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INSERVICE TRAINING IN ZIMBABWE

AN ANALYSIS OF THE RELATIONS AMONGST EDUCATION & TRAINING, INDUSTRY AND THE STATE

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C O N T E N T S

INTRODUCTION

(i) The Background and Rationale for the study of In-service Training in Zimbabwe.

To a greater extent than many other industrialising countries, Zimbabwe has sought to ensure that externally funded research and study be pursued in ways that relate directly to their own development concerns. If a study is worth permitting, then it should seek as far as possible to address itself to priorities that are consistent with national needs and interests. This implies that if a study is in some measure to serve these needs, there must be a process of renegotiation with the authorities so that the research agenda can be localised. An essential result of this process of localisation must be a reporting back both to the policy community and to the research community during the course of the study.

In the case of this present research, this reporting took two forms. At the end of the first three weeks of work, during July 1987, a seminar on results was arranged at the Zimbabwe Institute for Development Studies (ZIDS), and copies of the preliminary paper were provided to the Ministry of Labour and Ministry of Education. At the end of the second short trip of two weeks in July 1988, two seminars were arranged. One involved key training directors and training experts from the private sector, including several of the largest enterprises in Zimbabwe. The second was a meeting organised by the University of Zimbabwe's Faculty of Education, to which the Ministry of Higher Education had invited a number of its senior personnel concerned with the area of in-

service education and training.

As far as the content and focus of the study were concerned, several issues became clear in early discussions within Zimbabwe. The first, and most obvious point was that several of the most critical policy instruments related to in-service training did not have very much data available in the public domain. There was, for example, profound ignorance in many quarters about the workings of the Zimbabwe Manpower Development Fund(ZIMDEV), which had been levying industry and commerce. Virtually no material was available on who was deriving benefit from the fund, or what were some of the policy dilemmas facing decision-makers responsible for setting forth regulations. Yet this was clearly a prime instrument for the encouragement and support of in-service training. It was accordingly thought useful to look at the workings of the fund, and set forth some of the options that might be relevant to its playing a more public role.

Another area which was clearly also in need of close examination was the operation of one of the main modes of in-service training- the apprenticeship system. The workings of this traditional system had required some major surgery at Independence in order to allow it to operate as an instrument of African advancement in the seven gazetted apprentice fields. But there was again a stark lack of information about what had happened to apprenticeship over the 8 years since independence. Who was using the system? Could it be expected to accommodate large numbers of young people? Who was aspiring to enter apprenticeship? Was it true that despite

state support apprentice numbers were actually continuing to fall? All these questions were current, but there was little or no available data on what was driving apprentice numbers.

These two concerns appeared sufficiently central to in-service training in Zimbabwe that it was thought valuable to concentrate some attention on examining the data. This meant a certain amount of primary research in inspecting registers of apprenticeships, analysis of the enterprises who were using the system, as well as understanding the arguments of those criticizing the system. Equally, with the ZIMDEV fund, it was important to research what categories of trainees were receiving rebate, and to try and understand why so few firms appeared to have applied for rebates, apart from those getting it automatically for apprentice and skilled worker upgrading.

Neither of these two areas has been examined in a comprehensive manner, given the shortage of time, but at least an attempt has been made to put them both onto the policy map, and initiate a debate about relevant options.

A third area of focus commanded some significant attention, and that was the relationship between the public and private training worlds. Again, this was a field where very little work seemed to be available, and yet it was clear that to a degree unusual in Sub-Saharan Africa, a significant element of in-service education and training was being met by the large correspondence institutions and by the growing network of private tutorial

colleges. Some effort was accordingly made to get some sense of how these different kinds of institutions were providing for the in-service needs of those already working. And because there was some hint that even those working in the informal sector occasionally took advantage of these facilities, it was thought worthwhile to pursue the possible relevance of these institutions to the many people who could no longer expect to achieve a job in the formal sector of the economy.

A fourth area of concentration was very generally the vocational education and training system itself. The system was clearly central to any understanding of in-service training policy. The difficulty was that vocational education and training was a system in transition. New institutions were being established, but there was no knowledge, naturally, of how they would relate to other older parts of the system. In several cases the new initiatives were running on a very different set of assumptions from the old. But there was not easily available any account of how the various pieces fitted together. Thus in the area of vocational skill development, there appeared to be two forms of in-service training (apprenticeship and up-grade training) and there were emerging several new forms of pre-service, direct entry training from the school system. There clearly were some interactions amongst these various forms, both at the level of the firms and trainees, as well as at the policy level, but time was needed to sort out what might be the potential of these different modalities, and in what sense they formed part of any unified system of vocational preparation.

An additional complication in reviewing these mechanisms of in-service education and training was that although many of them were in 1987 the responsibility of the Ministry of Labour, Manpower Planning and Social Welfare (hereafter Ministry of Labour), there was already some expectation that several institutions would be shifting into the Ministry of Education. In particular, it was expected that the technical colleges and the polytechnic would move. What was less expected was the move of the directorate of industrial training into the Ministry of Education. However, early in 1988 these shifts were announced, and by July 1988, the institutional training (technical colleges) and the industrial training were both relocated within the new ministry. But to make things more complicated, the old Ministry of Education was itself split into the Ministry of Primary and Secondary Education, and the Ministry of Higher Education. It was to the latter that the institutions from the Ministry of Labour were relocated.

However, there was already an important element of the complex of vocational initiatives that was within the then Ministry of Education. This was a concern with a widespread vocationalisation of secondary education, intended to deal with the problematic transition from school to work. Once the Ministry of Education split, this initiative was not in the same ministry as those elements coming from the Ministry of Labour, but was within the Ministry of Primary and Secondary Education. This may prove a minor disadvantage since the school-based vocational initiative will be planned somewhat separately from the other sections of vocational education and training. This vocational school element

is still very much at a pilot stage, and it is far from clear what implications the recently selected pilot schools may have for the very large number of regular secondary schools.

In a situation where responsibilities for vocational and professional preparation were shifting from ministry to ministry and from section to section, this study was also able to perform in a very small way a briefing function. It was not just a question of visiting Zimbabwe and documenting an in-service training system that existed, but rather there was possible a minor formative evaluation role, as the various options for training were being discussed. The result of such a perspective is that study partly plays the role of an issues paper, and it partly seeks to put on the agenda for debate questions that have not thus far been openly discussed in any detail.

(ii). Towards greater co-operation in in-service training.
In concluding this section on background and rationale, it may be fitting to make some remarks about the climate for in-service training. By its very nature, in-service training requires a degree of co-operation amongst different institutional actors. This is not exclusively the case, for there are examples of enterprises where relatively high quality in-service training is handled almost entirely in-house. But in perhaps the majority of cases in-service training demands the co-operation of several parties beyond the firm. Frequently, it involves access to some part of the technical, and professional courses in further education. Equally, it may involve agreement between professional

associations and government about access to courses, and even payment in foreign exchange when fees have to be remitted outside the country. Ideally, also there should be agreement amongst trade unions and management, with government, about the shape of in-service training.

It would be no exaggeration to say that until relatively recently there has been an adversarial quality to much of the discussion about in-service training, and this is reflected in parts of the following paper. A commitment to more in-service training at all levels has been widely expected of industry by government as part of an indication that industry is serious about indegenous advancement. Several of the initiatives of the Independent government were founded upon the view that industry and commerce would need to be persuaded by regulations and legislation to take African in-service training more seriously. Some of these measures will be examined in the paper, and notably the new apprentice and ZIMDEV regulations.

But over the last several months, there are indications that greater cooperation between the private and public sectors is envisaged in ways that would assist policies for in-service training. For one thing, there is a new urgency about getting the technical colleges and the polytechnic in Harare furnished with the staff they have lacked for many years. Since one element in in-service training was often release to the colleges, this had been a weak link in the chain of in-service provision. Another area where it is being recognised that education-industry

cooperation has weakened over the years has been the various advisory committees concerned with curriculum and with general policy matters in the colleges and polytechnic. These have been meeting much too infrequently, with the result that industry has been out of touch with what provision is possible, and the colleges likewise. With new management shortly arriving in the colleges, this too may prove an area for renewed cooperation.

At the national level, with the National Manpower Advisory Council (NAMACO)and its 9 specialist committees, there is again room for a move forward in government-industry liaison. The whole framework had scarcely got underway on a regular basis before the changes in ministry responsibility were taking place. Now that these are settled, it seems possible that the committee structure can be revitalized. However, it should be noted from the experience of many other countries that representatives from industry and commerce at a high level cannot be expected to continue attending meetings that are merely talking-shops, and have little impact on the training policy environment.

More generally, it seems clear that the Ministry of Higher Education is anxious to develop an active dialogue with industry. There is a mood of readiness to discuss industry's concerns about training, and to put on the table several of the matters that have been troubling both sides. A number of occasions are being planned that are intended to produce an open debate about options for the way ahead.

Some of this is doubtless due to the relocation of vocational and technical institutions in a different setting, but if there is a new openness to be detected, it may stem from a realisation on both sides that the politics of large-scale educated unemployment (at the post-form 4 level) are likely to become a permanent feature of the country. As we shall see in a moment, the numbers of young people now involved in transition from secondary school to very uncertain futures is very large, and it cannot be expected that a small scheme here or there will make any dent in the total problem. During the rest of the 1980s and early 1990s, education-and-employment is certain to move into centre stage as a political issue. Zimbabwe's aspirations to be considered a modern state with the welfare of its young people at stake will not allow the phenomenon of educated unemployment to be disregarded. It can be anticipated, therefore, that many forms of pre-service and in-service training will be reviewed for their scope in meeting this challenge.

(iii). Essential Economic Background.

This section can be very brief since fortunately there are available very recent data and analysis on the national economy, the manufacturing sector in particular, and patterns of employment. The focus here will more be on those aspects of the work already done on the economy that have particular relevance to our topic of in-service training. Of most direct value to the present study is the UNIDO monograph, The Manufacturing Sector in Zimbabwe (November 1986).

There will also become available in later 1988 a country case study of Zimbabwe, by Roger Riddell, which will examine Zimbabwe's Industrial Future, as part of a larger ODA study on Industrialisation in Sub-Saharan Africa. In 1987 the World Bank has also produced An Industrial Sector Memorandum on Zimbabwe. These documents along with other valuable work produced by the government affords a very full picture of the crucially important role of the manufacturing sector in the country. The sector produces 24% of GDP, very much higher than the average in sub-Saharan Africa. It is also responsible for 16% of formal sector employment. It grew very rapidly during the period of enforced protection (UDI), and developed during that time a reputation for ingenuity in adaptation, repair and maintenance, much of which has survived till the present. Indeed it could be argued that the severity of the foreign exchange crisis over the past years has reinforced these tendencies acquired prior to Independence.

Even though the industrial sector and within it the role of manufacturing has been relatively major in Zimbabwe compared with other sub-Saharan African countries, outside South Africa, the contribution of manufacturing to total industrial activity is not a sufficient condition to consider a country industrialised. As Ndlela has pointed out, the crucial additional factor must be what proportion of the population are actually involved in the industrial sector. Nor is it enough just to look at the formal sector labour market, where we have already noted that manufacturing alone is responsible for 16% of modern sector jobs. If the criterion of the total labour force engaged in industry is

used, Zimbabwe scarcely seems industrialised at all. 'Between 1979 and 1982, industrial employment was only about 4% of total population'. (Ndlela, 1986, 141)

The reason for emphasising these very basic figures at the beginning of a study on training is to make the rather obvious point that industry as presently organised is scarcely in a position to make a major further contribution to formal employment. There is in some quarters in Zimbabwe the view that industry is somehow a resource that can be cajoled, influenced or even ordered to do things dramatically differently, whether in human resource development, employment policy, training or whatever. The reality is a good deal more constrained than the popular image, and it is clear that there are very significant limitations upon rapid restructuring.

Another characteristic of industry that is germane to the question of altering any of its basic mechanisms, especially in the area of training, must be the ownership structure. Government desire to intervene in the industrial sector and make it more responsive to national priorities is commonplace the world over. But in the Zimbabwe context the fact that Central Government and the Parastatals have an influence in just three sectors, - foodstuffs, textiles, and metals and metal products (contributing 25%, 38% and 17% respectively to total turnover, does mean that there are inevitably limits to government influence. Compared to the relative ease of government manoeuvre in the expansion of schools and colleges, the private character

of industry stands in stark contrast.

A further obstacle to any very dramatic attempt to make industry follow particular pathways in human resources policy is the very significant foreign dimension of ownership. Recent figures suggest much lower proportions for foreign control than previous estimates, but these still indicate that for the manufacturing sector as a whole, some 48% is foreign owned and 52% domestically owned. And of the sector that is domestically owned, a very small proportion indeed is owned by African capital. But what this suggests for a majority African government is a situation where it can have a very significant impact on the <u>supply</u> of schooling, but very much less influence over the <u>demand</u> for educated workers. This too is not an unusual situation in many countries whether in Africa or Europe, but there is no doubt that the degree of freedom available to government is even further constrained by the influence of foreign capital, the dominance of private companies, and the very small numbers of African owners of large and medium sized companies.

Our principal concerns in this present account must be with the implications for training and employment of the present character of industry. The first point must be that however important industry may be to the country, it has made little additional contribution to employment over the Independence period. Indeed there was decline in productive employment over most of this period. What little addition to formal employment there was came almost entirely from growth in the area of service employment.

Secondly, the fact that industry is not working at full capacity is not attributable to human resource constraints, lack of trained manpower or particular skills' shortages. On the several occasions when employers have been asked about their constraints to full capacity, they have pointed to shortages of imported materials, lack of domestic demand, lack of export demand, lack of machine spare parts etc. The shortages of specialised skills have come very low down their lists. (UNIDO, 1986, 201)

When the questions directly concern their ability to take on more employees, industry then turns to some of the legislation relating to security of tenure, the rates to be paid for the employment of casual labour, and the tendency for government to announce across the board wage increases. The requirement of prior ministerial approval before the dismissal of any employee has probably meant that employers have been loth to take on fresh workers during upturns in their business. They have tended to use overtime, or short term fixed contract workers instead. We mention later on that there has been a very significant rise in the use of contract workers, but it is not clear whether such workers are necessarily counted in the estimates of formal sector employment.

From the point of view of in-service training policy, there are several aspects of these labour laws and wage decrees that may be held to have possibly negative effects upon training. First, it could be argued that a policy of statutory wage increases not only undermines the system of collective bargaining (as the employers' confederation would say), but it may also act as a disincentive

for training p...cies within the enterprise. One reason that individuals may invest time and energy in improving their knowledge and skill may to increase their earnings (and promotion prospects). It is just possible that across the board wage increases could interfere with training policies which are predicated upon rewards for the successful completion of in-service courses. This would require careful investigation at the enterprise level.

It is much more likely that in-service training may be restricted by the policy of taking on short term contract workers. This practice has grown up in recent years as a way of dealing with the problem of high rates of pay for casual workers, and the reluctance to take on permanent employees, because of the dismissal procedures. It seems likely that one of the perquisites denied to those who are on a series of short term contracts will be access to training or the reimbursement of training paid for by the employee. Again, it has not been possible to pursue in any detail some of these conditions of contract labour, but, given its prevalence, this would be an important field of study. It is worth noting that the Minister of Labour, Cde John Nkomo, in an intervention at the Confederation of Zimbabwe Industry congress in July, mentioned that 'consideration was being given to relaxing some of these regulations about casuals because the unemployment crisis was appreciated, and there could be ways of making more casual jobs available.' (Herald, 14-7-88)

Much of the paper that follows is concerned with the mechanisms

and policy instruments used by government and the enterprises to improve the quality of existing labour, but it should be underlined at the outset that government is bound to be incr.asingly interested in how to expand the number of new jobs rather than how to alter marginally the shape of skills within the existing formal sector labour market. Indeed new and wideranging plans were announced in January 1988 intended to encourage employment creation through a variety of means.

(iv). The Stark Relationships between Schooling, Training and jobs

Before looking at the increasingly stark relations between the numbers of educated young people, the availability of training places and the chances of a job, it may be useful briefly to sketch out the rapidity with which the Zimbabwean education system made the transition from a discriminatory policy regime offering secondary school oppertunities to the few towards a system of mass entitlement where primary education was free, and all pupils were encouraged to aspire to secondary education. In the decade just before Independence in 1980, there was a marked contrast between the progress of the 5,400 non-African children from grade I of primary in 1968 to the fourth year of secondary in 1978, with almost no dropouts, and the progress of the African school children over the same period. Of these latter, only 75% entered the first primary grade, unlike 100% for their counterparts. Of the 75% entering, some 45% dropped out without completeing primary. And only 19% of the age cohort entered secondary, from which, also, some 40% dropped out before getting to form IV. Interestingly, the massive competitiveness of the African system produced eventually a tiny

group of African school leavers who as a group used to achieve some of the highest pass rates of all countries taking the Cambridge O level. Even with these very small numbers, African secondary school leavers encountered some difficulty in gaining jobs in the formal sector of the economy, except in specific occupations such as teaching.

At Independence, Zimbabwe was one of the few countries to encourage the whole cohort of primary leavers to expect to enter secondary; unlike the 19% which had been entering secondary in the late colonial period, all children would now have the right and the opportunity to avail themselves of secondary education. In other words African pupils would have the same entitlement as had been commonplace for non-African children for years. It was a bold step, and was the result of reflecting on the experience of other countries such as Tanzania which had throttled back the transition from primary and secondary to as little as 3 - 4 % of the children completing primary schools. Zimbabwe's view was that exposure to secondary education had been prevented during the colonial era. and that universal entitlement now was a natural consequence of the belief that a would-be modern nation must educate all its people.

Of course one of the cruellest paradoxes of the relations between education and jobs is how relatively simple it is (especially in a country with a colonial tradition of severe restriction) to expand the educational infrastructure. This is not to downplay the cost to government, and the individual sacrifices of parents and

communities in physically providing hundreds of new schools. But within a few years, from 1979 to 1985, primary enrolments had increased by about 160 percent and secondary by about 650 per cent. By contrast, in the employment sector, the expansion of available jobs is certainly not something that can be merely announced by the appropriate minister, whether in a developing country or an industrialised nation.

We have talked of the manufacturing sector as being large by sub-Saharan standards, containing some 16% of the approximately 1 million people in formal sector employment. Under the very restricted secondary school policy regime prior to Independence, those reaching form 4 were a rather small proportion of those in formal jobs. This underlined the fact that form 4 achievement equated with a job. By early in the Independence period, form 4 was growing, but it was still as low as 24,000 in 1983. However as soon as the first effects of the campaign to universalise secondary access began to move through the system, numbers had shot up, - to 92,000 in 1985. Once the form 1 cohort of over 250,000 in 1988 has reached form 4, the numbers will have more than doubled again in a 5 year period. When an annual figure of 1/4 of a million school leavers is placed beside the total employees in manufacturing of 160,000, the scale of the imbalance between formal school and formal work becomes clear.

Of course, many things can happen to the estimates of school leaver cohorts. One possibility is that there will be a rather significant drop out from school, as parents reflect on their

investment in school fees and the absence of the kind of work that form 4 qualifications used to be able to command. But the shape of the population pyramid is certain to maintain large numbers going through school, even if dropout and wastage do increase.

One time-honoured political reaction to this kind of arithmetic of unemployment has been to develop a rationale for the partial vocationalisation of secondary education. The thinking on this line within Zimbabwe has been recent - July 1986, and has been termed the 'new structure and content of education'. The initial pronouncements about its character indicated that each child in the first two years of secondary would be encouraged to take at least two technical/vocational subjects. Then in the second two years, children specialising in technical and vocational education would still take some academic, as would those following academic courses take at least one technical subject. The result would eventually be that no child would leave secondary without being exposed to a major or minor form of technical/vocational education. The Task Force working on the details of this proposal in the once unified Ministry of Education has recently been relocated within the Ministry of Primary and Secondary Education. But at the moment, only a small number of pilot schools have been identified who could pursue a serious measure of vocationalisation.

Even though a great deal has not yet happened on the ground to illustrate the importance of this new vocationalism in practice, there has already been some considerable discussion about the

advantages and disadvantages of school-based versus industry-based patterns of vocational training. The discussion about these options within Zimbabwe has been made more public by the perception that the World Bank in several of its recent papers has been urging caution on prevocational training in schools, and a preference for locating training on the job itself, or through inservice training off the job. The Zimbabwe reaction to this counsel has come both from the Ministry of Primary and Secondary Education and from the Ministry of Higher Education, but there has been substantial common ground in their responses. By making industrial needs the determinant of training places, there is a great danger, it is argued, that vocational training is narrowed to the very small number of trainees industry actually wants. Fay Chung, Minister of Primary and Secondary Education, has attacked the criticism of school-based training, as recently as 1988:

> ... if you say training must be done by employers or on-the-job, you immediately narrow the number of people who can be trained. For example, in this country industries are a very small sector of the economy, and if we were to say the existing industries could recruit the number they wanted, we would be training about a thousand a year or so that would lock us into a system of maintaining the present size of industry. This is particularly so in Zimbabwe where you have got a lot of job protection. (Chung, 1989, 36)

A similar argument against vocational training predicated on industrial needs is made by the Minister of Higher Education, Dzingai Mutumbuka, with particular reference to parts of the country that don't have any industries:

> In developed countries, where you have developed industry etc, it is unnecessary (to have a lot of school-based training). ...but if you were to say all technical and vocational education including carpentry must take place after school, what will happen to the children in Murewa, because there is not a single factory there? Does it mean that Murewa will not be expected to produce carpenters for the next 200 years? (Mutumbuka, 1989, 58)

In their own way both these eloquent statements about the problems of letting industry be the determinant of the amount of training undertaken are emphasising the same point about manpower planning. It would have been possible at Independence to have tried to plan the expansion of secondary education in relation to the likely jobs available. In which case there would certainly have been no move towards universal secondary education. Similarly, expanding the number of pupils with some measure of vocational skill must be seen as something of an article of faith. Children imbued with a level of basic skill are, it is hoped, in a position to be more productive. The ministers are not really arguing that ordinary schools must be turned into vocational training centres, nor are they proposing that a vocational curriculum will somehow automatically produce vocational jobs. Rather the assumption is that an elementary knowledge of technology should be an ordinary accompaniment of schooling. Fay Chung's argument for considering technology as part of everyone's general education is also, interestingly enough, a very powerful underlining of the fact that the maintenance mentality is not something to be learnt by a handful of people in industry, but must be acquired by the generality of the population:

> I would say it is possible to democratize the basic

> level of vocational training as is done in other countries. There is no reason to say Africa or Zimbabwe should be different from, say, what is common in western Europe and the United States. Let's take the United States -- at the end of secondary school a student knows that he has to put water into an engine and oil and clean it, as part of his education, but a person in Africa who has received secondary education does not know that. I have seen this: I have been to a co-op where the tractor was not working and I asked these co-op members who had 'O' levels, 'What's wrong with your tractor?' and they said 'It's tired', as if the tractor was a horse or a human being. Really the problem was that they didn't have the vocational training to clean the engine. So I would say that a basic level of vocational training must be there and I don't think it needs to cost 10 times more (than general education). (Chung, 1989, 37).

Even though there is a coherent philosophy for technology as a part of general education, and for all children routinely to have exposure to some practical subjects, the implementation of these plans is still, as we have said, at the pilot stage.

Effectively this means that there is very little prevocational training available in the school system in 1988, and that therefore pupils must still look to the post-school institutions for their training if any. We show later on in this account that the government training system has not so far experienced any of the dramatic expansion associated with the school system. Partly this was because the major form of training for industry was apprenticeship, and this was predicated upon in-service arrangements with employers. And partly perhaps it was because training was located in a quite different ministry. Whatever the reason, the number of training places, just for vocational skills, has remained very small up to the present. In point of fact there has not yet been a great deal of

discussion in Zimbabwe about the role of post school vocational preparation, either in the in-service or pre-service mode. But there has been a strong tendency to continue to think of the urban vocational and technical institutions as connected to the urban industrial sector, and some of the rural vocational centres (such as the 14 belonging to the Ministry of Youth, Sports and Culture) as being oriented to cooperative-or self-employment in the rural areas.

However, now that much of formal sector training once associated with the Ministry of Labour, has moved within the ministry responsible for the planning of post school education and training, there is likely to be much more consolidated planning of the post-16 sector. It may also be that there will be more resources available. One crucial policy issue may turn out to be the need to involve local community funding in the provision of post-school training, just as such funding has been essential to the massive expansion of schooling itself. Without the provision of these local resources, it is likely that post school vocational training will continue to develop rather slowly, dependent upon the several external donors prepared to respond. But with the best international will in the world, these external bodies are only going to be able to provide a fraction of the places demanded, and there will be a tendency for them to concentrate on urban formal sector skills.

The absolute shortage of places in the traditional in-service training mode (such as apprenticeship) may need to be replaced by

relatively low cost community-based skill training centres. These will operate essentially in the pre-service mode, but evidence from other parts of Africa would suggest that such centres can tap non-governmental funds, and play an important role in providing both employment and self-employment skills to school leavers.

In 1988, however, these debates about post-school training are just beginning. What follows is principally concerned with existing mechanisms, their operation, strengths and weaknesses. But the underlying theme of this introduction runs throughout this account - that relatively small numbers of skilled workers are being taken on by industry. We shall show that there are several alternatives to training in the apprentice mode, and that some of these are organised entirely within the enterprise. The indications certainly are that the state will find it difficult significantly to raise the numbers in skilled manual apprenticeships. But the message of this report is that there may well be several ways to reach the same end - the provision of more skills to more people. Many less conventional methods may be needed if the clienteles in growth centres, in the informal sector, both men and women, are to be reached.

Before concluding this introductory section, we pay some attention to the historical context of skill acquisition in the in-service mode, and we note that this history is essential to understanding a certain legacy of suspicion and misunderstanding about the purposes of training workers for industry. A

more detailed discussion of the history of the apprenticeship system and other training methods in the period to Independence is contained in the valuable monograph by Ben Mothobi, Training for Development.(1978)

(v)In-service Training in Historical Context*

In a country that was so recently run on the basis of European skill and African semi-skill, in-service training is at the centre of many debates and political initiatives. High status in-service training was available in colonial Rhodesia, but was disproportionately so for European workers. Rhodesia's dependence on a very significant cadre of immigrants with fully formed skills undermined any major national planning of upgrading, professional development, or worker improvement. Quite suddenly in 1980, with Independence, the terms of the discussion were changed. European skills and knowledge left the country at every level, from apprentice, to journeyman. supervisor to junior manager. This affected very directly the world of production, but it also removed whole segments of skill and experience from the public service. Vacancies were filled in the public sector quite rapidly, often on the basis of very considerable educational qualifications, but inevitably with very little working experience. There has been virtually no attention given to how industry made good its losses of skill, but what is clear is that it followed a very different path from the public sector. At the lower levels it sought to upgrade and promote many of those who had been semi-skilled (with strong encouragement from the government); at higher levels, recruitment

was much less rapid, but industry and commerce profited from a second hemorrhaging of high level skills and knowledge from the public service just a few years after Independence. This internal migration, from public to private sectors, carried over both Europeans and Africans[1] - the former with years of experience in administration, and the latter with at least several years of responsibility in the exercise of authority. While this migration did not make good industry's losses of technological, engineering and management skill, it did allow it in a small way to profit from skills and experience for whose training it had not been responsible. In the process, the public service had to sustain a double shock, losing significant numbers of those who had just begun to offer it some continuity.

These movements very directly affected the main instruments for government provision of in-service training - the technical colleges - but they have also affected the government departments and sections responsible for the planning and execution of many measures touching on in-service training. At the very point when the government has wanted to stake out a much greater area of policy responsibility for itself in the area of in-service provision, it has had to acknowledge its very real difficulties in delivering effective teaching, supervision, and control.

Several factors have to make the discussion of in-service training much more than a technical or a pedagogical matter. Unlike the school system which has been directly in the hands of the State, local communities and the voluntary bodies, and which

it has been possible dramatically to expand in line with popular aspirations, the training system had traditionally been very closely linked to the production system, with the technical colleges having very few students who were not directly sponsored by firms. With apprenticeship traditionally dependent on the needs and the sponsorship of the employers, government found itself confronted by a training system that was actually continuing to contract, while the education system expanded at almost exponential rates. The expansion of in-service provision appeared to depend on a private sector that was predominantly foreign-owned. Even though it was appreciated that numbers could reflect the serious recession in industry, this close linking of training positions to the fortunes of the private sector only served to confirm the view that national manpower development policies could not afford to be so dependent on the interests of private capital.

From this viewpoint two approaches developed. First, there was a much more interventionist policy pursued by the State in respect of apprenticeship as well as a search for other instruments to encourage in-service training by industry. And second there was a realization that as such measures seemed unlikely to dramatically increase numbers under training it would be necessary to develop new and imaginative pre-service policies. Such initiatives could be much more directly controlled by government, and would therefore potentially allow greater freedom of manoeuvre than policies dependent on the goodwill of the private sector. It is essential to recognize that the policy shift from in-service to

pre-service training is fuelled by the much larger politics of educated unemployment. With apprenticeship numbers (new starts) at just over 1,000 in 1986 (and still falling), and other initiatives still numbered only in hundreds of trainees, the sheer arithmetic of Form Four (96,000 in 1986) has made many policy makers examine the transition from education to training. No less than 110,000 young people applied for apprenticeships in 1986, and just over 1,000 got taken on, for what has traditionally been seen as the main form of in-service training in Zimbabwe.

We shall note later on how these pressures have made the Ministry of Labour examine pre-service, institutional training both in the technical colleges and in other settings. But it should also be noticed that the Ministry of Education has recently become aware that if the numerous products of the secondary schools are to fare better in this transition from schooling to employment, then they should seek to anticipate some of the skills of industry and commerce within the schools. What this means is that both ministries have been rather actively exploring the various options and models for pre-employment, pre-service and pre-vocational education and training. These developments may appear to be conceptually distant from a study of in-service education and training; in reality they are intimately connected. Once the State had decided to be responsible for an expanded programme of pre-employment vocational training (and education), it is not impossible that employers, presented with an abundant supply of both apprentice applicants and vocational school/college trainees of various sorts, will opt for the latter, for whose training

costs the government or parents have been responsible. In-service training, in the form of apprenticeship, may further decline in that situation.

From a policy perspective, it must be appreciated that if the numbers of positions in industry at a skilled artisan or skilled worker level are finite and are growing very slowly, then the applicants in the apprenticeship mode are in fact likely to be in direct competition with applicants in the vocational school or prevocational training mode. The same ministry may turn out to be offering industry two rather different forms of post-form four leavers -apprentices and institutionally trained young workers - and to be allowing industry to decide which it prefers. Then, once the Ministry of Education has brought on stream its own versions of pre-vocationalization, the choice will be even wider, since both the apprentice applicants and those being institutionally trained by the Ministry of Labour will have had some additional orientation to the practical.

In addition to sketching out the various models of preparation with which government is involved (and these include several ministries other than labour and education), we must also be aware that industry and commerce have not necessarily been waiting to see what developments government would come up with. There is evidence that industry has been, in some sectors, exceedingly active in developing its own training capacities. There have been very significant investments in training managers, training systems and training centres. The scale of

these developments is not easy to quantify, and it has been particularly difficult for government to follow and understand the dynamics of these changes, such have been the demands of their own emergent systems. But it is probably an appropriate moment to recognize what has been attempted by the private sector, and to seek to understand the extent to which industry's contribution complements that provided by government, or is attempting to provide a substitute that is completely within the control of industry itself.

In this arena, there is very considerable room for suspicion and distrust. Government is frequently characterized as desiring to control all vocational preparation, classifying and registering all workers according to a national system of categories. While the historical justification for this was the need to break the bond between skill and race, and to reclassify those cadres who were downgraded during the late colonial period, the image of government to many employers continues to be that of a body determined to take under its control and regulation more areas of training than it can possibly oversee. On the other side, there remains with some sections of government a fundamental distrust of the training policies and activities of the private sector. Industry is conceived to be deliberately obstructing the expansion of apprenticeship, partly by refusing to take on more than a few candidates, and partly developing alternative systems of skill development. As part of the internal brain drain to which we referred, lecturers that were once staffing the technical colleges of the public sector, or even administering

parts of the Ministry of Labour, are seen to be running the private sector's training centres or managing its companies. Again, there has been no serious research on this trend, but it only takes a handful of well -known cases to support an image. (On the general issue of internal brain drain, see footnote 1).

In summary, there seems on both sides (industry and government) to be an inadequate understanding of what the other's motives are. To some extent the technical colleges illustrate aspects of this distrust. If they are satisfactorily to be responsive to industrial and commercial needs, colleges in Zimbabwe as in other mixed economies must have an intimate sense of their clienteles - in the hotel industry, electronics, building, automotive and engineering, as well as in business, banking, accounting etc. Representation on curriculum planning committees by industry and commerce needs to be frequent and routine, and the mechanisms for encouraging new courses and getting reimbursement for their costs have to be open and well understood, It is widely held that the only problem with the leges! is that their salaries are insufficient to attract or retain staff. This is certainly true, but behind this obvious cause is the deeper question of who the colleges are serving and who should be consulted on their development.

Before closing this introductory section, it is worth pointing to a third crucial factor in the whole area of in-service training and education - apart from government and industry. And that is the individual client, the student or aspiring trainee. Zimbabwe

has a quite extraordinary tradition of interest in professional and educational improvement. There are part-time students from the very highest office holders in the land down to the operators of hand-made machinery in the informal economy of Mbare and Magaba on the outskirts of Central Harare. Despite one of the most rapid and comprehensive extensions of formal primary and secondary education in the third world, this tradition of self-improvement through education and training survives, and is possibly getting even stronger. It is an essential element in any understanding of in-service training, for the great majority of these tens of thousands pursuing part-time professional development are actually working, as employees or on their own account. The mechanisms that are used to satisfy these educational and professional aspirations are the correspondence colleges and the Independent education and training centres which offer direct tuition. These networks of correspondence and tutorial colleges are almost as extraordinary a tradition of Zimbabwe as the aspirations of their clients. Several of the better known have the very powerful credential of having enrolled thousands of indigenous Zimbabweans for examinations that the stratified schooling of colonial Rhodesia made inaccessible, as well as for vocational qualifications that allowed some progress in the workplace. They now cater for a much wider range of professional qualifications, and serve a much wider range of clients.

But here too there have been suspicions (on the college and the government sides) of each other's intentions. The colleges are

sometimes characterized as preying on the gullible, while the government is perceived sometimes to be more concerned with control and regulation than with understanding the population the colleges are serving. There are however in the heart of this matter some very powerful issues of policy, and not least in the area of educational financing. Private and community initiatives have been crucial to the expansion of basic education in Zimbabwe, as have NGOs to the whole realm of non-formal skills training. At the level of the private tutorial and correspondence colleges, a service is offered to many areas beyond the reach of government provision without putting further burdens on the strained education and training budgets of the State.

In subsequent sections, we shall examine some of the most significant aspects of the world of in-service education and training. More attention will be paid to the areas of technical skill than to management expertise, and some industrial sectors will be given more space than others. The issue of the in-service training for industrial maintenance will be referred to wherever it is relevant. But, like the term in-service training, industrial maintenance is not a technical matter in Zimbabwe. Historically, industrial maintenance was predicated upon European skill and supervision and upon African semi-skill and unskill. With the collapse of that equation a whole series of expedients have underlined how fragile was the systematization of maintenance. But researching the role of maintenance training in the economy is made extremely complex by the fact that the

emigration of those who had played a crucial role in the organization of maintenance coincided almost precisely with the foreign exchange crisis, the consequent impossibility of importing spare parts, and the arrival of large numbers of inexperienced artisans and technicians in position of significant authority. These elements continually come together in any discussion of the economy in maintenance, and nowhere more clearly than in the analysis of the crisis in the Central Mechanical and Equipment Department (CMED) which seeks to maintain and provide no less than 12,000 items of equipment to Zimbabwe's government ministries and departments:

> The two major problems facing CMED were the lack of foreign exchange, particularly affecting the level of availability of spare parts and preventing the effective repair and maintenance of the fleet, and the continuing critical shortage of experienced and skilled staff at all levels.2

A.GOVERNMENT INITIATIVES IN IN-SERVICE TRAINING, 1980-1987

The rationale for government intervention in the sphere of vocational preparation has already been alluded to, and it is nowhere more forcefully set out than in volume I of the National Manpower Survey 1981 (July 1983).[3] Most of the instruments in the government armoury are anticipated in that document, and these include the centralization of apprentice recruitment, the bonding of apprentices, the development of (regional) vocational training centers, the upgrading system and the trade testing of those classified officially as semi-skilled, the interest in regulating private sector training institutions, the development of (pre-

employment) institutional training and the notion of a national grading system, comprising within it a new categorization of skilled workers. A new National Manpower Council (NAMACO) was proposed and lastly, the existing levy system on employers was consolidated and the rate raised to one per cent of the wage bill. The Manpower Survey remains a remarkable document, and is essential reading for anyone wishing to understand the original basis of the State's concern with vocational preparation. This is not to say that the explicitly socialist and political economy analysis of labor and capital is necessarily shared by the agencies charged with implementing some of the policies charted by the NMS. Indeed, it could be argued that in some instances the concern is more with extending the role and regulatory functions of the State than with the alteration of the relations of production. Implicit in the NMS is an anxiety that vocational training (including in-service training) predicated upon the Africanization of the existing relations of production will eventually reproduce a pattern of employment, salaries and wages that will not be dramatically different from the colonial dispensation. 'For example in the public service the ratio between the highest paid (the Permanent Secretary) and the lowest paid (the messenger) is 75:1'.[4] By implication, it would be a rather different form of in-service training that would challenge the existing wage differentials.

There is no space here to develop some of these larger issues raised by the Manpower Survey, but one area may be relevant for historians and social scientists to pursue. And that is the

question of what particular elements in the larger scheme of national manpower development were actually implemented, and whether the State has taken on board a number of roles and responsibilities in vocational preparation whose original rationale lay in a vision of socialist transformation.

We shall turn now to look at just a few of the mechanisms that make up in-service training policy of government. In particular, we shall examine the development of apprenticeship, new forms of institutional preparation, and the instrument which the NMS hoped would act as an added incentive to those private sector organizations that are undertaking progressive training programmes. - the new levy for training.[5]

(i) In-service training in the apprenticeship mode

In terms of the attention paid to it, there seems little doubt that the apprenticeship system has been one of the priority areas for the Ministry of Labour. Historically, apprenticeship had been predominantly European in most of the seven designated trades; it had also meant that, because of the tight linkage between apprenticeship and college attendance, the technical wings of the existing colleges were also European. Apprenticeship seemed the obvious gateway to skilled manpower development and beyond. Hence the measurers mentioned in the Manpower Survey. Some of these were to ensure that young people who were likely to emigrate did not simply avail themselves of Zimbabwe's limited facilities for in-service training, only to leave and work in another country. This was effected by bonding

apprentices for four years after the t ...nation of their four years of training. Another concern was to try and break the exclusive right of the employer to take apprentices of his choice. This had resulted i.. the predominantly European apprentice profile to which we have referred. As a matter of historical fact, it should probably be stressed that it was organized labour more than the employers who were responsible for these particular patterns of recruitment; it could be argued for a number of industries that employers were in the colonial period actually seeking to weaken the stranglehold of these European unions by encouraging Africans to enter fragmented skill positions. The motive was not so much manpower development as profit, but it will be worth noting a possible parallel with this colonial trend in the post-Independence period.

In any event, with the Manpower Planning and Development Act of 1984 a number of these measures anticipated in the Manpower Survey of the previous year were put into effect. The centralization of apprentice recruitment meant that, in future, applicants would apply to the registrar of apprentices. Applications would be screened and then pre-selected groups would be sent to interested employers for the final selection to be done at the level of the firm or establishment. This measure may have initially been thought of as an instrument to break the colour line in apprentice recruitment; in fact, by the time it was implemented, the ratios of Europeans to Africans had already dramatically altered. In 1982 there were five Africans to one European. If the racial issue was no longer the dominant factor,

the centralization procedure was justified on other criteria. It was felt that urban dwellers and particularly those who lived near the major industries taking apprentices had an undue advantage over young people in the rural areas. Many employers in steel towns from Scotland to USA to Zimbabwe have preferred to take on the sons of the fathers who have worked in steel. In terms of the adversarial relations between government and industry, this practice can be characterized as nepotism by government, but from the point of view of industry, it brings into the workplace someone who is socially conditioned to industrial life.

With the centralization of recruitment, the State felt it might be able to make apprenticeship a more national provision, by sending to employers not only young people from rural areas but also girls. Employers still had the right of refusal. Even though the practice was to send along to interested employers at least twice as many candidates as there were places, it was not uncommon for large numbers to be rejected. Again this made for poor relations between government and employers, especially when employers in some cases insisted on actually testing the candidates whom the ministry was already meant to have screened.

However, standing back for a moment from the actual procedures of recruitment, it is worth noting that of the approximately 1,000,000 people in the formal sector of the economy in the mid 1980s, new apprentices across the entire country (population 8 million) made up just about 1,000. In other words the State had

taken on an extraordinarily complex task to deal with just a one-thousandth part of the formal economy. As we have already mentioned, no less than 110,000 young people applied to the registrar of apprentices in 1986, and yet there were only just over 1,000 apprentices actually taken on. The sheer size of the applicant body meant that with the best will in the world, it would have been an enormous task to sort out manually (no computers were involved) small groups from the mountains of applications and send them along to employers, according to the criteria of rural origin, sex, excellence etc. In the event, the volume of applications meant that very large numbers simply could not be processed at all.

We shall return to the issue of recruitment later, but arguably there are several much more significant matters that emerge from a close study of this key group of future in-service trainees. These concern the pattern and number of establishments that are actually involved with the apprentice mode of training. Very little work has been done in Zimbabwe on which firms are taking on new apprentices, and it seemed therefore worthwhile to get some sense of the population of establishments involved with the apprentice mode of training. Against a pattern of overall shrinkage in apprentice numbers from some 2,000 new entrants in 1981 and in 1982 down to around 1,000 by 1986,[6] it can be anticipated that the number of firms involved in this form of in-service training was also shrinking. It may be useful to indicate the order of magnitude of involvement of firms in this training across the main seven designated trades:

Number of establishments taking on new apprentices in 1984-86 [7]

Trade	1984,	1985,	1986
Printing	15	11	15
Hairdressing	20	36	10
Building	13	4	12
Automotive	72	58	49
Electrical	67	81	63
Mechanical	133	128	107
Aircraft	4	3	4
Total of firms	324	321	260
Total new apprentices in these firms	1,186	1,394	1,164

Several points need to be made about the patterns that underlie these figures. The first is that the apparent total of 260 firms involved in taking new apprentices is misleading; the individual total of firms involved in each designated trade is fairly accurate, but a significant number of firms and establishments take apprentices in each of the three areas automotive, electrical and mechanical. This is particularly the case in the firms in electrical and mechanical. Hence the actual number of firms involved in taking apprentices is well beneath the apparent total.

A second issue is more important for the overall picture. Within most of the designated trades a very small number of establishments is responsible for a large number of the apprentices. For instance, within electrical trades, just six firms have over the three years - 1984 to 1986 - taken on more than 50 per cent of the 1,000 odd new apprentices. And what are these six establishments? Zisco Steel, Zimbabwe Electrical Supply Authority (ZESA), National Railways of Zimbabwe (NRZ), Harare City Council, the Army, and finally the Registrar of Apprentices

itself. In automotive trades, one institution, the CMED, took on a third of the entire new apprentice body in the same three-year period. In mechanical, three institutions took more than a third of the entire new intake - NRZ, ZISCO, and the Registrar of Apprentices. In the building trades, just three institutions were responsible for 184 out of the 225 apprentices taken on in this period. These institutions were NRZ, the Registrar of Apprentices and the Ministry of Construction. What is striking about the pattern is that it is the public and parastatal institutions that are taking the large numbers of newcomers.

If we look across the trades in the most recent year, 1986, for which figures can be found, the pattern is even more clear. Just four bodies in the public or parastatal sector are responsible for half of the entire intake of 1,164. These four are CMED, ZISCO, the National Railways, and the Registrar of Apprenticeship. It is worth noting the significance of the role of the Registrar of Apprentices, which in 1986 took on no fewer than 216 new apprentices. What this implies is that given the continuing shrinkage of apprentice numbers the State itself has taken on the role of the employers, and has proceeded to register apprentices in the expectation that they could be placed after training. In other words, with the reluctance of regular employers to recruit (especially given the recession of recent years), the State has felt it should intervene to continue the production of skilled labour in the event of a later recovery of demand. In the process, however, we can observe a shift from the older pattern of in-service training to something much nearer a

version of pre-service training. This pattern has been clear in the building trades for quite some time where the Registrar has been responsible for almost 3/4 of the new recruits for the last two years. Another version can be detected in the National Railways Training School. The very large numbers of apprentices taken on by NRZ in the last three years (over 500) points to the fact that there has been a gradual shift within the railway training system from training for their own needs exclusively towards a form of training for the nation. In fact the Railways Training School is already formally an annex of Bulawayo Technical College, and with this latest development, it is really becoming a new kind of vocational training centre; it is taking on apprentices that are clearly surplus to the requirement of the railways, but it is exposing them during their training period to a much wider range of skilled trades than could be found in many other small establishments. Just how these arrangements work out in practice has not been examined, but it would be valuable to monitor this form of training. It could be argued that through the close association to a working enterprise, trainees might benefit in a way that they might not in an ordinary vocational training centre. On the negative side, it may be worth noting that in institutions taking on a very large number of apprentices such as the Railways and the CMED, the ratio of artisan (or master) to trainee is likely to be significantly diluted, with deleterious consequences for learning on the job.

The other aspect of the apprenticeship mode of in-service training is that it is meant to involve release to the technical

colleges, ideally during the first year. The staffing difficulties which have continued to plague the college since the early 1980s do mean that in many cases they simply cannot accommodate and teach the apprentices off the job. Sometimes, apprentices are being offered their related period of theoretical training at the college two or three years late. Some have even finished their training before they can get access.

Reviewing the status of apprenticeship in the late 1980s, we can see that there are a number of trends pulling it in different directions. From the government side, a great deal of thought (and much legislation) has gone into an attempt to secure this form of training, change its composition, and bolster the numbers of young people who get an opportunity to enter. Even though rebates from the levy fund are automatically available to cover the first two years of training, the numbers are still running at about half of what they were in the early 1980s. And without the Registrar of Apprentices taking on almost 1/5 of the entire cohort in 1986, numbers would have sunk well below 1,000. With the very important role played by public and parastatal bodies, also, it means that the completely private sector is really only taking on something like 500 new apprentices a year. There is evidence that the retreat from apprenticeship is still continuing in the private sector. Several firms have stopped taking them, and others are contemplating doing so. The major issue is the complexity and time-consuming nature of the recruitment process. The question perhaps needs to be asked whether the situation could really be turned around by the government abandoning the

centralized recruitment system, or perhaps modifying it so that the emphasis is on monitoring the training being offered in industry rather than attempting to recruit and monitor. With the staff that are currently on hand, it would appear to be difficult effectively to do both. On the other hand, experience from other countries (including industrialized) would suggest that once the State has begun to intervene and take on the task of taking trainees under its own wing, employers may be content to let them do so, and select those they want at the end of the training period.

(ii) Upgrade training of skilled workers as in-service training

The second model of in-service for industry also has its origins in the National Manpower Survey. It was mentioned earlier that due to the obstruction of European dominated trades unions, the employers had actually encouraged Africans to undertake a number of fragmented skilled tasks. This trend became more widespread during the war years at the end of the 1970s, when Europeans were called up. There was a case to be made for a system that would allow for a re-categorization of some of the semi-skilled. A new set of skilled worker grades was developed, and people could apply to be trade tested and be graded, if successful on a scale from skilled worker grade 4 to skilled worker grade 1. The highest grade (class 1) was deemed to be equivalent to an apprentice who had successfully completed his full term of training. This trade testing and upgrading system came into operation in late 1982, and has continued to play a role in re-categorizing some 2,500 workers each year since then.

Initially, a relatively high proportion of those applying were actually awarded class one (55 per cent in 1982), which possibly testifies to the accuracy of the NMS in analyzing the existence of this group. Since then however the numbers reaching class one by trade testing alone have progressively fallen, and in 1986 only 13 per cent of the applicants were awarded this class.

Trade-testing (and on-site assessment which has also been implemented) may encourage training, but they clearly are not a form of in-service training by themselves. At a certain point, however, a connection was made between the grading system and the notion that the grading might be taken as a starting point for in-service training that could carry a worker up to a higher grade. Interestingly, the motor industry had started doing operator training (at skilled and semi-skilled levels) in 1981 at two sites, Msasa in Harare and Westgate in Bulawayo, and it was these which were taken over in 1983 to become the focus of the in-service training component of the upgrade programme. With the takeover, the new vocational training centres (VTCs) were to branch out into other trades, greatly assisted by French and German bilateral co-operation. But in terms of tracing the development of in-service training of employed workers, it is instructive to see how, within a five year period, the conception shifted from an industry initiative designed to meet the skill shortages within their own categorization of labour to one with a much broader orientation towards multi-skilled training.

In its first incarnation, the motor industry's concept was linked

to their system of semi-skilled operators (grades 5, 4, 3) and skilled operators (grades 2, 1) all of which were beneath the skill of the journeyman. In an attempt to accommodate the 4 skilled worker classes of the government, a conversion exercise was carried out which made grade 5 into a workshop hand, made the motor trades grade 1 into a skilled worker class 1, and squeezed the others in between. The detail is only worth attending to because it relates to a much larger discussion about the industry-based system of job categories and their implications for mobility and training; and to these we will return.

But to continue the progress from an industry-based training centre to a government centre used by industry. We should note the lengthening of the training cycles. The old semi-skilled operator grade 4 had received 1 week training; the conversion to skilled worker grade 4 had altered the training manuals to 4 weeks; and finally with the bilateral co-operation the systematization and lengthening of training had gone further, with each training year comprising two training cycles, and with a growing concern that the centre-based training should also become part of a more general understanding with the employer about what kinds of experience need to be acquired on the job.

The upgrade training, however, once it had acknowledged that trade-testing by itself, while useful, would not develop the skills of people in industry, soon turned into a scheme which would carry a worker from class 4 right up to class 1, over a period of four or more years. In other words the VTC model as it

developed in Msasa must be seen as properly a dual system in which a worker, once identified as able to profit from the scheme, will routinely stick with the project till he/she reaches class 1. During classes 4 and 3, two blocks of 6 weeks are spent in the VTC, and during classes 2 and 1, two blocks of 12 weeks are spent there. What this means is, inevitably, that there has to be something of an understanding with the employer. The employee is engaged in a really major piece of in-service training that stretches over four to five years. This is something fundamentally different from being sent for a week or two of upgrading. It is for this reason that there has been discussion of formalizing the whole process through a series of 'traineeship contracts', so that the employer is aware of his side of the bargain.

Taking the long view of the VTC mode and comparing it with the apprenticeship mode is instructive. Both were born in a somewhat adversarial relationship with the employers - the one through the centralization of recruitment, and the upgrade scheme through the encouragement of the individual worker to come and get him/herself trade-tested, regardless of the wish of the employer. However, in the case of upgrade training, there is obviously no way that it can continue over the full cycle without the active commitment of the employers to their side of the bargain. In effect this means that for a parallel system of vocational training to apprenticeship the employer is given a great deal more say in the case of the VTC mode than in the other. Admittedly, no one can go to the VTC without first being trade-tested or assessed on site,

and then being registered with the registrar in the Ministry of Labour. But it seems now quite likely, as employers get a sense of the quality of the VTC training, that they will be even trying to get their own candidates accepted.

Several other points are worth making about the VTC mode of upgrade training. Unlike the pool of applicants for apprenticeship, we have no sense of the size of the group who would like to attend. We do have accurate figures on numbers who have been tested and assessed, and these run at about 2,500 each year (probably more a reflection of the manpower and facilities available for testing than of the real demand from industry). But we do not know how many of those tested actually wanted to proceed for upgrade training. Secondly, as the upgrade training moves towards a coherent scheme of traineeship contracts, the same young people will be attending the centre over at least a three-year period, with obvious consequences for the size of the total throughput. What this implies for the VTC system nationally is that two institutions will only be able to cope with a small element of the potential market. Thirdly, there is some evidence that the VTC system is becoming younger, and although the regulation period or attendance in industry prior to release had been three years, a precedent has been set for reducing this to just one.

(iii) From upgrade training to pre-employment training in the VTC mode

At the very point that the upgrade training model is just finding its feet in its new Msasa premises (it moved from the old motor

trade location), yet another model of VTC is being born. On the same site as the headquarters of the Directorate of Industrial Training at Belvedere in Harare, a new form of direct entry training will be started in early September 1988. The students have been selected, the premises are ready, only the instructors are hard to come by. As we have implied at various points in this account, the shift from an in-service to a pre-service mode has tended in Zimbabwe (as in other countries) to be driven by the politics of youth employment or rather youth unemployment. In addition, it may appear that the direct entry mode is not dependent on employers, whether public, parastatal or private, in the way that apprenticeship and upgrade training are.

In reality a very serious attempt has been made to conceptualize direct entry training (straight from school) in a way that accords with the principles being hammered out in the Msasa VTC. This is certainly facilitated by the same bilateral agency - the West Germans - being involved with both.[8] But it is a very different model: a one and a half year compulsory training phase can lead off either directly to the labour market, to a reduced apprenticeship contract or into a training process of four years (in all) will carry the young person through to the same goal of class 1 skilled worker as the apprenticeship or the upgrade training system. This four-year system is probably seen as the ideal option since it marries the initial institutional training to two periods of work on the job with release for advanced training in the second and the last year. However, like all institutional training it places a much heavier burden on the

institution to locate the work placements in industry, and to ensure that the initial training carries industry along with it.

Once this new version has come on stream, there will be no less than three versions of vocational preparation on offer to employers, all under the authority of the Directorate of Industrial Training. All will require the co-operation of employers to become viable. It therefore seems exceedingly likely that employers will be encouraged to recruit freely from the direct entry system. In this situation it may well then appear anomalous for two of the systems to offer a rather free hand to employers in approval and selection, and the other (older) system of apprenticeship to be surrounded by the complexities of the centralised arrangements.

One thing is certain, and that is that the sheer novelty and diversity of options will imply a great deal of dissemination to employers, and the development of rather active systems of consultation on curriculum, placements, rotation, etc. But as systems proliferate, it becomes increasingly important not to talk generally of employers but to have a clear idea of the specific patterns which employers are involved with. For example, in the automotive industry we mentioned that a single institution - CMED - was taking no less than a third of all new apprentices over the past three years. The remaining apprentices were being taken by some 70 different firms. In the VTC Msasa by contrast, a sample of some 160 different automotive trainees taken from the last several years suggests that almost 90 firms have been able to tap

into a somewhat different part of the labour market than apprenticeship. For in-service training schemes to flourish, it will be essential for the organizers and the instructors to be aware of the needs and interests of the particular employers' constituency. But even more important, for in-service schemes to flourish, the instructors themselves have to earn the respect and confidence of the employers. We have already noted how the sheer absence of instructors in the technical colleges has threatened the very framework of apprenticeship, and the same could easily happen with upgrade and direct entry VTCs if this does not get regarded as the single most vital component of the whole exercise.

(iv) Other versions of institutional training and their relationships with in-service training

Beyond the three models already discussed, there are further versions of vocational preparation in operation. These are worth briefly alluding to since they do illustrate something of the delicate balance that exists between the pre-service and in-service modes of vocational preparation. They also exemplify some of the issues and problems involved in developing a multi-level, and multi-institutional form of vocational preparation that still retains a degree of unity and coherence. The first of these is a Vocational Training School (as opposed to a VTC) and the flagship of what was expected to develop into a series of these is clearly St. Peters Kubatana, just outside Harare. In the original blueprint for this kind of institution, it was conceived of as really a kind of post-school training system which would take some of the many drop outs at the end of form II and offer these school leavers an alternative education system with a practical bias

hence providing pupils with a foundation from which they can progress up the technical training ladder to artisan, technician and professional levels.[9]

However, what was conceived and executed in the late 1970s by the Catholic Church as a three year full time training course was later overtaken by the dramatic expansion of four years secondary education. By the time the Ministry of Labour identified it in 1984 as a 'model vocational training school' it was having to face a different pattern of educational aspirations, and was in effect offering skill training in two years part time. The participants were no longer school leavers but form III and form IV youngsters who were also trying to pursue their O-levels. The sheer speed with which institutions get overtaken by events is perhaps inevitable in situations where educational access is being democratized on the scale of Zimbabwe, but it does mean that a skill training centre may well have to rethink its clientele, curriculum, and connection with national certification as much as three times within a decade.

St. Peters has in fact been endowed (by Misereor in West Germany) with the kind of equipment on which a very thorough grounding in vocational and industrial skills can be acquired. It also has a level of trained instructor (and a level of commitment) that could ensure the transfer of such competence. Where only a third of a student's time is being used directly with these facilities, it could be argued that there is an under-utilization of the technological capacity of the available plant. Of the three

crucial factors of production (plant, instructors and clientele), it may be that St. Peters does have the first two, but could perhaps serve the needs of the high density areas around it more directly at the form IV leavers level. While plant and instructors of the quality of St. Peters are not going to be common-place at the school level in Zimbabwe for some time to come, it does at least raise the question of whether this model vocational training school ought not to be following very closely the curricular and linkage developments underway in Belvedere and Msasa.

On the question of whether there will gradually develop a network of such institutions around the country, it is still too early to say. There is apparently at least one other (in Honde Valley) also linked to the church[10], but a good deal would seem to depend on whether the VTS model shifts upwards to post form IV, or whether it remains in school, running in parallel with the O-level classes. Of course, the latest set of events to overtake the possible future planning of any network of vocational training schools is the national initiative to vocationally orient all secondary education. To this we will return later.

The second model of institutional training worth noting is at Mutare Technical College. This too, like St. Peters, and all the other technical colleges, is under the Directorate of Institutional Training, as opposed to the Directorate of Industrial Training with which our first three models were connected. What makes Mutare important in any discussion of the

balance between in-service and pre-service modes of vocational preparation is that it is in fact direct entry craft level training, such as is shortly to start at Belvedere. After one year of solidly college-based training (in 1986 when the scheme started), the students can go different ways -trying for apprenticeship, entering technician classes, or continuing with artisan training in the college, interspersed with, ideally, long sandwiches in industry. It has not in fact been possible to visit this new model and assess how the crucially important links with local industry have developed, nor what is the patten of options that has finally emerged. But clearly because it does constitute another version of direct entry training, it is essential to be able to conceptualize it within the same framework of vocational preparation as the other options.

It seems likely that the tensions between the in-service and pre-service use of technical college facilities are going to take some time to settle down. On the one hand where plant has been built at considerable expense (whether with local or external funds) there will be pressure to fill up classes, and make use of the scarce lecturers, especially in situations where the college is new and industry not sensitized to its use. The same thing has actually happened in other colleges than Mutare, where small classes of sponsored students have been joined by 'in-fill' students not sponsored by any employers. This produces presumably a situation in which both pre-service and in-service students are being taught at the same time, the one group with guaranteed access to an industry setting and the one perhaps having to find a

location, by itself or with the help of the college.

What needs to be monitored in this situation of a shifting balance between pre-service and in-service training are obviously the actual quantities of students involved, and the new patterns of access to industry or commerce that they manage to develop. What also should be anticipated (whether at the craft level in Mutare or at the graduate level) is the need to involve the potential employers in a major consultative exercise across the whole range of new courses that are being piloted. Such has been the rate of development of new initiatives in the field of vocational preparation that it cannot be assumed that national employment councils of the various industries are aware or the implications for their membership of the following developments:

- The emerging patterns of functional, upgrade training at Msasa (and Westgate)
- The September 1988 start-up of direct entry training at Belvedere
- The 1986 start-up of direct entry training Mutare
- The shrinkage in apprentice numbers (outside the public and parastatal sectors)
- The distinctive quality of the St. Peter's Kubatana vocational training school.

Summary comments on the configuration of alternative vocational training systems within Zimbabwe

The history of vocational training systems would indicate that time-honoured methods of training in different kinds of industries are slow to change, and the process whereby these different approaches get digested and absorbed into something that is

recognisably a national system of vocational preparation is also gradual. In the case of Zimbabwe, the various modes of vocational training that we have briefly described are all with the exception of apprenticeship very recent, and even apprenticeship has been sufficiently altered in some respects to appear in a different form from that known in the pre independence period. The modes that we have identified - apprenticeship, up-grade, direct entry, and vocational school-could not really be described as constituting a system. They are more properly to be thought of as separate initiatives taken to deal with particular parts of a larger problem. They should therefore be seen somewhat as <u>sub-systems in transition</u>.

The principles that we have identified as catalysing these separate initiatives are important. Of these perhaps the most important is the distinction between pre-service and in-service. Of the two in-service approaches (apprenticeship and upgrade training) there has been much more state intervention with the first, and yet the second would appear to have increased in popularity while apprenticeship has almost certainly declined. It has however in some ways been an unfair comparison to make, because the two training opportunities have been very different. Apprenticeship has been seen as a four year commitment, with reduced employer responsibility for recruitment. Whereas upgrade training has appealed to employers because it appears to be able to respond to a specific need, for example to raise a person's skill level by a certain margin. In other words the latter system is attractive to some employers because it looks like it can be

stopped and started dependent on the skill needs of the firm; the other one runs for four years regardless. In addition, employers are aware that the off the job training in upgrade centres is very closely monitored, and that there is a very strong technical assistance component attached to at least one of the centres. By contrast release of the craft apprentices to the polytechnic and technical college has had a history of inadequate staffing and management. The acquisition of the related theory, and the exposure to the new national craft courses has been bedeviled for years for the apprentices. So apprenticeship competes with up-grade training at some considerable disadvantage.

The other two sub-systems are even more in transition. Direct entry training into one of the technical colleges is a subject on which very little information is available, even though the trainees are in their third year. Direct entry training into the National Vocational Training and Development Centre at Belvedere has been delayed for a year and a half through lack of instructors, and is only going to start in September 1988. As far as the vocational training schools are concerned, their status remains still very uncertain in mid-1988, as they are involved in something of a double transition. As vocational training schools, they were part of the Ministry of Higher Education in 1988. But at the same time they are clearly relevant to the intended reform of secondary schooling towards greater vocationalisation. If they are to be seen as the flagship of the new vocationalism, then they are less appropriately located in Higher Education than in the Ministry of Primary and Secondary.

By July 1988, a pilot group of 15 vocationally oriented secondary schools had been identified, and meetings were being held to determine whether a thoroughly vocational element in the curriculum, like the Zimbabwe National Craft Certificate (ZNCC) was compatible with the pursuit of a reduced number of 'O' levels. Recommendations for action resulting from these discussions are not available yet, but already a number or predictable tensions have emerged. The attempt to couple a full craft course with a good complement of O levels may encounter parental opposition. But a more important issue relates to the idea that a certificate originally designed for an apprentice to follow in college can be taken in school. The ZNCC is really an in-service certificate to be followed by young people who are being exposed to a trade on the job, but are temporarily on release to the college. The training on the job, and the experience of regular work are crucial elements behind the ZNCC. But when such a certificate is transferred to a pre-service environment, it is no longer the same course. It is not just a case of ensuring that the hours assigned in school parallel those for the college; it is a question of how to compensate for the lack of an industrial base upon which the certificate can be located.

As for these pilot schools becoming a model for the rest of the secondary school system, that seems very unlikely. For these are pilot schools in a special sense of the word 'pilot'. They are some of the only schools in the Harare region already to have sufficient equipment to be considered vocational. So they have not been given a package of equipment; they are endowed with

equipment from their previous existence. So they do not pilot the cost of equipping other schools in a similar fashion. Indeed it would seem that the other secondary schools will only be able to afford a much more bare foot approach to voacationalisation. These pilots therefore may not turn out to be charting a course for other secondary schools to follow.

The transition of these four different modes of vocational preparation into the Ministry of Higher Education (or Primary and Secondary) is certain to alter the balance between in-service and pre-service approaches. On the positive side, it might be argued that a location within a Ministry of education would make for more continuity between the education and training functions. In countries (possibly the majority) where one ministry is responsible for education and another for vocational training, there is often a complete disjunction between schooling and training places. Once one ministry is responsible for the whole operation, it might be thought that greater attention would begin to be paid to the post-school training opportunities for young people.

We have already mentioned that form 4 and form 1 figures for 1986 were 96,000 and 169,000 respectively, and they are estimated to have altered to 123,000 and 263,000 by 1988. By contrast with these numbers in form 4, the size of the formal vocational training system is miniscule: apprentice numbers are apparently a little under 1000 new starts; Belvedere will initially take about 100 direct entry youngsters. And the upgrade training and

vocational schools are not of course open to young people leaving school. For a school system whose form 4 output will be one quarter million young people by 1988, the provision of some 1100 training places would suggest a major disjunction between education and training.

In point of fact education and training are still partly in two ministries, since the massive school cohorts are in the Ministry of Primary and Secondary and the vocational and technical training places are with Higher Education. However, it would still seem likely that the political pressure to democratise secondary education would now extend to the democratisation of training. The shape of any such expansion has been little discussed, but increasingly it would appear not to be dependent upon formal industrial apprenticeship. In the first five-year national development plan (1986-1990 it is mentioned that there will be a six-fold increase in the output of vocational training centres, with four new VTCs being built. What is not mentioned is whether there will be direct entry to any such new facilities. The description is noncommittal:

> Initially, training was provided only to persons who were already employed in the trade in which the training was required. Belvedere will now offer training to four-year secondary school leavers who will be trained to be self-reliant and for subsequent employment. (FFNDP), 1988,II,51)

As pressure grows for something like a 'training entitlement' for the large majority of secondary school leavers who effectively 'fail' their '0' levels, it would seem likely that new centres will be dedicated to the direct entry (pre-service) mode. As the

enormity of the task becomes clearer, it is not impossible that some of the mechanisms used to expand secondary education will begin to be applied to the training sphere, - i.e. community self-help. Failing the use of such financing strategies, the post-school training sector may continue to be marked by very heavy dependence on external donors. High cost, low access training centres, assisted by external finance, are likely to continue to be oriented towards the formal sector of the economy. They will be able to accommodate only very small numbers of those who aspire to receive training. Other aspirants will turn where they can to find and even pay for their own training. These openings will include training through the private colleges, the correspondence colleges, (both of which are described later) and every other kind of training opportunity, whether on the job, or through less formal schemes such as the Youth Training Centres.

It will be in this kind of climate of concern about the political impact of a quarter of a million new school leavers reaching the labour market each year in the late 1980s that there will be a readiness to consider radical alternatives to the existing schemes that we have described. Already the Confederation of Zimbabwe Industry (CZI) has been raising such possibilities in its discussion of employment creation at the July 1988 Congress:

> While it is desirable that any system of vocational or technical training should produce manpower of the required standard under a formal and regulated system, it is equally desirable that a less formal system should be allowed to operate side by side to cater for those who cannot be absorbed into the formal system. This affords an alternative way of preparing for future permanent employment. Such a system could be a novel

> **in-house on-the-job training scheme designed for school leavers for a fixed period with the intention of offering the school leaver permanent employment elsewhere. (CZI, 1988,4.)**

The young people pouring out of school in these present years will not be able to afford the luxury of waiting for a unified system of vocational preparation to be developed. They will do what they can to insert themselves in some kind of training or work experience. But before looking at some of their training and work options, it will be important to examine one of the principal policy instruments for the expansion of good quality training in the post-independence period: The Zimbabwe Manpower Development Fund.

(v) The Zimbabwe Manpower Development Fund (ZIMDEV) as an instrument of in-service training

Although there had been a small levy operating in the late colonial period, it was again the National Manpower Survey and the new activities of the then Ministry of Manpower Planning and Development that brought in the notion of an expanded levy of 1 per cent of the wage bill. This became effective in January 1983, and it was anticipated that the money thus raised could be used as an added incentive for private sector firms undertaking 'progressive training programmes'. By 1986 this levy, operating across a population of some 13,000 establishments, was bringing into ZIMDEV a levy income of just over 24,000,000 Zimbabwe dollars in one year. Crucial to any study of in-service training must be an understanding of what leverage this rather large source of funds has proved to have. Is it possible to detect patterns of

'progressive training programmes' in industries which have received rebates as the National Manpower Survey anticipated? Can the ZIMDEV levy be held to have had any direct effect on apprentice numbers? Has Zimbabwe managed to be any more successful than several other countries where it has been found that levy funds mount up, either because employers choose to regard it as a tax or the procedures to get the money back are simply too complicated? It is not intended here to make any serious evaluation of these matters, which would clearly require a major research inquiry, but just to give some indications of trends that are perhaps detectable from what data can be found.

There is in fact little published work on the levy fund, but it is clear that in respect of certain categories of training there is something approaching a standing obligation to reimburse. For a whole series of other courses, however, it would appear that the ZIMDEV 'list of approved training eligible for rebates', which is issued each year, can actually be deployed as a manpower planning instrument.[11] Thus, apprenticeship and upgrade training are now automatically reimbursed without the need for the employer to make much more than notification of the fact that workers are at Msasa or Westgate. The fact that all apprentices and upgrade trainees are already registered with the directorate of industrial training doubtless facilitates this.

By far the largest part of the money that is actually paid out goes to the reimbursement of apprentice-costs in their first and second years, during which time it is assumed that they are learning to be productive. In 1986, the first and second year

apprentices cost the fund 11.2 million dollars. This presumably covers the approximately 2,500 who were in their first or second year of training. It is not known however whether the intention is eventually to cover the costs of other kinds of direct entry recruits such as those at Belvedere (in 1988) or even those doing craft training in Mutare. It could perhaps be argued that there is not much difference between the 25 per cent of the 1986 apprentices who have no employer, but are under the umbrella of the registrar of apprentices and those young people who are direct entry recruits. But the issue could be put the other way round: Is there a rationale for some direct entry craft level trainees to be paying their own fees, while another group would appear to be being charged to ZIMDEV at approximately 4,400 dollars per person? With the possibility that direct entry training, initially unlinked to employers, could rapidly expand, these questions are worth raising. For instance, two years of direct entry at Belvedere and at Mutare could come close to 2,000 students, which reimbursed at the same rate, would take the bulk of the available moneys.

It thus becomes crucial to understand to what extent the ZIMDEV money is covering at the moment many of the other forms of training in industry and commerce, whether company training schemes, supervisor training, development of junior management or whatever. To this end, the available data for the last two years have been examined in respect of employers who applied for training rebates other than for VTCs and apprenticeship. In the first year for which data is available (1984), the categorization

was insufficiently precise to allow any judgement to be made, but the picture for 1985 is a good deal more clear:

Number of firms successfully applying for rebates, and numbers of trainees12

	1984	1985	1986
Firms	76	77	80+
Trainees	416	640	663

The first point that is rather startling is that apparently the total number of employers who applied for any category other than those that are almost automatic (VTCs and apprenticeship) was steady at around 77 out of 15,000 over a three year period. It is possible that in earlier years perhaps more employers applied than finally were successful, but if the 1986 applications are an indication to go by, then the total may not have been much greater.

Employers at any rate have not been applying in large numbers over this three-year period, and their readiness to do so must be attributed to combination of what is laid down in the details of approved training and to experience of earlier years. As far as the 1985 trainee numbers are concerned, employers will have been guided (or discouraged) by the 1984 and 1985 eligibility rules and by their earlier experience. It may therefore be useful in summary form to lay out the broad categories which were intended to attract rebates for in-service training during that time:

(a)Ex-combatants and ex-refugees engaged in apprenticeship training

(b)Regular apprentices (this was handled automatically)

(c)Recognized training to acquire a professional qualification in management courses offered by the following institutions\associations. (Here followed a list of 20 professional institutes, societies and associations. Also one line mentioning government Institutions - National Intermediate Diploma, National Diploma and higher National Diploma. And a further line mentioned any other courses with the approval of the Ministry of Labour. My underlining added).

(d)Post-qualifying practical training necessary to acquire a professional qualification or membership of a professional institute registered or recognized in Zimbabwe. (Here followed: Engineering cadets (Society of Engineers); pharmaceutical cadets; Institute of the Motor Industry; City Guilds of London Institute; Learner Miners; and any other technical training approved by Ministry of Labour..) - [my underlining.]

(e)Training given in the following trades and professions. (Here followed a list of 4 technician: dental, lab., survey and pharmacy; 3 mechanics: agricultural, typewriter, cash register; shoe designers and dress designers; electronic engineers, flight engineers, pilots, horticulturalists and opticians; and then watch repairers, loom tuners and sewing machine mechanics, and well-sinkers (at least 60 ft.)

Some further notes were added in the 1985\86 edition which may have had an impact on those who applied for that year...

For a training programme to be considered, it should either:

(i) Have a clearly structured training schedule - showing both theory and practical content, organized preferably on a competency based training programme

(ii)Culminate in an acceptable assessment and accreditation system reflecting both practical and theory aptitude level

(iii)Have clearly stated and realistical set time period of training logically proportioned between the practical and theory training

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(iv)Be administered by qualified trainers.

Several messages come across rather strongly from this set of

guidelines. First, there is a very strong support for the notion of a full professional qualification, and for the induction necessary to lead to membership of a professional institute. Second, there is not a very strong steer towards government institutions, though their diplomas are mentioned. Thirdly, there is a possibility that other courses meeting the approved conditions could be agreed by the Ministry. In the event, the great bulk of successful applications in 1985 were those pursuing induction or examination for professional bodies and institutes. Approximate figures for some of the most popular of these were as follows:

	Approx. totals for 1985
Chartered Accountants (CAs)	177
Chartered Institute of Secretaries and Administrators (CIS)	82
Zimbabwe Association of Accounting Technicians (ZAAT)	53
Institute of Administration and Commerce	31
Institute of Bankers (IOB)	23
Chartered Institute of Insurance (CII)	21
	387
In the technical field, there were large numbers of learner miners (152), engineering cadets (24) and assayors (11) .. a total of	187
Overall	574

This means that the six professional associations and the three more technical induction periods took by far the bulk of the 640 successful applicants in 1985. There were in addition some 15 other professional institutes which had numbers ranging from one to seven. There were only two technicians. The other interesting

point that may be noted is that just ten firms and establishments were responsible for no less than 277 out of the 387 successful applications in the professional field. While just four mining companies along with the National Railways were responsible for virtually all the technical applications. In other words - like the pattern of apprenticeship sponsorship - some 2/3 of the entire successful applications were drawn from about 14 individual companies.

In terms of the ability of the ZIMDEV levy to act as an instrument for privileging and encouraging certain activities and discouraging others, there are a few lessons to be learned from this admittedly rather thin data set. First, the sheer act of specifying by name the 20 professional institutes was obviously influential in getting the training managers or personnel managers of those particular companies supporting such activities to apply. Equally, however, the absence of any specific reference to particular courses in the government's technical colleges was possibly also influential in a negative way. In addition, the absence of any specific examples of rebateable in-plant training may have discouraged training managers from trying to make a case for their training centres. They would have been further discouraged doubtless by the very heavy emphasis upon long term courses and professional qualifications. In point of fact, several firms did in both 1985 and in 1986 apply for all kinds of short term (1 day to 1 week) training courses, but these were in general disallowed.

Possibly learning a lesson from the pattern of applications from 1985, the 1986/7 approved rebate regulations have sought to be very much more specific. Instead of a one-line reference to government institutions and their diplomas (in the 1985 rules), there are almost two full pages of very specific courses to be taken at the National Certificate level (7); at the National Intermediate Diploma (19); at the National Diploma (19); and at the National Higher Diploma (3). By contrast the suggested support for courses offered by professional institutes and societies has shrunk form 20 to 10. The clear thrust of this very major change in specificity must be an attempt to encourage attendance at national training institutions. Unfortunately it will not be possible to discover for 1986/7 whether the changed direction of the publicity was really effective, since the guidelines on what would be supported for 1986 went out just a few months before the closing date. It will be a further year before it will be possible to gauge any impact.

A second interesting lesson learnt from the previous years is perhaps that industry and commerces continuing preference for short management courses should be diverted into the Management Training Bureau (MTB) which is run by the Ministry of Labour. In view of the fact that the whole array of tailor-made short courses offered by the private and voluntary sector have not attracted rebates (presumably because of their shortness and alleged high cost), the following note in the 1986/7 guidelines is perhaps indicative of this same concern that the private sector should be encouraged to use public sector courses:

N.B.MTB courses have not been listed for rebate because they are in fact heavily subsidized by both State and ZIMDEV hence the very low fees, and are for short durations, to minimize many hours lost to the employing organizations while addressing specific management problems to improve the efficiency and effectiveness of the organization.4c14

We return at this point to something of the adversarial quality that has animated private sector discussion of centralized apprenticeship, and here is concerned with the private sector's preference for management course run by the Zimbabwe Institute of Management, the Institute of Personnel Management, and many other both profit-making and non-profit-making bodies. Such courses are generally not able to attract rebates, and yet ZIMDEV funds (from the private and parastatal sector) were used for the Management Training Bureau, in the hope that it would attract clients from both the public and private sectors. The key issue, it would appear, is not the shortness of the courses (to judge from the above note) but their sponsorship. In terms of in-service training of both junior and senior management which many would argue is actually a higher priority in the private and public sectors than the vocational preparation of skilled workers, it seems unfortunate that there should be this polarization. With the longer courses, there is possibly less of a problem since the rebate regulations suggest both the management courses in the technical colleges as well as the diplomas of the Institutes of Marketing Management, Industrial Management, and Cost and Management Accountants.

Taking the longer view of the role of a levy grant system in a

mixed economy, a number of summary points could be made about the present impact of the scheme on in-service training and education.

1. The scheme has achieved some sort of stability in respect of apprentices and VTC upgrading which in combination, in 1987, will probably account for almost half of the $24 million likely to be raised. However, we have noted that other direct entry schemes are going to pose policy dilemmas for government as their numbers conceivably rise to challenge apprentice numbers.

2. On the management and induction training side of the scheme, the take-up by employers has been constrained to a minute fraction of the potential clientele, and in the most recent accounting (1985/6) of grants for these areas, 884,000 approximately was paid out. Arguably the take-up has been inhibited by the lack of clarity about what could be rebated, and at what levels. The impression that nothing except professional courses leading to recognized qualifications is likely to be funded is widespread, and is to some extent justified by the only available data.

3. In the most recent years' regulations there is strong evidence of encouragement to use national training institutions such as the technical colleges and the MTB. While this is entirely justifiable, it is also true that more has been written on the chronic shortages of qualified staff at these government training institutions than on any other single aspect of training. So long as block or year long release for apprentices and other trainees cannot be guaranteed, industry will continue to be tempted to make its own training arrangements. The speed with which much of industry has appointed training managers is in marked contrast with the instructor vacancies in the public sector.

4. ZIMDEV funds have been very significantly in surplus since the inception of the scheme. Prior to the 1987 additions (of approximately 24 million), there was 50 million in surplus. Most of this had been theoretically allocated to building programmes in the technical colleges for the period 1986/87, but expenditure had been minimal thus far. Many industrialists and policy-makers concerned with the quality of training regard the recruitment and retention of instructors and lecturers at national institutions as being one of the first calls on ZIMDEV funds.

5. Lastly, and possibly as important as any other point, the ZIMDEV fund has in many ways had the result of souring relations between government and industry and commerce. There would appear to have been little consultation on the rules and regulations for rebates. The National Manpower Advisory Council would be one obvious focus for such

discussion, but that body had just, in late 1986, begun to meet in a regular way, and its specialist industry committees who could well be charged with detailed advice on courses and training within particular trades were only in the formation stage. There is thus something of a policy vacuum, and very little of routine consultation amongst government, employers and unions on the most urgent training needs by sector. In the absence of such mechanisms, it should not be surprising that there is the wildest speculation about the utilization of ZIMDEV funds - much of it quite irresponsible.

ZIMDEV in transition

Before ending this section on ZIMDEV, it will be important to give some sense of any changes in emphasis during the period 1987-1988, especially as this was the year in which the management of the funds were transferred along with the technical colleges and the vocational training centres to the new Ministry of Higher Education. As the administrative changes were only really beginning to have effect in July 1988, it is not yet possible to detect a direct influence of the new ministry. However, it may be worth noting whether the trends that were evident in the period from 1984 to 1986 were continued up to the point of transition. Of particular interest may be the question of the size of the clientele making use of the funds, alterations in the patterns of expenditure, and perhaps any indication that the regulations of the fund do have an effect on private enterprise training.

There are now available approximate figures for those categories being reimbursed in the period up to July 1987. They are somewhat different from the patterns in the previous years, but this is less due to the firms changing their training behaviour than the changes in the regulations. During 1987 the regulations that were

to govern what would be reimbursed for the 1986-period were issued just 2-3 months prior to the closing date,. What this meant is that firms could not plan to do things differently it was already too late to alter training schemes to accommodate to the regulations. The same thing happened again for the training period June 1987 to July 1988. As late as March 1988, the regulations were issued that were to govern the period which had almost finished. Applications had to be lodged by the end of June 1988. One thing is certain with this timing; the ZIMDEV fund cannot expect to influence employers' training patterns in advance.

The implication for the fund as it makes the transition from Labour to Higher Education is that if the fund wishes to influence forthcoming training, then the regulations for the period 1988-89 need to be issued in July-August 1988. This is especially important if the regulations are going to continue to change as they have done in the past. For example in the regulations for the period 1986-87, there were a series of fairly major changes, which training managers would have been unable to anticipate. We have already mentioned that support for the courses and examinations linked to professional associations had shrunk from 20 to 10 and in the following year they were to be restricted further from 10 to 5. These kinds of rather sudden shifts from year to year make planning very difficult, and as they are not accompanied by an explanation of the rationale, it is difficult even to be certain that courses associated with professional bodies are a ZIMDEV priority. It would seem that the shift in

these professional rebates is one of the principal reasons why rebates for formal courses fell from 844,000 to 196.00 over the period of a year.

We also mentioned earlier that ZIMDEV was concerned to try and make more employers use the polytechnic and technical colleges at different levels of the national diploma. Large numbers of such courses were listed, but it was too late for this information to have affected the 1986-7 training pattern and it is too early to know if the employers who have just submitted their claims for 1987-8 have made much use of the college courses. One thing is known, however, and that is that the number of employers who have applied for these formal and professional course rebates has scarcely altered. Curiously, the number of employers applying by the due date in June 1988 was almost identical to the previous year - at 69 in all. This is of course a minute proportion of the 13,000 circulated. But it is interesting to note that of those who applied in 1987-8, just over half were different from the year before. Not too much should perhaps be attached to this, except to say that the tiny number of total applicants is more significant than the fact that half of the previous year's group were either not entitled or bothered to re-apply.

One of the reasons for the very low employer response, even of those who have applied before, must be traced to disappointing results in earlier claims. It is not the case that very large numbers of employers are applying and being disqualified. Rather very small numbers of employers are applying but are in many

cases, receiving very small proportions of their total claim. No calculations have been done on such data, but the evidence available indicates that total claims are much more extensive than the few items that are rewarded by rebate. And since the preparation of claims is time-consuming. It is quite possible that one of the major reasons why some of the employers who do know about the fund don't reapply is that the investment of time in making the claim is not justified by the return.

Again, this is something that could be greatly improved if details of the actual rates of pay were to be announced in advance. For example, it is not known to prospective applicants that the average paid back to someone applying for a course or professional institute preparation was approximately 600 Z dollars (though much lower for some and higher for others.) Nor is it known that the rate awarded for articled clerks (in law and accountancy), and miners and engineering cadets is worked out as a quarter of their approximate salary. What this means is that trainees in the latter mode are awarded a rebate of 2000Z dollars, or roughly three times more than those applying for course and professional preparation rebates.

The reason is that there are several different sets of principles operating across this very small rebate universe. In the case of apprentices in their first two years (4 years for 'special scheme' apprentices), the assumption is that the fund pays the entire cost, including wages in the firm, time at college, including boarding etc. This comes to as high as 4, 00 Z dollars a year,

but is less for hairdressing and building. The next highest category are those who are indentured or articled as cadets. These are essentially learning on the job, but receive basically a quarter of their salary - or roughly 2,000. Then there are the group who are recompensed for the actual cost of particular courses, exam fees, whilst they too are learning on the job. They receive an average of 600 Z dollars. The fourth group are those who go for skilled worker training, and these are only paid for the time they are actually away from the job.

In very approximate figures the cost to the ZIMDEV fund of these four different categories during the rebate period 1986-7 was as follows:

1.	Apprentices (1st 2 years and special scheme)	10,691,000
2.	Skilled workers (to Msasa and Westgate)	678,637
3.	Industrial and professional induction	726,000
4.	Formal and professional courses and examinations	196,452

In terms of numbers of employers involved in these various categories, it is not possible to be very accurate. The last two categories, taken together, are those that have only attracted, so far some 70 employers per year. The number of employers taking apprentices is difficult to calculate, for the reasons given earlier, but is probably not higher than 200, and perhaps much less. The number of employers using the upgrade system is currently constrained by the fact that there are only two centres. But numbers have been growing, and for example for the motor trade alone in one centre for the first six months of 1988, no less than 115 employers sent workers to Msasa. These figures certainly do

no mean that there are 385 employers involved in ZIMDEV rebates, for there are some firms that appear in all four categories. It would, in fact be valuable to put all four groups into a small data base, so that there could be information fed to the different employers associations, trade unions, and to those planning the rebate system for the next years.

How influential has ZIMDEV been in the training arena? The answer is almost certainly 'not very', or perhaps 'not of all'. But it is difficult to estimate whether apprentice numbers would have fallen further without this form of state support. The rebates may have played a small part in support of the upgrade training, but it would seem that the reputation of the training itself has probably been as influential. As for categories 3 and 4 above, we suspect that the rebate system is almost entirely without influence. The few firms who apply were in most cases doing a good deal of training anyway, on which they have sought more or less successfully to get some money back. They have almost certainly continued with their training patterns, regardless of their failure at recouping the levy. But for the majority of companies, especially smaller and local, the fund is almost unknown. The levy is simply another tax.

Can it realistically be expected to play a more influential role, and how? In the new policy regime, under the Ministry of Higher Education, there may be an opportunity for the fund to play a part in a somewhat more collaborative training environment. It is really not possible to continue thinking that the fund can play

the role of fine-tuning the manpower needed for the economy. And it would certainly be beyond the capacity of those associated with the fund to deal with a large volume of requests for particular training schemes to be monitored and assessed for rebate. The only feasible way of handling the political necessity to involve many more firms in the scheme is to involve the professional, commercial and industrial associations in determining training priorities for their particular branch of industry.

Once a decision has been taken to move from a few officers in government deciding what is worthy of rebate to a dialogue with the parties most intimately concerned, several options are open. One would be for each sub group of industry and commerce, such as banking, hotels, construction etc to be presented with the need to determine on an industry basis what were the training priorities, and to present these for discussion to NAMACO. The major part of the money levied from that sector could then be open for reimbursement within that same sector. Some such method would seek to make the particular industry much more accountable for its own training priorities. And the state would need to accept that in this option most of the money would go back into the sector from which it came, paying particular attention to ways in which small firms could be made to invest in training.

Any such industry-specific accountability for training has one major disadvantage from the point of view of government; it removes the freedom to invest the levy surplus in national

training facilities such as the colleges, the Manpower Training Bureau etc. On the other hand it would also remove a good deal of the negative attitude to training that is incurred in the present arrangements. Obviously there are a lot of intermediate positions possible between industry-specific training boards and the view of the levy as a tax to be used for supplementing national training institutions. Whatever improvements are made in the present position, there would clearly be value in seeing if a great deal more interest could be awakened with a public relations exercise which informed employers and trade union organisations of past patterns, announced a year in advance the rules of the game, and also clarified with employers the investment decisions on the surplus of the previous several years.

B. PRIVATE AND PARASTATAL SECTOR INITIATIVES IN IN-SERVICE TRAINING

One of the private sector's commonest complaints to government is that since Independence they have done a great deal of training, very little of which has attracted any recognition, let alone rebate, from government. The impression given apparently is that in the eyes of government many of these private sector initiatives have been in competition with national schemes, or have even been designed to subvert or circumvent government provision. Industry, on its side, may well feel that it cannot afford to wait year after year for the government to put its training house in order. This is obviously not the easiest situation in which to attempt an analysis of in-service training in industry, since, as we mentioned at the outset, the concept

can be understood to be more than just a technical or pedagogical issue.

Nevertheless, there are a number of broad issues which may be mentioned. The research base for some of these observations is slender. Only a relatively small number of industry based training schemes, centres and schools have been visited. The views of employer associations and confederations have been sought, but it has not been possible to review at all satisfactorily the position of the unions on training policy. Visits have been restricted to Harare. In view of these many shortcomings, the concentration in this much shorter section of the paper will be more on the tendencies and trends that would profit from closer examination and further research and less on detailed discussion of preliminary data.

Perhaps the first point that needs to be stressed in the present economic climate of industry in Zimbabwe is that the skills and manpower issues are by many industrialists perceived as being almost the least important factors responsible for constraining output.[15] Foreign exchange, materials and spares are much more important constraints than labour skills - whether managerial or technical. We have in fact suggested at the beginning of this paper that this may be too simplistic a way of stating relative priorities. It also seems clear that the absence of spares and foreign exchange has wreaked dramatically more havoc in organizations with an already weakened repair and maintenance capacity. There is no more vivid testimony to the negative

interaction of these two factors than the four volume management study of the Central Mechanical Equipment Department.[16] A very fragile repair and maintenance facility can be devastated by the need to switch from a replacement mentality to the need to adopt policies of preventive maintenance. The implications for staffing in a preventive maintenance regime are very major, and involve every level from management, to accountant to skilled worker. Admittedly the sanctions imposed on the UDI economy had accustomed much of industry to 'thinking local' in terms oftechnological adaptation, use of materials etc. But with Independence, Zimbabwe lost a great deal of its hard won 'tradition' of repair, maintenance and technological adaptation.

Here we shall look briefly at a small number of issues that seem important. Amongst these, it will be worth noting some of the developments in job grading and job evaluation - and the implications of these for training as well as for the government's skilled worker classes. It may also prove useful to give some sense of the diversity of 'industry', examining the different training traditions within particular sectors.

(i)<u>In-service training of workers other than skilled</u>

One of the paradoxes of Rhodesian and Zimbabwean history is that too much attention in both regimes may have been paid to the skilled worker. For different reasons, but with the same effect. We have already noted that journeyman skill was in deliberately short supply in the colonial period, with the result that employers actively began to circumvent European skills by

fragmented African semi-s 1. With Independence, the new government naturally regarded the Africanization of apprenticeship as one of its first targets, but arguably has paid almost as much attention to controlling this particular tiny cadre as did quite different forces in the colonial era. The result has been the continuation of the tendency towards the use of fragmented labour which was seen earlier. European journeyman unions were the thorn in the flesh of the colonial employer; the regulations, centralization and paraphernalia surrounding predominantly African apprenticeship is a thorn in the flesh of the Independence employer. Accordingly the attractions of other forms of labour became clear.

The fascination with the Africanizat:on of skill we noticed led to the development of four skilled worker classes, to the notion of upgrade training, and to ideas about a national grading system of labour. This topic is large enough for several research projects, but it would appear that the national dissemination of the skilled worker categories has not made a great difference to the composition of the modern sector labour force, except at the margins. We have noted that the reclassification and trade testing process has encompassed between 10- and 12,000 since Independence, but it should be remembered from the National Manpower Survey that there were allegedly 176,000 semi-skilled and half a million unskilled in the formal sector in 1981. Not to mention the much larger numbers in the agricultural and informal economy.

There has been some progress in some industries in accommodating traditional industry-specific job categories to the new order, but there appears to be little analysis of what has transpired in this process. We have noted already that the motor trade sought to squeeze most, but not all of its existing categories into the new grades. The classification process has not been finished but there are a little over 1,000 journeymen (employers and employees), some 700 in the band that might correspond to the new classes 2 and 3, and some 10,000 in the lowest categories, which would include the new class 4, the unclassified workshop hands, garage attendants etc.

A quite different process has gone on in the building industry. They have retained their traditional worker grades, running from 1 up to 4; there is then a category which is allowed to do certain elements of skilled work; finally there are the government's four skilled worker classes. These two groups of workers have two quite different job pyramids: the worker grade pyramid has a huge base (10,600) and a small top (600), while the skilled worker pyramid stands on it head: its base is tiny (250) and its top (class 1) is quite large (2,200). Indeed the shape of the skilled worker classes is more in the shape of a T, since all the classes except class 1 are 400 or less. There is a further group of 2,000 approximately lying in between.

These two very different industries thus illustrate every diverse approaches to the process of recategorization, and they underline the fact that classification cannot be separated from the

existing relations of production. Equally it is possible to reclassify skilled operators (or operatives) as skilled workers, without this altering the nature of the work. Or it can be done in a way that can emphasize new career tracks, upgrading possibilities etc. On the other hand, the whole exercise cannot be carried on without paying some considerable attention to the pay levels, existing technology in the industry, and to the education and skill levels of those already in post.

In the engineering industry, the process of skill fragmentation has gone rather far, and the present situation is buttressed by collective bargaining agreements about skilled worker and graded job categories. The industry has also been one of the early ones to apply the Paterson job evaluation system to the whole system. This is a job evaluation scheme which is rather widespread in Zimbabwe (being originally introduced by Anglo-American, and based on Prof. Paterson of Strathclyde University, Scotland). It breaks all jobs down into six bands of decision making: Policy-making; Programming; Interpretive; Routine or Process; Automatic or Operative; and finally, Defined. The defined and automatic bands start with A and B, then the system goes up through the alphabet to F.[17]

A glance at the Collective Bargaining Agreement (1985) for this industry which brings together no less than 80 pages of graded job categories illustrates the way in which these are spread across the A and B grades, with a scattering of Cs.[18] There is nothing particularly sinister about any of this, but it must be

remembered that a job evaluation system works by judging the skill or decision-making content of jobs as they exist. It stands to reason that the Paterson system was applied to a situation which, as we have said, was already characterized by a long-standing process of fragmenting skill in the colonial period. It could therefore be argued that job evaluation systems reinforce and solidify the existing relations of production. These are of course also powerfully affected by decisions about technology. But it must be borne in mind that the concerns and preoccupations with skilled labour status may have meant that insufficient attention has been given by government to the classification of other workers.

It goes without saying that an in-service training system predicated on a fragmented skill base is likely to be rather different from one that examines anew the processes of job mobility within job categories.

(ii) In-service training provision in the private and parastatal sectors

It is impossible to generalize about the provision of in-plant training in Zimbabwe. The scale runs from groups like Anglo-American whose annual estimate of 'training man days' is costed at 4.5 million dollars, to groups with purpose-built training complexes (ZESA with French technical assistance), to systems where there is virtually no off-the-job training at all. It is only sensible here to indicate a few of the trends, especially those that might be important for NAMACO and other training policy groups to be aware of.

One of the first of these has been a realization that the educational level of the workforce can now progressively rise, as increasingly the ordinary applicant for work will be some kind of form IV product. Some of the more training-conscious firms are currently developing training systems that bring directly into the company young people from school, and expose them on a contract basis to the rough and tumble of unskilled work on the shop floor before making a very careful decision about those with talent and flair and those without. Such handpicked groups (who survive company selection procedures after one or two contract periods) are then introduced to training courses which in many cases have been given a great deal of thought.

These are absolutely distinct from the old practices of learning on the job, and are also very different from the apprentice system. They involve, interestingly enough, a high degree of learner self-direction, in which trainees work their way through course maps, career tracks and follow purpose-built manuals. The emphasis has to be on a relatively high degree of literacy, and on self-pacing, adjusted to the intelligence and motivation of the trainee. This is certainly true of the 'learner directed training' schemes, which are now running in parallel with the apprenticeship system in one or two sites. And in a different way, much of this applies to the Criterion Referenced Instruction (CRI) which has come in via some of the mining companies, but is now spreading out into other industry sectors.

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This latter system comes from USA (Mager Associates, Arizona) and

its strength and attraction as an in-service training system are that it seeks to work backwards from precisely what a particular job requires in knowledge and performance to specify the exact ways in which those desired behaviours can be defined and tested. CRI is not concerned with frills (what are termed 'nice-to-knows in the jargon)', but with the very precise specification of what terminal behaviours are required, and what earlier skills are essential to ensure satisfactory performance of the terminal objective. The system is thus concerned with building up a whole series of graduated performance checks that will ensure that a particular final operation is done to perfection. In this sense it has some important implications for training officers who are beset with problems of slipshod work, inadequate maintenance schedules, or with youngsters who are overtrained or undertrained. It offers by contrast a vision of a world where the maintenance mechanic for a particular sub-system will have mastered all that needs to be known and done in order to do a particular job to perfection - and nothing more.

It may be something of caricature to suggest that CRI and similar mastery-learning systems are necessarily very restrictive; they obviously could be applied to higher levels of performance, including apprentice skills. Their peculiar attraction however is in the ideal of mastery, accuracy, and cost efficiency. Why bother spending 4 years learning 10 times more than can be applied on the shopfloor?

As far as their status in Zimbabwe is concerned, these systems

certainly do qualify for very serious attention from the bodies like NAMACO and its specialist trade committees when these get eventually set up. They are important because they do take very seriously the learning needs of workers at many levels. It is understood, in fact, that CRI, for instance, has been in principle approved by the Directorate of Industrial Training as qualifying for rebate. This could be an important precedent for several of the other in-service training systems which are coming on to the market. Many of these in fact offer a better deal for the operator or semi-skilled worker than what was there before. But it would be entirely appropriate for such schemes to be openly discussed at the training policy committees, and for care to be taken about how they do and do not intersect with the apprenticeship training system and with the VTC system. It does seem likely that this kind of discussion does have to take place on an industry by industry basis, which makes it even more crucial that the representational and consultative mechanisms attached to NAMACO get off the ground.

(iii) Varieties of in-service training in the private small scale sector - some policy issues.

We have referred to some example of training systems that are not in the apprentice or up grade training mode but which have been becoming evident in Zimbabwe in recent years. We should want to emphasise, however, that these training systems tend to be restricted to the larger firms, and within the larger firms are more common amongst those that are multinational. This is perhaps understandable since developments in training approaches, as in technology, can be moved round the various branches without

each one having to develop the system from scratch. The situation is different for the majority of local firms, whether large or small. Clearly, the larger firms have financial capacity to justify a training establishment, but lacking an international pressure to develop training according to particular norms, they are obliged to be much more pragmatic.

Examples have been encountered in Zimbabwe of quite large companies which do not have an explicit company training policy, covering different levels of workers and types of course. Such firms may well treat training in an ad hoc manner; when there is a conspicuous need for training, it will be organised. But when the demand has passed, the training facility will not necessarily be maintained. In one case, after Independence, such a firm developed a technical training centre to help with a situation where very large numbers of whites had emigrated. Suddenly semi-skilled workers had to be exposed to some pre-apprentice training. But when the need was passed (and perhaps also because the firm's apprentices could no longer legally be picked from these preliminary training courses) the training facility was abandoned. Unlike many of the multinational firms, these companies do not yet have any institutionalised commitment to training. They may take apprentices or they may not, but these decisions will tend not be part of a training strategy as such. Indeed one firm admitted that while taking apprentices, their general tendency was still to train by the time honoured method of sitting 'next to Nellie'.

With the smaller local firms, in sectors like engineering and building, there may be even less of training policy. Some will allege that when they did train apprentices, they were unable to hold on to them, and that through this type of 'bitter experience' they have gone back to other methods. What this may amount to in practice is the taking on of relatively unskilled workers - 'literally off the streets' - and exposing the most promising of them to specific skills, e.g. in welding. It may well be that the contract system of labour recruitment, to which we have already referred, is the vehicle used to allow small employers to keep new workers 'on probation' until they identify the need to move someone to permanent terms. To some employers, it will appear that there will 'always be more workers to choose from', if some don't prove suitable. This sense of security in a labour surplus is not one that is conducive to major investments in in-service training. By contrast, government policy since Independence has sought to promote security of tenure for labour, reduction in the use of casual workers, and to reward and punish those who trained and didn't train via the levy grant mechanism.

For these thousands of small firms in the industrial sector, it would be worth asking the question whether the policies to improve the conditions of work and the training of workers over these last eight years have been effective. It would take much more detailed research than has been possible in this short project to analyse the impact of policy on the smaller firm over this period, but it could be very worthwhile. For example a small firm with 50 employees all told may be paying a training

levy of some 40,000Z dollars per year. But it may have no apprentices, made no use of upgrade training, and just send the occasional employee for a one week welding course. In short, it has no system for recuperating any of the 160,000Z dollars approximately that it has contributed to the levy funds over the past four years. In addition, it may be utilising systems of labour recruitment that allow it to keep on permanent terms only a certain proportion of its workforce.

The government's policy instruments are not having the effect of making this kind of firm more training-conscious. There may be no evidence of a greater commitment to in-service training over the years. But this is not necessarily an argument for exempting the small firms from paying the levy. The whole rationale for the levy was to increase the pool of trained people, not to force everyone to train. So even if these small firms are not among the very small number of companies who have been applying for rebates, it could be argued that their needs might be met indirectly if the levy system was elsewhere developing kinds of skills that could be utilised. The difficulty with this argument is the following.

It could be that many of the smaller firms are actually still running on the formula of(expatriate expertise(in design, in engineering, in management and in sales) and African semi-skill. The only difference from the pre-Independence may be that the non-African apprentices have vanished, but with their disappearance the bridge between shopfloor skill and design work may have also

gone. The non-African apprentice in Rhodesia as in the UK in earlier days could have moved on from his apprenticeship to design work, through night school, and then to management. It is not clear that Independence has really seen the replacement of the non-African apprentice, but perhaps what has happened is a re-ordering of the job hierarchies, with job fragmentation on the shopfloor, and a greater concentration of expertise in the management team.

Without extended case study work on local firms, this must remain speculative, but it is often said that management has to work 'ten times as hard as before' and that African line supervisory positions are very had to fill. Both these kinds of comment point to a possible realignment of semi-skill, skill and management which is still very inadequately understocd.. But these realignments of skill and knowledge are crucial to make explicit if the role of in-service education and in-service training is to be clarified.

It may be that for the next short while, the small firms have correctly identified the impossibility of their being able to train and hold on to African apprentices, draughtsmen, or junior engineers of a standard comparable to the Europeans. They have judged that there are simply too few for this to be a feasible strategy. In this respect, the small firms have been suffering perhaps a similar problem to the polytechnic and technical colleges - an inability to attract and hold on to highly qualified technical staff. The authorities have decided that the college problem can only be solved by 'situation training' of

technical instructors and by better conditions. In the small firm sector, it has not been possible for production necessities to wait for the education and training system to prepare large numbers of skilled manpower. Hence other arrangements have probably been made, as we have suggested, to take care of the absence of traditional categories of skilled (non-African) manpower. What this may mean is that when the education and training system finally gets around to producing large numbers of trained youngsters, the relationships within production may have altered so much that they can no longer be accommodated.

In concluding this section on the smaller local industrial unit, we are presented with a major dilemma for in-service training. It seems quite possible that the government intentions regarding training have had virtually no impact in the small firm sector. Indeed they may have hastened some of the realignments we have mentioned. It would be valuable to analyse much more closely patterns of current training in the small firm, and to explore ways in which a much wider spectrum of skill can be developed. The diversity of skill and expertise in manufacturing is much richer in Zimbabwe than in many other independent African countries. The challenge for in-service education and training is to ensure that this engineering expertise progressively becomes indigenised. For one thing it may mean that the smaller firms' voice has to be heard more than at present in the various manpower advisory councils.

In-service training in the tertiary sector

Like manufacturing, the tertiary (service) sector has a number of major distinctions between large and small scale, and multinational and local. These inevitably affect patterns of provision of in-service training. In many ways the whole discussion about training has an entirely different flavour to it in the services sector than in production. To some extent these differences are a reflection of a very different history and tradition of training than in the manufacturing sector. There are also some important differences in understanding of what the role of the state and of the employers might be in these fields. With the so-called craft skill for industry there has been in many countries much more discussion about the division of responsibility for training. Some of this debate can be traced to the influence of guilds and trade unions in the protection of skill, and in several countries the shape of apprentice training is the result of a very long history of negotiation amongst workers, employers, the education authorities and the government over shared responsibilities. Clearly, one reason why apprentice training has been problematic in some developing countries is that the relationships amongst these four bodies have been very different in the motherland than in the country to which the system was exported. And it is equally obvious that the relations amongst these actors differed significantly in a colonial, expatriate minority regime from in an independent African government.

We have argued earlier that in the industrial sector the

apprenticeship training mode was almost over-valued as the touchstone of 'real training', and thus the reduction in apprentice numbers was construed as necessarily a diminution in the quality of vocational preparation. No such loaded debate takes place over the preparation of bank clerks, insurance clerks, hotel waiters, trainee accountants etc. To a much greater extent than with industry, it is assumed that the banks, insurance companies, hotels and accountants will organise the training of their workforce so that business can be conducted effectively. This may seem almost too obvious a point, but it has a considerable bearing on the issue of in-service training. For many of these service industries, government's assumption would seem to be that the industry will take care of its own in-service training needs.

Whereas in some of the craft training, we have seen a discussion of several different modes (apprentice, up-grade, direct entry, inplant), with different values placed upon them, there would appear to be no such discussion in respect of banking or insurance, hotel-keeping or accountancy. Nor has there been an attempt to ensure that all new recruits for these sectors be centralised and selected from a pool as with apprentices. Rightly or wrongly, therefore, the impression is given that these sectors do not need to be so carefully 'policed'. The major banks and the principal insurance companies take training seriously, as do the major hotel groups. Several of these institutions are helped by their wider connections outside Zimbabwe in developing training packages and approaches. The

banks tend to have established training schools, as does the largest of the insurance companies. In respect of these activities and the formal training activities of other service industries, it may be worth examining briefly the main types of training and how, if at all, they may be affected by the government's levy grant system.

As may be imagined, the in-house training is highly specific to the particular industry and even to the particular bank, insurance company or hotel group. The relationship between this training and the more formal preparation for membership of the precessional institution (where it exists) is quite complex. In some instances there may be quite a strong encouragement to pursue the external qualification process as well as the internal. An example of this is that when junior officers in one bank sign their articles they commit themselves to passing the first stage of their professional examinations by the age of 25. This bank also attaches an honorarium to the completion of the examinations for the Institute of Bankers of Zimbabwe.

At the moment, the levy grant situation is that training costs can only be reimbursed for these external professional examinations. The policy question must presumably be the following: What should the relationship be between the amount that an institution pays to organise its own in-house training and the amount that it pays to the ZIMDEV fund as a 1% levy? For instance, one large bank has a training budget of around half a million Z dollars, to which must be added the cost of trainees

staying in hotels. Then to this must be added the amount taken by the levy on all employees. It can be appreciated that this comes to a significant amount. If on the other hand we examine what the banks who applied managed to get back from ZIMDEV in 1986/7 the total is 23,507 Z dollars for 79 individuals, or in other words some 300 dollars for each of these people. These individuals consist only of these who have been involved in doing examinations for the Institute of Bankers.

It is not difficult to be critical of a situation where institutions appear almost to be paying twice for training, once on their own account and once to the state. But it is not difficult either to appreciate the dilemma of the ZIMDEV authorities who have thought about the possible reimbursement of systematic in-house training. As soon as the principle was accepted that firms with a coherent training system could deduct the cost of that from their levy total, many of the larger firms could very rapidly show that their training costs were much higher than their levy, and hence there would be no levy funds derived from them at all. Any such principle would effectively exempt the larger, often multinational, firms from paying the levy at all.

If, however, some recognition were to be given to firms that ran training centres, it might be possible to design a system whereby, say, up to a half of the levied amount could be reimbursed for the organisation of thorough in-house training, and the other half could be retained by ZIMDEV for the

distribution and encouragement of other forms of training. But it would certainly seem that a means should be found for according a measure of recognition to in-house or in-plant training.

Of course, the real difficulty with in-house training is the extreme complexity of evaluating it against criteria that might seem 'progressive'. In NAMACO there has apparently been some discussion of whether in-house training could be reimbursed if it was deemed to be of a national character, - not too specialised and local. It might also be argued in a state that is concerned with equity that in-house training could properly be reviewed in respect of gender stereotyping. - For example, how many of these training as bankers, accountants or insurance personnel are women? It could equally be mentioned that the crucial questions to be asked of in-house training are the very ones most difficult to answer. For instance, there may be a great deal of short term training of bank tellers, or insurance clerks, or waiter, but the career lines for some of these occupations may terminate very abruptly, so that there is effectively no advancement. It would almost certainly be possible to analyse some of the tertiary occupations (not necessarily the few sectors that have been mentioned) in ways that are as critical as anything that might have been said about the engineering industry. The basic problem for analysis whether in Zimbabwe or the UK is that any attempt seriously to explore the nature and assumptions embedded in in-house training would require a great deal of effort, and very considerable analytical skills. Which is why Zimbabwe has stuck

with its focus on easily measured formal certification.

A compromise between the all-or-nothing approach would be for ZIMDEV to encourage the different industrial and commercial associations to come forward with their own recommendations for approved in-house training and its relations with external certification. This is not something that can be generalised across different industrial and commercial groups; nor is it a task that can be left to the large employers to sort out. The many smaller firms need to be involved. The emphasis must to a significant extent involve the different industries in the analysis of their training situations. These training schemes could constitute a basis for a much more informed dialogue than at present. One of the obvious reasons why so few firms apply to ZIMDEV must be that they are not clear about the 'rules of the game', and have little or no part in determining the procedures whereby their applications are judged.

In examining the diversity of training systems that industries as different as textiles and clothing, building and automotive are currently developing, it seems essential that the whole process of judging, accrediting and monitoring be not something that is done by government alone, but increasingly involve all three main parties (government, employers and workers representatives). It would seem that the last of these three groups have until this point been conspicuous by their absence from many of the debates about training.

The tendency to regard the development of training systems by industry as something necessarily antagonistic to governmental initiatives in training does seem unfortunate. This adversarial dimension is probably accentuated by the absence of a document that looks coolly and steadfastly across the entire training policy domain. Such a document (which might be the product of a high level Commission on the Vocational Preparation of Young People) would be able to look at the complementarities of governments present initiates with industry's initiatives, as well as at the rationales for particular industries developing virtually self-reliant training systems. This kind of consultative document would also be able to examine the scope for some of the really major training centres of both government, commerce and industry becoming resources for surplus capacity training - in the manner of the Railways Training School in Bulawayo.

C. IN-SERVICE TRAINING THROUGH CORRESPONDENCE, PRIVATE COLLEGE AND THROUGH TRAINING CONSULTANCY ORGANISATIONS.

(i) Correspondence Colleges.

We referred in the introduction to the fact that one of the more remarkable features of in-service education and training in Zimbabwe was the existence of a relatively sophisticated configuration of distance education and face to face instruction through private colleges. In the pre-independence era, there were already four correspondence colleges operating, the earliest of these being the Central African Correspondence College (1954), followed by Rapid Results College, and the International Correspondence Schools, also in the 1950s. The principal demand

at that time was for some opportunity to continue basic education up to the junior secondary level, since the provision of post-primary education for Africans was particularly limited. From the early 1960s the correspondence medium could be supplemented by attendance at study groups meeting to work through correspondence materials in a learning environment controlled by a mentor. These correspondence study groups, closely associated with the Central African Correspondence College, and with some of the churches, certainly served the needs of pre-service candidates as well as those who were already at work and who wished to improve their formal qualifications. Precise data on the distribution of pre -and in-service clients of the correspondence schools is hard to come by, but in general they may be assumed to attract a high proportion of students who are already working, whether in the formal or informal sectors of the economy; and of course they are particularly attractive to students who are located far from opportunities for face to face tuition.

Over the period from the mid 1950s to the late 1980s, the pattern of provision has altered significantly. The early emphasis upon upper primary and junior secondary shifted towards tutoring for the form IV ('O' level) examinations, and then as the government proceeded massively to expand secondary education from the early 198Cs, the colleges shifted towards more vocational and professional courses. With the very rapid Africanisation of the civil service, and the enormous need for every level of clerical, secretarial, and commercial competence with the emigration of

Europeans at Independence, the colleges found themselves responding to a growing demand to improve the qualifications of those at work, especially as the school system was dramatically raising the normal entry of young people into the workforce. The speed with which possession of a number of 'O' levels became something rather ordinary meant that a further more vocational qualification became necessary not only for those aspiring for jobs, but also for those who wished to protect an existing job against the higher academic qualifications of younger entrants.

It is often assumed that the comparative advantage of correspondence colleges is in the fields where there is no need to develop the skills through immediate practical application. To an extent this is correct, and the balance of courses offered by the colleges reflect this. There is considerable emphasis on clerical, secretarial and book keeping skills, but as we shall note shortly, there has also been something of a shift into the technical, vocational and even agricultural fields.

However, in the late 1980s, one of the most obvious in-service strengths of the correspondence colleges is to offer preparation for the professional institutions. There is a very wide array of these, some international, some now with Zimbabwe branches. With some the examinations are still entirely external; with others they are now localised, and internationally moderated. Qualifications for membership of these professional institutes and associations has certainly become an increasingly important element in the spectrum of in-service training. It should be

distinguished from the specialised in-plant or in-firm training associated with particular products, services and methods in which enterprises wish to develop the competence of their workforce. The exact relationship between these two rather distinct forms of in-service training (firm-specific and profession-specific) differs from occupation to occupation, and in an ideal world the external professional qualification should reinforce what is being acquired in the narrower on-the-job training. There is however no very direct relationship between success in professional examinations and promotion within the enterprise - whether this is a private company, a parastatal organisation or a part of a public sector ministry.

In some fields, such as banking, there is quite a tight bond between external professional success and some form of recognition within the particular bank. A number of banks require their entrants to have entered for the first part of the diploma of the Institute of Bankers of Zimbabwe by the time they are 25. Several also offer honoraria and cash bonuses to successful students. It should not perhaps be surprising that more than 500 mature students are pursuing these Institute examinations through Rapid Results College. Doubtless some reinforcement of this also is derived from the fact that the ZIMDEV funds do offer rebates for the examination and tuition fees of successful candidates, and for the year 1987, rebates were available to 79 in-service students, totalling some 23,500 Z dollars.

Among the many other professional societies for which the correspondence colleges variously offer support services, there are the following:

Zimbabwe Association of Accounting Technicians (ZAAT)
The Institute of Chartered Secretaries and Administrators in Zimbabwe (CIS)
Zimbabwe Institute of Management (ZIM)
The Building Societies Institute
The Institute of Personnel Management
The Chartered Institute of Management Accountants
The Institute of Administration and Commerce
The Chartered Institute of Transport
The Institute of Credit Management
The Institute of Certified Bookkeepers
The Institute of Marketing Management
The Institute of Salesmanship
The Institution of Industrial Managers
The Institute of Travel Management
The Society of Engineers.

This is by no means an exhaustive listing, but indicates the range of professional qualifications which can be taken by correspondence (a large number of them available through Rapid Results). One of the most popular of all has been the examinations leading to the CIS. The numbers currently registered with the Institute are rising towards the 3,000 mark, of which well over 2,000 are pursuing courses by correspondence (and smaller numbers are taking face to face tuition with the private colleges).

It would be intriguing to know the scale of participation in these professional qualifications, and to what extent they are being catered for by the correspondence institutions located in Zimbabwe. At the moment the information available from the ZIMDEV fund is rather sparse, and does not allow a calculation to

be made with any certainty about those students pursuing professional examinations and those pursuing the similarly named qualifications at the polytechnic and technical colleges (at intermediate diploma, diploma and higher diploma levels). We have already noted a tendency within the ZIMDEV regulations to shift emphasis away from the examinations of the professional institutions towards the national certification available through the technical colleges. Within a three year period the number of rebateable courses linked directly to professional institutions and associations had shrunk from 20 to 5 (in 1987 and 1988). These five included: the Leather Institute of Zimbabwe; Institute of Bankers; CIS;ZAAT; and Institute of Auctioneers. The reason for making the point about these very rapid changes in the rebate regulations is that the correspondence institutions require to invest rather heavily in course development if they are to mount one of these professional courses.

At the moment, we would suggest that this is probably not a major issue, since so few firms either apply or successfully recover funds form ZIMDEV. During the period which ran from July 1987 to June 1988, there were again only some 70 firms that applied. From these 70 firms, the data on successful applications are not yet available, but the previous year, the figures would suggest that only some 150 individuals got rebates for their participation in examinations of the Chartered Institute of Insurance, the Chartered Institute of Transport, the Institute of Administration and Commerce the Institute of Bankers, and ZAAT.

How many of these actually pursued their courses by correspondence we cannot tell. But what is certain is that a significant number of them did so, but that a very much larger number than 150 were pursuing all manner of professional in-service qualifications in Zimbabwe. Indeed two of the professional institutions where we are aware of the correspondence figures (for just one college) indicate that some 3,000 working students are active on the books. Many of these must be located in firms that have not applied for rebates, and a number of them will also be in the public sector itself, which is not allowed to present its candidates for ZIMDEV rebates.

Before we leave this particular section of the discussion (which links the correspondence institutions, with the professional institutions and associations, and with ZIMDEV), there are a number of points that might be made:

- To make any kind of policy decision about reimbursing training in pursuit of precessional qualifications, it would be valuable to have figures on the population so involved.

- It would also be valuable to know in what mode (correspondence or face to face) such students were pursuing their studies.

- Given that both for students and the correspondence colleges, the decision to invest in a course is a relatively long term commitment, there needs to be some collaborative mechanism amongst the ZIMDEV fund, the professional institution and the tutorial bodies, so that the apparent arbitrariness of the ZIMDEV regulations can be replaced by much longer term agreements.

- The notorious unreliability of manpower planning does not suggest any very elaborate mechanism for estimating total numbers required in any of these professional bodies. On the other hand, it should be noted that the list of professional associations listed leans very much more towards the commercial and financial than it does towards the fields of production and engineering.

The correspondence institutions do not only offer in-service training for the professional institution examinations; they also offer their own diplomas. These are available for a similar range of vocational subjects to those linked to the professional institutions, as well as a good number that are much narrower and more specific. Thus there are available subjects like supervision, store keeping, public relations, salesmanship,, advertising, personnel management, marketing, running your own business, secretarial practice, book keeping and accountancy and business management. The cost of such courses varies a great deal, depending on whether the course is entirely locally produced, on local paper, or whether it is imported from one of the international systems with a branch in Zimbabwe. The length also varies markedly from courses of 28 or more booklets to ones of 10 or 12. These differences translate into total course fees that range from 40 to 70 dollars at the low end to 300 to 500 dollars (Z) at the higher end. But there is little doubt that for the money, there is available to the student a great degree of material that they can work through. The tests which are built into every lecture or module in the courses are a control on the achievement of the students, as indeed is the instalment system which many of the students use.

The fact that many of these courses only carry the correspondence school's own diploma or other certification does not seem to affect interest in the courses. In several cases the reputation of the school is itself of some weight with employers. In for instance the Hotel and Catering Management course offered by

International Correspondence Schools, there are some 70 Zimbabwean students following the subject from two of the larger hotel chains, and the employers are covering the costs. Whether any of the training costs of approximately 400 Z per student are rebateable from the ZIMDEV is doubtful, since the levy regulations specify hotel keeping and catering as offered at the intermediate, national and higher national diplomas of the technical college system.

The last area of interest that should be noted with the correspondence institutions is their recent move into technical fields. These subjects would include electronic engineering, electrical engineering, radio, audio and TV servicing, automobile engineering, comprehensive building, as well as elementary workshop engineering, elementary motor engineering, dressmaking, garage management, animal husbandry, crop husbandry, and farm management and planning. There is frequently a tendency to assume that such technical subjects cannot be effectively taught by correspondence. But in fact, the world over, millions of people (most of them women) knit, sew and follow patterns from the printed word alone. So it should perhaps not be surprising that many people who are working in garage or workshops seek to learn more about the theory of the work in which they may be quite well versed in practice. In Zimbabwe in particular, where there has been widespread access to some measure of secondary education, much of which has not resulted in sufficient passes to pursue academic education, there is a perhaps natural interest in seeking some more vocational qualification. We still know too

little about the character of those who respond so readily to the advertising of the correspondence college but there is little doubting their growing interest in a greater degree of vocational orientation.

An example from July 1988 may help to underline this thirst for the vocational, coming both from in-service and some pre-service students. One of the correspondence colleges advertised some 24 separate courses in one mail shot, of which all were vocational except GCE, English Language, and hobbies. The pattern of response showed that every single course advertised was positively responded to, with the exception of hobbies, and amongst the more popular were agriculture, bookkeeping, English language, dressmaking and electrical engineering. In another college, the average Zimbabwe enrolments over the past three years have been as follows in these particular technical subjects: Introduction to workshop engineering (58); Elementary technical drawing (109); Elementary motor engineering (196); Electrical (theory) (96). These kinds of numbers may seem small, but if those doing some form of technical course from all the correspondence colleges were pooled together, they would come to a significant total of several thousands altogether.

At the moment, this is an almost entirely unresearched constituency. The majority of them are paying their own way almost certainly. Some are located in micro-enterprises in the informal economy, some in small firms, many are situated outside Harare, out of reach of the few formal training institutions -

even if the latter had space. There would be considerable value in exploring in some more depth the character and education/work profile of this particular clientele. Among the questions to be answered would be what is the contribution of relevant theory, trouble-shooting suggestions and diagnostic advice to someone who is already experienced. Partly to gain some preliminary leverage on this kind of question, a number of the theoretical manuals borrowed from the Harare correspondence colleges were discussed with small groups of mechanics who were operating in the most rudimentary conditions in the informal sector. The motor mechanics who were in the midst of improvising piston rings from one make of car for another (genuine spare parts being almost unobtainable), and who had the whole engine perched on a treestump for a workbench, were completely unphased by the motor mechanics modules. The consensus of opinion was that although they knew perfectly well how to strip an engine, they were sometimes at a loss for a particular technical term. Their view, in short, was that the materials looked relevant and interesting. It would of course be quite another matter to discover their precise usefulness. But it was intriguing to note that they were perceived to be of value, even outside the formal sector of the economy, where they might be assumed to be more easily converted into some sort of promotion.

These conversations with working mechanics about the role of trade theory raise a number of questions that can only be touched upon in this short account. First, a number of the mechanics point back to a measure of exposure to practical studies in their

secondary school as something that influenced them to pursue this interest after O level. On the other hand, and somewhat paradoxically, they are sceptical of the young people who leave school and enter car mechanics course in some of the private colleges, on the grounds that courses which did not deal with the repair and maintenance of cars that actually work are likely to be useless. Second, the mechanics are aware of the value of being exposed via apprenticeship or upgrade training to a higher standard of skill that is available in such relationships, even though they are already very skilled. On the other hand, the car mechanics regard themselves as more creative and innovative than some of their counterparts in the specialised car agencies, since the latter are used to replacing parts on a single make of car, whereas, they often have to make adaptations, buying secondhand parts, and trying to work out how much life is left in them.

In a situation where some of the major constraints to productivity are lack of tools, spare parts, adequate space to work, and electricity, the provision of relevant trade theory is bound to come rather low down the priority listing. What is intriguing, however, is just how much interest is betrayed in the access to further knowledge. But as we point out elsewhere in this report, one of things which the state has found greatest difficulty in providing is evening and part-time access to technical training through the technical college network. Given that the formal technical training sector finds it problematic covering the needs of the relatively small number of formal trainees, there seems little likelihood in the near future that

upgrading or technical improvement will be available to those not situated in companies who are responsive to formal training. Consequently, others interested in skill development will continue to find what they can through other routes, including correspondence.

However, the profile of correspondence student motivated enough to take self-instruction in a technical field must remain a mystery, until perhaps a questionnaire can go out with the correspondence materials, and until some of the technical 'correspondents' can be visited on site. Such a task could well be a high priority for the Correspondence College Council, interested in demonstrating the nature of its contribution to in-service training in Zimbabwe.

Before leaving the correspondence colleges, it may be useful to give a very rough indication of how many students are actually involved in the correspondence mode in Zimbabwe. The five colleges in the field are Central African Correspondence College, Rapid Results, International Correspondence Schools, Zimbabwe Distance Education College, and Transworld Education College (which also offers ICS courses). Total enrolments in these institutions are currently around the 200,000 mark. Certainly, the majority of students are still in the academic fields, but in a number of colleges, very significant minorities are now located in commercial and technical, as well as in the professional domains. Amongst the five colleges there is now almost 140 years of experience of delivering correspondence education and

training, and it may be that to a greater extent than heretofore some of this expertise could be drawn upon by other countries. Particularly when the World Bank in its Sub Saharan Africa policy paper on education is promoting the virtues of distance education so strongly, Zimbabwe seems well placed to illustrate some of the lessons that have been learnt.

(ii) In-service education and training through the private colleges

Another important institutional actor in the field of in-service education and training is the large group of independent or private colleges. There are probably somewhere between 40 and 50 such colleges, and new ones are starting each year. Many of the better known of this group are members of the Zimbabwe Association of Self-supported Training and Education Centres (ZASTEC). All but one college seeks to be profit-making. The mix of subjects differs significantly from college to college, but in many there is a significant academic division, offering variations of form one to form six schooling. But increasingly, like the correspondence colleges, the face to face colleges have moved into commercial and technical fields, both long and short courses.

Such is the demand for the more popular of these commercial and technical courses that there is literally 'hot-seating' in which one class takes the place of the previous class every hour on the hour. In the extreme versions of this mode, some 12 classes can get access to typewriting between 7.30 am and 7.30 pm. But in the main the throughput is a good deal more leisurely since the

private colleges are often significantly more expensive than either the technical colleges of government or the correspondence institutions. As far as the distinction between pre-and in-service education and training are concerned, there is generally a tendency for those attending the longer day courses to be pre-service trainees, and for those attending evening classes to be at work. The situation is not the same with some of the very short day courses run by the colleges - to which we shall return. But it is probably true to say that the bulk of private college students are in the pre-service mode, and a minority in the in-service mode. The proportions are probably the other way round in the correspondence colleges.

Nevertheless, these evening students still constitute significant numbers, and the total across the private college sector would probably reach several thousand, out of a very rough estimate of 12 to 15,000 in the private college sector as a whole. The content of the courses is also a little different from the correspondence sector. There is a good deal less emphasis on examinations leading to membership of professional institutions and associations, though a small number of colleges offer some face to face tuition for CIS and one or two other institutions. A good deal of the work concentrates on secretarial and commercial careers at different levels. In the eyes of many students the Pitmans and other international certification for such courses is still more highly regarded than the new localised certification associated with the polytechnic and technical colleges. This is understandable, and is likely to continue for

a time until the national certificates get a name for themselves. But in the short term it produces a few anomalies such as students pursuing their classes at the polytechnic but taking their examinations a second time through the private system.

There are a small number of private colleges which offer such more technical and vocational courses. The best known in the Harare region are the branch of Speciss College at Magaba, and the much older Monomotapa Technical. The latter concentrates on what it terms pre-apprenticeship motor vehicle, while the former covers motor maintenance (diesel and petrol), radio service; TV; auto-electrics; refrigeration; tailoring; dressmaking, and pattern cutting, and designing. None of these latter courses attract certification, yet they remain very popular with the largest numbers coming to motor maintenance (diesel and petrol), where the figures come to between 400 and 500 in 1988. The cost of such courses depends a great deal on the number of hours, but a 13-14 month course will cost in the region of 500 dollars. The existence of evening classes and weekend classes at Speciss is testimony to the demand by working adults to get access to classes out of normal hours. There is evidence in the development of new colleges in 1988 that this demand is felt to be far from satisfied. For instance, the correspondence college, ZDECO, has started a new face to face facility termed the Zimbabwe Technical and Commercial College.

Perhaps some of the most significant evidence of demand for in-service courses comes from Harare Polytechnic itself. It may

seem inappropriate to include reference to the polytechnic within a discussion of the private colleges, but there is indeed one very thriving division of the polytechnic - Adult Education - which actually operates on a cost recovery basis. Like the 'self-supporting' feature of the ZASTEC group, this section of the polytechnic only runs courses that can cover the cost of their lecturers and consumables, plus a profit of 20% to contribute to the amenities fund of the polytechnic. Under this dispensation, a whole series of evening courses have been run in subjects like machine shop engineering; electrical engineering (C+G 803); mechanical engineering; institute of the motor industry; printing; mechanical engineering technicians. Most of these are national (or international) certificate courses. There are also a whole series of courses in carpentry, pattern cutting, motor mechanics, cookery which are not certificable, but which draw in significant numbers. Unlike the regular day courses for national certification, these cost covering courses are calculated on lecturer rates of pay not very different from the better colleges in the private sector.

There are in fact some important policy issues raised by what would appear like two systems operating within the polytechnic at the same time. Evening students in the adult education options are paying fees which are two or three times higher than the very subsidised regular day courses. Approximately 50% of those on the national certificate courses are paying their own fees, while the other half are being reimbursed by employers. The anomaly is of course that there is actually a disincentive for employers to

sponsor in the evening. On the other hand, these evening classes have partially solved one of the longest-standing problems of the technical colleges, since the lecturers are paid at a rate for the job which makes it relatively easy to attract good staff. And an added advantage of the evening tuition at the polytechnic is that these mature students get access to the same high quality engineering equipment and facilities as day students, and to many of the same lecturers. The private vocational colleges would find it impossible to replicate this standard of equipment. (Total numbers in adult education at the polytechnic are 600-700.)

The last feature of the private colleges is the recent move by a number of them into very short tailor-made courses, aimed at improved business and commercial practice. The most developed of the colleges in this sphere is Speciss, which through its Training Services division, offers some 30 different very short (one to five day) courses on the following kinds of topics; PAYE calculation; supervisory skills; export procedures; telephone selling etc. Almost by definition such courses are made use of by people who are already working, and they are covered by the particular companies who sponsor the trainees. Costs range from 90 to 280 dollars for one to three day courses, and they are all very intensive. Over 1000 students attend such courses in one year and they are drawn from some 350 different firms who have used these courses on more than one occasion. Again this speaks to the existence of a market for very specific skills, tailored to the business climate of Zimbabwe. And it is worth noting that

these kinds of very short courses cannot attract reimbursements from ZIMDEV.

One comment may be in order in ending this section on the private colleges. There has been a tendency in some quarters to see the private colleges as profiting from a certain disarray in the public sector institutions. For many years there has been a difficulty, to which we have already referred, in holding on to the best lectures in the technical colleges and in the polytechnic. With the transfer of the technical colleges to the Ministry of Higher Education in mid 1988, there is already evidence that lectures salaries in the colleges are being taken seriously. This is a first step, but there is still a good deal of ground to be made up if the technical colleges and the polytechnic are to operate in the intensive day and evening routine that the Adult Education and Business Studies departments have shown to be possible. It is of particular importance to potential in-service trainees nationally that the colleges become known for first-rate evening and day course provision. From a longer term perspective it will politically be more acceptable for the private colleges to be competing with a strong national technical college system than with one which is regarded as cheaper but much less effective.

(iii) In-service Training through the Private Sector's Management Training and Consultancy Operations.

There is one very prominent feature of the main Harare newspaper, The Herald, and that is the constant advertising of courses by the correspondence college, the private colleges, and a number of

the training consultancies. The first two are by far the most numerous, and it is some indication of the competitiveness within the market that there were over 40 advertisements in a single paper over a two week period. This has the effect, naturally, of making the private sector of training a good deal more visible to the public than the government sector. These advertisements stress the salary, leadership and competitive advantage of the courses: Profitable farming; the quick economical way to success; learn to earn; train at home for a better career; will you be one of tomorrows leaders? Train for a successful office career; this is the time for you, your company or institution to move up your investment for the future...etc

But in addition to the private colleges and correspondence colleges, there is a significant number of advertisements from organisations such as the Zimbabwe Institute of Management (ZIM), the National Commercial Employers' Association of Zimbabwe (NCEAZ), the Zimbabwe Institute of Engineers; Management and Skills Training (MAST); and C.F. Tulley (the computer company). Others advertise more through the journals dedicated to management, personnel, trade and industry. But in total they come to a rather large group of organisations, offering different aspects of in-service training. They may perhaps be broken down into the following categories.

First there are the professional institutions and associations. Typical of these are ZIM and the Commercial Employers Association (NCEAZ). The latter tend to offer short courses on some of the

very topics that were mentioned above for the Speciss Training Services, - such as effective supervision, selling on the telephone; receptionist skills; and industrial relations. ZIM also offers courses on supervision, but its comparative advantage is clearly across the whole management spectrum. In this sphere, it offers very short courses, as well as courses that span a much longer period, but are made up of one day a month, with assignments. The Zimbabwe Institute of Engineers has also just entered this management market.

The second group of training arrangements are those associated with a particular company, where courses are linked to the particular product for which the company is known. Thus computer franchise houses put on courses on word processing, systems analysis, programming etc. C.F. Tulley is just one example of where short courses are on offer not only for the firm's clients but for other sectors also.

A third and slightly different model is where the originally firm-specific training has spilled out from the confines of the company and is on offer to other interested firms. In the Delta group of companies, there is now a fully developed vocational training center, which is not only serving the needs of the group but is taking in trainees for other firms. Still within Delta, the Mandel Training Center is an example of centre that serves its own group's employees, acts as a training consultancy for other firms, and also offers its premises for other organisations to carry out training functions. Mandel emphasises the

supervisory and management aspects of training, as well as dealing in particular packages, such as 6M, which are offered to the work force in general. Again there is some overlap with the kind of course by Speciss, but there is a wider variety of provision within the management sphere. Courses are typically 2 to 4 days, and cover such specific topics as: time management; worker's committee effectiveness; performance appraisal; job evaluation; 6M simulation; effective recruiting, and many others.

A variation on this same kind of spill-over training from the company's own needs to the servicing of other clients can be seen in the training consultancies associated with the major firms of chartered accountants, such as Coopers and Lybrand and Price Waterhouse, and Deloitte, Haskins and Sells. These firms have moved out beyond their original area of auditing, accounting and finance to enter the field of management training, and human resources development more generally. Price Waterhouse now has in its human resources consultancy framework a stake in the MAST Organisation (Management and Skills Training) which is headquartered in London, as well as in the PE Consulting Group which latter gives it access to production management. It also has developed a training relationship with the Confederation of Zimbabwe Industries. In its current listing of training courses and facilities available, it numbers the following: management and leadership skills; finance, audit, tax and computers; production engineering, including maintenance management; personnel management and training; marketing skills. Within these broad fields, many very short courses are on offer, as well

as consulting services across the human resource profile of a firm. The clients for such services appear to be drawn from both parastatal and private sectors.

Although we have mentioned Price Waterhouse, we could as easily have referred to a number of others, similarly involved in management training as different levels. One of the rapid developments has been the firm of M.B.B. (Manpower Builds Business) which has made a particular inroad in video-based supervision training, as well as a series of very specific skills (double-entry book-keeping; balance sheets) and more general management development techniques. In late July 1988 the latest arrival on the training consultant stages was Organisational Training for Development, the new training arm of the Anglo American Corporation, again resulting from a spillover from their existing training for the group to offering training to companies outside the group.

What are we to make of all these management organisations, including the many we have not mentioned such as Louis Allen Associates, the Institute of Personnel Management, Human Resources, etc? Is there arising the same thirst for management training as we have identified in many other levels of training? It would be impossible more than to raise a few issues without pursuing in-depth research into this phenomenon of management training. But we could suggest a number of areas that might be worth exploring. First, and most obviously, there is a sense in which management is the next frontier for African advancement.

With the Africanisation of the public sector, the management levels of the private sector remain a very attractive objective for many Africans. So there is undoubtedly pressure from that quarter to attend courses that directly relate to the job skills of the field. At the same time, with the emergence of the relatively isolated Rhodesian white management to the much wider international access associated with Zimbabwe's Independence, there was suddenly an opportunity to become updated on many of the techniques which had become commonplace in North America and Europe. An additional factor operating here may have been the need to switch from the protected market of UDI to a much greater export orientation in the 1980s.

But there are probably a series of more complex aspects of this flowering of management training opportunities. At some levels it would seem that the aspirants are driving the 'product', in the sense that young upwardly mobile Africans are demanding management training. There may even be a sense in which in the current wage restraint it is seen as 'a perk' to be sent on a short course, which may cost several hundred dollars. Another possible explanation of this flurry of very specialised short courses is that the management task has been fragmented, in a way parallel to the fragmentation of skilled work that we refered to earlier. If there was any truth in this, it would need to be explained in terms of a defensive strategy by existing management.

Some of the more thoughtful analysts of the management training

situation in Zimbabwe identify the courses as often being out of step with the in-service training needs of particular companies. Frequently participants come on such course even when they have not been marked out by companies for exposure to new techniques. Indeed there may not even be a management training plan within the company. In this way, the courses may often be certificate-driven, with participants studying situations of which they have not yet had any direct experience in the firm. In terms of in-service training opportunities, the situation currently seems to be particularly rich, but we are still very far from an adequate explanation of what is driving the system, and what is the effectiveness of the product.

As with our comments on the private colleges, so now with the private management training, there must be some relationship to what is being attempted in the public sector. We noted in this account that the Management Training Bureau ran courses which were heavily subsidised by the state and by ZIMDEV, and which were meant to appeal to the parastatal and private sectors. Despite these subsidies, the MTB seldom seems to figure in any current discussion of private sector management training. In addition to the MTB mandate, there is apparently an intention within the Parastatals Commission to develop a unit dedicated to the particular problems of parastatal management. How this will work out and relate to the current utilisation of private management consultancies by the parastatals is not clear, but again, as with the polytechnic courses, it will be important to ensure that there is not a glaring gap between the image of

public and private sector management.

D. IN-SERVICE TRAINING AND EDUCATION IN THE INFORMAL ECONOMY: THE CHALLENGE TO SCHOOLS AND TO FORMAL TRAINING INSTITUTIONS

The last section of this paper contains a few observations on in-service training and education seen from the perspective of the client, and particularly those clients who are not situated in a major company with a whole apparatus of training officers, training manuals and ongoing training programmes. This group of potential clients may shortly constitute the bulk of all form IV leavers (since only a small proportion of these will get access to some of the systems we have thus far been preoccupied with). It must also include the growing numbers of young people currently working in the informal economy, and for whom there is no formalized access to in-service training or education. Since those working in the formal economy are predominantly male, this client group should contain a large number of young women.

The school system has, since its virtual universalization at the secondary level, been apprised of the likely fate of its products reaching form IV and leaving to face a variety of uncertain futures. The sheer absence of in-service training facilities for those who are not in jobs has meant that the Ministry of Education has decided that the schools should at least in some measure help their pupils to anticipate the demands of a world without ready access to jobs, or work experience. Accordingly in the new structure and content of education, there is a commitment to offer in the pre-service mode some orientation to a world where 100,000 young people will be competing for 1,000

apprenticeship slots.

There are no easy remedies for this particular equation. Which is why it is almost certainly not the case that schools should follow one model of pre-vocational preparation. There are already a number of models well known to the education policy community: the Education with Production innovations of the ZIMFEP schools; the practical subjects done in the theoretical Cambridge mode; the emphasis on design technology with which several teachers are now conversant; and the many vocational experiments in schools which the Ministry of Labour was interested in, following the St. Peters model. In addition, there are low cost distance education models using technical kits, in the manner of ZIMSCI.

In what is frankly a quite new education situation, there is clearly no room (and indeed no evidence) to judge any of these models, in advance, as vocational school fallacies. But as they get planned, the planners need consciously to remind themselves that their priority cannot only be so to prepare school children that the handful who finally get apprenticeships manage to get a few months remission of time. Their image of life after school must also include a picture of form IV pupils entering some of the best known firms as contract workers at the very lowest levels (as now), and having the opportunity to prove themselves by their attitudes and orientation to the practical etc. No question here of negotiating remission of anything, but of getting a chance to start at the bottom and enter some of the

company training programmes. But the vision of work after form IV must also include realistically, the work situation and training options of those in the informal economy, whether in cities or in smaller towns.

There has been no work done at all in Zimbabwe on the pattern of in-service training and education of those who are currently engaged in self-employment or wage labour in the informal economy. Nor has there been any significant attention given to other workers in both private and public sectors who are very far from being considered as candidates for ZIMDEV rebates as articled clerks, learner miners or whatever. But what is surprising about even the most superficial examination of in-service training amongst what could be called ordinary workers, or the working poor, is how dedicated large numbers of them are to self-improvement.

Amongst a random sample of some 50 young people working in the informal economy with their families, in co-operatives or on their own account, a significant minority were engaged in professional development. Some had been to Oxyco to the Welding Skills Centre, others were planning to attend Mbare's various vocational training centres, others again were enrolled on small business courses with some of the many correspondence colleges and tutorial colleges. Some had heard tell of Belvedere and Msasa and were wondering how to get access. But in the main they had already a rather developed map of in-service provision that could be accommodated to their very full working times (usually 6

or 7 days a week at the workplace).

We do not wish to give the impression that the informal sector mechanics, fabricators, and car breakers in the Harare locations of Magaba, Mbare, and Gazaland are very different in the pattern of their aspirations from their counterparts entering the formal economy. They participate, both groups, in a rather powerful 'culture of self-improvement', and are therefore aware of opportunities for further training and education. Of course to some extent, the discussion of education and training issues amongst workers within the informal sector has been facilitated by the rather rapid move of recent form 4 school leavers into self employment in some of these urban locations.

Little quantitative work has been carried out since the Informal Sector Study Seminar in September 1983, and the ILO-SATEP study of the following year, but the education level of the recent entrants to the sector has certainly risen, and in conjunction with that, it may well be that those who have attained 2 or 3 'O levels still feel that not very much academically separates them from those who got access to some form of further education and training. Hence the quite wide spread interest in further study that we referred to in the section on correspondence education.

But one thing that has not developed yet is any system of informal apprenticeship. This is not to say that young people are not learning on the job, but the tendency is still apparently to teach relations rather than those who are not kin. There seem

to be no examples (in what was a preliminary survey) of young people paying for skill acquisition, as happens elsewhere on the continent. Some discussions with owners would suggest that such arrangements would be difficult, given the knowledge about labour legislation. Indeed there would also seem to be a hesitation for the same reason about taking on employees and paying them much less than the minimum wage. Instead, when there is a lot of work, an additional person will be taken for that task. If this is indeed the pattern in the informal sector, it would be an interesting example of both the formal and informal sectors 'contracting' workers for particular tasks, to avoid the legislation.

The specific needs for in-service training within the informal sector are very hard to disentangle from the wider infrastructural concerns. Very large numbers of owners work on small plots or stands that have been allocated within a walled compound in Mbare, but there they lack many basic facilities, such as power, light, and space, and shelter. Certainly the quality of the product of service is affected by these conditions. But the lack of basic hand-operated machine tools, for cutting, bending or shaping metal is also affecting the quality. There could be a very interesting study done in the informal sector of the machines used for twisting wire into the shapes required for fencing. These machines, fitted with electric motors, have been made in the formal industrial sector but they are now manufactured by informal sector fabricators, without the electric motors. There are now large numbers of such

machines being made with local designs and adjustments, but though most of them do the job for which they were designed, they are crudely put together. One of the fabricators discussed his interest in trying to get an attachment to the firm that made the proper ones, acquiring a certificate from them for competency, and then coming back to make higher quality machine. This in-service aspiration underlines the difficulty of in-service training in the informal sector: there would almost certainly be equipment in the formal factory setting that was partly responsible for the greater accuracy of the machines made there. So the in-service training could mean exposure to and environment technologically not reproducible in a '3x5' stand in the informal sector.

The implications of this kind of example emphasise the inevitability of most in-service training in the informal sector being restricted to what can be learnt on the job. Lacking the appropriate machines tools, accurate measurement, and a workshop setting, the informal mechanics are in-serviced on the job in such skills as extemporising, making do, and fixing things up. But beyond this, many of them do have a interest in pursuing in some way a scheme of further education and training.

In some ways the characteristics of this map of in-service training and education are very different from the models with which we have been concerned earlier in this paper. Its principal features are that in-service training or education needs to take place outside working hours, that its pace needs to

be in the control of the client and not the institution offering it, and that it may need to depend on self-learning rather than direct instruction. Paradoxically, the very things which the public sector institutions currently find it hardest to deliver - tuition in the evenings or at weekends, are the very things that the private vocational training centres and the correspondence schools often find easiest. In the current crisis of instructors at the technical colleges, the hardest slots to fill are those for the evening classes.

As the schools begin to sharpen up the meanings of pre-service preparation for the facilitation of later patterns of continuing education and training, they could do worse than analysing what several thousands of form IV leavers are actually studying and learning off-the-job (and without jobs) in Zimbabwe in 1988. The question could then be asked whether the schools could anticipate some of this, and thus ease the transition from full-time study to part-time study.

In such an economy of job scarcity, the schools will be very ill-advised to nail their colours to a particular mast, a particular vocational syllabus, which will have the approval of any single authority. Their obligation, rather, may be to orient young people to what the opportunity structure is really like after form IV. What is a VTC? What possibility of apprenticeship? What is the work and study pattern of the DDF centres? What are some of the names of approved correspondence colleges? How can one take Pitmans whilst still at school? In one way, the most

effective vocational preparation of young ... ple would be an absolutely first rate text, annually revised, which showed who went where after school, and how many people applied for what options. That could be more vocational than the struggle to buy one lathe.

On the other hand, schools should expect to help children orient themselves to the practical, to the mechanical, to the exploratory, and to the technological. There must be just a little bit of truth in industry's criticisms of youngsters as insufficiently conditioned to technology. But this kind of familiarity with the technical need not be attempted only via technical subjects as conventionally conceived. It could as readily be acquired by 'tinkering' over the whole four years of secondary on a single project in applied science or design technology. If youngsters in school were exposed to a critical examination of informal sector technology, through work experience visits, or through group projects, they could well acquire a perspective on technological adaption which would be very different from trying to follow an old vocational curriculum in a non-vocational setting.

The importance of situating the analysis of the national provision of in-service training and education finally within this user perspective is precisely because this potential clientele is much larger and more diverse than the small numbers getting the full advantage of the rebate system at the country's national institutions. This potential clientele may only be able

to afford a few months of car mechanics, evenings only, or a few days of welding instruction. Hence in the accreditation and monitoring of the fortunately many private, community, and NGO training centres by the Ministries of Education and Labour, it must be remembered that the in-service needs of tens of thousands of young people (and adults) are being served by the present system. There is an urgent need for the state to develop its own apparatus of evening courses in all its major teaching institutions, from university to college to VTC. Many thousands of students would turn to such facilities once they became more of a going concern. But as the State moves more in this kind of direction, there is certainly much to be learned from the present pattern of low cost, user-oriented in-service training and education, available through the welter of small and large colleges.

In conclusion:

We end with a quotation and a comment:

> Meanwhile the Authority is becoming increasingly convinced that there is a need for centralized co-ordinated control of all training efforts throughout the country. There are many well-meaning organizations entering the training field but some appear to have inadequate objectives, with consequent dissipation of finance and effort. Lack of co-ordination and overall direction is leading to duplication of effort and individuals are being tantalized by training which in many cases will not fit them for the employment which they seek.21

This quotation is taken from the first page of the Annual Report of the Apprenticeship Training and Skilled Manpower Development

Authority for the year ended 31st December 1976. Twelve years ago the Apprenticeship Authority was apparently frustrated at how much training was going on that they were not able to control. It was in many ways a good thing that they were unable to control so many of the independent training initiatives, since there was precious little training available through the formal channels. Today, of course, things are very different, but it is still the case that fully subsidized vocational training is for the few rather than the many. For the foreseeable future, the State is unlikely to be able to afford to organize in-service training for the many, but as its own capacity increases, it will become increasingly important to be aware of the totality of in-service training and education offered by different bodies, and to be able sensitively to examine and plan for complementarities.

E. CONCLUSIONS AND RECOMMENDATIONS ON INSERVICE TRAINING, IN THE CONTEXT OF INCREASED PUBLIC AND PRIVATE SECTOR COOPERATION.

The problem of generalisation

In acquiring the data for the previous sections, it was necessary to seek the views of a large number of different constituencies, in government and in the world of education and training. By this point in our discussion, it must be evident that it is not possible loosely to talk of industry, of government, or about the training constituency. There is no such thing as a single constituency in any of these fields. Within the world of industry, the spectrum contains some of the largest industrial concerns in Southern Africa, such as Anglo-American; it also contains regular branch plants of other multinationals; and it contains a large number of local firms. These latter are both

large and small. But even the smallest of these regular small-scale firms are large in comparison with many of the micro-industries that are starting up in tiny stands and enclosures all over those parts of Harare where they can gain a foothold. And even in this informal sector, there are major distinctions between the entrepreneur with a regular plot, a full tool set, some assistants and a steady clientele, and the petty producer with no permanent work site and whose tools are carried to and from from his daily work.

In pursuit of this data we have interviewed in firms where the training was part of a whole separate establishment, and where there were training packages adjusted to the needs of the workforce, and training budgets that were larger than the turnover of entire firms. Other quite large and productive firms with strong export orientation have minimal training establishments. This is not to say that there is no training system in operation. There is, but it does not reside in a full time training officer, training protocols etc. And other firms again are so small that the very notion of a separate training function is unthinkable. When the spread is so wide, it is difficult to conceive of recommendations that could carry weight across a whole industrial category.

When it comes to the training constituency, there is a similar diversity. As we have seen there are government training institutions at most levels from management training to technician, to craft level. However, there is by no means a

government monopoly on training. There is a very strong private training world, some of it organised by particular professional and employer organisations; some of it by private colleges (whether face to face or by correspondence); and some by private consultancy organisations. There is every evidence that the private training world is continuing to expand, fuelled increasingly by the large numbers of young people emerging from the secondary school system and requiring some more vocational qu ification to assist them in searching for work. Across this large and very diverse provision of training, it is difficult to conceive of easy generalisations.

Finally within the government sector itself, there is not anything as simple as a single government training system. Not only are there training centres linked to many different ministries, but even within the ministries with which we have been closest concerned (Labour and Education), there have been major changes of responsibility for particular training institutions over the period of this research. Inevitably the different ministry traditions of education and training will affect the institutions which have been effectively transferred from the Ministry of Labour to the Ministry of Higher Education. These transfers have taken place at a time when there was the beginning of a real attempt to think through the relationships between the upgrade training facilities (which were inservice) and the new style training centres, such as Belvedere, which seemed likely to accept intakes that were pre-service.

So, in the government sector too, there are no easy recommendations to be made, based on existing trends in established centres. Almost all the institutional actors on the government side are in a state of transition, and thus their likely impact on the total training environment is hard to estimate. In the huge secondary school sector, for example, there are at least two separate conceptions at work which will need further clarification. There are the schools currently piloting a version of a more vocationally oriented curriculum, but many of the questions about the extent and depth of their vocationalism remain unclear. Then there are all the other secondary schools for which the ministry has suggested that there be a basic level of technological understanding, or in other words an acceptence that technology is an ordinary part of general education. Apart from the schools, there are important relationships between the technical colleges and industry to be worked out, as well as issues relating to the pre- and inservice functions of such institutions.

Principles and assumptions in training recommendations

When so many of the institutions charged with training are in transition, what may be appropriate are not a set of very specific recommendations about particular institutions, but rather a number of principles that may provide the direction for more detailed suggestions.

1. The inseparability of preservice from inservice systems of training.

The first principle evident in the study of training in Zimbabwe

is the dynamic relationship between the pre- and inservice modes of industrial and commercial training. These are not two quite separate subsystems, but are both very influenced by what happens to the other. Thus if the technical colleges and the recently commissioned Belvedere centre begin to take regular groups of school leavers for full time institutional training in the preservice mode, this will inevitably impact on apprentice numbers. Equally, if the process of taking on apprentices was greatly simplified, and many of the recent restrictions on employers' selection removed, that might encourage many more firms to take on young people. Which would in turn affect the planning of preservice training.

But we have argued throughout that deciding about the appropriate mix of pre- and inservice training is not a technical problem, to be solved by more careful studies of the labour market. It may well be the case, as a number of external agencies would argue, that vocational training should be as far as possible workplace-based rather than school- or institution-based. This tends to avoid wastage, and is of course dramatically cheaper, since the employer is contributing to the costs of training. But as both Ministers of Education have pointed out earlier in this study, training located in the workplace not only requires there to be places to work, but it also demands employer willingness to take on, and train school-leavers. Just as the expansion of secondary education was not the result of a calculation of industry's absorptive capacity, so now the expansion of training opportunities is not predicated on a narrow definition of

industry's current needs. With the numbers currently in the secondary schools, it is inevitable that a broadening of post-school training opportunities will be largely in the preservice mode. But both the investment in secondary education for all, and the expected widening of training opportunities for school-leavers are partly articles of faith. The assumption surrounding these programmes is that a better educated and trained workforce will be an important element in expanding industry, agriculture and commerce. But both ministries are acutely aware that the national investment in education and training is a gift that can go sour if there is no opportunity productively to employ or use the new levels of skill and knowledge. To change the metaphor to one that figures in a major seminar on Education and Employment sponsored by Zimbabwe in 1989, education can be seen as a 'time-bomb' if it results in very large numbers of young people engaging in 'low productivity, non-wage employment'. (Dag Hammarskjold, 1989).

2. Limits to encouraging high quality inservice training in labour surplus economies.

Another principle has become clear over the period of the first independence decade and that is that there are limits upon government's ability to influence patterns of training in industry. This is particularly because trained manpower can be produced in a large number of ways. For instance in the colonial period it was produced principally by immigration. In the early months of the Independence period it was widely thought that a radically altered apprenticeship system would change employers' discriminatory use of apprentice training. With the benefit of hindsight, it can be seen that the easiest element to change was

the racial composition of colonial apprenticeship, but the measures used to terminate that abuse may well have come close to terminating apprenticeship itself. Since the apprentice training system was by no means the only way to produce skilled labour, it was soon apparent that employers who had traditionally taken on apprentices were able to substitute alternative forms of training, including the new upgrade training provided by government. Others were able to profit from the abundant supply of better educated youngsters flooding out of school, many of whom were more anxious to get a foothold in a good firm, whatever the terms and conditions, than to secure an apprenticeship. At the very time that the apprenticeship contract was being fenced around with more and more regulations - many of them aimed to improve the quality of the training and the security of the apprentice, a very different kind of contract labour system was being adopted by many employers.

Other employers who had been accustomed to using the colleges for off-the-job training of their craft level workers found difficulties in securing places at the right point in their training schedules, and they too began to make other arrangements. And certainly there were other employers who sought to substitute technology for labour, when it became obvious that skilled labour might prove expensive to train, and, because of the new labour laws, difficult to shed.

In all of these different ways, it is apparent that over the decade Zimbabwean industry has been prepared rapidly to rethink

its approach to the training of skilled labour. Many new patterns and packages are already in place. Accordingly, as the decade comes to an end, and the government's own thinking on training policy is still not settled, there is no doubt that many industries have adopted new ways of training new workers. It is now imperative for government to understand these new initiatives, and equally it is imperative for industry to understand government's concerns to train very much larger numbers of young people than have hitherto been planned for.

We have argued throughout this account that apprenticeship figured too centrally in government's thinking about high quality vocational preparation. What has passed almost unnoticed in government determination to maintain apprenticeship numbers has been the emergence of what could be called 'a government apprentice'. This new style of apprentice really has the Registrar of Apprentices as his employer, and although he may be attached to a parastatal, there is some evidence that his status is closer to preservice than to inservice, in the sense that the government has persuaded certain firms to take on recruits surplus to the firm's requirements in order to obtain a good training environment.

3. Government's comparative advantage may be more with the small and micro enterprise sectors than with the large scale industries.

It was natural that government should seek first to deal with the large scale sector, since there were very clear anomalies in recruitment that needed to be sorted out. However, it might be

argued that too much attention has focused on both the apprenticeship system and on the ZIMDEV Fund, to the detriment of thinking about the potentially much larger numbers of young people who were beginning to enter the informal and micro-enterprise sector. Paradoxically, the government is in a much better position to influence training policy in the very small scale sector than it is in the large scale. Or, putting it rather differently, if the government's concern is with the mass of young people leaving school, then it is likely to be able more easily to affect the training and work environment in the informal and micro-enterprise sector than in the branch plants of multinationals. Arguably also, the large firms are already committed to training - the discussion is only about the mechanism to be preferred. Whereas in the informal sector, some positive initiatives by government could dramatically encourage this sector, and shape its growth.

We have said earlier that creation of places at secondary schools or in training institutions is generally much easier to achieve than the creation of jobs. The one exception to this may be in the micro-enterprise sector. Unlike the modern industrial sector where the capital required to create a single job is very large, the capital required to make a whole series of micro-industrial estates is very small. The suggestion here is not the creation of modern, small scale industries - which elsewhere in Africa have proved very problematic, and have involved considerable dependence on external donors. Rather it is the provision of secure areas on a site and service basis for the thousands of

young people anxious to make or sell some product, in very small work units.

This may seem a very mundane and ordinary development compared with large scale industries, but evidence from other countries would suggest that government policy can have a great deal to do with a positive environment for micro-enterprise. In this respect, the specifically training issues are less concerned with the systems of on the job training in the industries themselves. More likely the government can play an important role by encouraging access to training centres during the evening, and by making it possible for workers in small and micro industries to take trade tests. The business of facilitating the progress of small scale industry is of course concerned with a great deal more than the provision of easily accessed inservice training, but if the government is concerned to follow through on the democratisation of secondary education, then systems for updating skills and knowledge are an important mechanism for ensuring that the informal sector does not become something very remote and separate from the so-called modern sector.

4. <u>From competition to collaboration in the public and private training sectors.</u>

Another thread that has run through this account has been the very rapid development of private training, delivered through colleges and through distance training institutions. In some respects there has been an adversarial quality in the relationships between the public and private training sectors, but more recently it has been acknowledged that the roles of the public

and private sectors can be complementary, especially given the large and ever increasing demand for vocational and commercial qualifications by school leavers. Certainly some parts of the private sector are expensive, but many others are relatively low cost, especially the correspondence institutions, and it is clear that they are being used by many young people, both in the inservice and preservice modes. It is important to note that this includes young people who are working on their own account in the informal sector. In several ways, this low cost part of the private sector could well repay further research, for it seems probable that the correspondence sector could be a very valuable indicator of the demand for further qualifications from people located outside the main centres of population. The colleges could be encouraged routinely to collect information on the employment or self-employment status of their many thousands of trainees, since this would be a very useful addition to our knowledge of the profile of inservice training.

5. Industry-Government cooperation in inservice training.

A further theme, and perhaps the most important of all as a focus for recommendations, is the growth of cooperation between the government and the industrial and commercial sector on training provision. We have noted that there has been, in some measure, a history of suspicion and resentment on both sides, and particularly in respect of the apprentice training regulations, and the levy-grant scheme (ZIMDEV). More recently, however, there are indications of an awareness that the traditional mechanisms for education-industry liaison do need to be

strengthened. At this point, it is possible that Zimbabwe as a country with a stronger industrial base than many other African countries, and with very rich human resources, could profit from the example of several other middle income countries in Latin America, Asia and the Middle East, and could design a national training agency with the significant quasi-autonomous status of such institutions in these other regions. Such an agency, being neither part of a line ministry nor an extension of the employers' federation would be in a position to run the levy-grant operation, and organise education-industry cooperation at many different levels of the training system. There would certainly be merit in Zimbabwe exploring the potential contribution of such a national training agency. It could be especially valuable in developing coherent training policy at different levels, and for ensuring the collaboration of both private and governmental initiatives, as well as external assistance.

6. The contribution of external development assistance in the training sector.

One of the traditions of which Zimbabwe has been justifiably proud since Independence has been a reluctance to become dependent upon foreign aid in a sector as crucial as education and training. This is not to say that external donors have not been important since USAID, CIDA, French Cooperation, GTZ, SIDA and ODA have all made contributions at different times to parts of the technical and vocational training establishment. The absence of a single national body responsible for the articulation of training policy has however been a disadvantage,

and has meant that the donors have been aiding the development of a system whose parameters they did not all clearly understand. They can be in part excused for this, since there has not been readily available a national training policy document, to which their aid could be directed. The result has been that the contributions of the various donors cannot be easily assessed as part of a master plan. But now that higher technical and technological training are part of a single ministry, it may be anticipated that external donors will be able more readily to respond to a national analysis of training requirements.

7. Inservice training from the perspective of the users.

It may be appropriate to conclude this section on recommendations by returning to the clients of inservice education and training. Zimbabwe has had a long history of workers seeking to improve their general and professional qualifications through their own efforts and their own finance. This tradition of self-improvement is a very positive one, and ideally it is something that needs to be understood and acknowledged by agencies - whether governmental or industrial - that are developing structures of inservice training. However rapidly government moves to provide an infrastructure of colleges and training centres at the post-secondary level, it cannot be expected that more than a fraction of the tens of thousands leaving schools can be accommodated on government or industry schemes with all their costs covered. The very great majority in the future as in the past will seek to arrange and finance their own preservice and inservice courses. And in relation to this huge clientele, the

government's role will chiefly be to ensure that courses are available at prices and at times that young workers can manage. The authorities will need sensitivity to monitor the financing of courses, so that a gulf does not develop between a very small number of trainees for whom all costs are covered through ZIMDEV or other funds, and another group, very much larger, which has to find all the costs of its training.

At different points throughout this document we have noted the complexity of provision, the difficulty about knowing what courses were available, how to gain an apprenticeship, how to get access to direct entry training in the colleges etc etc. What would appear to be lacking is a simple directory that could be used in the later years of secondary school to indicate to would-be leavers the nature of provision and routes into the various courses that are offered. To be useful this would need to be updated each year, and ideally might indicate the relationship between the number of places and the number of applicants in the previous year. Such an inventory would be an important element in any attempt to democratise the area of training, and it would be particularly appreciated by those who are located in the small towns in the rural areas, as well as the many young people who are working on their own account but who wish to continue their education, and gain professional qualifications. For Zimbabwe to become the learning society it aspires to be, an efficient inservice training system will be essential. The foundations of such a system exist, but the major providers in government, industry and commerce need to discuss their collaboration in

support of it, and the major users need to be made aware of its scope and variety.

Kenneth King, 1989.

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2. Crown Agents and Coopers Lybrand, Management Study of the Central Mechanical Equipment Department. Draft Report in 4 Volumes, vol. 1(Nov. 1983), p. 1.

3. Ministry of Manpower Planning and Development, National Manpower Survey 1981, vol. 1 (Harare, July 1983).

4. Ibid., p. 37.

5. Ibid., p. 63.

6. The actual apprentice numbers are more complex than what is suggested here. In colonial Rhodesia, the Apprenticeship Authority was seeking to expand numbers, but in fact other pressures (from white unions) were keeping them down to often less than 1000. Numbers did move up significantly at Independence, but by the mid-1980s they were down to not much above the older Rhodesian figures.

7. Figures are derived from annual registers of new apprentices, Directorate of Industrial Training.

8. Functional Planning for NVTDC Harare Training Sections in Msasa and Belvedere (Harare, July 1983) and Training of school leavers at NVTDC Harare: Course structure (Harare, 1987.)

9. Ministry of Manpower Planning and Development: Model Vocational Training School: Proposal (n.d.) p. 1.

10. Altogether three other potential VTS schemes (all church related) were planned to become VTSS in 1987: Marist Brothers in Dete; St. Columba's Bulawayo; and Ziva Zano in Honde Valley (to which we refer in the text).

11. See the memoranda from the Zimbabwe Manpower Development Fund of 1984, 1985-6, and 1986-7, on rebates.

12. Data derived from the register of trainees for whom successful applications were made from ZIMDEV.

13. Memorandum on Approved Training Eligible for Rebates, 1985-1986 (Zimbabwe Manpower Development Fund).

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