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Technical and Vocational Education and Training (TVET): A Brief Study of the Role of Enterprises, Government and NGOs

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Abstract

>> The following study was undertaken as a result of the clear recognition of two factors: one involving a strong presence, the other a gaping absence. There is present in the developing world today a deep recognition that training provision can be improved if it is developed in conjunction with enterprise needs. There is also present a growing number of enterprises, of many types and sizes, which are entering more directly into the field of training provision, either as customers of public or private training institutions, or as hosts of their own in-house skills development.

At the same time, an absence was clearly identified: a gap in research on enterprise-based training or at least an opportunity to bring together the many experiences that have recently been made.

This article starts with some general remarks about the growth in the commodities sector in both Africa and Asia. It then addresses the phenomenon of technical and vocational education and training (TVET), before going on to the support it has received from enterprises, government and development agencies.



by Stephen Murray

1. Introduction

There currently exist a number of strengths in the economies of the continents of Africa and Asia that may help motivate the development of training practices in their constituent countries. One of the first among these are the high global prices for commodities from countries where the efficient extraction of raw materials is now a central issue. Technology and machinery can, after all, only do so much – the capacity of employees to carry out the work well depends on the skills they have been trained to use. Domestic productivity and investment have also been important influences, as has foreign direct investment.

Countries have changed their economic policies in line with national exigencies and pressure from abroad, and educational priorities have also been clarified to back this up. National legislation has been adopted along with training systems reinvigorated by cooperation with industry, respected and valid frameworks, broader experiments in sourcing finances, and a new appreciation of the more

applied types of training based on the notion that participating makes the learner more employable.

The danger here is to get swept along by thoughts of an economic miracle financing and exhorting a new training renaissance. A genuinely active commitment by interested parties, particularly the more powerful stakeholders involved, is essential. The vast majority of people of working age will not share in the new riches or in the improved training offer, at least in the short term. Donor funding for such services as training has been decreased (though with correspondingly greater support for primary education programmes).¹ Current economic growth rates in Africa are still not high enough to move even half its people out of poverty by 2015, and an agricultural sector ignorant of high-value marketable crops and characterised by low productivity still dominates.

The most successful industries are often islands of wealth and professionalism distant from local populations: occasional sources of employment for the urban and rural poor, but

of course often more interesting for fiscal reasons from the point of view of central government. Likewise, whatever measures were taken in Singapore or the Republic of Korea when they were in similar circumstances and employing similar methods to develop their economies – a planned transition from labour-intensive lower technology manufacturing to medium technology products – might not be replicable in other nations at this point in the 21st century.

One must understand that subjects as diverse as labour regulation and the foibles of political patronage all impinge on levels of economic development and, specifically, on the breadth and appropriateness of training provision. In addition, a typical African country will not be as likely to export as a typical Asian one, except in the field of commodities, and this requires emphasising certain non-manufacturing and low-level skills over others. Likewise, the evaluation of pre-training needs and post-training effects may not be the strength of the developing world. But perhaps this is generalising too much.



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It is arguable that only a growth in the private sector will see a change in emphasis away from current situations like training/education dominated by supply-driven policies that ignore employment growth areas or identification of specific skills needs, or that are beholden to the demands of a now contracting civil service, and towards the skills match articulated by enterprises, both the great and the small (and hopefully also government).

The roles will be defined thus: government can concentrate on labour market entry or re-entry training while business can devote itself to enterprise-specific training and skills upgrading of new entrants and existing workers – in the latter scenario, if joint responsibility exists, the enterprise should be the more active player. The larger presence of business stakeholders will affect state TVET policy

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for the same eminently business reasons that pressure is being applied to reduce the regulatory barriers to starting or expanding a business, or hiring and firing. Circumstances have changed in certain places such that a flexible and responsive training culture can come into existence as the effective option for many members of the competitive skills market.

That training is better when it responds to market demand rather than as a mismatched offering financed by taxation and payroll levies

is a sound point. The chief characteristics of this change can all be said to be related: certain stakeholders take the place of others and expand, while others reduce the parts they play as government takes on a more refereeing role alongside its normal responsibilities. The circle involves:

- I. The appearance or growth of the private (for-profit and non-profit) training market;
- II. Its increased competition with public providers, the lessening of state financial inputs and provision;
- III. The development of laws and authorities by the state (with some stakeholder participation); and
- IV. A rise in enterprise training (often now of a higher quality as dictated by competition and production goals).

Non-training stakeholders who might also have a say in this are parents/guardians, community and development partners, and perhaps regional, sectoral or awarding bodies.

Put simply, the objectives of this circle are to offer programmes leading to practical skills and flexible work attitude, all of this as an aid to employment (whether formal or informal), economic empowerment and social mobility (African Union, 2007, 27) in times of general structural adjustment and some good economic

both to develop the African University of Science and Technology in four countries in Africa and to plan the Gulf of Guinea Oil and Gas Institute that will train and undertake research for the rapidly growing oil and gas industry in Africa. During the same year, he also completed a study for the IDB of the economic and vocational training development of the poorest states in Mexico over the last ten years and how it can be developed during the next decade. Stephen worked for over 10 years as Head of the Centre for International Business Education and Research, Mexico City. He was also editor of *The Anahuac Journal*, a research journal of the Oxford University Press whose focus is on business affairs in Latin America. Stephen was born in Dublin and educated in Cambridge and Trinity College Dublin.

news. It was found in 2001 that what characterised successful training projects at the national level were clearly articulated procedures involving a strong working relationship between government (though not a proliferation of ministries), implementing agent, local communities and donors, supported by well-defined systems for monitoring and evaluation of training needs and impact studies, along with financial, management and technical audits, all overseen by a capable core team (Johanson, 2001b, 29). There is one element missing from this equation. What is not in the power of most stakeholders is the ability to conjure up more employment – at the end of the day, the former emphasis on training supply was a deception hiding the actual lack of job supply.

2. Technical and vocational education and training (TVET)

Over the past two decades, the emphasis in education in the developing world has been on the provision of primary instruction. This is a wise strategy in terms of later education and training as it will form the basis of the knowledge, skills, discipline and motivation of any academic or vocational schooling that comes afterwards. To put it succinctly: the fact that young people now have a literacy rate 16.3% higher than adults (UNECA, 2005, 73) means that the pool of trainees among this and later generations will probably be easier to train (for instance, not so many will require pre-apprenticeship remedial training).

However, the renewed emphasis on the usefulness of TVET, for the unskilled and semi-skilled, is the result of a pragmatic recognition of the resources that are available, the level of skills of locals, the possibilities of employment or self-employment that pertain, and the degree of assistance (from government, community, donor or enterprise) that can be procured. Its growing importance is partly due to the widely

applauded experiments that have taken place in regions as different as Latin America and Eastern Asia and the transition countries of Eastern Europe and Central Asia.

The recent circumstances of TVET provision are quite well known: the low esteem it is accorded sits side by side with the high hopes that are invested in it, such as in the Plan for the Second Decade of Education (2006-15) presented by the African Union to make it a central activity in human capacity building on the continent and to support stakeholders to be more active and cooperative in restructuring their rather underdeveloped delivery systems.

There has been a re-evaluation of TVET in the dual role it has in improving economic well-being and employment, and in the not so obvious non-economic purposes of civic and cultural equanimity and gender equity. The growing population in many poor areas of the world is not met by a similar increase in wage employment, meaning that many youths are unemployed and without access to training provision of an appropriate focus and quality. A number of individual countries and certain regional groups have made the serious commitment in organizational design, financing, facilities, quality assurance and public/private cooperation to create training authorities. Southern Africa is a good example of this, with certain comparatively successful projects (such as that of Botswana) inciting the ambition of its neighbours.

In this as in other areas, a few companies with sufficient clout have had a deep influence on clarifying the national educational vision (training in this study is held to be part of general education). A number of these initiatives have indeed included company and labour representatives, and some have even progressed beyond the limitations of occasionally listening to their points of view on ad hoc committees to more regular and direct influence on TVET provision (mining companies in South Africa, for example, have acquired a very powerful voice in sector-specific training issues at the national level – see Enterprise Case 1 in chapter Five below).

But it should always be kept very clearly in mind that the objectives of TVET provision, from the point of view of the state, will not always coincide with those of industry; though they do not contradict each other but, on the contrary, are often mutually supportive. For members of the African Union, for example, the priority areas are agriculture, public health and water resources, energy and environmental management, information and communication technologies, construction and maintenance, indigenous and cottage industry, and good governance (African Union, 2007, 32-33).

In a typical developing country, after all, political and business goals might not exactly converge, but training on a national scale will only be successful if government is won over and political commitment is also present (see Johanson and Adams, 2004, 17-19).

But a positive attitude can be created towards TVET even by social outreach measures (such as the International Centre for Entrepreneurship and Career Development (ICECD) in India and Thailand's 'Fix It' centres).² Very often,

TABLE 1 – CHANGING ROLES IN VOCATIONAL EDUCATION AND TRAINING

OLD PARADIGM	NEW PARADIGM
Supply-driven approach	Search for demand-driven approaches
Training for employment	Learning for employability
In-service training	Concept of continuing life-long learning
Training and focus on the teacher/trainer	Self-learning and focus on the learner
One-time learning	Continuing recurrent life-long learning
Education and training separated	Education and training integrated (a sound general education and broad-based initial training are essential bases for life-long continuing learning)
Specialisation in one skill	A search for multi-skilling
Skill recognition based on training period and examination	Recognition based on competency and prior learning
Rigid and fixed entry and exit	Flexible and multiple entry and exit
Focus on formal sector	Recognition of the need to focus both on formal and informal sectors
Training for wage employment	Training for wage and self-employment
Centralised system	Decentralized system requiring both strong national and decentralised institutions
Policy and delivery dominated by state	Policy and delivery separate, market-driven
Governance dominated by the state	Participatory governance, recognition of multiple actors, social dialogue

(From ILO. N.D. The Changing Role of Government and Other Stakeholders in Vocational Education and Training)

The challenge to the provision of TVET includes the notoriously low opinion many people have of it. Historically, vocational training has been associated with a paucity of education and ability among those who undertook it, and with very volatile, low-paid work in the informal sector (IS). In many nations, training provision is overwhelmingly an activity of the informal sector (for example, the still very popular informal apprenticeship with a master craftsman in West Africa) and whatever low value awarded to this is habitually attached to TVET in general. For better or worse, the informal sector operates in a world outside the overly-rigid labour regulations (and quite frequently far from the tax collector), and this, combined with the ingenuity of poor entrepreneurs, allows a very wide array of training improvisations to almost spontaneously surface.

young people who only attained junior secondary education were those who took the typical local training offerings, whereas those who completed senior secondary had the qualifications to enter some sort of third-level institution. The presence of vocational/technical education in secondary schools (e.g., very high in Tanzania, low in Malaysia and miniscule in South Africa and Zambia) has an influence on how it is accepted socially as well as on new recruit skills ability at enterprise-entry level.

Beyond the technical/vocational and vocationalised secondary schools, the more formal provision in the past was mainly the responsibility of public providers which had been established for the very practical purpose of creating a workforce possessing those skills necessary for economic progress and healthy

employment levels. The inevitable rigidity that comes with centralised management, mixed with a lack of financing, meant that in practice, training was separated from industrial realities – the existence of training provision, rather than its impact, was ticked off as being present and correct.

The growth of private providers (for-profit and non-profit), and the direct influence (in-company, training provider contracts) and indirect influence (pressure on institutes and government) of enterprises, as much as decisions made by politicians, are changing the habit of TVET provision and its status. One danger here is the temptation among private providers to address only those skills that can be cheaply offered and that have mass appeal, therefore not answering skills shortages recognised by enterprises and often not clearly communicated by them.³ In addition, one controversial reason explaining why certain types of privately-provided training are not well regarded is because they cater mainly to women (women can comprise a large percentage of trainees: to give an example, it was calculated that women made up 76% of all enrolments in non-government institutes in Ghana (Johanson and Adams, 2004, 95)).

However, there is now wider use of techniques and frameworks based on competency measures and assessments, which act as a real-world foundation to the training of employable skills. This has resulted in greater credibility for any certification that is given to successful learners, an important advance in the context of the very high esteem that academic qualification (useful or not) is shown, and a major part of the inclusion of vocational training in overall educational pathways.

There is even now little appreciation that TVET exists in – indeed is an integral part of – all three educational levels (primary, secondary and tertiary), furnishing occupational skills that often play an essential part of the later success of trainees/graduates in the workplace.⁴ However, there is also an awareness that seems to be steadily growing that networking (both horizontally and vertically among countries, institutes and companies) can mean greater visibility for this activity, permitting an exchange of experiences and access to funds. The sharing of information and effort can mean that more stakeholders see the benefits of joining a new push to improve TVET provision and widen the range of trade skills that are offered, to men and to women. The prestige of the TVET offer has also been improved by such non-training activities as consulting, technical assistance, rental of often model facilities, data collection and dissemination, and some amount of research.⁵

3. Enterprise support

The enterprise size, and indeed the way of thinking about and doing business by its managers, can be a major element in decisions concerning training. Survivalist and micro business entrepreneurs will have certain very immediate concerns that are a part of their short-termist perspective, and SME owners will also have their own issues. The managers of a large company could well be convinced that training leads to increased profitability and staff retention, with good results to show for the culture of investing through upskilling or multi-skilling (very fashionable concepts now: for example, they are important components in South Africa's Clothing, Textile, Footwear and Leather (CTFL) sector).

The internal obstacle to the initiation and continuance of training is the level of support that is given to it by management staff who may well be very wary of investing a large, cyclical budget and the equipment, facilities and talent of the company in an endeavour

time and preferably with figures in the black. Enlightenment may only come after a period of successful activities and possibly only then because training was "bundled" in as a support mechanism for other innovations (e.g., competency-based learning integrated into company-wide quality assurance mechanisms).⁷

After all, many companies, perhaps the majority, have neither the trained staff nor even the inclination to involve themselves in in-house training (or quite often training in general). The presence of a high-quality private or public provider with programmes designed according to the needs of sector or enterprise itself would then be most welcome. In sum, the inclination not to get involved in in-company training is a fair disposition – the road to effective training provision is littered with the ruins of failures in the public and private field.

There is a central proviso when speaking of training associated with enterprises – indeed it is an obvious one – that the amount of training that is established for or by enterprises is indivisibly linked to the economic state of each

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that may appear to be a distraction from the core work of the enterprise itself.⁶ They may well feel that the local population is so large, or that the work to be done so elementary, that training can be replaced by taking on locally available capable people or kept rudimentary and implemented on a "just-in-time" basis. By contrast, for example, a number of companies are sufficiently large that they possess the sort of critical mass of employees that facilitates an internal labour market and a preference to generate skills rather than buy in from outside.

For all enterprises, doing business is a numbers game after all – the widespread inability to assess returns on investment in training conflicts with the mindset that requires results plainly presented in the minimum amount of

locality or country. Places with few enterprises will have relatively little enterprise-based or in-company training; enterprises with scant revenues will prefer to spend whatever money they earn on what they see as more pressing needs. But this study addresses the theme without naively assuming that every location has a vibrant company engaged in widely known training practices; though at the same time it does not discount the possibility that practices which work well when industry is closely involved cannot also work well should it be absent or not engaged.

It could be argued that certain specifically in-company TVET has a much better reputation as it is situated in a real-world context of skills needs and uses, salary, promotion and even

mobility to other firms – even its trainers are often industry-experienced and quite possibly still dedicated to the job being trained. Indeed, the very presence of a well-publicised policy within an eminent firm can also enhance the respect shown to TVET. One antidote to the low level of certain training providers, to encourage them to better their work, is through clear communication from the private sector that graduates from institutes they deem incompetent will not be considered as candidates for any jobs the sector may offer. Real encouragement will further involve feedback, donations and workplace experience.

In some countries, there is at present (and there will be in others quite soon) the risk that a gap (of everything from social prestige to employability) will expand not only between informal and formal training but also between training that is enterprise-based and the rest. Governments must listen to the guidance of enterprises as the main and most involved source of information concerning any skills shortages; and naturally those larger firms with higher budgets, skills needs and influence will probably have the most say.

A far-sighted company will integrate non-economic considerations into its training provision, so that whatever instruction is given is not simplistically based solely on rates of return but will also embrace employee morale, health and safety, and social responsibility. At the same time, there should be positive effects from such engagements for the enterprise that are not merely to do with charity. In the long-term, those firms that create (independently or otherwise) a high-class training culture could be a source of information and guidance with such matters as competency-based curriculum design and skills audit by the local or national government.

The resulting training can be genuinely quite good. In Zambia in 2002, companies had 17% of training ranked in the highest category and only 3% in the lowest (compared to private providers with 61% in the lowest category and public providers with 19%) (figures quoted in Johanson and Adams, 2004, 103).

The very existence of a successful in-company training regime, if it gains a certain fame (and information about training, particularly of the truthful variety, is not always easy to obtain), could well embolden the authorities to carry out general TVET reforms, starting with performance acting as the basis of any licensing or funding. The influence could well extend out to other enterprises and training providers in general, for exactly the same reasons and with like ramifications. The constraints are the obvious ones: the level of motivation among decision-makers, availability of funds, capacity of whatever system

or institution is involved, disinclination on the part of the enterprise to create or engage in an advocacy system, and so on.

As such, it can be well expected that, whatever the positive repercussions that may appear, these will be the result of outside players participating as followers or colleagues in the skills development project of a firm or sector, as much as the same enterprises deliberately involving themselves in TVET reforms. However, there is no reason why this will not then be of benefit to the population at large, in giving them new skills or upskilling them and generally making them more capable employees or enterprise-owners.

(even leading to such nuanced appeals to provide distance learning options and include entrepreneurship-based TVET in national development programmes in places like Central and East Africa (UNEVOC, December 2005, 11)).¹⁰

The obvious ways that government can help the development of skills is to make training happen in the first place (by giving potential trainees a good educational base and through financing, regulation and provision of vocational offers) and to make it worthwhile (by job creation). It can properly link educational and training policies with "agro-industrial" developments (Ajao, 2008).

BOX 1 – ROLES OF COMPANIES IN ESTABLISHING TYPES AND QUALITY OF TRAINING

1. Direct training (in-company by own employees or by others contracted from outside)
2. Acceptance only of candidates with preferred training/certification/etc.
3. Voicing its preoccupations to ministers and other stakeholders, in direct participation (e.g., membership in committees) or indirectly (e.g., lobbying); this may well include at some stage addressing primary and secondary education (as trainees are weak or capable primarily because of their formative education) as well as adult literacy and numeracy (as in the company commitment to ABET in South Africa).
4. Sponsorship of institutions in some manner (e.g., public or private providers) that fulfil its requirements.
5. Public airing of its needs and minimum requirements.

4. The role of government

A government can only welcome with open arms the development of a training sector that appears to obey the dictates of its own profit-making (and indirectly job-creating) business imperatives, and that sets out to give its employees the knowledge and skills that arise from these commercial imperatives. The over-seeing of training in many nations has been a rather overlooked occupation or undertaken in isolated stop-start interventions in the formal technical and commercial sectors;⁸ however, as we will see later, there have been very great strides to eradicate this failing.

It is easy to imagine that certain members of the public authorities will be personally uncomfortable with this business-based training provision (originating in the fear that it could make certain public TVET jobs obsolete or in need of painful reworking),⁹ but it could just as easily be seen as a tremendous opportunity to bring relatively dynamic providers into a public-private grouping in sore need of guidance about curriculum content, industry-centred working habits, and entry into the promised land of competent on-the-job training and employment creation. There is a recurring call for a government/provider/enterprise partnership in different parts of the world

Many commentators have stated their opinion that government should restrict its role to pre-employment training, financing and administration of training provision, and leave actual training provision either to a much more autonomous, decentralised public training sector, the socially committed non-profit private entities, or the market-driven for-profit training providers. One could argue that, in practice, a single body cannot competently run both the provision and the regulation of training – one has to suffer because of greater attention paid to the other. Companies work with all three and at the same time also represent another alternative, though one that is mostly not open to the public at large but to either apprentice/trainee recruits or current employees.

The government can involve itself in business-based training through a number of influences:

>> It can reduce the number of ministries (with their generally short-term appointees and therefore short-term application of policy) that have control of training so that conflicting decisions are not made to confuse the unnecessarily underdeveloped training provision¹¹ (DFID, 2007, 21–22; Canagarajah et al, 2002, 22–23). This can be the simplified

channel for employer-worker input, cost-sharing measures and training relevance.

>> Legislation that directly affects the provision of training or that regulates some activity that will indirectly influence company commitment to training (e.g., minimum percentage of employees from disadvantaged groups, indigenous ownership levels¹²). However, as well as more widespread business-based training, lowering regulatory obstacles may allow unregistered entrepreneurs offering training of poor quality to prosper.

>> The government may invest more to modernise its own vocational/technical institutions and bring industry-specific skills training into the curriculum not only of state-run training providers but also of general secondary schools, their vocational and technical peers, and higher education¹³.

>> Financial support of vocational activities, specifically involving the establishment of a levy system and the rate to be paid, the efficiency of a system to fund training (through receipt of grants or tax deduction, etc.), direct subvention by the government (capital funding, land or building donation, bursaries, etc.) based on quality of training provision (e.g., competency framework in place) and objective outcome measures (e.g., placement of trainees in employment), and even discontinuance of VAT on pedagogic equipment.

>> A government may not be the initial instigator but moves to create national qualifications authorities¹⁴ and its associated frameworks/equivalencies. System compliance processes (e.g., accreditation) and partnerships are inevitably a responsibility of the government, and inter-regional advances can only happen through contact and cooperation between governments¹⁵ (which is not to say that sectoral cooperation between companies, for example, cannot also occur).

>> Trying to have a state-funded (and often state-controlled) provider piggy-back on the pedagogically useful possibilities of industry linkage: relatively simple collaborations could involve workplace instruction, employers invited to help curriculum development or training in their role as industry experts, etc. But there also exists the possibility of deeper institutional linkages and regular sponsorship of activities (again, whether a company, even with a highly developed in-house training provision, will want to get involved is another matter).

>> Conducting data-gathering and assessment exercises (of a comprehensiveness equal to a typical national learning assessment) concerning the need for training in general,

what it should consist of and at whom targeted provision should be aimed; and publicise this properly to counteract the suffocating lack of ability among many enterprises to assess returns on training.

>> The greater involvement of informal and formal enterprises in skills development will make governments address their skills enhancement needs instead of over-concentrating on institutional secondary and tertiary education to the detriment of TVET growth and improvement; it might also make them realise that exposure to skills training is not sufficient on its own to create jobs or raise incomes (see, for example, the related remarks in DFID, 2007, 1-3).

>> Supporting in-house training strengths (soft skills, leadership development, company-specific skills upgrades, broad apprenticeships, etc.) and encourage in-house investment of at least 3.5% of payroll in training.¹⁶

>> There is a need for government to improve their TVET system because of the dependence of all training activities on government-sourced provision, either directly through funding and hiring of public provision or indirectly through teaching material production and employment on a part-time basis of trainers trained and/or working at public institutions, etc.

>> The government can organise high-class training programmes specifically for managers of business-based training so that the very best knock-on effect can be achieved.

>> Governments will be the principal contact for donors and development bodies, and they can channel some of the support in cash or kind they receive to business-specific skills development.¹⁷

>> Companies have also been invited onto committees that oversee matters relating either to national training developments or to more specific local or sectoral advances; their input could have some direct bearing on such weaknesses as education policy analysis and recurrent financial procurement and disbursement.

For a generation, governments were involved more in poverty-reduction campaigns than in the encouragement of economic growth (clarified by a mix of threats and incentives from international development bodies). Therefore their emphasis has been on primary education.¹⁸ When they were involved in training provision, their motivation was often based on labour supply pressures that resulted in stop-gap expansion of public education and training. However, recently there has been a return to considering appropriate training

provision for enterprises. State involvement in the supply of skills hasn't always been under-achieving: to give two examples, the intervention of government has a good track record in countries like Singapore and South Korea.

A wise government will evaluate the location, quality and aptness of national training provision to identify where weaknesses lie and how to dilute or eliminate the problem. Thus, if a company is providing a sound training service (admittedly often for reasons of self-interest) and it appears the best option in that locality, it would be intelligent to support the maintenance or even extension of that same service to the benefit of locals. The reduction of fiscal or regulatory impediments would be a start, as would help in training better trainers/assessors/facilitators and providing better teaching aids.

Of course, it may also be the case that the company is not willing to get involved with a body that is by definition a social rather than an entrepreneurial organ, and one that is often lethargic, voluble and sometimes corrupt in its operations. Even the most competent of government stakeholders will find their ability to support business-based training rather constrained by the magnitude of challenges facing the public training system, structural adjustment programmes, a decline in development assistance flows and a distributive system that puts a low priority on the private sector, and an absence of collective bargaining (with employers, unions, etc) to encourage training, among other factors. Even the monitoring system, which is a crucial government service using quantitative and qualitative indicators to diagnose training implementation, can be relatively under-developed, the problems being a focus on infrastructure over collection and analysis of information, inappropriate personnel, and technically weak and ad hoc performance.

What government can do as a minimal support to in-company training is to design:

- I. A helpful policy environment starting with a reduction in training regulation,
- II. Better linkages through improved facilitating institutions and processes (so that the private sector knows about and participates in qualifications, framework, funding, trainer training, etc.),
- III. Application of best practices in workplace-education interventions by listening to employer/employee views, and
- IV. More effective information systems (that would, for instance, highlight ways to reduce opportunity costs).

Getting involved with government may mean submitting to their administration of accreditation, financial results, minimum hours of instruction, admission levels, centrally controlled examinations, trainer's wages and qualifications, tuition charges, etc. This would be a frightening loss of independence for a business, even if it does not involve a core business activity – training is after all a core necessity. A government can get involved in sponsoring vocational training for vague medium- to long-term reasons, for instance ones related to macro-economic projections. On the other hand, an enterprise gets involved usually for very specific "skills enhancement ↔ commercial well-being" reasons, with activities disciplined by identified skills needs and time constraints, among others.

This is why governments may be excited by the model training culture practised by larger companies, for example. Their confidence can be so great that they delegate training management to major corporate organisations: Latin America has had a great deal of experience of this (Peru's Servicio Nacional de Adiestramiento de Trabajo Industrial (SENATI) is a good example, as is Mexico's Instituto de Capacitación de la Industria de la Construcción (ICIC)). But the unhelpful interventions described above also explain why the same companies might like to stay clear of government interference.

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5. The major Development Agencies and TVET

A brief comment could be made here concerning the expressions of support for TVET by the major development bodies.

The World Bank's Vocational and Technical Education and Training policy paper on provision in the developing world dates back to May 1991. It assigns to government the role of facilitator rather than provider and emphasises what it considers to be the key changes required for training to be effective:

- I. Proper economic and labour market analysis,
- II. Programmes to strengthen quality and access to replace pre-vocational training,
- III. Private training to be encouraged by policy reforms,
- IV. Public training to be more responsive and efficient, and
- V. Evolution of government-donor participation.

The International Labour Organization (ILO) has a series of vocational training recommendations (e.g., for fishermen/seafarers, etc.) along with other instruments concerning such important issues as skills recognition and certification. In these recommendations, there is great emphasis made on "consultation with the employers' and workers' organisations involved" along with "collaboration with other countries, as well as with international organisations, in setting up joint ... training schemes ... as [such] cannot be covered by national programmes" (ILO, 1966). Its "Decent Work" policy framework states clearly how essential skills development is for both the formal and the informal sectors.

This highlighting of TVET contrasts with its absence in most poverty reduction strategies in developing nations (Bennell, 1999, 1–2). For example, there is no explicit mention of skills development in the Millennium Development Goals of the United Nations, although there is, of course, no reason why poverty-alleviating TVET initiatives cannot be included in the subsequent policies established by individual governments based on the MDGs.

UNESCO comments directly on training provision in several documents containing recommendations to "guide national decision-makers to develop effective, relevant and equitable policies of education and training" (UNESCO and ILO, 2002, 2–3). These are effectively a summary of internationally acknowledged sound standards and practices (the Convention on Technical and Vocational Education (1989) and the Revised Recommendation concerning Technical and Vocational Education (2001)). They support the idea that training should be given a high priority, that it be appropriately funded, and that national coordinating bodies be set up. They also specifically welcome the participation of "professional associations, workers, employers and other interested parties" (UNESCO, Convention on Technical and Vocational Education, Art. 2, para. 2d). The same body brought together 122 TVET experts in the autumn of 2004 that resulted in the Bonn Declaration, which describes TVET as "the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development" (UNESCO-UNEVOC, 2006, 9; UNEVOC Bulletin, April 2005, 1–2). The same short document ends with a commitment to "taking the action necessary for quality skills development that leads to economically viable, environmentally sound and sustainable communities".

It is interesting to note that delegates at UNESCO's general conference in October 2005 and again two years later spoke approvingly of TVET provision as a major component of the "framework of diversified post-primary provision". They placed it fully in the context of employability and citizenship, as a bridge between education and the world of work, and as a key element of Education for All (EFA) and the Decade for Sustainable Development (DESD) activities (UNEVOC Bulletin, December 2005, 1). The third goal of EFA is very pertinent to TVET provision as it sets out "to ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes".

If we concentrate on one region, we can recognise that there is no shortage of high hopes and policy but perhaps a lack of specific implementation detail and concentration of effort. At a meeting in early 1995, African heads of state signed a statement supporting the "prominent place" of training and placing special emphasis on "the variety of options and the professionalisation of training" (UNESCO-UNEVOC, 1996, 140). The Commission for Africa Report of March 2005 led directly to a plan by the G8 members a short time later to "help develop skilled professionals for Africa's private and public sectors through supporting networks of excellence between African and other countries" (Bourne, 2005, 12).

The African Union suggests in its Plan for the Second Decade of Education (2006–2015) that vocational training should be integrated into the general education system (a tough challenge if only because of the immense size of the training that is done in the informal sector in that continent). It recommends that TVET should be transformed into "a mainstream activity for human capacity building in Africa" and further supports moves to "position TVET programmes and TVET institutions in Africa as vehicles for regional cooperation and ... development" (African Union, 2007, 5).¹⁹

The Southern African Development Community (SADC) has advanced quite far in its project to develop sub-regional cooperation in vocational training among its member states, guided by the "Learning for Life, Work and the Future" (or LLWF) initiative adopted in July 2002. It mentions that it hopes to achieve the best results through "a partnership approach to financing, education and training, among governments, beneficiaries and employers". (Okaka, 2003, 47).

A good example of advances in a particular sector is the "Framework for African Agricultural Productivity" (FAAP, 2004), which arose out of the New Partnership for African Development (NEPAD). A central objective of this framework is institutional capacity-building and training in agriculture and natural resources at the post-secondary level. Support from the developed world can come from former colonial powers. The Agence Intergouvernementale de la Francophonie (AIF) started supporting national TVET programmes in 2000 based on best practices, information networks, and "shared tools for collaboration" (UNESCO-UNEVOC Bulletin, Sept. 2004, 12).²⁰ Usefully, some of these large institutions are coming together to coordinate their work: a recent example is the planned cooperation between the African Development Bank (ADB) and the AIF that originated in a meeting in Tunis in May 2007.

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Endnotes

¹ For example, in the 1970s, TVET represented 22% of direct lending by the World Bank for education and training; by the 1990s it had dropped to 5% (Johanson, 2001b, 1).

² The reputation of TVET in communities can be enhanced by such mutually beneficial measures as Thailand's "Fix It" centres, where teachers and students spend periods of a week in villages repairing tools, machinery and appliances and training locals.

³ In Niger in 2002, for example, where 85% of TVET institutions were private (for-profit or non-profit), a third of these were catering only for office skills (ILO, 2002, 99).

⁴ The lack of faith in TVET at the national level is still prevalent: as recently as 2007, the Ugandan government left vocational and technical education out of its new Universal Post-Primary Education Training policy (Natukunda, 2007), though the 3.5% of all students who are in technical schools compared to the 96.5% in regular secondary schools helps explain this.

⁵ Uruguay's Interamerican Research and Documentation Centre on Vocational Training (Cinterfor) is a good example of this.

⁶ Japan stands out as a contrast: there, most managers and supervisors have training responsibilities as part of their duties.

⁷ This has been the experience of the Nemangkawi Training Institute in Indonesia.

⁸ Indeed so much so that an ILO writer comments that "in most countries, the degree of connectedness between training institutions in different ministries is so minimal that it is difficult to conceive of a public vocational training system" (Bennell, 1999, 12).

⁹ But the reworking is desperately needed. One commentator was particularly scathing of public training providers: "Public vocational institutions are organizationally, pedagogically, culturally and financially constrained to provide relevant education for the fast changing world of work" (Singh, 1998, 53)

¹⁰ The experience in northern Europe, for instance, has been that a mixture of industry consensus and cooperative unions is the driving force in establishing enterprise-based schemes.

¹¹ Indonesia would be typical of the simplest situation: pre-employment training and retraining are managed by both the Ministry of Education and of Labor, while in-plant training is principally the preserve of the Ministry of Labour

¹² Indigenous ownership percentages of 51% in Nigerian oil and gas operations or Zimbabwean mines will mean that some heed would have to be made of identified skills gaps among locals and their own expressions of training provision.

¹³ For example, the National Education Policy 2004–2015 of the Gambia does precisely this (see Saidy, 2007).

¹⁴ This could be some sort of skills development body, with individual sectoral focuses, which administers a process of enterprise-level functional analysis to identify national occupational standards and, from these, vocational qualifications. A separate training standards body would appraise training provision and re-accredit those previously appraised. For example, the Association of National Training Agencies (CANTA) of the Caribbean Community (CARICOM) has standards that address 120 occupational areas concentrated on levels 1 (entry-level worker) to 3 (technician autonomous worker).

¹⁵ There has been undeniable progress. In late 2000, Botswana's Minister of Education was talking about countries in his region having "closer links to Europe than with each other" in TVET development but arguably the same would not be said now because of SADC initiatives and other projects.

¹⁶ A figure recommended by the ABC (Asian Business Council, 2002, 13), among many other bodies.

¹⁷ A good example is the partnership that was created in 2000 between GTZ and the Guinean government (in the guise of its Office de Formation et de Perfectionnement Professionnels – ONFPP) to establish enterprise-based training schemes that would have joint learning and working places, and design and deliver demand-driven curricula for growing sectors and specific target groups (Axmann, 2004, 38–39).

¹⁸ Low-income countries devote about half their education spending to primary provision (in rich countries it is about 25%). Even so, up to a third of household discretionary income is spent on primary education (UNESCO, 2008, 32), translating into less free time and funds for training for the parents.

¹⁹ A country like the Gambia must produce its own legislation and policy documents to participate in international agreements such as these: this explains the existence of its Technical Training Act, National Training Authority Act and National Education Policy 2004–2015.

²⁰ France is the largest contributor to the educational sector among bilateral donors and, like Germany and Japan, allocates a large part of this aid to the post-primary fields.

References

Afenyadu, Dela et al. 1999. Learning to Compete: Training and Enterprise in Ghana, Kenya and South Africa. Education Research Paper No. 42. Edinburgh: Centre of African Studies, University of Edinburgh.

African Union. 2007. Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa. Meeting of the Bureau of the Conference of Ministers of Education of the AU, 29–31 May, 2007, Addis Ababa, Ethiopia.

Ajao, Wale. "National Policy on Education (NPE) Suffers Poor Implementation," The Vanguard (Nigeria), 2 January 2008 (from www.allafrica.com).

Archer, Sean. 2007. The International Literature on Skills Training and the Scope for South African Application. Social Science Research Network, University of Cape Town.

Asia Business Council (with the NCVER). 2002. Training and Competitiveness: An Asian Firm Perspective. Hong Kong.

Atchoarena, D. 2002. Private Training: Working Group for International Cooperation in Skills Development. World Bank Study on Vocational Skills Development in Sub-Saharan Africa: A Working Group Review. Edinburgh: ILO.

Axmann, Michael. 2004. Facilitating Labour Market Entry for Youth through Enterprise-Based Schemes in Vocational Education and Training and Skills Development. SEED Working Paper No.48. Geneva: ILO.

Bennell, Paul. 1999. Learning to Change: Skills Development among the Economically Vulnerable and Socially Excluded in Developing Countries. Geneva: ILO.

Bessant, J. et al. 2003. "Putting supply chain learning into practice," in International Journal of Production Management, vol. 23, no. 2, pp.167–184.

Beveridge, M., K. King, R. Palmer and R. Wedgwood (eds.). 2005. Reintegrating Education, Skills and Work in Africa. Edinburgh: Centre of African Studies, University of Edinburgh.

Bhuwane, Teeluck (ed.). 2006. Reforming Technical and Vocational Education in Sub-Saharan Africa. Dakar, Senegal: UNESCO/BREDA.

Bourne, Richard. 2005. The Case for a Compact in Valletta: How the Commonwealth Can Cooperate with the European and African Unions to Implement the Promises of 2005 for African Development. London: Commonwealth Policy Studies Unit.

Canagarajah, S., A. Dar, R. Nording and D. Raju. 2002. Effectiveness of Lending for Vocational Education and Training Lessons from World Bank Perspective. Washington D.C.: World Bank.

Commission for Africa. 2005. Our Common Interest: Report of the Commission for Africa. London: Department for International Development (DFID).

DFID. 2007. Technical and Vocational Skills Development. London: DFID.

European Training Foundation/World Bank. 2005. Reforming Technical Vocational Education and Training in the Middle East and North Africa: Experiences and Challenges. Luxembourg: Office for Official Publications of the European Communities.

Gardingen, Paul van and Anna Karp. "International Experience on Regional Programmes for Science and Technology: Lessons for Africa's Science and Technology Consolidated Plan of Action." September 2005. Centre for the Study of Environmental Change and Sustainability, University of Edinburgh.

Gereffi, Gary, John Humphrey and Timothy Sturgeon. 2003. "The Governance of Global Value Chains." From www.globalvaluechains.org.

Gerhards, T. 2003. "Difficulties and Prospects of Vocational Education in Africa – MISREOR'S Experiences," in European Journal of Vocational Education–CEDEFOP, 29, 52–62.

Grierson, John (ed.). 2002. Practices and Trends in Formal Sector Enterprise-Based Training in Africa. Turin: ILO.

Hobbs, E. J. et al. 1996. "A transaction cost approach to supply chain management," in Supply Chain Management: An International Journal, vol. 1, no.2, pp. 15–27.

Haan, Hans Christian. 2006. Training for Work in the Informal Micro-Enterprise Sector: Fresh Evidence from Sub-Saharan Africa. Dordrecht: Springer.

ILO. N. D. The Changing Role of Government and Other Stakeholders in Vocational Education and Training. Geneva: Training Policies and Systems Branch, ILO.

ILO. 1966. ILO Instruments Concerning Qualifications/Skills Recognition and Certification. Example is "Vocational Training (Fishermen) Recommendations, adopted 21/6/1966. Accessed from http://ilo-mirror.library.cornell.edu/public/english/employment/skills/recomm/topic_i/t22_ilo.htm#3

ILO. 2005. Vocational Training and Skills Development in the Poverty Reduction Strategy Papers: A Preliminary Review. Geneva: Skills and Employability Department, ILO.

ILO/NORRAG. 2008. Post-Primary Education and Skills Development. Geneva: ILO.

Johanson, Richard K. 2001a. Review of World Bank Projects in Technical-Vocational Education and Training (TVET), 1990–2000. Washington D.C.: World Bank.

ILO/NORRAG. 2008. Post-Primary Education and Skills Development. Geneva: ILO.

Johanson, Richard K. 2001a. Review of World Bank Projects in Technical-Vocational Education and Training (TVET), 1990-2000. Washington D.C.: World Bank.

Johanson, Richard K. 2001b. Sub-Saharan Africa (SSA): Regional Response to Bank TVET Policy in the 1990s. Washington D.C.: World Bank.

Johanson, Richard K. and Avril V. Adams. 2004. Skills Development in Sub-Saharan Africa. Washington D.C.: World Bank.

Krogh, Georg von, Kazuo Ichijo and Ikujiro Nonaka. 2000. Enabling Knowledge Creation. New York: Oxford University Press.

Middleton, John, Adrian Zideman and Avril Van Adams. 1991. Vocational and Technical Education and Training. Washington D.C.: World Bank.

Natukunda, Carol. "Is Secondary Education More Beneficial than Vocational Education?" New Vision (Uganda), 11 February 2007 (from www.allafrica.com).

Nelson, Richard R. (ed.). 1993. National Innovation Systems: A Comparative Analysis. New York: Oxford University Press.

Okaka, P.O. 2003. Learning for Life, Work and the Future: Stimulating Reform in Southern Africa through Sub-Regional Co-operation. Report of a UNEVOC workshop on the status and needs of training of TVET trainers in the SADC Sub-Region, Phoenix, Mauritius, 18-20 March 2003.

Rath, Amitav and Andrew Barnett. 2005. "Innovations Systems: Concepts, Approaches and Lessons from RNRRS." DFID (The Policy Practice).

SABMiller Africa and Asia. 2003. Artisan Skills Upgrade in a Developing World Environment. Johannesburg, South Africa.

Singh, Madhu. 1998. School Enterprises: Combining Vocational Learning with Production. Berlin: UNESCO-UNEVOC.

Tidd, J. et al. 2005. Managing Innovation: Integrating Technological, Market and Organizational Change, 3rd Ed. Chichester: John Wiley and Sons.

UNECA (United Nations Economic Commission for Africa). 2005. Economic Report on Africa. Addis Ababa, Ethiopia.

UNESCO and ILO. 2002. Technical and Vocational Education and Training for the Twenty-First Century. Paris: UNESCO.

UNESCO and ILO. 2002. Technical and Vocational Education and Training for the Twenty-First Century. Paris: UNESCO.

UNESCO. 2004. The Education System at the Beginning of the Twenty-First Century: An Overview and Assessment. Presented at the 47th Session of the International Conference on Education, Geneva, 8-11 September 2004. Switzerland: UNESCO.

UNESCO. 2005. Skills for Sustainable Livelihoods - Implementing the UNESCO Normative Instruments Concerning Technical and Vocational Education and Training. (Sub-regional TVET seminar, Nairobi, Kenya, 22-25 August, 2005.)

UNESCO. 2008. Education for All by 2015: Will We Make It? Summary. EFA Global Monitoring Report. Paris: UNESCO.

UNESCO-UNEVOC. 2006. Report of Activities 2004-2005. Bonn: UNEVOC.

UNEVOC. 2000. "Looking for Life, Work and the Future: Stimulating Reform in Southern Africa through Subregional Co-operation." Initial workshop, Gaborone, Botswana, 5-8 December 2000.

UNEVOC. 2004. "Bulletin" ISSN 1020-9468, Bonn: UNEVOC.

UNEVOC. 2005. "Bulletin" ISSN 1020-9468, Bonn: UNEVOC.

World Bank. 2004. Skills Development in Sub-Saharan Africa. Washington D.C.: World Bank.

Yamada, Shoko and Norika Matsuda. 2007. Vocational and Industrial Human Resources Development through TVET in Africa. Tokyo: Institute for International Cooperation / Japan International Cooperation Agency.

Zideman, Adrian. 2002. Financing Vocational Training to Meet Policy Objectives: Sub-Saharan Africa. Washington D.C.: World Bank.



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