ABSTRACT

A divergence between ideals and practice has been a characteristic feature of polytechnic development. The polytechnics originated as a 'non-formal' educational initiative, aiming to provide training opportunities to primary school leavers relating directly to the practical skill requirements of local farmers and artisans. They were to be local institutions created through community initiative, based mainly on local resources and controlled by local representatives through management committees. However, the displacement of these goals has been a major and recurrent theme in reports on polytechnic development, with complaints about the neglect of agriculture in polytechnic training, the formalisation of curriculum and assessment, a limited orientation to local self-employment, and weaknesses in management and in particular the limited role played by many Management Committees. It has been claimed that the polytechnics have lost direction and in general suffer from poor status and low morale. Recent Aid Agency reports have reasserted the relevance of the programme's original ideals in providing polytechnics with a new sense of purpose and direction. In this paper, however, it is suggested that such policy prescriptions have had little impact and may even be counter-productive. It is suggested that a reassessment of aims is long overdue, given the cultural realities within which polytechnics must function. The paper considers the clash of ideology and culture in the areas of curriculum, assessment, self-employment and local control. It suggests that the 'neglect' of agriculture, the orientation to trade tests and paid employment, and the tendency to expect Government to 'take over' from the Management Committees, reflect cultural pressures which cannot be discounted in prescribing policies for the polytechnics. In particular it is argued (1) that instead of emphasising agriculture as central to the polytechnic curriculum, a much more selective approach is appropriate (2) that rather than stressing curricular flexibility in individual polytechnics, flexibility could be sought on a district basis (3) that rather than rejecting certification outright, a more relevant and effective form of assessment for the polytechnics is required (4) that in some respects an orientation to paid employment is more realistic for polytechnic leavers than an orientation to self-employment (5) that instead of expecting Management Committees to play a central role within the present policy framework, steps could be taken to develop a more active District focus. Taken together, these points suggest that fairly substantial reassessment of the role and objectives of the polytechnics is required.
In general terms, the village polytechnic programme was a response to the problems of youth unemployment or underemployment in rural areas of Kenya. The polytechnics were to help to plug the gap between the number of primary school-leavers and the inadequate level of opportunities in education, training or employment. The National Christian Council of Kenya Report 'After School What?' had expressed concern over the lack of training opportunities for Kenya's rapidly growing population of primary school leavers, the vast majority of whom were unable to progress to secondary schooling. The Report had suggested that these youngsters typically lacked the experience and skills which would allow them to contribute significantly to their own and their family's survival. In the absence of rural opportunities, youngsters were being tempted to Kenya's cities in search of work; yet statistics readily verified that the pace of employment growth in the economy's 'modern sector' in no way kept pace with the expanding number of job seekers. The migration of rural youth exacerbated the social and political problems of Kenya's cities, while urban bias distorted the path of development and reduced the prospects of rural progress. Amongst other recommendations, the NCCK Report proposed the introduction of rural institutions which would provide training in practical skills and encourage youngsters to remain in and contribute to the development of their own areas. This proposal was endorsed by the Kericho international conference on education held the same year, and the NCCK proceeded to establish four 'village polytechnics', thereby launching a programme which over the following two decades has led to the creation of several hundred polytechnics in Kenya (NCCK 1966).

The polytechnics were conceived as a training programme and training opportunities formed the core of polytechnic provision. But what kind of training? And how was it to be provided? In these respects, the polytechnic programme bore the hallmarks of its origins in the mid/late 1960s. This period witnessed the onset of disillusion with formal education as a means of either economic investment or social reform. It was fashionable to argue, as one analyst later put it, that 'the formal education system in poor countries has palpably failed to provide relevant skills, knowledge and attitudes at acceptable cost; the formal system was castigated as playing 'an important part in hindering progress towards development goals and in exacerbating the problems of rural stagnation and urban unemployment' (Simkins 1977). Attention focussed on 'non-formal' methods which
offered apparently cheaper and more relevant alternatives, especially to those who failed to benefit from formal education. A review by Coombs and Ahmed of non-formal methods of 'attacking rural poverty' gave official blessing to this approach (Coombs and Ahmed 1974), and the village polytechnic initiative itself lent impetus to this changing intellectual climate. For a time, the polytechnics were frequently cited and discussed as an interesting example of the non-formal approach (Court 1974; Kipkorir 1975; Simkins 1977).

From the outset, the polytechnic programme was conceived as a 'non-formal' initiative which would offer rural youngsters opportunities denied them by the formal system. The polytechnics were to be small-scale, unpretentious institutions orientated to local communities and largely based on local resources. They were to provide low-level training in modest buildings at modest fees, in ways which related directly to the practical skill requirements of the local farmer or artisan. To ensure local relevance, the training programme was to be flexible and adaptive, avoiding the structured forms of curriculum, assessment and certification associated with formal schooling. Agriculture was to be a central component of the curriculum, while training in non-farm skills was to create a versatile artisan who could respond to the varied demands of rural life. In practical terms, this implied an interdisciplinary curriculum, whose content and length would vary with the requirements of the individual trainee.

A further characteristic of the 'non-formal' approach was its emphasis on self-reliance and local control. Polytechnics were to be local institutions, created by community initiative, based on local resources and controlled by local representatives through management committees. The polytechnics were to be agencies of local development, partly by creating skills and producing goods and services at a quality and price appropriate to local demand, but also by initiating new techniques and generally providing centres for community learning. The polytechnic could act as a catalyst for change by contributing directly to the improvement of local infrastructure and productive activities. These characteristics were neatly captured in the title of the new agency, with 'polytechnic' implying training across a range of practical skills, and 'village' expressing the centrality of the community dimension.
By 1985, when at the suggestion of President Moi the 'village' became 'youth' polytechnics, some 320 polytechnics had been officially recognised by the Kenyan authorities and were in receipt of Government assistance, mainly in the form of grants for staff salaries. A further unspecified number of polytechnics received no government aid, relying entirely upon a variety of other income sources including trainee fees, earnings from goods and services provided to the local community, funds raised through local harambee and support provided by local sponsors or the aid community. Polytechnics ranged in character, from the very small-scale, with perhaps a handful of trainees, the most elementary equipment and no workshops or accommodation, to fairly substantial establishments with many trainees in several trades, a variety of workshops equipped with a range of tools and materials, some staff accommodation and perhaps even some dormitories for trainees. The Government assisted polytechnics typically offered a number of two year courses in individual trades and crafts, of which carpentry, masonry, dressmaking and home economics were ubiquitous, while others such as plumbing, leatherwork or vehicle maintenance depended more on local conditions or the maturity of the polytechnic.

Though information about the polytechnics is limited, and generalising about an institution of considerable variety is hazardous, the polytechnics have attracted a fair amount of attention and comment. Early evaluations were concerned with the difficulties of establishing the polytechnics as a distinctive educational alternative, warning of the dangers of subordination to the prevailing educational system and in particular of the dangers of excessive formalisation within the polytechnic curriculum (cf Court 1974; Kipkorir 1975). Later reports have focussed on a variety of problems afflicting the polytechnic programme, some of which are listed below:

- Shortage of resources - tools, workshops, accommodation.
- Problems of recruitment, as polytechnics have increasingly recruited from further afield and higher age ranges.
- Poor staff conditions and inadequate staff training and low morale.
- Curriculum issues - in particular course standardisation and inadequate training in agriculture.
Assessment issues - in particular the orientation to certification amongst polytechnics.

Problems of efficiency and poor internal management.

Uneven performance of polytechnic management committees.

Excessive control by government authorities.

Limited local orientation amongst polytechnics.

Lack of post-training support, and the limited local self-employment amongst polytechnic leavers.

Of these problems, probably the most pressing and the most intractable are those concerned with resources and management, as polytechnics struggle to provide an adequate training often with pitifully inadequate funds and facilities. In some polytechnics, this may mean 30 trainees sharing a single sewing machine, with dressmaking instruction based on paper cutouts because material is unavailable; lack of tools and materials is a common barrier both to polytechnic training and to post-training support. Instructors with little experience and no qualifications may have to instruct first and second year classes, often composed of trainees of different ages and levels of skill, and frequently combining workshop training with on-the-job supervision. To function effectively, Government Assisted polytechnics must try to balance the costs of training against an income derived from fees, contract work and sales, with the major capital and current expenditure depending mostly upon government grants supplemented by sponsorship and local fundraising. In adverse circumstances, the polytechnics have contributed skills and services to their local communities. In conditions which are far from easy, the initiation and expansion of the polytechnic programme therefore represents a major and impressive achievement. At least one report could conclude that 'polytechnics are fulfilling a need and most of them are doing so effectively' (Ferguson & Barker 1979) despite the formidable difficulties that many of them confront.

If these problems and achievements are readily acknowledged, the price the polytechnics have paid for their survival and growth has provoked much critical concern. Displacement of goals has been a major theme in reports of polytechnic development, with the polytechnics failing to live
up to the original aims of the programme in several major respects. According to Loubser, writing of the early 1980's:

'There is concern in the aid community about the current state of confusion about the structure and direction of the village polytechnics, the increasing formalisation, the lack of interest in agriculture, and the orientation toward employment rather than self-employment. One of the main concerns is that the village polytechnics will lose sight of their original purposes to provide skills that are in demand in their local areas and thereby stem the tide of migration to the towns and cities' (Loubser 1983).

The Aid Agencies involved in the polytechnics formed a forum in 1982 with the aim of restoring to the polytechnics their original sense of direction and purpose. This intention was most clearly expressed in the Action Aid Report, which drew a series of sharp contrasts between how polytechnics were functioning in practice and 'how it was supposed to be'; there followed a series of recommendations designed to bridge the gap between principle and practice (Action Aid 1982). Similarly, the later DANIDA report found the original concept of the polytechnic - as a nonformal, non-institutional agency which would be practically and locally orientated, adaptive and innovative, decentralised and participative - was far from being realised; again, there followed some recommendations to restore an orientation to informality, self-reliance and locality amongst the polytechnics (DANIDA 1985). The main complaints of the Aid Agencies have been directed against the neglect of agriculture, the formalisation of curriculum and assessment, the marginal impact polytechnics have had in creating rural self-employment and reducing migration, and weaknesses in management and in particular the limited role of the Management Committees. The Action Aid Report, while acknowledging that the polytechnics were offering services essential to local communities, nevertheless warned that their aims were not being fully realised, because of confusion over policy and responsibilities, low morale and lack of flexibility. DANIDA also complained of a lack of 'aims consciousness' amongst staff (DANIDA 1985). Amongst recommendations to restore a sense of direction and purpose, the aid agencies proposed:

- Greater decentralisation of authority to polytechnics.
- Greater flexibility in the training offered.
- More attention to agriculture.
Encouraging the formation of work groups.

More emphasis on experience and skills rather than certification.

The development of a 'work' rather than 'school' atmosphere in the polytechnics.

The general orientation adopted reflects on a more or less explicit re-assertion of the values and assumptions upon which the polytechnic programme was first initiated.

A gap between rhetoric and reality is a common enough feature of policy development, but the divergence between policy prescription on the one hand and polytechnic practice on the other seems to have been an especially striking and persistent characteristic of the polytechnic programme. Policy and practice have continually been at odds, with policy presenting a set of prescriptions bearing questionable relation to what polytechnics actually do, while practice has been governed largely by prevailing pressures and constraints. Insofar as policy has influenced practice, its impact has been limited, and at times, perhaps, even counter productive. In this paper I shall suggest that this characteristic is rooted in an underlying conflict between ideology and culture, with the polytechnics inhabiting a world in which ideological prescriptions clash with cultural values to produce some awkward dilemmas for those concerned with developing the polytechnic programme.

Ironically, this perspective is inspired by another report published in the mid-1960's, 'Development Projects Observed', by A. Hirschman, published by the World Bank shortly after the initiation of the polytechnic programme (Hirschman 1967). Hirschman had been commissioned to examine a variety of development projects sponsored by the World Bank, and in his report he drew attention to a variety of significant but neglected conditions which influenced, often decisively, the performance and outcomes of projects. Hirschman complained of a tendency to overlook or simply discount the ways in which a project might be affected by unfavourable factors, including those in its cultural environment. Projects were often based, he suggested, on premises about desirable cultural change, without sufficient attention either to the prospects of such change occurring, or to how this might be achieved. He complained of a serious and systematic neglect of an area that
can be crucial to the performance of a project (Hirschman 1967). Hirschman suggested that all projects must involve some compromise between accommodating to and trying to change the prevailing cultural traits, and suggested that more heed should be given to striking an adequate and realistic balance between these possibilities.

Hirschman's observations provide a useful point from which to reassess the problems and dilemmas of the polytechnic programme. Given the persistent gap between policy prescription and polytechnic practice, some such reassessment seems long overdue. Some of the main areas in which polytechnic performance has been deemed disappointing are the formalisation of the curriculum, the dependence on certification, the marginal impact on self-employment and the limited role of the management committees. Let us look at each of these in turn, first to consider how conflict between ideology and culture has contributed to the divergence between policy and practice, and then to consider the problem of striking an acceptable balance between accommodating to and changing the existing cultural constraints. This 'reassessment' is based in part on a study of eight polytechnics which I undertook in the autumn of 1985, in addition to the evidence of previous reports (Dey 1985).

THE CURRICULUM

From their inception polytechnics have been regarded as a means of providing a relevant and adaptive form of education beyond the confines and constraints of the formal system. To youngsters unable to continue with formal schooling, the polytechnic programme could offer a non-academic training, based largely on productive activities, and in skills directly related to local income-generating opportunities. This ideology has been a recurrent theme underlying aid agency policy prescriptions, which have continually emphasised the need for greater flexibility in polytechnic provision (Ferguson & Barker 1979, Migot-Adholla & Owiro 1980; Action Aid 1982; DANIDA 1985). A recurring complaint has been that polytechnics have tended to develop along standardised lines and failed to offer the range and variety of skills which might be expected of a flexible and locally adapted institution.

Apart from the ubiquitous provision of some courses, already noted, suggesting a somewhat limited sensitivity to local conditions, evidence suggests that the polytechnics are 'expansionary' rather than 'responsive'
Institutions: courses are added to but seldom withdrawn. In my own study, examples of course withdrawal were very rare, and future development was invariably defined in terms of more rather than different courses. This was so even where polytechnic leavers were having difficulty in finding local opportunities in their trade. None of the three social development officers I interviewed could cite an example of a course withdrawn in favour of another because its training potential was exhausted (Dey 1985). But lack of flexibility may reduce the chance for youngsters to utilise their skills locally; and oversupply may also exacerbate local competition and reduce a polytechnic's income generating potential. Although data on how leavers utilise their skills is notoriously unreliable, there is some evidence to suggest that local opportunities in trades like carpentry and masonry are exhausted, at any rate in some districts (Ferguson & Barker 1979, DANIDA 1985).

Apart from what is taught, there is also evidence of inflexibility in how skills are imparted. In my study, all the polytechnics had developed a rather rigid course structure. Teaching was organised almost entirely on the basis of two year courses in particular subjects; courses were almost invariably full-time, limiting accessibility and precluding a combination of training with part-time work; opportunities for sampling subjects or transferring between courses were very limited; and opportunities to take subjects in combination were also limited, although a combination of skills from different subjects would seem more relevant to rural income generation than specialisation in traditional trade divisions (Dey 1985). Along with a fairly rigid course structure, many polytechnics have adopted some of the style and trappings (classroom instruction, uniforms, dormitories) of the formal system (Loubser 1983).

One obvious explanation of why practice has diverged from prescription is the problem of resources. The two year course structure is probably well enough adapted to limited polytechnic finances: a more flexible approach would almost certainly place heavy strains on the organisational and teaching capabilities of the polytechnics. The relatively low cost in skills and equipment of some trades may help explain their popularity, while fixed investment in workshops and equipment and staff immobility may also explain the difficulty of withdrawing courses.
Underlying the resource issue, however, is the problem of the cultural position of polytechnic training and of the polytechnics themselves. An agency offering an elementary training at low cost to those who have 'failed' to proceed to secondary or further education inevitably suffers from low status. This finds expression in a variety of forms, not least in the poor conditions and low morale of polytechnic staff, the limited resource commitments undertaken by Government, and the difficulties in securing finance through local fund-raising. In this context, self-reliance inevitably condemns polytechnics to a level of funding insufficient to support the innovative and responsive approaches that ideology prescribes. It is not surprising, on the other hand, to find polytechnics aspiring to the educational structure and style associated with higher status: it is a well known characteristic of educational institutions that, regardless of their 'proper purpose' as it were, they are heavily influenced by institutions which enjoy greater preeminence than themselves in the educational hierarchy.

Court and Kinyanjui have recently commented on the persistence of high demand for formal education in Sub-Saharan Africa (Court and Kinyanjui 1985), and this certainly the case in Kenya, with its traditional emphasis on formal schooling as a route to qualifications and paid employment. Vocational education, by contrast, has suffered from its associations with the racially divisive policies of the earlier colonial period. An approach centered on training as a means of improving skills and productivity within the family and rural environment has to compete against a cultural emphasis on academic education as a route to qualifications and secure employment. This cultural stress on formal education inevitably finds expression within the polytechnics, through the medium of communal aspirations and parental and trainee pressure. Perhaps the most dramatic example of this is to be found in the fate of agriculture, supposed to be the lynchpin of the polytechnic curriculum.

Far from being central, agriculture has achieved only a marginal position within polytechnics, often being taken as a minor compulsory component subsidiary to the main subject studied. In my own study, agriculture as a full-time course was offered in only two of the eight polytechnics, and taken by only six trainees in all (Dey 1985). In the only case I came across where agriculture was accorded a central place in the curriculum, the very survival of the polytechnic had been placed in doubt because
Dependent on recruitment for fees and for continuing Government support, it is not surprising that polytechnics putting agriculture to the centre of their activities are hard to find. According to the Action Aid report, children tend to discount agriculture 'as a possible career', the subject's low status being reinforced by its neglect within the educational system (ACTION AID 1982). The Report attributes the neglect of agriculture to traditional values which accorded low status to working on the land (embodied, for example, in its traditional use as a method of punishment), sustained by institutional inertia (reflected, for example, in the absence of agriculture from the primary school curriculum). This implies that cultural evaluations of agriculture are based on misconceptions derived from historical conditions which no longer apply, and sustained by institutional practices which are no longer appropriate. However, it seems likely that popular conceptions which are dismissive of 'agriculture as a possible career' are rooted in contemporary cultural and socio-economic realities. One can presume that a 'career' in agriculture offers less prospect of income, security, status and opportunity than alternative forms of economic activity. This explanation is sufficiently plausible that one can dispense with the invocation of historically conditioned and institutionally reinforced misconceptions (cf Kinyanjui 1979). One can also presume that these attitudes are especially pronounced amongst polytechnic leavers, whose interest in training is probably inspired precisely by a desire to escape from a 'career' in agriculture! (cf Ferguson & Barker 1979).

Thus an ideology which stresses flexibility and relevance (i.e. agriculture) runs into conflict with countervailing cultural pressures producing rigidities and formalisation. Policy prescriptions predicated upon ideology without acknowledging the cultural context in which polytechnics find themselves are in danger of being irrelevant or impractical. Perhaps this is why exhortations to eschew formalisation or to concentrate on agriculture have had so little impact on the polytechnics. These prescriptions may be, in Hirschman's phrase, 'sterile trait-changing' (Hirschman 1967), but this implies a significant degree of cultural change without indicating how this can be accomplished. Perhaps it has been assumed that cultural change is inevitable given the economic 'realities' of school-leaver unemployment and of dependence on agriculture. It is more likely, though, that severe competition for employment will increase rather than reduce the demand
for formal education (cf Court & Kinyanjui 1985). Nor is it clear that polytechnic training provides the most effective means of fostering agricultural skills and productivity. Apart from the overriding importance of land reform and investment in determining production, doubts have grown about the efficiency and effectiveness of both vocational and 'non-formal' training (Court & Kinyanjui 1985). Loubser, for example, follows King in suggesting that informal non-institutional training based on the rural artisan community may be more effective in providing appropriate skills than institutional approaches such as polytechnic training (Loubser 1983). One might also question the wisdom of offering a training in agriculture to school-leavers whose main interest is in trying to find other methods of generating an income. This may apply even to those orientated to remaining within the locality, for Kongstad and Monsted noted extensive supplementation of agricultural production through income from non-farm activities in their study of Western Kenya (Kongstad and Monsted 1980). Even if most school leavers and up dependent on agriculture one cannot infer from this fact that this will be true of polytechnic leavers in general or any individual in particular. Given the prospect (however slight) of achieving something better, surely only time and experience, rather than education, will convert the ambitious and adventurous youth into the sober and realistic farmer? It is also interesting to note the argument from Collier and Lal that income transfers from urban migrants may have played a crucial role in fostering agricultural innovation in Kenya (Collier and Lal 1980), partly perhaps because Kenyan family and communal ties effectively transcend the boundaries between land and city (cf King 1977). The 'realities' are not so clear-cut after all, and one must be sceptical of any presumption that cultural pressures for formal education will change.

This suggests, therefore, that some kind of balance must be struck between policy ideals and cultural realities. At the moment, polytechnics have been asked to do the impossible, with dubious results. Thus agriculture has been incorporated as a compulsory component in the curriculum of many polytechnics, but its status remains low, the quality of training offered is very variable, and its impact, constrained by scarce resources and lack of expertise, must in many cases be marginal if not counterproductive. The polytechnics have been caught between conflicting ideological and cultural pressures, and the consequence has been a diffusion of resources and commitment. Given variation in economic circumstances and in cultural attitudes
to education and migration (cf Konstad and Monsted 1980) a more selective approach, emphasising agriculture only where appropriate to local conditions, and concentrating resources and expertise to ensure a satisfactory standard of training, would seem to promise more satisfactory results.

As for flexibility, the polytechnics have been pressed to develop a more adaptive approach by undertaking research into local skill requirements. But a full-scale survey of local demand is a substantial undertaking given the limited resources available to most polytechnics. Nor is it clear how the results can be used. A demonstration of the ILO's Community Profile Survey indicates the difficulties of applying such research. A survey for Katito Youth Polytechnic reviewed opportunities and manpower requirements in the locality and recommended skills training in the following areas: electrical, plumbing, metalwork, leatherwork and tannery. The polytechnic, meantime, was providing courses in the traditional subjects: masonry, carpentry, home economics and tailoring/dressmaking. Clearly the survey can provide a valuable information base for evaluating polytechnic activities, but whether it can in itself secure greater flexibility is more doubtful.

In the Katito survey, the shortage of skilled manpower in watch, radio and shoe repair, motor and agricultural mechanics, leathercraft and plumbing justified recommendations for new courses. However, the availability of local skilled manpower in the traditional trades was conveniently overlooked and the survey made no recommendations regarding the traditional courses beyond a few suggestions to improve their income-generating potential (Dey 1985). Obviously it is more acceptable to recommend the introduction of new courses than the cessation of old ones, and although the CPS may introduce new and valuable information its use may still reflect the rules of the game, including the existing constraints on flexibility. There is little point in advocating a heavy investment of limited resources in information gathering if the prevailing pressures prevent its effective utilisation. A more limited appraisal of opportunities and courses may be more realistic, while at the same time steps could be taken to improve flexibility within the existing course structure. Apart from diversification within the present course framework, this might involve encouraging cooperation between polytechnics, allowing specialisation to develop within districts at the expense of distinctively 'local' provision. Compromises of this sort seem inescapable, but are unacceptable only if local relevance and adaptability are regarded as somehow sacrosanct, discounting the pressures for
training in skills which will have relevance outwith as well as within the immediate locality.

ASSESSMENT

Closely connected with curriculum issues is the question of assessment. The formalisation of the polytechnic curriculum has been reflected in a widespread orientation to formal assessment and certification of trainee skills, mainly through the medium of the Ministry of Labour trade tests for particular crafts. This is a marked departure from the original ideal, in which training was to be geared to acquiring income-generating skills rather than formal qualifications. The trainee was to acquire skills through working 'on the job', in the process helping polytechnic acquire an income through providing goods and services to its locality. The skills thus acquired could be tested through their market-ability: the proper test of a polytechnic training was to be found in the purchase of the product rather than in any formal assessment or certification of skills. Formal assessment could lead away from an orientation to local production and self-employment and therefore could 'endanger the fundamental idea' (DANIDA 1985) of the polytechnic programme.

However, the ideology of non-certification has run into conflict with the same cultural pressures as those affecting the curriculum. The demand for qualifications is high, in Kenya particularly so (Loubser 1983). These pressures have proved irresistible, and a substantial proportion of polytechnic trainees take the Trade Test if it is available in their particular subject. Thus all the polytechnics in my study were orientated to Trade Tests, and the only issue was whether all trainees in a subject presented for the Test or only those thought likely to pass (Dey 1985).

Although the ideology of non-certification is far from being realised, it has had some impact on polytechnic practice. The fiction of non-certification is maintained in the refusal to contemplate a regular form of assessment related to polytechnic requirements. It finds institutional expression in the absence of any formal assessment within the polytechnics, which provide leavers with a document indicating, but not assessing, the skills which they have acquired through training. Formal certification of skills is a matter supposedly left to the individual trainee, who
must apply for a Trade Test conducted under the auspices of the Ministry of Labour. In practice, though, this can only be described as a polite fiction, as the polytechnics commonly pursue certification for trainees as a valuable outcome of training. While this allows ideology and practice to be reconciled, the price is dependence on an unsatisfactory system of assessment. The Trade Test has been subject of such serious criticism that the DANIDA report rejected it outright as a measure of the efficiency of polytechnic training (DANIDA 1985). In my own study, the Trade Test was criticised by polytechnic managers and staff as both inappropriate and ineffective. The Test was thought to bear little relation to the range and depth of skills which trainees require in order to 'earn a living'. Complaints were also directed against poor conditions attending the examination, and arbitrary and sometimes corrupt assessment on the part of examiners (Dey 1985). In combination, the various criticisms implied a loss of faith in the Trade Test as a fair and reliable method of assessment.

Maintaining the fiction of non-certification, therefore, exacts a price through the polytechnics' dependence on an inadequate and inappropriate form of assessment. Ideology demands that the polytechnics be in the forefront of change towards a more relevant and skill-related educational system, but if this is equated with non-certification then in practice the costs are borne (or refused) by youngsters denied the status associated with formal qualifications. Yet those supposed to benefit from polytechnic provision have been 'failed' in more ways than one, for they lack qualifications as well as skills, and training which offers them one without the other accepts their relegation to the bottom of the status hierarchy. It does seem politically naive and ethically unacceptable to deny youngsters qualifications which might open the door (if only a little) to wider opportunities. Do polytechnic trainees not deserve a 'second chance'? Even Aid Agencies have, on occasion, doubted the wisdom of rejecting certification outright (cf DANIDA 1981).

As Simkins has argued, education is inescapably involved in allocating status as well as imparting skills (Simkins 1977). A better balance between cultural trait-making and trait-taking, therefore, might be to accommodate to cultural pressures for certification while seeking a more appropriate system of assessment. There seems to be no a priori
reason why a training relevant for local income generation should not provide qualifications which permit trainees to acquire appropriate skills and compete for wider opportunities. There has been some recognition in recent years of the potent role which assessment can play as an instrument of educational reform (cf Court and Kinyanjui 1985). More internal assessment, and an achievement based approach, might go some way to meeting the fears of critics who stress the distorting and demoralising influence of certification. Some such accommodation seems desirable if, as Kipkorir has argued, the polytechnics do not and cannot dispel the 'magic' of certification (Kipkorir 1975).

**SELF-EMPLOYMENT**

An orientation to self-employment is a powerful plank in the ideology of the polytechnic programme. The programme is supposed to train 'job creators' rather than 'job seekers' (DANIDA 1985). Given the statistical gap between the growth of jobs in the formal sector and the numbers of school leavers seeking work, it is assumed that self-employment provides the only realistic alternative for many youngsters, who in the absence of paid employment must somehow learn to generate their own incomes. Self-employment is also valued as a means of job creation and of community development. According to Kipkorir, trainees are encouraged to determine the needs of the community and then to design and construct products to meet those needs (Kipkorir 1975). Training is orientated to producing tangible results since technical skills alone do not create jobs (Kipkorir 1975). Polytechnics therefore incorporate a degree of elementary business training into the curriculum. Self-employment is then the logical conclusion to training, while the identification and satisfaction of local needs contributes to rural development. The community acquires the skills and exploits the resources required for satisfying its own needs, thereby fostering progress while protecting the rural economy from penetration and outside exploitation.

The image of the self-reliant community producing to satisfy its own requirements is a potent one, but it bears little relation to the realities of Kenyan development. Evidence suggests that fierce competition limits opportunities for self-employment and reduces its potential as a
force for rural development. Kongstad and Monsted in their study of non-farm activities in Western Kenya suggest that sharp competition and sluggish growth are the main characteristics of rural enterprises, mainly because of the impact of competition from urban industry and industrial goods. Thus aggressive marketing by large-scale manufacturers has undermined the position of shoemakers and tailors, while a combination of imported hoes and jembes preferred for their better quality and longer life, and access to scrap metal enjoyed by urban petty producers, has undercut the position of metalworkers who were once common in the smaller rural markets. On the other hand, the pace of mechanisation has been too slow to create a market for local maintenance and repair work (Kongstad and Monsted 1980). The overall impression of stagnant or declining business is reinforced by Carlsen's study of economic and social transformation in Kisumu, in which he found the majority of the rural enterprises were stagnant, low productivity enterprises which hardly able to produce a surplus (Carlsen 1980). Carlsen suggests that the rural non-farm sector seems more significant as a source of income to poor rural households through low productivity and low income jobs than as a means of productive employment and accumulation. The non-farm sector can provide better incomes than most agricultural activities, and average incomes of all self-employed and employed in the non-farm sector even compare favourably with the urban sector; but it is as a source of income and cheap consumer goods rather than as a vehicle for accumulation and development that the sector benefits the rural community. The income opportunities available are restricted by fierce competition, and overall the impression is of low productivity activities of a 'defensive' nature, orientated to survival, rather than of entrepreneurial innovation and development (Carlsen 1980).

Polytechnic leavers are particularly disadvantaged in these fiercely competitive rural markets by their youth and inexperience, while the severe shortage of capital and credit precludes the acquisition of tools, materials and premises. The prospect of youngsters with an elementary training, little if any capital, limited experience and negligible business skills making a contribution to local development through entrepreneurial activity seems rather fanciful. In such a hostile environment, cultural pressure to seek rather than create jobs is readily understandable. The evidence suggests that many trainees are indeed orientated to and subsequently seek paid employment, with only a small minority taking up some
form of 'self-employment' (Ferguson and Barker 1979; Caplen 1980; DANIDA 1985). Nevertheless the polytechnics have remained wedded to self-employment as an ideal, and the predominant policy response has been to preserve the principle of self-employment by pursuing the creation of leavers' work groups. This approach has been widely canvassed, and has been given practical expression in the formation of production units for leavers in some polytechnics, as well as a variety of schemes for assisting with tools and expertise. As well as permitting a pooling of scarce resources, in theory the workgroup can provide a means of supporting and supervising leavers to help offset the problems posed by youth and inexperience. But this policy seems to have been more effective in maintaining the self-employment ideology than in providing practical support to leavers. Amongst the polytechnics in my study, there were some examples of leavers collaborating on an informal basis, but very few of work groups based on a formal footing, with an established management structure and proper procedures for finance and allocation of work. As a species, it would appear that work groups belong to the past or future rather than the present; those in the past having recently folded, and the others having just started, or waiting only for order, contracts, tools and materials in order to begin! Most work groups seem destined for a short life, for where the severe shortage of capital, contracts and experience does not preclude a start altogether, then poor management, trainee self-interest and disputes over finance and work allocation may hasten an early end (Dey 1985).

It is something of a paradox, therefore, to find the workgroup presented as the key which will unlock the door to self-employment. Its appeal to trainees can be understood, perhaps, as an idealistic venture which projects the friendly and protective environment of the polytechnic into a difficult and uncertain future. But as one instructor suggested, these dreams tend to dissolve into thin air on departure into the real world of scarce resources and fierce competition. That the polytechnics, the Aid Agencies and Government should place their faith in such a chimera seems less explicable. Apparently there is faith in a technological 'fix', based on the provision of tools and credit, and discounting the problems posed by lack of experience, status and effective training, as well as an ingrained cultural individualism (King 1977).
The preoccupation with self-employment, then, is not based on a realistic assessment of either opportunities or potential, and training suffers as a result. According to Carlsen, rural development in Kenya will depend on agricultural production and increasing rural incomes; lack of entrepreneurial skills is not a limiting factor, and investment in such skills is both expensive and likely to result merely in promoting some producers at the expense of others (Carlsen 1980). At present training in the polytechnics is probably highly inefficient, since an attempt is made to provide an elementary business training (in costing materials, pricing a product etc) to all trainees. Loubser by contrast advocates the adoption of an intensive internship scheme to provide an effective training in business techniques (Loubser 1983). Such an approach raises questions of equity in the allocation of polytechnic resources, and as we have seen Carlsen suggests that such investment may be pointless as well as expensive. But at least a more selective approach recognises that opportunities for self-employment are limited and that its impact on rural development is at best uncertain. This would allow polytechnics to adopt a more positive approach to other outcomes of training, in the form of paid employment and petty production. This in turn might go some way to reducing the male bias inherent in allocating resources mainly to the traditional artisan trades and allow a greater allocation of resources to training in female activities, which are concentrated predominantly in petty production and paid employment. The present bias to male trades is rather ironical, since female trainees are less likely to seek qualifications rather than skills, or to use their training as an escape route to the city - they are more likely to employ their skills directly, and assume a central role in agriculture and in social development. The ideology of self-employment tends to obscure or discount the practical contribution polytechnics can make in creating income-generating skills in these areas, and in the process resource allocation is distorted and the training potential of the polytechnics unfulfilled.

This suggests that a better balance could be struck between self-employment and other outcomes of polytechnic training. The cultural pressure for paid employment, or for practical skills to supplement farm incomes, are grounded in a reasonable scepticism about the possibilities and prospects for self-employment. Certainly a more sober appraisal of opportunities and
a more selective approach to self-employment seem desirable if the hopes and expectations of trainees are not to be raised only to be cruelly dis-appointed.

THE MANAGEMENT COMMITTEES

Whatever shifts in character and function may follow from the change in name from 'village' to 'youth', polytechnics until now have been closely associated with a community emphasis. The polytechnics are initiated by the community as self-help institutions, and they have been generally conceived as agents of community development. This ideology has had a substantial impact on the polytechnic programme, in particular in casting the polytechnic management committees representing local community interests in a central role in running the polytechnics: the polytechnics are not only initiated but also supposed to be run by and for the community through the medium of the management committees. Formally, the management committees are responsible for the employment and supervision of staff and the overall development of the polytechnic, while the day-to-day business is conducted by a manager appointed by and accountable to the Committee. This position has survived the growing Government involvement in the programme, for although the Government may provide assistance in the form of grants for instructors, Government Assisted polytechnics are at least in theory still supposed to run their own affairs through their management committees.

Theory diverges from practice, however, for as Action Aid noted, the Government exercises considerable influence through its financial leverage (Action Aid 1982). The most significant control is over staffing, in decisions over which courses to assist and who will teach them. The fact that assistance is tied to salaries for particular courses gives the Government considerable influence over the curriculum. This extends to appointments too, as posts are advertised through and applicants interviewed at the District Office (albeit with the manager and the chairman of the management committee in attendance). Decisions on transfer are taken through the District Office and though the management committee formally has the right to terminate employment, it is doubtful if this right can be exercised without the approval of the District Office and ultimately of the Ministry.
of Culture and Social Services in Nairobi. Supervision is exercised in
the first instance by the manager and the management committee, but the
hierarchy stretches to the District Office and again to MCSS in Nairobi;
as one manager observed, 'we in the polytechnics are very well supervised'.
(Dey 1985).

One consequence of this gap between rhetoric and reality over the
role of the management committee is confusion, which seems widespread. Thus
staff I interviewed found the question 'who is your employer?' very difficult
to answer. Everyone knew, of course, that formally the management com-
mittee is the employer, but that doesn't explain who really makes the decisions
when it comes to hiring and firing, or supervision. There is confusion about
who decides and who is merely consulted, with each side claiming the other
makes the decisions. The apparently decisive role of the District Office
in hiring, supervision and transfers encourages staff to look to the Govern-
ment as their employer despite formal statements to the contrary. Staff find
themselves in a difficult and uncertain position, and the damaging effect
this may have on morale is probably exacerbated by the lack of conditions
comparable to those of other Government employees. Concern over conditions
amongst staff I interviewed included complaints over low and irregular pay,
lack of allowances (e.g. for housing), limited opportunities for training and
promotion, and inadequate security in employment and retirement; there
were also anxieties over the role of the management committee in supervision,
dismissal and staff welfare (Dey 1985). Given these worries and uncertain-
ties, it is not surprising that Action Aid found low morale to be a pressing

Another damaging result of the divergence between theory and prac-
tice is the lack of an effective policy-making framework. The polytechnics
may draw up ambitious development plans, but they typically lack the finan-
cial resources to put these into effect. On the other hand, the Government
has seen its role as regulatory and reactive, and has refrained from taking
an active role in policy development. District Officials exercise consider-
able influence, but in managing the programme rather than in identifying
problems and initiating change. Policy-making, therefore, has reached an
impasse. Resource allocation decisions are mostly ad hoc and reactive,
with little evidence of redistributive or other priorities being pursued,
at least in any of the three Districts I visited (Dey 1985). The programme overall suffers from excessive regulation and inadequate evaluation, as is evident in the time-consuming but often pointless exercise of completing Monthly Reports for the District Office.

One way of overcoming this impasse would be to increase the responsibilities and strengthen the powers of the management committees. This would bring practice into line with ideology, and recommendations to this effect were made in both the most recent Aid Agency reports (Action Aid 1982; DANIDA 1985). However, this ignores the cultural context in which practice has diverged from ideology in the first place. Barkan and his colleagues in their review of self-help development agencies point out that virtually all projects requiring costs are started with the hope of being taken over by the state (Barkan et al 1980). Since the state 'helps those who help themselves', the initiation of self-help projects has become an indispensable method of competing for central resources. Active support of and involvement in self-help projects has also become an important prerequisite of political status and influence. Moreover, these political pressures mean that 'it is often difficult for civil servants to veto the initiation of self-help projects even if they want to' (Barkan et al 1980). Thus it is the 'structure of incentives' rather than ideological commitment to self-reliance which has encouraged the proliferation of self-help projects in Kenya (Barkan et al 1980). This means that a project can be initiated for a variety of political reasons - attracting resources, gaining status or maintaining legitimacy and support - which have little if any connection with realising the project's objectives. For the polytechnics, this may mean that an interest in initiating the polytechnic and gaining Government support is never translated into a more long-term interest in the life and development of the project. Once the polytechnic has been established and 'taken over' by the Government, other priorities may command communal attention and support. This may be especially true if, as has been suggested, the capacity of rural communities and local leadership to sustain projects has been stretched to the limit and perhaps 'overloaded' (Barkan et al 1980).

Given this cultural context, calls for management committees to play a more central role threaten merely to reproduce the existing and damaging divergence between policy and practice. It seems doubtful whether
management committees in general (no doubt there are some interesting exceptions) have either the desire or the competence to accept much greater responsibility, and any significant transfer of authority is likely to overload the committees. Obviously a balance has to be struck between local initiative and central involvement. One may be sceptical in any case whether the main issues of funding, coordination and planning can be tackled on a mainly local basis. As Migot-Adholla and Owiro observe, given the problems the programme is intended tackle, it may be unwise to leave the polytechnics in the hands of rural communities with mere remote control and grants from the Government (Migot-Adholla & Owiro 1981). And even if 'effective educational reform seems to demand localisation as an objective and centralisation as a mechanism' (Wurt & Kinyanjui 1985), an incremental approach to 'localisation' seems sensible (cf Rondinelli 1983), starting with a recognition of the existing cultural balance and trying to use this more constructively.

The Government has the capacity to play a more positive role, by providing better conditions for staff, by ensuring greater scope for coordination between polytechnics, and generally by acting as a catalyst in policy development. The Government could also take steps to moderate the impact of funding based on self-help on social inequalities by diverting resources to poorer communities and newer polytechnics rather than maintaining the present open-ended commitment to supporting staff salaries. It might be possible, for example, to appoint staff on a more short-term basis, and to introduce a matching grant procedure in providing assistance. Paradoxically, the present arrangement encourages local dependence as the Government tends to replace rather than assist local efforts. Far from undermining the community dimension, a more active Government approach, especially at District level, might oblige the polytechnics to wean themselves from present overdependence on Government funds and look more vigorously to their communities for support. Greater Government involvement in formulating priorities and allocating resources more equitably might stimulate the polytechnics to become more active in identifying and responding to community needs. Self reliance seems to require a more active partnership from both sides than that which exists at present.

CONCLUSION

The main thrust of this discussion has concerned the need to take more account of the cultural context in which the polytechnics operate. In
relation to the issues of curriculum, assessment, self-employment and the role of the management committees, I have argued that ideology and culture are in conflict. Thus ideology seeks a flexible curriculum centred on agriculture, while culture encourages formalisation of a curriculum in which agriculture is marginal. Ideology seeks rejection of formal assessment and certification while culture encourages pursuit of these as valuable goals in a competitive society. Ideology seeks a central role for management committees, while culture encourages a 'take-over' by Government. Although a gap between policy and practice may be inevitable and in some respects fruitful, in this case the programme seems to have suffered from the clash between ideology and culture. The outright rejection of formalisation and assessment has involved missed opportunities to work with and improve the existing approaches in the polytechnics. The preoccupation with self-employment has involved a bias against petty production and paid employment - a bias which has favoured male trades at the expense of training for girls. The insistence on a central role for the management committees has helped to perpetuate a policy-making process marked by ambiguity, confusion, excessive regulation and lack of dynamism. Overall, one suspects that the continual criticism of the polytechnic programme for failing to live up to its original ideals has also contributed to the general demoralisation of which the Aid Agencies complain.

If the polytechnics are to 'develop' as well as expand, then some reassessment of policy along the lines pursued here seems desirable. Although the Aid Agencies have complained about the lack of clear direction and purpose in the programme, it could be suggested that they have contributed to this position themselves by remaining so wedded to an ideology which culture and practice have proved misplaced. This ideology may have been effective in launching the programme, with its promise that the polytechnics would a: one and the same time reduce youth unemployment and urban migration, contribute to community development and initiate radical educational reform. These ideals were no doubt significant in legitimising the programme and mobilising political support; and it may be that this function remains vital to attracting and sustaining interest in the polytechnics, especially amongst Aid Agencies enamoured of prestigious projects and ambitious programmes promising dramatic results. But the prosaic reality of polytechnic practice suggests that the programme's main contribution
lies in the more modest objective of providing a training which will help 
youngsters to find income opportunities. If so, then this objective may be 
satisfied in any context: nationally as well as locally, in paid employ-
ment or petty production as well as self-employment. This suggests a 
rather different order of priorities, a different balance between varied and 
at times competing objectives, for the aim of improving skills and incomes 
may be satisfied in a number of directions, some of which may conflict 
with an over-riding orientation to self-employment, agriculture or local 
development. As Loubser has argued, there is room for a variety of appro-
aches within the programmes (Loubser 1983). This is not to reject, therefore, 
the contribution which polytechnics can and do make to local self-employ-
ment, agriculture or local development. Indeed, I have suggested that by 
recognising the limits of that contribution, and making some accommodation 
to cultural pressures - in the form of more active Government involvement, 
a positive role for assessment, a more selective approach to agricultural 
and business training, and a shift in emphasis from male-dominated trades 
to female skills in petty production and paid employment - some progress 
could be made toward improving the programmes' effectiveness in meeting 
these objectives. Nevertheless, although the polytechnic programme can 
contribute to educational reform and rural development in these ways, its 
impact in these areas is bound to be marginal at best. Educational reform 
requires an overhaul of the whole system, preferably from the top down 
rather than the bottom up, if any real progress is to be made in reducing 
inequalities or eradicating 'the diploma disease' (Dore 1975). Rural 
development requires agricultural investment and rising real incomes (and 
a host of other factors) rather than the injection of entrepreneurial skills 
(Carlsen 1980). To pretend otherwise, and to assess the polytechnic pro-
grame by what it could achieve 'if only the world was different', serves 
neither the case for radical reform nor for the practical potential of the polytechnics.
REFERENCES


Caplen, B. 1980 Education for stagnation and development.


NCCK 1966 - After school what?

Rondinelli, D 1983 Development projects as policy experiments. An adaptive approach to development administration. Methuen.