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AUTHOR Herschbach, Dennis R.
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ABSTRACT

Employers need training, want it, and are willing to pay for it providing it is relevant to their requirements, results in improved product quality, and fosters increased productivity. Firm characteristics make a difference not only with regard to the kinds of skills wanted by employers but also with regard to how training can best be delivered. The distinctive features of large, small and medium, and micro enterprises must be taken into account when developing employer-relevant training programs. Formal training institutions are generally restricted in their ability to respond to employer-related training needs. Most successful training programs are flexible in terms of the content offered, methods of instruction, and mode of delivery. Establishing linkages between training and employment is considered essential to successful program planning. Educational planning is most responsive to labor market needs when it is done locally, and local planners need local data. Planners must fully consider the larger political, economic, and social context. A program's success will depend on a set of interrelated conditions fostering program stability, efficient use of resources, long-term development, and effective links with employment. (MN)

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Linking With Employment: Training From
the Perspective of Employers

Dennis R. Herschbach

Department of Industrial, Technological and Occupational Education
University of Maryland

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Linking with Employment: Training from the Perspective of Employers

Introduction

Linked closely with national development policy, training programs in developing countries have primarily addressed formal sector employment. The type of content, institutional form, means of assessing needs, staff training, links with other institutions-- all have been influenced profoundly by the perceived need to train workers for modern employment. It is now apparent that training must be conceptualized in broader terms. Not only are many countries reassessing development policy, but there is a growing recognition that the role of training must be reexamined in order to more effectively address employment-related needs. "Non-traditional" approaches to training may be needed.

Yet, until recently, relatively little has been known about the link between training and employment. To be sure, there is considerable international interest in improving the responsiveness of vocational education and training institutions to changing employment-related needs. International discussion, however, has tended to focus on the institutions themselves, and on how to improve the efficiency of training, with considerably less attention given to employers and their expectations for training. And even when the training and employment link is examined, it is usually from the perspective of assessing the demand for skilled manpower, rather than from the viewpoint of identifying implications for staffing, curriculum design, training structure, and other systemic concerns. Consequently, there is less understanding of what employers expect from training, of the complexity of the training/employment link, and of the implications for training program design and implementation.

This paper briefly focuses, from the perspective of the employer, on the link with employment; it is largely exploratory and attempts to bring into clearer focus some of the features of the training/employment link which have not received sufficient attention. The purpose is to provide insight into ways that training institutions can become more flexible and responsive to changing employment-related training needs.

What Do Employers Want?

Employers need training, they want it and they are willing to pay for it--providing training is relevant to their requirements, results in improved product quality and fosters increased productivity. Considerable training occurs within firms. Large firms tend to have organized training programs for a variety of work levels. Smaller firms, on the other hand, tend to rely on informal, unsystematized, on-the-job training; they compete intensely with similar firms for domestic labor. Major sources of technical information include foreign parent corporations, companies that specialize in instructional materials for a particular industry, manufacturers of specific equipment, and/or foreign technical experts. This information is crucial to better production, new product development and market expansion. It is larger firms, however, which mainly take advantage of these sources of information, because

they have greater access. A particularly important source of technical knowledge for smaller firms is provided by individuals who have received overseas training, either in a formal institution or within a firm. The individual brings knowledge back to the local firm that is directly transferred to work processes. In the case of virtually all employers, nevertheless, training and the search for new employees form a continuous process--due to turnover rates, altered production technology, or the need to realize cost savings and improve productivity (Anderson, 1982; Dahlman, et al, 1985; Pack and Westphal, 1986).

Employers rely on training for three kinds of individuals: a) those who are adaptable and able to absorb training within the firm; b) those who bring the required skills with them; or c) those who bring new skills into the firm. By far the greatest number of new employees fit the first category. For these individuals, most training programs give too much emphasis on skill development and not enough on basic skills. The greatest need is for individuals in the third category, even though their numbers are small. Employers in developing countries in general tend to rely heavily on the outside sources mentioned above.

It is understandable that employers place high value on basic education skills-- the ability to read, write and do simple arithmetic (Nunez and Russell, 1982; Pratzner and Russell, 1984; Wade, 1984). Basic skills are used by individuals in all three of the above categories. Probably the greatest contribution to human resource development that can be made by formal training institutions is the assurance of a sound grounding in academic skills and special vocational uses of academic skills. Many students in developing countries do not now possess basic skill levels that are sufficiently high to enable them to profit from vocational training or to realize their full work potential. It is the deficit in basic skills that inhibits vocational development, within school and at work.

Large numbers of students enter training programs with severe learning difficulties, poor basic skills, and poor study habits. Consequently, they cannot profit from instruction. Achievement is low, course offerings are severely restricted, and employment prospects are problematic. The investment in training, even if modest, cannot be used well, and often cannot be justified by the return, which may be marginal at best.

Investment in basic skills development enhances development in general. There is evidence to suggest that a "reservoir" of individuals with basic literacy and numeracy skills is required for initiating and sustaining economic growth (Westphal, Yung and Pursell, 1981; Kaneko, 1984). If resources are restricted, and a choice is necessary between providing public primary education or vocational training, then the investment clearly should be made in primary education.

Cognitive skills are increasingly important in those industries exposed to worldwide competition. There is intense international pressure to increase productivity and improve quality while decreasing cost. Workers must design, use and maintain more sophisticated production technology. One result is a greater demand for highly skilled workers competent in organizational, control, maintenance, programming, and technical service skills, and a lesser demand for manual, production and trade skills (Alfthan, 1985; Watanabe, 1986; Cyert and Mowery, 1987). While the numbers of firms using "high" technology may not be

large, they constitute a crucial and growing sector in many developing countries.

Employers also express concern about attitudes, motivation and acquaintance with the work world. Richards (1981), for example, synthesized the results of a number of studies and concluded that employers expected young employees to have basic academic skills, communication skills, an orientation to work, an ability to interact with fellow workers and superiors, and positive attitudes towards work. Owens (1983) examined job deficiencies identified by over 800 employers. Three major areas of concern were identified: 1) poor basic skills, particularly in oral and written communication; 2) poor work attitudes; and 3) insufficient orientation to work and business. These findings basically agree with conclusions reached by other studies (Kelly, et al, 1985; Cuervo, 1985; Herschbach, et al, 1985; Chapman and Windham, 1985).

Firm Characteristics

Firm characteristics make a difference not only with regard to the kinds of skills wanted by employers but to how training can best be delivered.

Large employers

Large firms conduct a variety of training activities on an ad hoc basis, often improvised to fill an urgent and specific need. These activities may range from short-term, low-skill training under direct job supervision to more organized and structured forms of training, such as vestibule programs. Large firms with close connections to international firms and trade associations tend to have access to training resources. The capital investment required for training is generally low because use is made of the firm's equipment and facilities. This also keeps recurrent expenditures low. On the other hand, unit costs in large firms with organized training departments can approach or exceed formal training school costs as the program takes on similar characteristics: a training director, permanent training staff, special facilities, and so forth. Although in-firm training programs generally have more resources and higher-quality programs, they cannot capitalize on economies of scale to the same extent as formal training programs. It is reasonable to expect organized nonformal training to typically cost more per training hour than its formal counterpart.

Larger firms also have few problems with retaining staff and thus have more incentive to train. They can pay good wages, promote from within the firm, and offer more job security and better working conditions. Moreover, as Salome and Charles (1988) suggest, large firms can establish a "more technically elaborate staff management policy which encourages career opportunities, retraining and advanced training and transfers among different activities within the same firm" (p. 64). Some firms may address a number of skill levels through training. Their greatest need, however, may be to retrain and upgrade in order to achieve better quality and productivity. This is particularly true in the case of firms with intermediate or advanced technology. In-service training on a regular basis is needed to cope with the complexity of the technology.

In general, public training investments do not have to be directed to large firms. Such firms can recruit sufficient qualified individuals, and have both the resources and capability to train in-house. Larger firms, however, may want recruits to have more generic vocational training and basic education skills,

with the firm taking responsibility for specific skill training once the individual is employed. This is particularly true of firms with internal labor markets; that is, in which the individual gains promotion through experience and training within the firm.

Small and medium size enterprises

Clearly, small and medium size enterprises encounter the most difficult training-related problems. Small firms tend to have few resources to plow back into training, particularly when the benefits are uncertain and visible only in the long term. If employees become too proficient, they will be likely to desert the firm to seek higher paying jobs elsewhere, or even open competitive enterprises. Their newly acquired skills make them premium employees. Many small employers are reluctant to train simply because they will often face the choice of paying higher wages or losing employees. Also the cost of training is high because small firms cannot capitalize on economies of scale. At most they may need to train only a few employees, and it is uneconomical to request outside assistance at the job site. Small and medium size firms also tend to be outside the mainstream of technological innovation and change, and consequently do not have ready access to new knowledge and practice.

For these reasons, few small and medium size firms establish organized training. They tend to rely on informal, unsystematic, on-the-job training or apprenticeship, and often compete intensely with similar firms for labor. In terms of sheer numbers, more individuals are probably trained through OJT and informal apprenticeship than through any other training means. Small firms also tend to rely heavily on formal vocational training programs for individuals who have at least the foundation skills on which productive, on-the-job training can be structured.

In general, smaller employers want specific skills taught, and rely on training institutions to supply individuals who can immediately go to work with little in-firm training. They also rely on workers from training institutions to introduce new skills into the firm. Smaller employers may also consider the equipment and processes taught in training too sophisticated for their production techniques.

The training need of many employers, however, is for skill upgrading rather than entry-level employment. They want a better quality work force, one that is motivated, able to respond to changing needs, capable of higher quality work, and productive. For many firms, the need to upgrade the existing work force--a need to which formal training institutions have not generally responded well--far outweighs any need for initial training of workers. Small firms simply do not often have the capability to upgrade in-house: they do not have access to new technology, lack individuals willing or able to train, cannot capitalize on economies of scale, and cannot afford outside training (Salome and Charmes, 1988).

One of the first prerequisites when addressing training for small firms is the ability to form groups large enough to provide economical training. This means that trainees have to be selected from a number of small employers with similar requirements.

Training can be responsive to the needs of small firms if certain conditions are met. First, the course material must be directly applicable to the specific

and immediate training-related needs of the firm. This means that training often has to be tailor-made, case by case. While some content can be generalized across different training programs, in many instances substantial tailoring will have to take place in order to achieve the specific configuration required by the small enterprise. Second, training has to be accessible to the small business. This means that courses may have to be offered in the evenings, at the work site, in various time blocks, or in other "unconventional" ways. Third, the burden rests with the formal institution to initiate contacts, to aggressively reach out and offer services to employees who may have little knowledge of what assistance they can get, or need. Fourth, it is best to offer an integrated package in which training is part of the range of services offered. Training may only be effective if it is conceived and implemented within the framework of addressing other problems in the firm, such as marketing and product quality (Marsden, 1984; Herschbach, 1985; International Labour Office, 1987).

While generic training offered through formal programs is sufficient for large enterprises, it is not for small firms. Small firms want specific skill training. However, it is not possible to satisfactorily address the specificity of training required through large programs with standardized content. Short-term, highly specialized courses are needed. This suggests a two-stage strategy: generic training supplied through institutions, followed by specific short-term training at the time of employment. Presently, however, the biggest barrier to such a strategy is probably bureaucratic inflexibility: considerable innovation and coordination are required.

Training investments tend to be focused on programs designed to prepare individuals for urban, formal sector employment. This is particularly true in the case of programs supported through donor agencies. Rather large programs can be delivered, and institutional structures often already exist through which to initiate programs. While the administrative tasks may be complex, they are considerably less so than when attempting to deliver programs to small scale employers, particularly those in rural areas. If the concern, however, is to maximize the effectiveness of training, initiatives should be addressed to small, urban and rural employers.

Medium and small firms have considerable potential to contribute to income and employment growth. Small-scale firms are a significant component of the industrial sector in most developing countries, accounting for more than 50 percent of industrial employment and constituting up to 90% of the total manufacturing enterprises in some countries. In urban areas, the informal sector (firms of 10 employees or less) may comprise up to 80% of the economic activity. It is also true that in developing countries most of the population lives in rural areas where, after agriculture, small-size enterprises make up the largest employment sector (Lindholm and Mead, 1987; USAID, 1987; Davis, 1988).

Micro enterprises

The informal economic sector is important just because of the sheer numbers of people involved--between 20 to 70 percent of the labor force in developing countries. Its labor intensive activities, moreover, are a major source of employment, and an alternative for those unable to find jobs in the formal economy.

Informal workers can profit from training and improve quality and productivity. But instruction must be fully adapted to the requirements of the very small businessman, and complement, rather than replace, indigenous work techniques. Although better tools and equipment and more technologically advanced ways of working are desirable, low-paid, labor-intensive work is a competitive advantage in low-demand markets. The informal worker competes because of the low price of his physical labor, which is less costly than machinery or equipment.

There are a number of constraints encountered in attempting to provide training services (Herschbach, 1987). First, because the units of work are so small, it is very difficult to form groups large enough to achieve economy of scale. Training must be specific to the immediate requirements of individual establishments; for this reason, general training programs are unsuitable. Second, there are no clear policy alternatives for financing training. Presently, the trainee and his family cover the cost of training by paying "learning fees" to masters willing to take on apprentices. Organized training would involve considerable resources and disrupt a system that now provides training at lower personal and social cost than can be achieved through other means. Third, training must be accessible to informal workers. Basic educational requirements, cost (even if modest), the lack of time, reluctance to become involved; these factors can hamper efforts to provide training services. Work hours are long, often spent in piece work, and any time lost through training constitutes a real loss of income.

Training policy for the informal economic sector must consider the following:

Non-traditional approaches are needed. The small size of work groups, the diverse skill requirements of different subsectors and the considerable heterogeneity of economic activity suggests in turn that training must be accessible to small groups and be highly specific while at the same time encompassing a broad range of economic activity.

Training must relate primarily to the adapted technology used; quality and productivity must be stressed, but this does not necessarily mean the use of more costly machinery and equipment.

Resources developed for formal training probably cannot be used. Resources appropriate to the production sophistication employed and educational background of informal workers must be used. Low levels of formal education can be expected. Training must address cost, time and social constraints.

Formal Training Institutions

Firms, then, vary greatly in size, internal organization, product mix, the sophistication and mix of production technology used, and market targets. The training needs of employers, as well as the ability of different training modes to address these needs, vary according to firm characteristics. In general, formal training institutions are restricted in their ability to respond to employer-related training needs. Most successful training programs are flexible in terms of the content offered, methods of instruction and mode of delivery. Once a formal training program is established, however, the capability to adapt to changing labor market signals is very limited, even if the original training target was appropriate. A considerable original capital investment is involved,

restricting the ability to reinvest. In addition, permanent instructional staff has to be reassigned or retrained, and curricula have to be revised or developed.

At best, formal training institutions can respond to local labor markets in three ways. First, the technical fields selected for training traditionally employ a large number of workers, are fairly stable in employment opportunity and form the foundation for performing a variety of jobs. These courses are offered year after year, and, while modifications are made, they are phased in gradually in response to information gained from local employers. Second, formal programs provide generic training, coupled with available short-term training at the work site. That is, the training provided by the institution covers a representative sample of skills relating to one occupational field or related fields--providing a basic technological and theoretical background, with additional skill-specific training provided on the job. Third, specific skill training is provided through ad hoc, short term programs, in collaboration with participating employers or groups. The equipment of participating firms can often be used, the training may be given in the institution or at the employing site, and trainees are placed with participating firms. Once the need is met, the program is phased out.

The obsolescence of instructional content is a major problem which directly infringes upon the quality of instruction in formal programs. In general, training institutions lag from 6 to 10 years behind companies in reflecting new technological developments in their training programs (International Labour Office, 1987). Besides the fact that many formal training programs may not have the required managerial and programming flexibility to adapt relatively quickly to changing training needs, they also simply do not have access to state-of-the-art knowledge and technique.

Small and medium-size firms tend to be outside the mainstream of technological innovation and change, and consequently do not have ready access to new knowledge and practice. While small firms probably do a satisfactory job inducting the new employee into existing production practices, they also experience considerably more difficulty in retraining and upgrading their work force to improve quality and productivity.

The problem of obsolete content is not so critical among large firms. Many large firms have links to multinational corporations, are members of trade associations or have licensing agreements with international firms. As mentioned, they acquire information through imported machinery, turnkey plants, copied products, joint ventures, nationals who travel abroad and many other informal and formal means. Training content is embedded in the new technology used, and is transferred along with the technology. This advantage is not enjoyed by the smaller employer or the formal training program, and their ability to transfer new work skills is therefore seriously impaired.

Employers may have little communication with training institutions. "Natural" linkages often do not exist. Although there may be a general awareness of training sources, there is also usually a widespread lack of specific knowledge regarding these sources. Unless a particular employer has hired many graduates from a certain institution, he is unlikely to have strong perceptions about that institution, and no idea of the qualifications of individuals. For this reason, in many countries, the majority of employers have greater faith in experience than in training. Many large employers prefer to



recruit from smaller firms, and smaller firms from each other.

In most countries, there is little evidence that the training system monitors the needs of employers. Linkages between employers and training institutions are almost non-existent. When such linkages do exist, they usually involve a small part of the labor market. On the other hand, employers do not actively try to establish links with training authorities, even though the problem of scarce skilled labor may be persistent. Employers have too many other problems of higher priority on their minds. If strong linkages are to be established the training authority must take the initiative.

Assessing Training Need

Establishing linkages between training and employment is considered essential to successful program planning. It is assumed that long and short term projections of training requirements can be estimated, with training supply adjusted accordingly. Overall planning decisions are usually made at the national level using a variety of forecasting and planning methods (Little, 1986). Such high-level planning, however, is often ineffective. In any case, the planning and administration of programs at the local level requires different kinds of employment linkages.

Local planning

Local planners need local data. In most countries labor markets are very diverse and dynamic, with a number of geographically separate and discrete local labor markets. To be sure, individuals move within the domestic market (and sometimes abroad), but there is no good way to anticipate or accommodate this movement and effectively address local needs. For purposes of making training decisions, assessments need to be carried out in local firms and plants. As Method (1979) observes, a major problem associated with macro-planning is that assessments are conducted "at such a high level of aggregation (national, regional, sectoral) that alternatives for training or skill utilization at the level of the firm, project or local organization cannot be considered directly" (p. 13).

Assessments may also be off-target. National planning data tend to focus on the modern industrial sector, while considerable local job expansion occurs in the informal sector. The planning model used in the modern sector, and the occupational structure and staffing pattern of more highly organized industries are inapplicable as models for small-size enterprises (Davis, 1980; 1988). When planning is based on assumptions mainly relevant to the modern sector, the likelihood is increased that many trainees will not be able to get jobs--regardless of the quality of training--because such jobs do not exist. Low placement rates associated with training programs can be attributed in large measure to the fact that training is given for formal sector jobs which do not exist.

Recent thinking tends to shift emphasis towards determining the kind and flow of information required and towards improving its access. The needs of local employers are often not anticipated or well articulated if there is no way to channel information to planners and decision makers. Determining market changes and speeding up the flow of information between service providers and employers is essential (Hollister, 1983; Richter, 1984; 1986; Kelly, et al 1985). This is in marked contrast to formulating specific training targets

(Daugherty, 1988).

One strategy being followed in some developing countries is to speed up the flow and amount of information about job content and work organizations so that the training system can adjust accordingly. Decisions regarding instructional content are also decentralized and local institutions can make changes in response to the local labor market (Noah and Middleton, 1987; International Labour Office, 1987). Also, cooperation with innovative firms is encouraged so that appropriate curriculum changes can be made. Schools use experienced individuals from local firms as instructors and share training technology. Support is solicited from industry to supply current training equipment, and the enterprise-institution collaboration is encouraged by "contracting" with specific industries for services.

The Training Context

So far the discussion has mainly centered on the training requirements of firms and how these requirements can best be addressed. But quite apart from these implementation concerns, planners must fully consider the larger political, economic and social context. A program's "success" depends upon a set of interrelated conditions which foster program stability, efficient use of resources, long-term development and effective links with employment. Whether or not these conditions are favorable depends on the everyday context within which the program functions.

The policy environment

The single most important factor determining the effectiveness of training interventions is the policy environment (Bowels, 1988). Without a supportive policy environment, training will at best experience only marginal success.

There are at least two ways in which the policy environment impacts on training. First, the conditions are established which make it possible for employers to benefit from training. Tax policies, for example, must favor investment, firm expansion, and market stability; working capital must be available so that employers can upgrade and expand; currency regulations must not impede supplies of materials, machinery, equipment and spare parts; barriers to markets must be removed, especially in the case of small employers; labor regulations must support staff development; and incentives must be present for investing in training. These are among the conditions which profoundly influence employers to seek out and use training services, and which impact on the relative usefulness of these services.

Government policy may support training, but if it does not also support the conditions -- political, economic, social, and otherwise -- essential for the stability and expansion of enterprises, then training itself is only of secondary importance, and employers will see little value in its use. The lack of a positive policy environment is, in fact, among the more crucial problems facing enterprises in many developing countries.

A second way in which the policy environment has an impact lies in that conditions are established which make it possible to provide effective training. Training cannot be successfully implemented if the training context is hostile or nonsupportive. Financial constraints, for example, may preclude a government from providing funds to meet training costs, or political control of

staffing may interfere with recruiting trained individuals. There may be competition for the control and use of resources, or the hiring and promotion policies of firms may work as disincentives to train. There may be few reasons to develop strong mutual working relationships with employers, or there may be conflicts between competing groups such as unions, large employer organizations, ministry officials, competing producers, and different ethnic or tribal groups. Training may be perceived as a means of creating pressure for higher wages, giving an unfair advantage to a business competitor, countering union influence, producing "cheap" labor; or as an indirect way of imposing taxation. These and other factors influence the acceptance and support of training interventions, conditioning the kinds of programs which can be implemented, and impacting on program quality and effectiveness (Herschbach, 1985). Unless the policy environment is supportive, quality training cannot be initiated and sustained. Policy environment and training are inextricably linked.

Poor program results are probably due more to an unsupportive policy environment than to any other cause. Interventions designed to achieve a supportive policy environment must go hand-in-hand with training program design and implementation. The two must be linked.

The economic context

The economic context appears to be one of the more important conditions surrounding program implementation. A rising demand for labor is required, for example, for most vocational education programs to be successful (Bowels, 1987). This is particularly true of institutional forms of training. Without a rising demand for labor there is less demand for training output. Employers have less interest in collaborating with training providers, and there are proportionally less resources available for training. Most estimates of training demand on which programming is based, however, usually predict higher demand levels regardless of the long-term economic outlook, thus often leading to highly erroneous planning decisions and poor use of resources.

While it is true that, even in times when the economy is stagnant, some firms will need new employees, in general, under low demand conditions retraining and upgrading, rather than initial skill development, should be emphasized. To the extent that training increases productivity, it provides a way to decrease unit labor costs and realize expanded output with no addition to costs, by maximizing the labor content of growth, even if this is limited growth. In addition, during periods of economic slack the opportunity cost of training is lower. The time spent in training rather than in production costs less in low periods than when production demand is high (Kelly, et al, 1985). For this reason, slack periods are a good time for employers to upgrade their labor force, develop new product lines, or alter production technology.

The provision of retraining and upgrading services requires constant feedback from employers and close program articulation. Most institutional forms of training simply do not have the flexibility required to address the specific upgrading needs of employers--yet this is one of the more pressing training needs.

Low income countries, in general, have not been very successful in implementing vocational programs of all types. A typical cycle occurs as follows: donor assistance is secured, and facilities are constructed and

equipped; a core staff is trained, often through overseas fellowships; the program is implemented; and donor support is withdrawn, only to have the program rapidly deteriorate. Development cannot be sustained.

There are a number of reasons for this. One is that the income level is simply too low to provide the threshold level of support needed to operate and maintain training programs over the long term. Projects are by necessity relatively small, but the unit cost of training is high because economies of scale cannot be realized. Flexibility is often lacking because sustained investment is not available even on a modest scale, and adaptation cannot be made. Administrative capacity is often weak, and related institutional support is often not available. Implementation at the school level is generally weak. Because of low salaries, it is difficult to attract and retain qualified teachers. There is limited capacity for curriculum development, instructional materials are not available and certification and evaluation systems are lacking. Then again, the modern sector may be small, employment opportunities limited, and growth stagnated, constraining participation by employers and restricting the support for training; graduates may have little opportunity for placement (Middleton and Demsky, 1988).

These conditions curtail the ability of poor countries to mobilize successful training programs both in the private and public sectors. But to ignore these conditions when designing and implementing programs invites failure. Investments should only be made in those training alternatives that can be sustained over time given the existing contextual conditions.

Provide integrated and coordinated service

Training services cannot be provided alone, but must be integrated and coordinated with other services which employers require. Although, in general, employers consider training a valued investment, their support is qualified. Other services must be available before employers are willing to invest in training (Curevo, 1985; Merschbach, et al, 1985; Kelly, et al, 1985). The need for capital, expanded markets, better distribution, better sources of raw materials, and advanced technology, for example, overshadow the immediate concern for training. Until these other needs are addressed, employers tend not to place a high priority on training because they cannot make full use of its benefits.

Failure to identify local constraints to production and marketing, for example, is usually a greater problem than failure to identify training needs. Typical constraints are in the area of energy, transport, capital, supply of raw materials, and other intermediate inputs (Dahlman, et al, 1985). Four components in various combinations are widely found in most programs designed to assist small and micro-enterprises: 1) financial assistance 2) technical assistance (also called extension); 3) social promotion and 4) training (Grindle, et al, 1987). But unless training is combined with a "package" of integrated initiatives to broadly address financial, production and marketing concerns, it cannot be fully effective and employers may opt not to use available services (Marsden, 1984; ILO, 1987; USAID, 1987).

There are a variety of approaches to assisting small and medium size enterprises. A consensus, however, is emerging among development specialists that one of the most effective ways, in the long term, is to assist in the development of indigenous intermediary service providers. The lack of service

providers is one of the major impediments to development. Local firms simply have no way to assess and remediate deficiencies. Donor assistance cannot fully address this problem because it is generally limited in scope and of relatively short duration. Rather than attempt to directly address specific development problems, a more effective approach is to target development assistance to the local institutions and service providers who can bring essential services to enterprises. Once this local capability exists, development is sustained as market forces come into play.

Training, then, is conceived as but a part of a package of integrated and coordinated services to employers. Moreover, training is focused on developing the intermediary service providers who can address the immediate production and marketing concerns of local employers. Less attention is given to specific skill development, which can probably in any case be more directly addressed by local service providers.

References

- Alfthan,, T. (1985). Developing Skills for Technological Change: Some Policy Issues. International Labour Review , 124 (5): 817-829.
- Anderson, D. (1982). Small Industry in Developing Countries: Some Issues . Development Economics Department, Staff Working Papers Number 518. Washington, D. C.: The World Bank.
- Bowels, W. D. (1988). A. I. D.'s Experience With Selected Employment Generation Projects . A. I. D. Evaluation Special Study No. 53. Washington, D.C.: U. S. Agency for International Development.
- Braun, F. (1987). Vocational training as a link between the schools and the labour market: the dual system in the Federal Republic of Germany. Comparative Education , 23(2):123-143.
- Bremer, J., Cole, E., Irelan, W. and Rourk, P. (1985). A Review of AID's Experience in Private Sector Development . AID Program Evaluation Report No. 14. Washington, D. C.: Bureau for Program and Policy Coordination, U. S. Agency for International Development.
- Bowman, M. J. (1988). Links between general and vocational education: does the one enhance the other? International Review of Education , 34 (2): 149-171.
- Chapman, D. W. and Windham, D. M (1985). Academic Program "Failures" and the Vocational School "Fallacy": Policy Issues in Secondary Education in Somalia. International Education Development , 5 (4): 269-281.
- Cuervo, A. (1985). Employer-based Training Survey: Panama . Washington, D. C.: Bureau for Science and Technology, U. S. Agency for International Development.
- Cyert, R. M. and Mowery, D. C. (1987). Technology and Employment . Washington, D. C.: National Academy Press.
- Dahlman, C. J., Rosa-Larson, B. and Westphal, L. E. (1985). Managing Technological Development Lessons from the Newly Industrializing Countries . World Bank Staff Working Papers Number 717. Washington, D. C.: The World Bank.
- Davis, R. G. (1988). Planning techniques and methods. International Encyclopedia of Education and Research , Vol. I, Supplementary. Oxford: Pergamon Press.
- Davis, R. G. (1980). Planning Education for Development , Vol II. Cambridge: Harvard CSED.
- Dougherty, C. (1988). Occupational training maps: what they are and why they are indispensable. International Review of Education , 34 (2): 241-244.
- Gershenberg, I. (1987). The training and spread of managerial know-how, a comparative analysis of multinational and other firms in Kenya. World Development , 15 (7): 931-939.

Grindle, M. S., Mann, C. K. and Shipton, P. M. (1987). Capacity Building for Resource Institutions for Small and Micro-Enterprises: a Strategic Overview Paper. Office of Rural and Institutional Development, Bureau for Science and Technology and Office of Private and Voluntary Cooperation, Bureau of Food for Peace and Voluntary Assistance. Washington, D. C.: U.S. Agency for International Development.

Herschbach, D. R. (1985). Linking Training and Employment: An Emerging Perspective. Washington, D. C.: Bureau for Science and Technology, U. S. Agency for International Development.

Herschbach, D. R. (1987). Training in the Urban Informal Sector. Geneva: Training Department, International Labor Office.

Herschbach, D. R., Reinhart, B. A., Darcy, R. L. and Sanguinetti, J. A. (1985). Linking Training and Employment: A Case Study of Training Systems in Jordan. Washington, D. C.: Bureau for Science and Technology, United States Agency for International Development.

Hollister, R. G. (1983). A perspective on the role of manpower analysis and planning in developing countries. In Manpower Issues in Educational Investment: A Consideration of Planning Processes and Techniques. World Bank Staff Working Papers No. 624. Washington, D. C.: World Bank.

International Labour Office (1987). Training and Retraining-- Implications of Technological Change. Geneva: International Labour Office.

Kaneko, M. (1984). Education and labor force composition in Southeast and East Asia development. Development Economics, 22 (1): 47-68.

Kelly, T., Evans, D. Faulds, V. and Callejas, J. (1985). Addressing Employment Needs: A Study of the Training System in Honduras. Washington, D. C.: Bureau for Science and Technology, U.S. Agency for International Development.

Liedholm, C. and Mead, D. (1987). Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications. MSU International Development Paper No. 9. Department of Agriculture Economics. East Lansing, Michigan: Michigan State University.

Little, A. (1986). Planning the education-employment link: A brief guide to current methods. International Journal of Education Development, 6 (2): 85-92.

Little, I. M. D. (1987). Small manufacturing enterprises in developing countries. The World Bank Economic Review, 1(2):203-235.

Marsden, K. (1984). Services for small firms: The roles of government programmes and market networks in Thailand. International Labour Review, 123 (2): 211-235.

Maurice, C. (1984). Private Sector Involvement With The Vocational Community: An Analysis of Policy Options. Columbus: The National Center for Research in Vocational Education.

- Method, F. J. (1979). The development of technical skills in LDC's. (Mimeograph). Washington,, D. C.: Planning Office of the Institute for Scientific and Technological Cooperation.
- Middleton, J. and Demsky, T. (1988). Review of World Bank Investments in Vocational Education and Training for Industry . Washington, D. C.: Education and Employment Division, Population and Human Resources Department, World Bank.
- Nunez, A. R. and Russell, J. F. (1982). As Others See Vocational Education Book 1: A Survey of the National Association of Manufacturers . Columbus, Ohio: The National Center for Research in Vocational Education.
- Noah, H. and Middleton, J. Planning and labor market linkages in Chinese secondary vocational and technical education. Washington, D. C.: Education and Employment Division, Population and Human Resources Department, World Bank.
- Owens, T. R. (1983). Private sector views of vocational education: A statement employer survey. Paper presented at the annual meeting of the American Vocational Education Association, Anaheim, CA, December, 1983.
- Pack, H. and Westphal, L. E. (1986). Industrial strategy and technological change. Journal of Development Economics , 22: 87-128.
- Pratzner, F. C. and Russell, J. F. Perspectives on the roles and functions of vocational education. In Lewis, M. V. and Pratzner, F. C. (1984). Perspectives on Vocational Education: Purposes and Performance . Columbus, Ohio: The National Center for Research in Vocational Education.
- Richter, L. (1984). Manpower planning in developing countries: changing approaches and emphases. International Labour Review , 123 (6), 677-692.
- Richardson, E. L. (1981). Employer perceptions of the preparation of youth for work. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles. April 17, 1981.
- Richter, L. (1986). Training Needs and Assessment Monitoring , Geneva: International Labour Office.
- Salome, B. and Charmes, J. (1988). In-service Training: Five Asian Experiences . Paris: Development Centre of the Organization for Economic Co-operation and Development.
- Sanyal, B. and Ferrin, C. (1986). The Urban Informal Sector and Small-Scale Enterprise . Washington, D. C.: Inter-American Foundation.
- Sherman, S. W. (Ed.) (1983). Education for Tomorrow's Jobs . Washington, D.C.: National Academy Press.
- U. S. Agency for International Development. (1987). Future A.I.D. Directions in Small and Micro-Enterprise Development . Report on the Williamsburg Workshop. Employment and Enterprise Development Division, Office of Rural and Institutional Development, Bureau for Science and Technology and Center for Development Information and Evaluation, Bureau for Planning and Program Coordination. Washington, D. C.: U.S. Agency for International, Development.

Wade, B. K. (1984). Soliciting Industry's Opinions for Improving Vocational Education . ED 246 357. University Park, PA: Pennsylvania State University

Watanabe, S. (1986). Labour-saving versus work-amplifying effects of micro-electronics. International Labour Review , 125 (3): 242-259.

Watson, K. (1988). Forty years of education and development: from optimism to uncertainty. Educational Review , 40 (2): 137-174.

Wenig, R. E. and Wolansky, W. D. (1983). Employer-Sponsored Skill Training . Columbus, Ohio: The National Center for Research in Vocational Education.

Westphal, L. E., Yung, W. R. and Pursell, G. (1981). Korean Industrial Competence: Where it Came From . Washington, D. C.: World Bank.