Whitsun analysis of the economic predicament facing Zimbabwe. What is identified is a classic case of the underdevelopment model. There exists a dual economy which maintains a position of perpetual advantage for employers who operate the wage sector. Figure 3 shows that the wage sector and the residual sector are linked chiefly by the unstable flow of labouring people who enter the wage sector to seek cash, but who are driven back to their tribal homes to seek security of domicile. Economic power within the system lies with those who command the modern technology, the high productivity and the savings surplus in the wage sector. Benefits, however, do not extend to the labouring class. Because of the low wages paid to Black workers in the wage sector, because of the lack of adequate housing and the consequently inadequate base for family life, wage earners depend for social security on their traditional homes and kinsmen in the residual sector. But there is insecurity here also, arising chiefly from the poor resource-base of tribal agriculture. Here population pressure has caused denuded land and declining agricultural productivity.

Such is the Whitsun diagnosis; the treatment prescribed takes two forms. Firstly, there is a 'transfer' goal. This aims at a permanent transfer of surplus population from the rural to the urban areas. For such a transfer to achieve permanence there has to be both vigorous growth and dramatic institutional change within the wage sector. Employment opportunities have to be quantitatively expanded but additionally such barriers to stability as sub-economic wages, racial discrimination at middle and higher levels of employment, and housing conditions which offer neither comfort nor security of tenure have to undergo qualitative improvement.

Secondly, there is a 'transformation' goal which refers to the task of transforming the rural environment; this is to be realized by direct investment in programmes of rural development, and in various forms of skills training. The Whitsun analysis identifies weaknesses in the two development approaches which have thus far been attempted in the country (Whitsun Foundation, 1975). The former Ministry of Internal Affairs attempted a people- and culture-orientated approach to community development but the constraints of inadequate finance and inadequate staff have led to disappointingly slow development. Tilcor (the Tribal Trust Land Development Corporation), on the other hand, has injected large sums of money into rural growth points with White-managed estate and industrial enterprises which offer wage employment to local Blacks. Whitsun

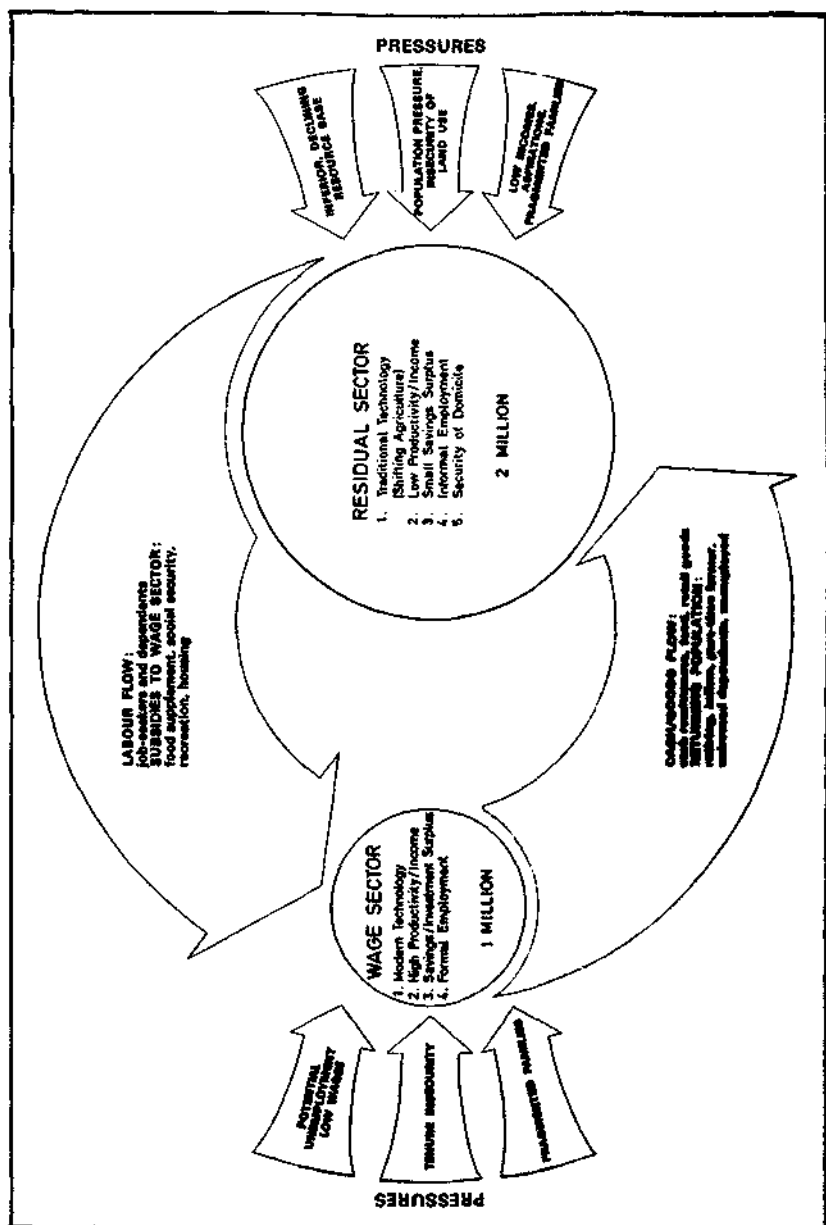


Figure 3: WHITSUN FOUNDATION: ANALYSIS OF ZIMBABWE'S ECONOMIC PREDICAMENT.

repeats the criticisms offered by Mao against state-owned tractor stations (Gray, 1973, pp.263-4): such programmes, by failing to engage and develop the skills of the local people, have enjoyed a low level of transformational spin-off. Consequently, Whitsun arrives at a transformation strategy which prescribes high levels of investment in the development of human skills.

Figure 4 shows the range of operations envisaged by Whitsun. Projects are of three basic types:

- (1) Research-based investigations aimed at the collection of reliable data. These are itemized in the squares in the central portion of the chart (Projects 1.02, 4.01, 1.01, 1.03, 1.04).
- (2) Schemes for rural development (itemized on the right-hand side of the chart). These consist of three large-scale projects and eight smaller projects. Some of the latter are primarily to assist in research, as is the case with Project 3.06 on the development of intermediate technology and 3.09 on the development of cage-culture fisheries. The unifying idea of these projects is the need to find better but nevertheless simple ways of exploiting existing resources.
- (3) Schemes for manpower training, consisting of one large-scale scheme and eight smaller schemes (itemized on the left-hand side of the chart), of which half are specifically related to agricultural development (2.01, 2.02, 2.03 and 2.07).

Project 2.08, the Whitsun Bursaries Scheme, is a good example of the kind of spin-off that Whitsun anticipates will result from a positive policy of investment in human skills. The bursaries are to support students following degree courses in any one of five areas which the Foundation has judged to be crucial to development, namely, accountancy, economics, administration, engineering and agriculture. Bursary winners are then bonded to some Whitsun-approved employment for a specific period of time. This enables the Foundation to channel the expertise gained by bursary winners either into their own projects or into other worthwhile schemes where there is a training element which will spread the skills yet further.

Figure 2 shows a structure for education which is certainly conservative when compared with the Zambian pattern, but which has obvious transformational intentions. It builds on the base of primary schooling, and the examination structures which were in existence at the time, namely Grade 7, Grade 9 (Form II), Form IV (Grade 11) and Form VI. However, options at second and third level are considerably widened by means of industrial training centres, community centres, and the range of colleges for technical, agricultural and management training.

Assessment. It is clear from the discussion outlined above that the education programmes presented in Figure 2 and Figure 4 arise from a pragmatic analysis of the economic situation in Zimbabwe, and that they place high priority both on the development of skills and on the creation of institutions with transformational

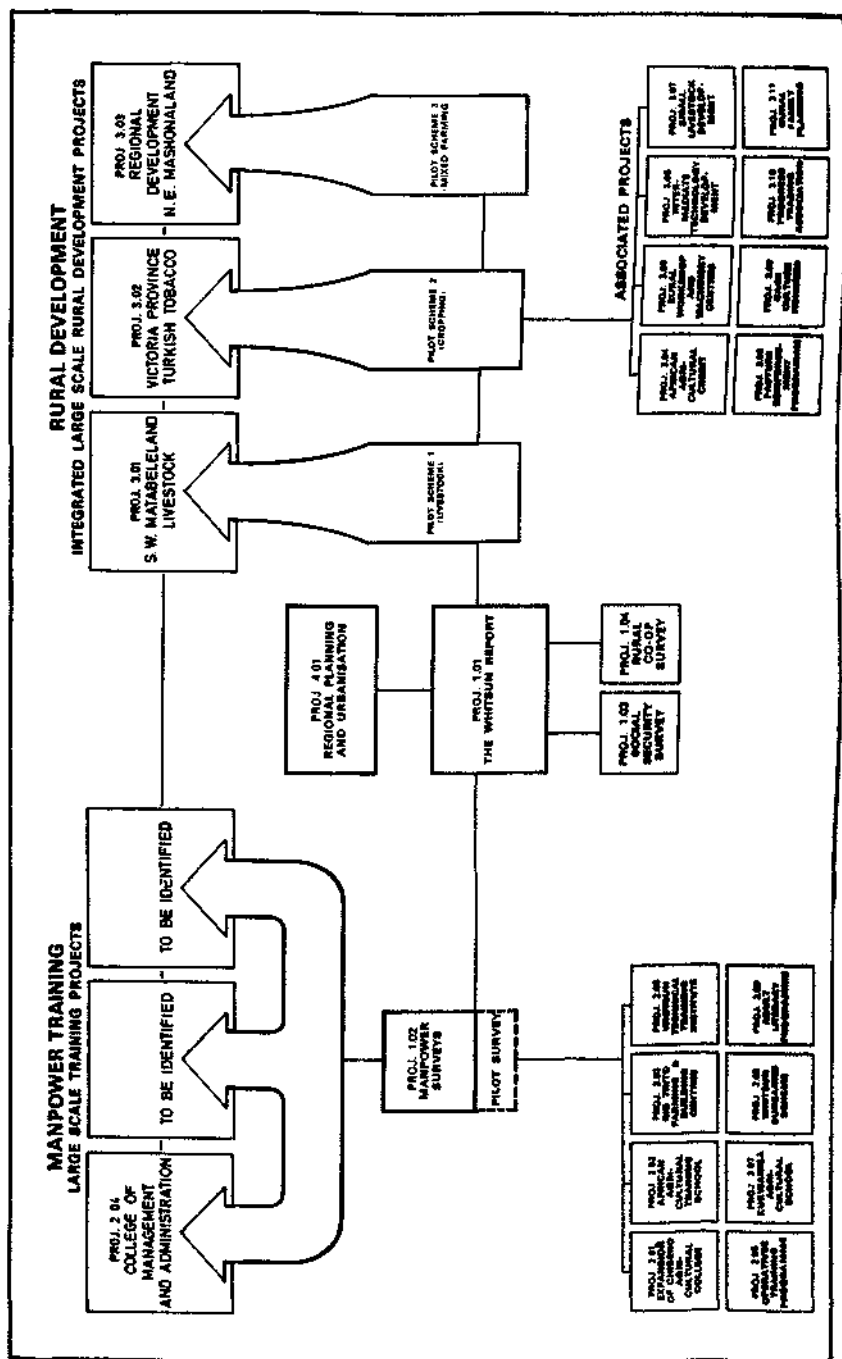


Figure 4: WHITSUN FOUNDATION: INITIAL OPERATION PROGRAMME.

potential. What remains in question is the match between such a policy for education and national goals:

In the white-owned industrial and business sectors there is considerable technical and managerial expertise and financial resources which, if they could be harnessed for the purpose, would have a significant impact on the less developed sectors of the economy. (Whitsun Foundation, 1976, preamble)

What is called for is an act of leadership, not from a single individual alone, but from the power group which controls the wage sector. The Whitsun analysis suggests that for economic development to take off, capital earned in the wage sector must be reinvested in the residual sector. It is a fact that in 90 years of White rule this particular act of decisive leadership was not taken.

CONCLUSION

In Zimbabwe today there is a vision of a new social order which will bring to every man an opportunity to achieve control over his individual destiny both because it acknowledges his right to decide for himself and because it offers genuine opportunities for economic improvement. Underdevelopment theory is important because it has heightened our awareness of some of the covert effects of educational and other institutions within a colonial system. Schools, by setting up barriers of exclusion, have helped to perpetuate a system whereby those who succeed are able to command economic advantages over those who do not. We should expect therefore that the politicians responsible for bringing the new order into being will scrutinize the educational system and the way it confers power on a selected few.

Development theory seems to me to be important because of its fundamental optimism. Man is the source of boundless initiative and inventiveness. Problems of poverty can be overcome if these qualities of initiative and inventiveness can be sufficiently developed among the people. And schools, comprising a massive institutional structure both well known and well respected by public opinion, can be used to generate the innovative and other skills which are needed to energize development.

But there is a dilemma arising from any conscious decision to develop high- and middle-level skills, particularly in countries where financial resources are scarce, because it involves the selection of key skills and of the people who have the potential to develop those skills. The selection of some for training and the consequent exclusion of others cannot be avoided, but the divisive effects of selection can be alleviated by the encouragement of such quality in the teaching profession as is needed to make the schools places which do indeed foster initiative and inventiveness among all their clients, and by the building up of a range of other training institutions, such as are envisaged by Whitsun. Such institutions have two important effects: on the one hand they cater for increasing numbers of people who are otherwise excluded from continuing their education, and on the other their concentration on technical skills makes a direct impact on economic productivity.

The shaping of new purposes for education in Zimbabwe seems vital and must be given priority, but material improvement for all our people and the very capacity to shape new institutional structures will depend in no small measure on the extent to which the existing plant for skills production, particularly schools and teachers' colleges, can go on producing a continuous supply of able people even while the system as a whole is being adapted and redirected.

Appendix

EXAMPLES OF CRITERIA FOR A DEVELOPMENT PLAN

(a) Lewis (1971)

1. *General features*

- 1.1. Commonsense rather than preconceived criteria should be applied.
- 1.2. Private investment should be encouraged, particularly in schemes which have high linkage effects (e.g., building).
- 1.3. Schemes should be feasible in terms of existing productive capacities.
- 1.4. Avoidance of excessive borrowing.
- 1.5. Avoidance of wastage on low-priority items.

2. *Priorities*

- 2.1. Plans should be based on properly constructed preliminary surveys.
- 2.2. Plans should include generous allowance for basic training.
- 2.3. The demands on basic services need to be critically assessed.
- 2.4. The rural-urban investment imbalance should be checked.
- 2.5. There should be measures to diminish urbanization.
- 2.6. Prestige expenditure should be kept to 10 per cent of the total.

(b) Galbraith (1964, p.68)

1. *Prerequisite*

- 1.1. Competent organs of government and administration.

2. *Essentials*

- 2.1. A plan should be pragmatic and not based on ideological considerations.
- 2.2. A plan should be accommodated to the cultural and economic base of the country.
- 2.3. A plan must state its strategy and must distinguish priorities.
- 2.3. Invisible dimensions (such as attitude changes and quality control) should be planned for.

(c) Streeten (1971)

1. *Broad categories*

- 1.1. A consideration of output and incomes.
- 1.2. Conditions of production.
- 1.3. Levels of living standards (including nutrition, housing, health and educational facilities).
- 1.4. Attitudes to work and life.
- 1.5. Institutions.
- 1.6. Policies.

2. *Factors for a breakthrough in agriculture*

- 2.1. Infrastructure, plus availability of essential inputs affecting production (fertilizers, etc.), plus training facilities.
- 2.2. Levels of living standards in the rural areas.
- 2.3. Attitude-breaking incentives.
- 2.4. Institutions (land tenure, credit and marketing facilities).
- 2.5. Policies—particularly on pricing and on the ready access to extension advice.

(d) Senghor (1964, p.48)

1. *Prerequisites*

- 1.1. The drawing up of an inventory of the existing traditional culture.
- 1.2. The drawing up of an inventory of the impact of colonialism and of the foreign culture on the existing culture.
- 1.3. The drawing up of an inventory of economic resources and of economic needs.

2. *Essentials*

- 2.1. The development plan must not be purely economic but must be social in the broadest cultural and political senses.

References

- ATKINSON, N.D. *et al.* 1978 *Report of an Investigation into the Possibilities for Education Development in Rhodesia-Zimbabwe after a Political Settlement* (Salisbury, privately).
- BAUER, P.T. 1971 'The vicious cycle of poverty', in I. Livingstone (ed.), *Economic Policy for Development* (Harmondsworth, Penguin), 10-36.
- COURT D. and GHAI, D.P. (eds) 1974 *Education, Society and Development: New Perspectives from Kenya* (Nairobi, Oxford Univ. Press).
- ELVIN, H.L. 1971 'World re-appraisals', in J. Lowe *et al.* (eds), *Education and Nation-Building in the Third World* (Edinburgh, Scottish Academic Press), 1-26.
- FURTADO, C. 1973 'Elements of a theory of underdevelopment—the underdevelopment structures', in H. Bernstein (ed.), *Underdevelopment and Development* (Harmondsworth, Penguin), 33-43.
- GALBRAITH, J.K. 1964 *Economic Development* (Cambridge, Harvard Univ. Press).
- GEERTZ, C. 1973 'Java and Japan compared', in H. Bernstein (ed.), *Underdevelopment and Development* (Harmondsworth, Penguin), 44-56.
- GHAI, D. 1974 'Towards a national system of education in Kenya', in Court and Ghai (eds), *Education, Society and Development*, 325-37.
- GRAY, J. 1973 'The economics of Maoism', in H. Bernstein (ed.), *Underdevelopment and Development* (Harmondsworth, Penguin), 254-73.

- JOLLY, R. 1971 'Contrasts in Cuban and African educational strategies', in J. Lowe *et al.* (eds), *Education and Nation-Building in the Third World* (Edinburgh, Scottish Academic Press), 210-29.
- KAUNDA, K. 1973 *Letter to My Children* (London, Longman).
- LEWIS, W.A. 1971 'On assessing a development plan', in I. Livingstone (ed.), *Economic Policy for Development* (Harmondsworth, Penguin), 405-17.
- LEYS, C. 1975 *Underdevelopment in Kenya* (London, Heinemann).
- O'CONNOR, J. 1973 'On Cuban political economy', in H. Bernstein (ed.), *Underdevelopment and Development* (Harmondsworth, Penguin), 298-311.
- SENGHOR, L.S. 1964 'Nationhood: Report on the doctrine and programme', in L.S. Senghor, *African Socialism* (London, Pall Mall Press), 7-65.
- SINGER, H.W. 1971 'Education and economic development', in I. Livingstone (ed.), *Economic Policy for Development* (Harmondsworth, Penguin), 53-63.
- STREETEN, P. 1971 'The frontiers of development studies: Some issues of development policy', in I. Livingstone (ed.), *Economic Policy for Development* (Harmondsworth, Penguin), 418-45.
- TUQAN, M. 1976 'Kenya', in N. Parkinson (ed.), *Educational Aid and National Development* (London, Macmillan), 81-135.
- WHITSUN FOUNDATION 1976 *A Programme for National Development* (Salisbury, Whitsun Foundation).
- 1977 *Data Bank: Education and Training* (Salisbury, Whitsun Foundation).
- ZAMBIA 1976 *Education for Development: Draft Statement on Educational Reform* (Lusaka, Ministry of Education).
- 1977 *Educational Reform: Proposals and Recommendations* (Lusaka, Government Printer).