SKILLS IN ASIA AND THE PACIFIC: WHY TRAINING MATTERS

The Tripartite Asian and Pacific Consultative Meeting on Human Resources Development and Training, to be held in Singapore from 30 June to 2 July 1999, will be one in a series of regional meetings (the others to be held during the course of 1999 in Africa, Europe and Latin America). These meetings will review major issues of training policy and programme development in the context of globalization and structural and technological change; examine the changing roles of various stakeholders in human resources development and training; and review the policy and institutional frameworks that will assist countries as they go about the vital task of making their training policies and systems more relevant, effective and efficient.

The meeting will examine the specific human resources development and training issues of importance to the Asian-Pacific situation, and is expected to formulate a common understanding on these issues.

This report is intended to serve as a basic document for discussion at the Asian and Pacific consultative meeting. The report reviews recent employment and training trends, examines the impact of globalization, new technology and changes in the workplace on the demand for skilled workers, and considers recent training policy and programme initiatives in the region. The report discusses the emerging partnerships and alliances between governments and social partners on human resources development and training programmes in the workplace. It also discusses some examples of specific ILO technical assistance in training in member States.

Mitsuko Horiuchi
Regional Director,
Asia and the Pacific
Acknowledgements

This report was prepared by Trevor Riordan with substantive inputs from Rashid Amjad, Torkel Alfthan and Ayse Mitchell. Anthony Twigger provided valuable advice and support during the preparation of the report. Other useful inputs were received from Ian Cummings, Barbara Murray and Gopal Bhattacharya. Text processing was carried out by Amittada Boonmontira and Ungkanee Sywarungsymun.

Parts of the report incorporate excerpts from papers prepared by David Ashton and André Lewis. In addition, material was incorporated from papers prepared for other publications and meetings by Josephine Hykin, Frank Pyke and Paul Ryan. Material was also incorporated from the ILO World Employment Report 1998-99, Employability in the global economy: how training matters.

The report was edited by Penelope Ferguson.
## CONTENTS

Preface .................................................................................................................................................. iii

Acknowledgements ............................................................................................................................... iv

1. **Introduction** .................................................................................................................................. 1
   1.1 Worsening global employment situation ............................................................................... 1
   1.2 Four main reasons for persistently high and rising levels of unemployment and underemployment ................................................................................................................................. 1
   1.3 The diverse and rapidly changing HRD and training environment ........................................ 3
   1.4 ILO standard-setting activities in the human resources development area ......................... 4
   1.5 The General Discussion on human resources development at the 2000 International Labour Conference .............................................................................................................................. 6

2. **Globalization, industrial restructuring, new technology and changing demands for skills** ........ 7
   2.1 The implications of globalization for skills and work ......................................................... 7
   2.2 Training, productivity and competitiveness in the global economy .................................. 8
   2.3 New technology and skills ............................................................................................... 11
   2.4 New forms of work organization and changing skill requirements .................................. 12
   2.5 Changing patterns of work .............................................................................................. 14
   2.6 Difficulties in identifying labour market needs ............................................................... 14
   2.7 The need for lifelong learning .......................................................................................... 15

3. **HRD and training policies and programmes – recent trends and initiatives** ............................ 17
   3.1.1 National training systems – the need for reform ......................................................... 17
   3.1.2 Coordinating HRD and training policies and programmes ........................................ 17
   3.1.3 Decentralization and autonomy ................................................................................ 19
   3.1.4 Strengthening basic education and developing core skills ....................................... 19
3.1.5 The impact of the financial crisis on training systems ..................21
3.1.6 Cost / benefit support for training ..............................................21

3.2 Different national approaches to training
3.2.1 The developmental State model of the Asian ‘tiger’ .................25
economies – the Republic of Korea, Singapore and Hong Kong, China
3.2.2 The approach to training in a transition economy – China ....25
3.2.3 The reform of training in a market economy – Australia ..........26
   - the move to workplace-based training and the development of
     a national strategy for vocational education and training
   - the privatization of training assessment and delivery
   - the challenges and difficulties of deregulating training

3.3 Some issues in the supply and delivery of skills..........................30
3.3.1 The recognition of skills..........................................................30
3.3.2 Flexible delivery, coaching, mentoring and self-paced learning 32
3.3.3 Quality standards and assurance for all providers .....................32

3.4 The special problems of training in small firms............................33

4. Training in the informal sector and equity - exclusion of vulnerable ..........39
groups from training and employment

4.1 The growing informal sector in Asia ............................................39
4.1.1 Employment in war-affected countries ....................................39
4.1.2 Training for rural employment in China ....................................40
4.1.3 Training authorities and the informal sector – the Philippines 42
4.1.4 The informal sector and unemployment in the Pacific ..........42

4.2 Open links and pathways within and between education ..............43
   and training institutions

4.3 Youth unemployment ..................................................................43
4.4 Long-term unemployed ...............................................................43
4.5 Older displaced workers ..............................................................44
4.6 People with disabilities ...............................................................44
4.7 Specific difficulties of exclusion for women across all groups ........45
4.8 Promoting access and equity ......................................................46

5. Partnerships and alliances in training .............................................49

5.1 The roles of the public and private sectors in training ..................49
5.2 Public and private stakeholders and their comparative advantages ....52
5.3 The State and society: towards an interactive and complementary partnership

Selected documents consulted
1. Introduction

1.1 Worsening global employment situation

Human resources development and training issues are inextricably linked to employment. In Asia and the Pacific, employment is a vital concern, as countries tackle the legacy of the Asian financial crisis. However, employment problems are by no means confined to this region. Despite some positive developments, notably in the United States, where unemployment is at its lowest levels since the early 1970s, and in a few other industrialized countries, the overall global employment situation remains grim, with persistently high levels of open unemployment and underemployment in most regions of the world.

The ILO estimates that by the end of 1998 more than one billion workers out of a total labour force of 3 billion are either openly unemployed or underemployed (i.e. work substantially less than full-time or earn less than a living wage). Of these, 150 million are searching for work and cannot find it. In addition, 25 to 30 per cent of the world’s workers – or between 750 and 900 million people – are underemployed.

These stubbornly persisting high levels of unemployment and underemployment have triggered growing concern over the social exclusion that follows from limited employment opportunities for the young and the old, the less skilled, the disabled and ethnic minority groups – with a bias against women in all these categories. The ILO estimates that worldwide, there are about 60 million young people between the ages of 15 and 24 who are in search of work but cannot find it.

1.2 Four main reasons for persistently high and rising levels of unemployment and underemployment

The East Asian crisis

The crisis in East Asia has exposed a negative side of globalization. Precise numbers are difficult, but the estimates of increases in unemployment and those pushed below the poverty line are staggering and show the immense hardship, suffering and social tensions that have been created. The rise in open unemployment in the countries directly affected could be between 15 and 20 million (Indonesia, the Republic of Korea, Malaysia, the Philippines and Thailand), and increases in the numbers below the poverty line could be three to four times this figure. (Table 1.1)

- In Indonesia, one in every five formal sector jobs had been wiped out in 1998 alone. An additional 20 per cent of the population, approximately 40 million people, is estimated to have fallen into poverty that year. Minimum wages purchasing power fell by almost 50 per cent.

- In the Republic of Korea, one in 20 workers lost their jobs between November 1997 and July 1998, and unemployment increased from 2.3 to 8.2 per cent. An estimated 12 per cent of the country’s population sank below the poverty line in 1998.
Skills in Asia and the Pacific: Why training matters

- In Thailand, open unemployment levels tripled in 1998, moving from 2 per cent to 6 per cent. It is estimated that 12 per cent of the Thai population sank into poverty that year.

Economies in transition have not sustained their earlier demand for labour

Far-reaching structural economic changes and at times extensive enterprise restructuring has led to large-scale retrenchment and job losses as transition economies have pursued market-oriented reforms. In China, reforms of state-owned enterprises will lead to significant job losses, as 15 to 20 per cent of employees are regarded as redundant. While the recorded unemployment level in China was low at 2.9 per cent, the effective urban unemployment rate was estimated at about 7.5 per cent. Real wages in Eastern Europe and the former Soviet Union are 70 to 80 per cent of the levels of the late 1980s. This has been accompanied by rising wage inequality. Previously, about 7 per cent of the labour force earned less than the average wage – this figure is now about 40 per cent. In 1989 approximately 14 million people in the former Communist Bloc in Eastern Europe lived on less than US$4 a day. By the mid-1990s this figure had risen to about 147 million. Many workers in these countries have not been paid for months. In China, 11 million workers in urban areas continue to receive basic salary payments from their factories but have no work.

High growth of labour supply against slow or little growth and limited employment opportunities

This is especially true of economies in South Asia, the Pacific island countries and in Africa. In Africa, labour force growth is about 3 per cent, adding 8-9 million potential workers each year. In Pakistan a combination of high growth of the labour force, estimated to be between 2.7 and 3 per cent, a slow down in out-migration and a significantly low growth of output has made the job situation much more difficult, and the declining poverty trend of the 1980s has been reversed. India’s economic performance has fluctuated in the 1990s due to both economic liberalization and the weather. Although the trend growth rate has been higher than in earlier years, it has not been sufficient or sustained for long enough to reduce significantly the high levels of underemployment and to absorb new job-seekers productively. The same applies to Bangladesh, where growth has also been significantly higher in recent years. The Pacific island economies typically depend on a narrow range of agricultural export commodities. Except in Fiji, where sugarcane plantations dominate agriculture, a majority of workers are engaged in subsistence activities in both the agricultural and non-agricultural sectors. Underemployment, low productivity and low incomes represent the real manifestation of the unemployment problem.

Jobless growth

In some parts of the world, even when growth has picked up its impact on unemployment has been marginal, and informal activities continue to expand. Latin America presents an example of this kind of growth without jobs.
Table 1.1  East Asian Crisis: Changes in unemployment rates and levels, 1996-1998

<table>
<thead>
<tr>
<th>Countries</th>
<th>Unemployment rates, per cent</th>
<th>New unemployed, millions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1996</td>
<td>1998 Most recent</td>
</tr>
<tr>
<td>China*</td>
<td>3.0</td>
<td>5.0 to 6.0</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>2.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.1</td>
<td>9.0 to 12.0</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>2.6</td>
<td>7.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>7.4</td>
<td>13.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>13.4 to 16.2</td>
<td>20.6 to 24.7</td>
</tr>
</tbody>
</table>

* Urban unemployment rate

1.3 The diverse and rapidly changing HRD and training environment in Asia and the Pacific

The wide diversity in economic development in the Asian region is equally reflected in the pattern of human resources development. The first tier of newly industrialized countries and special regions (the Republic of Korea, Singapore and Hong Kong, China), rank high in terms of human resources development, while South Asia and Asian transitional economies still lag behind. The economies in the first tier have been able to develop skills needed for transition to higher proportions of value-added and technologically advanced products.

Rapid globalization and liberalization and the resulting need to enhance international competitiveness have in recent years been the driving forces behind the strong emphasis on human resources development and training. There is a common theme – the need for a highly flexible and adaptable workforce to meet the challenges of new technology and increased competition due to the effects of globalization. The Asian financial crisis has also brought HRD and competitiveness issues to the forefront in many countries.

Human resources development, and training in particular, will be a critical factor in facilitating economic recovery in Asia in the wake of the financial crisis. The crisis has shown that the benefits of involvement in global markets can accrue on a stable basis only if the country has a well-educated labour force that can adapt its skills quickly in response to the changing demands of the global market place. Prior to the financial crisis, sustained rapid growth, large FDI inflows and changing economic structures in the second tier of newly industrializing countries in South-East Asia (Indonesia, Malaysia and Thailand) resulted in a shortage of critical skills, especially in science and technology fields. The education systems in these countries were not able to produce enough qualified workers to cope with the increasing demand and thereby support the transition to high-technology industries. Thailand, where more than 70 per cent of the workforce has only a primary school or lower education level, is a classic example. This has led to a critical examination of education and training systems in almost all countries in the region. A number of countries (Indonesia, Malaysia, the Philippines, Singapore and Thailand) have implemented comprehensive reforms. The main focus of attention has been
the mismatch between employment, and education and training or the lack of close linkages between training and the needs of the labour market. The crisis, however, has worsened the situation. Today, large numbers of unemployed coexist with a scarcity of workers with specific skills required by the labour market.

The Asian transitional economies, on the other hand, experience difficulties in reforming their training systems to cope with the problem of the surplus workers still employed in state enterprises, while at the same time attempting to deal with the need for skilled workers in the emerging high-technology industries. The issue of retraining has assumed particular importance with accelerated reform of state-owned enterprises in several countries. In China, for example, the government’s current re-employment programme aims to retrain and re-employ 10 million displaced workers within three years.

Reviews of national training systems in the region have revealed that major equity problems. In general, training opportunities for women, members of linguistic and minority groups, workers in the informal sector, older workers and workers with disabilities are inadequate or non-existent. The rapid growth of employment opportunities for women in manufacturing and service sectors has been largely confined to low-skilled and lower-quality jobs.

The high costs and limitations of public training systems in Asia have highlighted the importance of involving workers’ and employers’ organizations in the development of national human resources development policies and programmes. Social partners, particularly private sector employers, are playing a major role in providing continuing training to the work force. The rising demand for training, and the inability of the public sector to meet this demand, means that the private sector will need to play a leading role in delivering training at both the institutional and enterprise level.

The ILO’s Twelfth Asian Regional Meeting, held in Bangkok in 1997, recognized the need for increased emphasis on investing in human resources development for growth in the region, particularly in the prevailing economic climate. It was felt that the highest priority should be given to human resources development policies designed to meet the needs of the most vulnerable groups, who were especially likely to be affected by the economic downturn in the region. Equal access to education and training opportunities for women was also considered very important.

1.4 ILO standard-setting activities in the human resources development area

Human resources are, more than ever, at the centre of social and economic policies and development strategies. For some time now the effects of liberalization and globalization, and the resulting need to enhance international competitiveness, have had a major impact on human resources development policies. The changes brought about by programmes of structural adjustment, market liberalization and absorption of new technologies have placed great demands on training systems. Training policies and programmes must now deal with the demand for higher-level skills in line with economic requirements, while at the same time addressing many of society’s new problems such as unemployment, exclusion and poverty.
International labour standards form the cornerstone of the ILO’s activities. This point has been clearly reiterated by the Governing Body of the ILO, which recently emphasized the need to support the implementation of these instruments and to refocus ILO action on this essential part of its mandate. Human resources development standards should be able to serve as a frame of reference for the ILO’s programme of practical activities and should correspond to the ILO’s policy on vocational training and guidance.

The major ILO instruments in the area of human resources development and training are the Human Resources Development Convention, 1975 (No. 142) and Recommendation, 1975 (No. 150). They cover vocational training and guidance at various levels and have replaced several earlier Recommendations on vocational training and apprenticeship. The Convention and Recommendation are often called the human resource development standards.

Many other instruments also recognize the contribution of training and guidance to the promotion of employment, to equitable treatment in employment, and to improving working conditions. These include the Paid Educational Leave Convention, 1974 (No. 140) and its accompanying Recommendation (No. 148); the Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983 (No. 159) and Recommendation (No. 99); the Special Youth Schemes Recommendation, 1970 (No. 136); the Minimum Age Convention, 1973 (No. 138); the Employment Policy Convention, 1964 (No. 122); and the Equal Remuneration Convention, 1951 (No. 100) and Recommendation (No. 90).

Formulated in 1975, almost 25 years ago, the Human Resources Development Convention, 1975 (No. 142) and Recommendation (No. 150) mirror the prevailing economic and social conditions of that period. Then, most countries pursued planned economic, social and industrialization policies, the information technology revolution was still in its infancy, work organization in enterprises was largely based on Taylorist principles and the labour force was employed in secure wage jobs. While the principles outlined in the Convention, which is rather general, are still relevant to today’s world, the Recommendation may need an overhaul.

The Recommendation gives little room for demand and labour market considerations; it provides little or no guidance on many issues that, today, are central to training policy and system reforms being undertaken by member States. These issues include the policy, governance and regulatory framework of training; the respective roles of stakeholders other than the State, (e.g. the private sector, the social partners and civil society) in formulating policy and providing training ways and means to diversify and tap alternative sources of finance for training; devising appropriate mechanisms and methods to target training programmes so that they reach particular groups; the shift away from training for skills and qualifications towards developing and recognizing competencies that take in a wide range of work-related knowledge, technical and behavioural skills and attitudes; and the increasing need to focus skill development activities on preparing workers for self employment and for work in the informal sector.
1.5 The General Discussion on human resources development at the 2000 International Labour Conference

Recent discussions in the ILO’s Governing Body on future standard-setting activities suggested that training and HRD should receive priority and that the instruments on HRD, particularly Recommendation No. 150, may need to be adapted to take into account socio-economic developments and changes in training policies, and training and guidance systems and practices. The discussions also suggested reinforcing technical assistance to promote the application of these standards. Several national studies completed during the last biennium (1996-97) also drew this conclusion, and they provide, with other regular programme research outputs of the ILO, a strong basis for the preparation of a General Discussion paper on these issues to be presented to the Conference in 2000. This was confirmed during the 270th Session of the Governing Body when it reviewed a number of proposals for the agenda of the 88th Session (2000) of the ILC. The proposal on HRD received the strongest support and was selected, in first place, with the support of employers, workers and 19 governments.

A General Discussion on the topic of Human resources training and development will therefore take place at the International Labour Conference in 2000. In preparation for the General Discussion, the ILO has decided to organize a series of regional meetings that will review major issues of training policy and programme development in the context of globalization and structural and technological change; examine the changing roles of various stakeholders in HRD and training; and review the policy and institutional frameworks that will assist countries in making their training policies and systems more relevant, effective and efficient. In addition to the present Tripartite Asian and Pacific Consultative Meeting on Human Resources Development and Training, similar consultative meetings in Africa, the Caribbean and Latin America will endeavour to reach a common understanding on major HRD and training policy issues in the respective regions.
2. Globalization, industrial restructuring, new technology and changing demands for skills

2.1 The implications of globalization for skills and work

The effects of evolving globalization and rapid technological development have resulted in substantial structural changes in the world of work with a profound impact on jobs. The skill requirements for these jobs have been changing rapidly and training systems are under increasing pressure to respond effectively. Globalization has increased competition between economies, and their products and processes now need to be of higher quality, and at a competitive cost, if they are to maintain their existing market share or expand.

In this period of increased competition, technological change and new forms of work organization, the level and quality of skills that nations possess will be critical factors in achieving economic efficiency and social equity. The importance of education and training in contributing to economic growth and development has always been recognized. More recently, however, in the context of rapid globalization and the expansion of new information technology, human resources development is increasingly seen as a critical factor in economic growth. The variation in growth and living standards across countries can be attributed to differences in education and skill levels, and the quality of their workforces. Countries with higher levels of skills have many advantages. They are able to adjust more effectively to the challenges and opportunities of globalization because their workforce is more flexible and better equipped to absorb and work with new technologies and equipment.

During the ILO’s Twelfth Asian Regional Meeting, several countries expressed concern about the potential negative impact of globalization. It was suggested that human resources policies should be developed to offset these effects, and the impact of new technology, because both factors affect unskilled workers most severely. Many countries also stressed the need for greater emphasis on training workers. Skills were perceived to allow workers greater independence in their choice of employment, while at the same time offering a degree of protection in tightening labour markets. It was further felt that competition between countries should be on the basis of the quality of a country’s skilled workers rather than low wages.

All these pressures have created a sustained drive toward improving performance, based on the growing knowledge-intensity of business. The companies that are likely to sustain their advantage in world markets will be those which have been able to utilize the workplace as a source of continuous learning and personal development, and mastered the management of knowledge for corporate success. However, the kinds of skills they require are increasingly the ‘soft’ skills. Technical knowledge and practical skills remain important but they must now be used within the context of teamwork and devolved management. Today’s employees have to be able to make decisions and work with colleagues to implement them. They require problem-solving, teamwork and communication skills. A recent consultation organized by the International Federation of Training and Development Organizations (IFTDO), with its members, focusing on the individual and organizational competence approach to training, found that “skills, knowledge and behaviours are the elements most commonly included, and qualifications and attitudes follow closely behind.” These are linked to the growing use of the employability concept, with its emphasis on the market appeal of personal skills and attributes which are transferable across employers. The ILO World Employment Report, and the IFTDO
report note that the levels of competence in these soft skills are rising as competition increases. This would be an important conclusion in itself, but there is a further complication. Unlike technical skills and knowledge, improvements in behaviours that boost employability are less easily developed by conventional education and training techniques.

The companies that are succeeding in today’s environment have also learned from the earlier experience of Japan how to incorporate best practice, with each organization in turn seeking to leapfrog the new benchmarks as they are established. Employers have responded to intensifying competitive pressures by refining the process of learning from leading companies through benchmarking. More and more companies are using this method as they seek to match best practice elsewhere. This technique provides the means by which good practice can be transferred successfully, both within and across national boundaries. It allows continuous improvement to become an integral part of business strategy and of the pursuit of excellence. This is the reason why benchmarking has become embedded in the processes leading to major quality awards such as the Malcolm Baldrige Award in the United States and the European Quality Award, all of which, in turn, have ‘developing and managing human resources’ as a central component. Governments have helped this process by using of market-driven schemes such the Investors in People Award in the United Kingdom and the People Developer Programme in Singapore.

2.2 Training, productivity and competitiveness in the global economy

The level of skills that a nation possesses and the quality of those skills are becoming critical factors influencing its ability to take advantage of the opportunities and minimize the social costs which rapid technological transformation and transition to a more open economy entail. An educated, skilled and adaptable workforce is essential to ensure more efficient and productive enterprises, improved national competitiveness, and to take advantage of new niches which the interface of globalization and new technology offers.

An economy’s competitiveness may be defined as its ability to produce goods and services that meet the tests of international competition, while its people enjoy a rising and sustainable standard of living. If an economy experiences a decline in competitiveness, or relative productivity, the adjustments required to correct it (through exchange rates or making labour markets more ‘flexible’) may result in lower levels of wages and incomes, rising unemployment and underemployment, and the economy’s total output falling below desired targets. The dynamics of the growth process also point to a positive relationship between a country’s rate of productivity growth and change in its share of world markets. Countries with high productivity growth rates also have high rates of investment and growth. Countries that are slow to adapt to the unprecedented strengthening of world competition, through cumulative causation, are likely to fall further behind and end up with an unfavourable product mix that makes long-term productivity growth even harder to achieve. In order to achieve lasting increases in the standard of living, countries must pay full attention to their international competitive position.

In East Asia, during the period of rapid economic expansion that preceded the financial crisis, the interaction of skills and growth was self-supporting, easing the process of growth. These countries accumulated capital and skills at a very rapid pace. Policy choices could be more ambitious precisely because the level of education and skills did not constrain their
implementation. The case of East Asia shows that while education and training cannot alone act as catalysts for growth, their absence and the absence of appropriate levels of skills can be a constraint. This region’s work to develop supporting skills played an important role in moving to higher value-added and technologically-advanced goods. In East Asia, growth in productivity was accompanied by positive employment growth in manufacturing.

In contrast, Latin America’s productivity growth in manufacturing has been accompanied by low or negative employment growth. Latin American economies have experienced both a relative shortage of skills and a distribution of skills and years of education which is more polarized than in East Asia, thus encouraging new, technology-intensive activities appropriate to the small share of the labour force with advanced education but not encouraging large-scale export activities requiring large amounts of semi-skilled labour. In Latin America a shortage of skilled workers has led to a widening wage gap between skilled and semi-skilled workers. A recent study shows that the wage differentials have widened by more than a quarter since 1990 in many countries. Much of the problem can be traced to inadequate schooling and skills development.

While a number of factors contributed to the East Asian crisis, evidence is also emerging that weaknesses in terms of competitiveness of capital and labour may have also been have contributed. This factor could also constrain the recovery of employment and output in the economy. Productivity growth in the region was weak in the long run and it weakened further over the 1990s. Two factors were crucial. First, exchange rate appreciation affected the entire manufacturing sector, and exports of both traditional and technology-intensive products dropped. Secondly, while unit labour costs, a major determinant of competitiveness, fell slightly, the decrease was not sufficient when compared with other producers to perpetuate the growth trend in exports. In terms of the two important components of unit labour costs, wages and productivity, while the wage component became more competitive or remained constant, the other component, productivity, became less competitive. In Thailand, for example, while total factor productivity had increased over the second half of the 1980s to 3 per cent, it slumped to zero over the 1990s.

Products and services designed specifically for a domestic market have a place in every economy but may, if relied upon solely, limit productivity and the potential to expand into other markets. On the other hand, expanding into the sophisticated manufactures that export markets often require can be difficult, as the research and development cost of new products is beyond the means of small companies. This has led to multi-national organizations, linkages between competitor companies and other strategies to enable businesses to interact internationally. There are many examples, of which the automotive industry is perhaps the best known. Car manufacturers commonly source products from competitors and assemble finished vehicles from a variety of sources rather than individually manufacturing in every country. Airlines also form strategic international alliances to minimize over-servicing on unprofitable routes and share marketing costs. This is a continuing trend and makes sound business sense. The effects of this approach flow into the human resources area when certain types and ranges of work shifts rapidly from one country to another. In these circumstances functions such as quality control and design cannot be kept within a single workplace, and new skills in managing resources and interacting with global workplace colleagues become more important for many workers.
Nearly all Organization for Economic Cooperation and Development (OECD) countries and other industrialized countries have experienced downsizing in their productive sectors. While much of this can be attributed to the impact of technology or to local economic conditions, it is also driven in many spheres by corporate philosophy. Doing more with less is a dictum influencing private and government sector organizations and, as a major cost factor, labour is frequently cut to test whether productivity gains from remaining workers can indeed provide suitable outputs with less workers. There is growing evidence that savage downsizing in many companies has been counter-productive but it continues to be a key tactic in industry competitive strategies.

International competitiveness, as noted earlier, is dependent on a broad range of factors. Education and training is a vital part of the 'people' factor. By itself though, education and training cannot directly produce a more internationally competitive nation - it is interdependent with other competitiveness factors. But the skills and competence of the workforce are significant determinants of measured economic growth and productivity performance. The way in which it is measured is also important. Excessive focus on professional education and qualifications as a primary measure of competitiveness has been a pitfall for some countries.

Continuing to expand university and other higher-level professional qualifications without expanding the vocational school and training programmes at the occupational end of the qualifications profile may make a country less competitive than countries that achieve a balanced expansion. Satisfactorily addressing minimum requirements for language, literacy and numeracy skills across the whole community should also be a priority.

The issues of upskilling, broad skilling and multi-skilling often arise in any discussion of training and competitiveness. Upskilling of existing enterprises and national workforces is a paramount objective in a changing marketplace. It means acquiring skills in new areas, and skills that take existing work to higher levels. Broad-skilling tends to concentrate on expanding the range of existing skills across a workforce to include new technologies or different types of

Box 2.1 Japan: Training in new technologies for competitiveness and equity

According to the “third sector” formula of public/private partnership adopted in Japan, computer colleges are being opened with the aim of meeting the high demand for skills in computer sciences and information technology, reviving declining sectors and regions, creating new job opportunities and retraining workers threatened by redundancy. Computer colleges combine the strength of public financing with the know-how of the private sector. The Employment Promotion Corporation, with the collaboration of the Ministry of Labour and support of local governments, constructs the facilities and provides the equipment. The private sector, training providers and local authorities ensure joint management and operation of colleges in their communities. The enterprises involved include IBM Japan, Fujitsu, Kobe Steel, Nippon Steel, Kansai Electric Power, Sony and Mitsubishi Electric. The Employment Promotion Corporation is also developing a network of human resources development service centres in all prefectures to provide advice and assistance for the planning and implementation of vocational training through the provision of instructors, facilities and customized courses for smaller firms. The Corporation receives public financing, mainly from the Employment Insurance Fund.

services to clients. Both upskilling and broad skilling are ongoing. They are incremental and part of natural workplace development throughout an individual’s career. Multi-skilling has generally been defined more narrowly, covering the blending of existing trades and occupations into more broadly-skilled descriptors. Multiskilling tends to occur in initial training through changes in the definitions and structure of trade courses.

Box 2.2 Canada: Partnership for multiskilling in response to local needs

The pulp and paper industry has been a major employer in the St. Catharines-Thorold area since the early 1900s, and now employs more than 2,000 people, with an annual payroll of $76 million and annual sales of $400 million. However the sector is suffering its worst downturn since the 1930s. The five area mills have diversified their product lines and developed a technology-training programme to enhance their competitiveness. A partnership between the five mills and Niagara College, the Lincoln County Board of Education and the Ontario Training and Adjustment Board involves about 250 tradespeople over the next three years, training them for work as millwrights, in pipefitting, electrical trades, instrumentation, machining and welding.

The concept of “Flex-Trades” is intended to train workers to perform tasks to agreed levels within their associated trade area. For example, a trained millwright would be able to carry out welding and pipefitting tasks up to the agreed level, depending on the individual’s competence.

The Flex-Trades concept will allow for more efficient use of personnel within the mechanical and electrical (maintenance) areas. In addition, each tradesperson will gain a higher skill level and an understanding of interdisciplinary relations.


2.3 New technology and skills

It is generally considered that the growth and use of information technology (IT) and enhanced and converging telecommunications services has had the greatest impact on workforce skills. This covers two dimensions: the burgeoning use of IT in most industries as an important operational tool, and the development, production, marketing and integration of IT services themselves. Both dimensions create issues that call for human resources development responses and training. It is estimated that in the United States at least 60 per cent of all workers require IT skills. However several studies in that country indicate that only 40 per cent of job applicants for work needing IT skills actually have them to the extent required, and that 43 per cent of businesses needing technically skilled people report that shortages of skilled workers have prevented them from expanding their business. Other countries would have similar profiles of existing workers being increasingly asked to master new technologies to do their work. It is not only an issue for older workers. For example, evidence from Australia and Europe suggests that graduates with higher education qualifications in computer science and related IT are actually finding it harder to gain employment in their field than graduates of other disciplines - in a market with an identified skill shortage. Clearly the quantum and level of training is not so much an issue as the relevance to workplace needs.
It is increasingly recognized that knowledge, both as an input and an output, is central to the process of growth and job creation. Today, knowledge in all its forms plays a crucial role in economic processes. Individuals with more knowledge get better-paid jobs, firms with more knowledge are winners in markets, and nations with more knowledge are more productive. Most knowledge, particularly for emerging technologies and practices, arises in enterprises. Workers therefore need access to learning that generates and keeps them abreast of new knowledge. Given the exponential expansion of information, however, and the rapid changes in technology and shifting job requirements, most knowledge that workers need will be stored outside the head, so to speak. Skill development should focus on how to access and interpret information rather than on rote learning the information itself.

### 2.4 New forms of work organization and changing skill requirements

The forces driving the adoption and spread of new organizational forms are, clearly:

- globalization, the growth of multi-national companies;
- developments in technology, especially information technology;
- the opening up of new markets in and the competition provided by suppliers from; Asia and the former Communist countries; and, crucially
- greater emphasis on product and service differentiation and flexibility of delivery.

Enterprises in Japan were the first to develop organizational innovation, with a focus on teamwork and total quality management, and this enabled them to out-perform Western companies. These innovations have subsequently been refined by companies in the United States, and, to a lesser extent, in the United Kingdom and continental Europe, to create modern high-performance organizations.

New organizational forms have emerged over the past three decades. There has been a shift away from the traditional, hierarchical, bureaucratic, command-and-control organizations where work was organized by management into a series of well-defined, routine, clearly demarcated tasks. The intensification of international competition, the de-layering of organizations, the introduction of flat hierarchies, and attempts to introduce total quality management and re-engineer organizational structures are radically transforming the nature of modern organizations.

The new forms aim to centre the efforts of employees on delivering added value to the customer. This often involves all employees contributing toward corporate goals through self-managed teams in which the focus is on individuals committing themselves to better performance. Individuals participate in the decision-making process, monitor their own behaviours and work collectively to out-perform the competition. In these organizations, the management of knowledge and performance becomes an increasingly important source of competitive advantage. This shift in organizational forms has been variously identified as a move toward more flexible forms of organization, high-performance management and more recently, toward process-based organizations.

As these changes are introduced, they have a number of predictable consequences. In the traditional command-and-control organization, the management style focuses on concrete tasks, designed within a Taylorist management framework. The employee’s behaviour is governed by
clear procedures that limit the sphere of responsibility. The supervisor is responsible for output while the training department delivers a series of one-off courses designed to provide the skills required for task performance.

De-layering generally brings a shift in management focus away from task management to an emphasis on creating added value. Fewer staff means that the same amount of work is spread across fewer people, requiring the introduction of multi-skilling. As responsibilities are devolved, front line staff take on what once were managerial responsibilities for implementing strategy and managing budgets, requiring a much broader knowledge of the organization and how it functions. Emphasis is placed on improving the quality of the product, or service, and employees are encouraged to take responsibility for this. The organizational focus shifts to place greater importance on satisfying the customer, both within and outside the organization. Responsibility for training shifts from the centralized training department to the line manager. The responsibilities of the trainer also start to shift away from the content of courses towards a more dynamic concern with results and competence.

The move to flat hierarchies and the growing use of networking has been accompanied by a change in the way enterprises use knowledge. In these changed organizations, the knowledge base of the organization is used to secure competitive advantages. Output is now produced through teams, and all members contribute to continuous improvement. Responsibility for the learning involved rests with the individual as team member. Here, employees take responsibility for monitoring their own behaviour and participate in decision-making. Trainers aim to support the learning involved and identify the competencies required to improve performance at both the individual and organizational levels. For all employees, the focus is on securing a competitive advantage in the market.

However these changes are labelled, in reality the move is toward less clearly defined work roles, where front-line staff, working in teams, are increasingly taking over responsibilities for customer service, organizing the work process, team leadership, change management and organizational performance. All this requires a quantum shift in the management of information and learning in the workplace.

When these changes take hold, they result in a radical change in the organization of work. The organization becomes focused on using the sum total of its resources to provide a competitive advantage in the market. The collective knowledge of all employees is one of these resources, but new skills are usually needed to facilitate the learning process and manage knowledge. For Guile and Fonda, effectively implementing this type of organizational structure, which they call process-based, demands an organizational environment that supports entrepreneurial creativity and the development of core capabilities, and encourages organizational learning.4

### 2.5 Changing patterns of work

Historically, employment strategies have been built around the notion of a traditional worker, employed full-time with one employer. Much of the formal training to support them has followed suit. This is rapidly changing as growth patterns in OECD countries show the trend towards multiple career changes and the drift towards part-time and casual work. The need for more flexible workforces means that considerable up-front development of skills for traditional trades or similar full-time occupations will not meet the requirements of enterprises or
individuals. Because of these changes in the workplace, and the changing patterns of employment, workers’ ability to maintain and upgrade their knowledge and skills becomes imperative.

To stay competitive, most modern economies rely upon a labour force that is not only sufficiently skilled and adaptable, but also geographically mobile. Whole industries shrink in some regions and cannot easily be replaced. Shipbuilding in Scotland is a prime example of an industry that, challenged by competition and new building techniques from Asia, contracted sharply over just 10 to 15 years. Many of the workers could not easily relocate although their skills might well have brought them employment in other countries. A range of government policy measures were introduced to attract new high-technology industries, and significant retraining schemes were funded and promoted to encourage workers into new areas.

Developing countries are also discovering that tremendous displacement of vast numbers of agricultural labourers follows rapid industrialization and the use of new labour-saving technologies in farming. Already in China it is estimated that up to 60 million people are on the move in search of work in the cities. One issue is about providing sufficient work for a population overall, but another is about accommodating new industries developing in different regions, by supplying workers prepared to apply their skills in various locations over their lifetime.

Modern organizations are focusing on outputs and effectiveness. There is continual pressure for results. The workforce is becoming more diverse, with fewer specialists at the core of the business; more outsourcing; and far more flexibility in the ratio of full-time, part-time and casual staff. People are being paid to think and do, and management is based on persuasion and consent rather than command. Many people who view themselves as specialists also have to be managers. In the course of their work they will be called upon to manage people, projects and money more and more often.

One result of this is that people want more involvement in decisions about how they do their jobs, a clearer picture of how their career can progress, and what obligations both the organization and the individual have in managing work – including recognition and rewards for performance. Human resources policies must accommodate this ‘thinking’ and increasingly empowered workforce.

### 2.6 Difficulties in identifying labour market needs

The demands made on national training systems are diverse and dynamic, but as the rate of external change accelerates, the time taken to conceive, develop and deliver a new training programme – the gestation period – remains constant or even lengthens. In an ideal world, planners would forecast accurately and in detail the size and qualifications of the future workforce and to have this information available far enough in advance to prepare the necessary training programmes. Unfortunately, this has never been achievable. Even when economies were more consistent and predictable, virtually all longer-term manpower forecasts have been “seriously wrong”. Over the past few decades this ‘flawed technique’ has often resulted in an oversupply of inflexible training capacity. To make matters worse, centralizing training usually reduces responsiveness by extending programme gestation periods.
At the end of the 1980s conventional long-term manpower forecasting became discredited, and a search began for a replacement. Although no clear consensus has yet emerged, it seems to be generally accepted that an adaptable approach is needed, based on a balance between a market-driven system and government intervention. What has been identified is a set of monitoring and signalling instruments for labour market analysis, forming the basis for a less ambitious and more reliable planning framework. The main components of this pluralist approach are that short-term mismatches should primarily be anticipated and responded to at the local level through labour market instruments such as wage data, job vacancies, tracer studies, household surveys and employer surveys. In China, secondary vocational educational and training (VET) schools regularly circulate questionnaires to their ex-students working in industry. Information is sought on the employers’ and graduates’ assessment of the training they have received, suggestions for improvement and their current employment. This provides excellent feedback for curriculum development and also a basis for gathering short-term labour market information. Longer-term planning should be undertaken centrally and by sector, with predicted or planned structural changes allied to labour-market analysis.

The decentralized VET infrastructure, and the expansion of the private sector, will increase institutional autonomy and competition and may also help to alleviate market mismatch and reduce response times. The changing nature of the training required by the future workforce – with greater emphasis on lifelong learning, transferable skills and personal characteristics – may, in the longer term, stabilize some course content and delivery methods. All training curricula are likely to stress content such as problem solving, reporting and information searching. These are competencies closely related to education and hence this type of syllabus content may change less often. In addition, specific job skills will be increasingly delegated. New technology, new methods of student-centred learning and a culture of learning for life will also improve responsiveness.

2.7 The need for lifelong learning

Lifelong learning is the guiding principle for policy strategies concerned not only with a nation’s economic well being and competitiveness but with personal fulfilment and social cohesion. “It (learning) will be essential for everyone and has to be made available to all,” according to an OECD report devoted to the topic. It applies to all people and nations regardless of their level of development. Its absence, warns Wirt, may cause inequality: “If lifelong learning does not happen there is a real risk that the workplace of the future will be led by an educated elite trained to lead a growing but expendable army of casual and part-time workers”.

The vital task of developing a culture committed to learning and to providing the necessary opportunities and infrastructure, is made ever more difficult when, in many cases, no such culture exists and systems of VET are often inadequate, disparate and insular. Traditionally, even in advanced economies, only a lucky few – primarily those working in managerial and professional occupations and employees of large, skills-oriented employers – have enjoyed access to lifelong learning opportunities.

Even within the firms whose success is built upon continuous innovation in processes and products, and which typically emphasise the continuing development of employee skills as part of an internal career path – the so-called ‘learning enterprises’ – not all employees benefit from such practices. Moreover, not all employers opt for such business and skills strategies.
Some employers prefer to limit employees’ access to skills, particularly in the older and less well educated categories.

If learning is to become normal and accessible then a learner-centered approach must be adopted, and learning must be provided in a variety of ways. To achieve this, a wide range of country- and region-specific actors and resources must be marshalled and coordinated and numerous obstacles – structural, institutional and individual – must be overcome. Primary education, which provides the foundation for further education throughout life, will need to strengthen basic knowledge and skills teaching, and find new ways to develop motivation and capacity for learning and to involve parents. At secondary level this emphasis must be sustained and inter-curricular content and languages should be introduced. If vocational streams are introduced they should occur at a late stage, and must provide for transfer in both directions at all stages. In present streaming, few students transfer into the academic stream.10

Partnerships must be forged between trainees, families, employers, trainers, unions and governments in order to enrich the learning experience, ease the transition to work and meet individual needs. One way in which this can be done is by promoting shared responsibilities for costs and benefits. Instead of leaving all the costs to the employer, employees and public agencies take on a share, in return for some influence on the availability and content of training. For example, employees may study in their own time and contribute to fees for externally provided training courses. The willingness of employees to take on such a share is in turn increased if the resulting skill is ‘general’, i.e., its scope exceeds the needs of the employer, and if it is certified by a public agency, giving it currency in the external labour market. The obstacles, however, should not be underestimated. Governments will need to provide additional resources and overcome institutional and individual inertia and vested interests. Fundamental changes will be required at all levels of education and training. New methods, structures and relationships will need to be established, and improved access and pedagogical training provided. Special attention should be given to the needs of small firms and their employees. New technology should also be explored, to determine its usefulness.
3. HRD and training policies and programmes - recent trends and initiatives

3.1 Some issues in reforming human resources development and training systems

3.1.1 National training systems: the need for reform

Substantial pressure for reform of training systems is growing out of the perceived failures of public training efforts. Public training systems have come in for a variety of criticisms including unresponsiveness to economic needs, particularly those of employers on the one hand, and those of local labour markets and communities on the other. Training systems in the region are finding it increasingly difficult to cope with the rapid structural changes to industry and work, and the types of skills required. A major constraint to the economic recovery of many countries in Asia, as they begin to recover from the effects of the financial crisis, will be the relatively low education and skill levels of their workforces. Despite many years of high growth in the region, the education and skill levels of workers do not seem to have improved significantly. In several countries, only a small percentage of the present workforce has received any systematic training. This low level of skills will also be one of the key factors influencing the international competitiveness of countries in the region, as they face increasing pressure from the effects of globalization and liberalization. National training systems will need substantial reform if they are to overcome many of their present weaknesses, which include, among others, a focus on supply-side training, poor linkages between training provided and the needs of industry, lack of flexibility in responding to these needs, the weak employment outcomes of many training programmes, lack of effective skill-recognition systems, and poor coordination between training providers. Much greater emphasis will need to be placed on making training systems more flexible and responsive to the needs of the labour market. Measures should include more autonomy for training institutions, developing better indicators to guide the planning of national training programmes, and promoting more workplace-based training.

3.1.2 Coordinating HRD and training policies and programmes

Many countries are experiencing difficulties in coordinating their systems of VET. These difficulties are not unique to Asia and the Pacific. The problems are similar and usually stem from the same root cause: many agencies providing similar courses, often for the same target groups, leading to waste of scarce resources and duplication of efforts. The lack of clear definitions of target groups, and uncertainty over the delineation of responsibility between providers and their comparative advantages, is rarely addressed. Each training institution awards its own certificates, which can tend to lower standards and confuse employers. In many countries in Asia and the Pacific there are several line ministries conducting pre-employment VET courses and a number of other ministries conducting a range of sector-specific vocational training courses for their own employees. Employers find it difficult to interact with the training system at the national and regional levels.

It has been argued that system-wide planning of training is made more complicated when operating responsibility is spread over several ministries. A minimalist response to the problem of lack of coordination is to create liaison committees or advisory national training councils. A stronger response is to establish bodies with some authority over training activities, particularly
over decision making. There are a number of successful examples of this stronger response in Asia, including the Vocational Training Council in Hong Kong, China, and the former Vocational Industry Training Board in Singapore.

In most countries, public sector involvement in VET has begun through an education ministry. However, an increasingly important role is being played by quasi-independent national training agencies located outside education ministries, attached in many cases to ministries of labour. Technical education in polytechnics, colleges and specialised technical institutes has largely remained the responsibility of ministries of education and higher education.

It is suggested that there are generally two main models for coordination. The 'coordinating ministry' model assigns responsibility for coordination to a single ministry. This model frequently does not acknowledge the distinction between management and coordination, and the coordination is often interpreted as bureaucratic interference. If the coordinating ministry is also a training provider competing for funds, this may complicate its relationships with other ministries. In this model, the coordinating role of line ministries tends either to be ignored by the other ministries, or the mandate is fiercely challenged.

The generally unfavourable experience with the coordinating ministry mechanism has led to the growth of a second 'model', that of the national training council or its equivalent. As noted earlier, this model is essentially either an advisory council or a regulatory body with decision making authority.

It is worth asking why, then, in practice, have national training councils and similar bodies sometimes failed to achieve true coordination amongst training systems, users and providers? One major factor is that the role and purpose of such bodies is not always clearly perceived. The scope and composition of training councils can also have a decisive influence on their effectiveness. While the tripartite constitutions that most coordinating bodies have ensures that the views of organized labour and formal sector employers are taken into account, people from the unorganized, or informal, sector are rarely included. Although this can be difficult, without informal sector representatives a very inadequate picture of real skill needs and opportunities will emerge.

National training councils are therefore faced with a dilemma. On the one hand their composition should be as broad as possible in order to obtain a representative picture of needs and opportunities. On the other hand, if a council is it too large it is likely to be unwieldy and will have difficulty operating. Finding the right level of participation also means remembering that decision- and policy-makers are not technicians, and vice-versa. The problem of representation is also influenced by the level at which the coordinating council is constituted, to whom it reports and who acts as its secretariat. A coordinating council that is directly responsible to, or too closely associated with, a particular line minister may face difficulties with other ministries and agencies.

3.1.3 Decentralization and autonomy

The rapid and radical changes now taking place in the work place have required most governments to undertake a fundamental review of the performance of their VET systems. One of the consequences of this reappraisal has been a universal move away from centralized control
and policy making. This is based on the idea that training is most likely to be effective if it is flexible and if it can respond to people's needs and that this can only be achieved if those who are responsible for providing the training and who have the authority to make decisions are close to the people who need training and their trainers. Institutions and local organizations are being given autonomy and the associated accountability, within a framework of national policy, priorities and targets. New incentives and monitoring systems encourage high-quality, adaptable and interchangeable courses and modes of study. Naturally, decentralization poses new problems, including the need for policy makers, providers and other legitimately interested groups to define and reach agreement about new roles and relationships. These changes will not be easy if existing stakeholders are required to relinquish long-established involvement. Setting and monitoring standards of training and certification is also essential. National (possibly international), non-bureaucratic and credible systems are needed to do this; this is another common aspiration of the newly decentralized VET systems.

### 3.1.4 Strengthening basic education and developing core skills

In order to meet the challenges created by the effects of globalization, the introduction of new technology and the changes to work, it is imperative to prepare individuals for a constantly changing workplace where hierarchical management is replaced by work in teams, and where information is transmitted rapidly through a multiplicity of means. In this environment, initiative is more important than obedience, and changing market boundaries and conditions make strategies especially complex. Education, therefore, must prepare individuals to:

- perform tasks for which they were not originally trained;
- adapt to non-linear career paths;
- use information independently;
- improvise and work creatively;
- deal with the complexities of a rapidly changing world.\(^\text{11}\)

It is now generally agreed that strengthening general education, in particular, at the primary and secondary levels, should be a key priority in public policies to improve the productivity and flexibility of the workforce. The general education level is closely linked to human resources development in general, and the trainability of the potential workforce is the ease with which people can be trained. This concept suggests that by providing basic skills (literacy, numeracy and a grasp of the basic principles of technology) the students will cope better with later training for special occupations. World Bank research has shown that in some countries, workers with a complete secondary school education have a 50 per cent greater chance of receiving in-service training than those with primary education alone.\(^\text{12}\) The Bank suggests that training in specific skills is more effective when trainees have strong literacy, numeracy, and problem-solving skills.

The primary and secondary education systems will also need to change to support the development of a flexible workforce. In many developing countries the system of education is very much a 'passive' learning environment. A 'learning-to-learn' approach needs to become more widespread, with students researching their own information, and learning to work in teams. At the secondary school level there should be greater efforts to expose students to the world of work, using systems such as the school-to-work programme in the United States, and the work experience programme in Australia. In the United Kingdom, schools and firms are entering into partnerships to solve real-life problems.
The higher education system will also need to be much more closely linked to developments in industry. Australia and the United Kingdom, for example, are trying to improve these links by developing cooperative, or “sandwich” engineering degree courses, whereby university work is interspersed with periods of work experience in industry. New masters degree courses specifically linked to industry, such as computer-integrated manufacturing (CIM), are also bringing the universities closer to the needs of industry. Some technological developments, for example, robots, have had a direct impact on the development of new courses such as mechatronics—a combination of mechanical engineering and electronics. In addition to developing technical skills, the universities face increasing pressure to develop students’ personal competencies such as problem-solving, the ability to work in teams and communication skills.

As noted above, there has been increasing emphasis on the development of what have been described variously as key competencies (Australia), and critical enabling skills (Singapore). Other variations include core skills, basic skills and many more. Although the terms vary, they all refer to a range of general skills which are considered fundamental for new entrants to the workplace. The researchers also identified what they called broad competencies—the ability to communicate clearly in writing and to use mathematics and science skills to diagnose and solve problems. It was felt that these competencies had an important effect on immediate productivity, and also affected workers’ ability to learn new skills throughout their working life. This adds the element of lifelong learning to the concept. In the Australian version, the key areas involved were: language and communication; mathematics; scientific and technological understanding; cultural understanding; problem solving; and personal and interpersonal skills. These areas were developed at a later stage into what became known as key competencies—consisting of a number of strands. These strands included:

- collecting, analysing and organizing ideas and information;
- expressing ideas and information;
- planning and organizing activities;
- working with others and in teams;
- using mathematical ideas and techniques;
- solving problems; and
- using technology.¹³

Within each of these competency strands there are three levels of performance, with 21 descriptors of general competencies. The key competencies are used in conjunction with both the school system and the industry- and occupation-based training systems.

The Australian approach aims to prepare young people for their first jobs, and to provide a foundation for their continuing vocational education and training by identifying the competencies which are essential for work. The approach also aims to allow all young people to develop these competencies, regardless of the school or training pathways they followed in the immediate post-compulsory school years.

Singapore has developed its own version of key competencies which it calls critical enabling skills. This also emphasizes the need for communication skills, the ability to handle information, using mathematical and scientific skills to solve problems, and the ability to work in teams.
3.1.5 The impact of the financial crisis on training systems

The continuous and rapid economic growth experienced by South-East Asian economies for three decades meant that they did not experience high levels of unemployment until the financial crisis of 1997. Government training policies focused on increasing the skill levels of the population as whole. Thus when the crisis did hit economies such as Indonesia, the Republic of Korea, Thailand and Hong Kong, China, there was little provision for the unemployed, either in the form of retraining or of unemployment insurance. Hong Kong, China had introduced a retraining scheme for displaced workers prior to the crisis, but this was not on a scale large enough to deal with the level of unemployment that eventually arose.

The financial crisis has thus exposed a number of weak areas in the human resources development policies of countries in the region. The first is the lack of provision for displaced workers in general. Traditionally, the family has provided the basic unit of security. However, the transformation of these societies by the sheer speed of economic growth means that the family network and its resources can no longer sustain members during periods of long-term unemployment. This is particularly the case with the migrant workers who now form a substantial proportion of the labour force. As a result we have witnessed the return of large-scale poverty in societies which had been well on their way to eradicating it. Thus, the need to introduce forms of social protection and re-training programmes for displaced workers is now on the agenda of many governments.

The other area in which the financial crisis has revealed serious weaknesses is labour productivity in countries such as Thailand. Hence, as these economies pull out of recession, there is a more urgent need to develop training systems which can make labour more productive, particularly as many of these economies seek to move in the direction of higher value-added forms of employment. In effect, this means introducing new management forms to improve workers’ commitment so that employers can raise labour productivity high enough to establish high-performance work organizations. Here, again, there is a significant role for national training programmes.

3.1.6 Cost/benefit support for training

More and more research is showing the positive benefits of investing in training. In Australia, for example, recent research has shown that the benefits exceed costs after considering maintenance quality, absenteeism rates and customer complaints. Training certainly decreases worker turnover, but it has other benefits as well. The rate of return to trainees is a 2.4 per cent increase in earnings. The return on people development is 10 per cent, while the return on capital is 7 per cent. There is a 22 per cent increase in hourly earnings associated with non-degree studies.\(^{14}\)

This is not an exclusively Australian experience. In Denmark, a 1996 study by the Danish Ministry of Business and Industry reported that enterprises which introduced process or production innovation accompanied by targeted training were more likely than non-innovators to report growth in output (11 per cent versus 4 per cent); growth in employment (3 per cent versus 2 per cent); and growth in labour productivity (10 per cent versus 4 per cent).\(^{15}\)
Detailed comparisons of productivity, machinery, and skills in matched samples of European biscuit-manufacturing plants found that although capital equipment was roughly equivalent, quality-adjusted productivity in France and the Netherlands was 25 per cent higher than in the United Kingdom, and that levels in Germany were 40 per cent higher than in the United Kingdom. The relatively low productivity of United Kingdom plants was largely attributable to the lower levels of qualifications of workers and to less effective on-the-job training, which resulted in a less flexible workforce.

In the United States a survey of 62 outlets of a multinational retail company found a significant positive correlation between sales volume per employee, the proportion of employees who received sales training, and employees’ perceptions of how seriously training was taken by the company. In another United States report it was shown that on-the-job training has a positive impact on productivity and wage growth; doubling the length of training raises productivity by up to 5 per cent, but raises wages by only 1 per cent.

### 3.2 Different national approaches to training

#### 3.2.1 The developmental state model of the Asian tiger economies: the Republic of Korea, Singapore and Hong Kong, China

Countries following this model have tackled the issues of developing their human resources in a very different way to that characteristic of the market model. They, too, have moved from low value-added forms of production to high value-added forms, but have done so in a much shorter space of time than their market model counterparts. As a result their education and training systems have developed in a very different way.

These countries had to break into world markets already dominated by the developed economies. Moreover, they had no natural resources which they could use as a basis for economic growth; they were obliged to use first their labour, and later their skills, as sources of competitive advantage. In their attack on world markets the State has played a more active role than has been the case in the market model economies. It has been active in both initiating growth through export-oriented policies, and thereby shaping the industries that provided a competitive advantage, and also in developing national human resources.

Economic growth was initiated by the actions of the state apparatus, either in attracting foreign investment or in establishing indigenous industries. In this context, trade and industry policies, which sheltered indigenous industries and spearheaded specific industries’ progress in export markets, were an important means of gaining a foothold in international markets. This strategy was used to establish a range of different industries within each of these economies.

Initially, these economies had only one advantage in world markets—a plentiful supply of cheap labour and this led to the development of low-skilled, low value-added forms of production. Government policies were designed to make the best use of this one advantage and establish forms of production which could utilise low-cost, low-skilled labour.

These governments were particularly effective at maintaining strong control over the education system and ensuring that in the initial phase of economic growth, the system delivered the basic literacy and numeracy skills that industry needed. Unlike countries in the market model, interest groups were not permitted to intervene to determine the form of
education and training provision. Given the limited demand for skills from industry, there was no rush to develop elaborate systems of secondary or higher education, as occurred in some of the African countries. Here, as a World Bank 1993 report on East Asia recognized, the governments made the right decisions by restricting their investment to providing basic primary, and, later, secondary education.

This form of behaviour marked a break from the market model in that it was not the market shaping the supply of education and training, but governments. Indeed, there are indications that, because of the strong demand for academic education which is characteristic of Confucian societies, if the governments had left it to the market to determine provision, then there would have been a rapid expansion of academic secondary and higher education that the kind of education parents wanted their children to have. In fact, the governments of the Republic of Korea, Singapore and Hong Kong, China restricted initial provision to create a balance between demand and supply.

Faced with full employment, rising wage costs and intensified competition from cheap labour in the developing countries, the governments of these economies sought to move towards higher value-added forms of production to sustain the rise in incomes. Once again, they used trade and industry policies to shape their development. Hong Kong, China was an exception here in that the Government did not have an explicit trade and industry policy - however market forces, in the form of the opening of the mainland market, provided the same impetus to move toward higher value-added forms of production.

These trade and industry polices were successful, but sustaining this shift in the economy required a drastic change in the provision of skills. The new industries in manufacturing and the service sectors required higher levels of general (secondary) education from their employees together with new craft and technical skills. Japan offered an example of this kind of transition, achieved in recent times. There, the Government had increased provision of general secondary education, but the craft and technical skills were provided through the larger employers. Using the system of lifetime employment, they developed employee skills through the use of systematic on-the-job training. However, in the rapidly growing tiger economies, this was not an option for a number of reasons specific to each country. Singapore, for example was reliant on multinational corporations (MNCs), and could not depend on them to guarantee lifetime employment and carry the costs of extended training. Thus, governments coordinated the supply of skills to meet anticipated changes in demand.

In Singapore and the Republic of Korea the value of this co-ordination was magnified because governments were more aware than individual parents of the types of craft and technical skills needed to meet the demands of the new manufacturing and service industries. There were two reasons for this. First, the governments influenced the demand for skills through their selective trade and industry policies. Second, the governments were able to draw lessons from the experiences of Western nations and Japan, which had already moved into higher value-added forms of production. Thus, as the economy moved which to a high value-added industry pattern of demand, the State played a crucial role in ensuring that workers had the right skills to meet the demands of the new industries. The governments achieved this by creating powerful super-ministries, which co-ordinated the demand for skills and the supply of skills.

In Singapore, this coordination was achieved through the combined efforts of the Ministry of Trade and Industry and the Economic Development Board, whereas in the Republic
of Korea the same function was performed by the Economic Planning Board. In both these countries, these bodies influenced both the types of industries established, and the decisions about the types of skills provided through the education and training systems which were directly under the control of the State. Unlike their market model counterparts, the education and training systems of these countries were directly controlled by the State. In the Republic of Korea, the Government introduced technical and vocational education to deliver the appropriate skills and channelled young people into that stream at the expense of traditional forms of academic education. In addition, it imposed a levy on the larger companies to encourage and fund industrial training. Both these measures were to some extent resisted but nevertheless succeeded in delivering more appropriate skills for employers. The Government also provided publicly funded training institutes to deliver skills that smaller employers needed.

The Government of Singapore used different tactics. It introduced more vocational and technical education, and put in place a form of the German apprenticeship system to meet the needs of MNCs. In the field of training it instituted the Skills Development Fund, derived from a levy on low-paid labour. This was designed to encourage employers to move into higher value-added forms of employment, and at the same time help pay for more and better employer-based training through programmes that were largely designed by the Government. These were aimed at improving the managerial skills of Singaporeans in the MNCs, and to enhance the basic skills of older workers who could otherwise be shut out from the labour market as demand shifted toward more highly skilled labour.

In Hong Kong, China, where the Government did not have such influence on the types of new industries established, it confined its actions to ensuring that the supply of skills responded rapidly to the shift in demand. In order to do this the State accepted responsibility for technical training and established and funded the Vocational Training Council, responsible for providing the new technical skills. Employer-based committees were set up to oversee the delivery of courses in the various trades, industries and occupations which were growing in the labour market.

These strategies have enabled the governments of the tiger economies to exert control over the education and training systems and so shape the skills of those entering the labour market. This has ensured a constant supply of appropriately trained young people for industry and commerce, increasing the level of their skills as the economies moved in the direction of higher value-added forms of production.

The actions of these governments, particularly through the super-ministries in Singapore and the Republic of Korea, have achieved a much more rapid response from the education and training system to the demands of the economy. Indeed, the decisions in Singapore and the Republic of Korea to increase the supply of trained labour were made almost in advance of the shift in demand, because the governments anticipated the new skills required as the economy moved toward higher value-added forms of production. In Hong Kong, China, the Government achieved a very rapid response from the supply side to shifts in demand. In all these instances this speed of response would not have been possible if the governments had sought to rely on the markets in the same way that the market countries had. This system of government-led coordination was therefore not only unique to the Asian tiger economies, but it was also essential if these economies record growth rates were not to be held back by serious skill shortages.
In the latest phase of economic growth, these economies, together with those in the market model, are facing yet another shift in the demand for skills. The new organizations producing high value-added goods and services require a high knowledge input and new forms of work. The governments of the Republic of Korea, Singapore and Hong Kong, China have responded with attempts to create knowledge-based economies. There has been an emphasis on upgrading the education and training systems even further; first to produce the engineers and scientists who can create innovative products, and second to develop a new breed of highly skilled employees capable of operating in organizations at the cutting edge of world markets. Hence the recent emphasis on the soft skills of communication, problem solving and teamwork.

This has highlighted an important problem facing policy makers in these economies. As we have seen, this form of government co-ordination of the supply of and demand for skills assumes that those responsible for government policy can anticipate the skills required for the next phase of industrial or economic growth. As long as these countries were 'catching up' with the West, they could use Western experience as an indication of the types of skills they would require. However, now that these economies have caught up with the older Western nations, this is no longer a viable approach. The task of identifying the skills required for the next phase of growth is, therefore, made that much more difficult.

3.2.2 The approach to training in a transition economy - China

In a transition economy, such as China, two systems of production coexist, and this has major implications for training. In China the first system, in the shape of centralized planning of production and distribution together with the centralized planning of the supply of skills, is complemented by the second, the use of the market to organize production, distribution and the supply of skills. This duality creates its own distinctive problems for the development of human resources.

In China, production was initially organized on a collective basis. Industrialization was spearheaded by the State in an attempt to develop a broad, self-sufficient industrial base. Thus, prior to the 1980s the planned economy was associated with a policy of full employment in urban areas, with the State officially guaranteeing every urban citizen a job. The State and collective forms of ownership accounted for 90 per cent of GNP, and represented the only major sources of employment. In order to ensure that every citizen had a job, enterprises were obliged to continue to find additional jobs, a policy which eventually led to overstaffing and low levels of efficiency. This was widely seen as a contributing factor to China’s long period of economic stagnation.

As the State was largely responsible for organizing production, it also played a major part in determining the demand for skills. The supply of skills was organized through the education and training systems, with the education system providing appropriately trained personnel for production units.

The growth of the private sector, as a result of the 1997 reform of state-owned enterprises, has been fuelled by foreign capital, much of which flowed in from the tiger economies to take advantage of the low cost of labour. This has created rapid economic growth, based on labour-intensive forms of production, although much of this was concentrated in the southern regions.
One of the consequences of this transformation is a serious problem of unemployment and under-employment. Under-employment, which was previously a characteristic of the rural work units and the state-owned enterprises, is now manifesting itself as unemployment. Together with the collapse of many state-owned enterprises, this has resulted in a massive problem of unemployment.

The Government faces another challenge in transforming the skills of the labour force. The economy is currently dominated by relatively low value-added forms of production, especially in the market sector as it takes advantage of China’s low labour costs for export-oriented production. Nevertheless, China has a developed education system, at both primary, secondary and tertiary level. Thus, while the education and training system can easily provide the basic numeracy and literacy skills required for low value-added production, it does have a problem meeting private companies’ needs. The skills needed to operate at higher levels in those companies are very different from those required by managers in state enterprises. In addition, new industries and new forms of work organization are placing further demands on the skills of labour. Moreover, as market forces replace state planning, a market infrastructure has to be created in the form of employment centres, labour market information services, individual guidance services and so on.

3.2.3 The reform of training in a market economy - Australia

The move to workplace-based training and the development of a national strategy for vocational education and training

The Australian Government has made a conscious effort to make training more relevant to the needs of industry, by encouraging and facilitating moves to have skills developed, tested and recognized in the workplace. Government funding has played a vital part, enabling each industry to develop its own competency-based standards (now often called benchmarks) for training and skill development. As noted earlier, the knowledge that workers will need in the future will be more holistic. Describing that knowledge will require more than a narrow specification of competence simply expressed as tasks and duties. Even where essential workplace knowledge can be described discretely, how it relates to real work requirements is hard to capture. It is nearly impossible to account for in traditional institutional training programs. Training and assessment, therefore, needs to involve people who have both training expertise, and experience with current industry practices and the modern work environment. No resources or national test instruments can replace genuine applied experience and judgment.

The work to develop Australia’s competency standards has moved on to produce a policy for a national product, the Training Package. Training packages are developed by national industry training advisory bodies (ITABs), other industry-based bodies or enterprises, to meet the training needs of specific industries or industry sectors. Each training package:

- provides an integrated set of nationally endorsed competency standards, assessment guidelines and qualifications for a specific industry, industry sector or enterprise;
- may also provide optional learning resources which can be used to underpin training programmes and assess outcomes;
- enables qualifications to be awarded through the assessment of competencies rather than undertaking a course;
- encourages the development and delivery of training to suit individual needs;
encourages learning in a work environment (on-the-job, off-the-job, work experience, work placement, work simulation or by a combination of methods) which leads to verifiable workplace outcomes.

The recent reforms to the Australian training and recognition system have occurred within the framework of a new national strategy (Box 3.1).

**Box 3.1: The Australian National Strategy for Skill Development**

In May 1998 the Australian Commonwealth and State Governments endorsed *A Bridge to the Future: Australia’s National Strategy for Vocational Education and Training 1998-2003*, the country’s National Strategy for Vocational Education and Training. The strategy outlines a vision for vocational education and training, which it describes thus: *Our over-arching challenge is to create the world’s most innovative and best regarded vocational education and training sector.* This includes:

- ensuring the skills of the Australian labour force are sufficient to support internationally competitive commerce and industry and,
- providing individuals with opportunities to optimize their potential.

This vision was developed by the Australian National Training Authority (ANTA) in consultation with many groups in the community. Producing a mission statement involved repeated rounds of consultation with key industry parties, and unions, with state, territory and federal governments and with important community groups such as those representing the interest of indigenous Australians and equity groups. Feedback from all groups involved and public surveys was collated and analysed to ensure the final strategy had meaning and positive outcomes for the great majority of the community. The national strategy together with the annual plans for vocational education and training funding and delivery are the key planning instruments for the Australian national vocational education and training system. The purpose of the strategy over the next five years is to:

- guide the setting of annual priorities for the training system;
- drive the planning process with states and territories;
- serve as a means of establishing targets and agreed performance measures; and
- meet government and stakeholder expectations regarding policy directions.

There are five broad objectives in the strategy and 16 proposed outcomes. For each of these there are a number of key performance measures against which all areas of the training system report on an annual basis. The measures cover both quantitative and qualitative indicators of performance and include cost-benefit, growth, quality assurance and equity targets.


The privatization of training assessment and delivery

The Australian Government has developed a strategy, which it calls *User Choice* for promoting an open training market by enabling employers and learners *the users* of training *to choose which provider (registered training organization) will deliver their publicly funded and/or recognized training*. The providers can be public, private or wholly within an enterprise.
This contributes to the flexibility of the vocational education and training system, and the New Apprenticeship system. Employers are also able to negotiate with registered training organizations to decide the timing, location and mode of delivery, who conducts the assessment, and how the training will be evaluated.

The application of User Choice is based on a number of system factors. First, there must actually be a choice of training providers that are reasonably available and accessible to users. In an increasingly deregulated market this may not occur in places where the number of potential clients is small and the costs of training delivery are high. Publicly funded infrastructure such as technical and further education (TAFE) colleges may cover wide geographic areas, but cannot be expected to cope with all possible future demands. Second, niche training markets will arise that will expect to be supplied quickly and in innovative ways. Both public and private providers must be encouraged to adapt their services to meet these niche market demands. However they are unlikely to risk diverting their efforts into new and unproven areas if this might threaten their existing business, as the fiercely competitive environment in which most providers operate means that losing even a small share of the market leads to non-profitability. The overall effect of User Choice has been to increase the number of providers in the formal training market. A similar pattern of privatization of training delivery has emerged in other countries, such as Chile.

**Box 3.2 Chile: From public to private training delivery**

Delivering vocational training was originally the concern of the public sector in Chile. However, the system has evolved into a structure in which the State does not offer training but finances and controls the use of public funds according to market demand. Under this market-oriented system, private training agencies sell their services to enterprises and carry out government-sponsored training programmes. The Government also subsidizes enterprise-based training though tax rebates. In addition, it finances training for those who have no access to enterprise-based training. The aim is to stimulate enterprise demand, with a view to orienting supply. Market competition is cultivated between training providers as a means of promoting efficiency and quality. Free public vocational training is also provided for new labour force entrants, unemployed adults and workers who have no access to enterprise-based training. Although the system increased training opportunities from 97,000 in 1980 to 400,000 in 1994, concern has been expressed about the low quality and high cost of training.


**The challenges and difficulties of deregulating training**

The Australian training system is moving toward deregulation and market-driven services, but still has a way to go. At best, one in four young Australians participate in recognized vocational preparation in the immediate post-compulsory school years, compared to an average of one in two in OECD countries. Of the overall workforce (aged 15 to 64 years), 52 per cent have no post-school qualifications. Traineeship commencements have shown a dramatic increase over the past three years but the people beginning those traineeships are getting older. Employers are
reporting difficulties in recruiting tradespersons and related workers, while apprenticeship numbers are falling.

The average number of hours of structured training that Australian employers provided for employees fell by 11.2 per cent between 1993 and 1996. Employers' total spending on structured training for the three month period July-September, 1998, showed a decline in expenditure per employee of 3 per cent. Fewer than 18 per cent of all employers currently provide nationally recognized, structured training to their employees, a fall of some 20 per cent over the equivalent 1993 figures. While 92 per cent of employees work for an employer who provides some form of training, certain occupational groups still have greater access to employer provided training than others. There are also significant disparities between equity groups, and access is skewed by gender: women have less access than men.

Such data suggests a need for greater intervention at the national level to redress impending skill shortages and promote equity in access to training. Too much direction by governments can, however, stifle a training market, and may even constrain growth and innovation while not necessarily guaranteeing more and better quality outcomes for users. Removing existing government regulations and policy, however, may not be advisable. Large-scale removal of quality assurance measures in an attempt to deregulate and thereby boost overall, training is not a viable alternative in an area of such importance to economic well-being and consumer protection.

Every economy can determine its gross national requirements for efficient and reliable training services. Next, it must decide whether to provide these services mostly through highly controlled public means while largely ignoring private provision, or to open the market more widely and manage compliance so that all providers follow common, national quality principles. The key to success appears to be the management of quality, rather than strict regulation.

Even in a wholly government-funded training system (if such a system exists) quality is an issue that needs planning and regular assessment. The theoretical benefit is, of course, that in such a system non-compliance can be rectified relatively swiftly and with finality if required. In practice, publicly funded training institutions that do not comply with quality criteria often appear to be less strenuously dealt with than private sector providers who commit the same offence.

3.3 Some issues in the supply and delivery of skills

3.3.1 The recognition of skills

An issue of increasing importance to many countries in Asia, as they begin to recover from the effects of the financial crisis, is the limited recognition of workers' existing skills. This creates many difficulties for workers, making their skills less portable and transferable, and limiting their employment opportunities. Many workers who have acquired skills through informal training on the job find that these skills are not recognized. This lack of recognition reflects a common view that only formal qualifications count, and acts as a barrier preventing men and women who trained informally in the market place gaining employment. There is a pressing need for countries in the region to develop skill testing, recognition and certification systems that capture all the skills available in the workplace, including those gained through informal training.
The obvious trend in developed economies is to bring their training both formal and informal and subsequent recognition into line with industry skill requirements. This maximizes use of national resources and ensures the cost of training is kept within reasonable limits. There are a number of approaches to achieving this, but at some point the issue of qualifications comes to the fore. Traditional separation of training and the recognition systems from industry has meant that many qualifications are based more upon the particular content of a course of study than industry competency requirements. In many cases the courses were never designed to do anything other than generally prepare individuals for the world of work vocational education in its broadest sense and so outcomes were not described in the way competency standards now operate.

Without an established system for measuring competency, individuals may have to gain recognition of their actual vocational skills in two ways:

- through work-based experience that may or may not be formally recognized through a recognition testing process;
- with formal qualifications that may be aligned with particular vocational areas but not easily evaluated.

It is not unusual for employers and society in general to value a formal qualification, a piece of paper that represents a period of study and effort, over that of less formally gained skills and abilities. This is because the former is at least tangible, and can be equated to a level of potential, if not actual, expected performance. Most developed countries have therefore tried to change their qualification frameworks so that they give a clear picture of a person’s training and abilities in a particular vocational area. Historically there has been little or no connection between many countries’ skill testing and certification processes. Competency standards can link the two by being both the benchmark for recognition as well as describing the outcomes that should be met by particular qualifications.

Many of the countries in Asia and the Pacific have adopted an occupation-based approach to skill standards, or skill recognition, that has largely been established by government agencies. This approach is now in desperate need of review, as, with few exceptions, it suffers from low levels of acceptance from workers and employers, covers only a small percentage of the workforce, and is extremely difficult to compare across countries. Together with the ILO East Asia Multidisciplinary Advisory Team (EASMAT), the ILO Asia and Pacific Skill Development Programme (APSDEP) has begun work on developing new regional model skill standards. These models use a workplace-based approach to skill recognition and training that focuses on the competencies required by workers in a specific industry or industrial sub-sector. The emphasis is on recognizing skills, not just certification, as is the case with many national systems. The function of the training system is to deliver the training required for the trainees to achieve these competencies. This workplace-oriented approach to skill standards is closely linked to the reform of national training systems. This work ties in with the development of national skill standards and recognition systems, and there is a strong need for it to continue.
3.3.2 Flexible delivery, coaching, mentoring and self-paced learning

It has been widely recognized that learning for individuals occurs over a lifetime in many settings, including schools, vocational education and training providers, universities, workplaces, community organizations, the home and elsewhere. Increased use of flexible delivery methods means individuals have more freedom to choose how to learn, and means the vocational education and training sector can respond better to the growing demand from employers for targeted training solutions.

Among other things, flexible delivery means more and better distance education. It also means making use of new technologies such as multi-media and Internet access to provide a diverse range of educational services, and to deliver these services in different ways to people in different settings.

Ideally, learning strategies and support should therefore be tailored suit the styles and environments that individuals and groups prefer. In many cases people will need access to learning resources and opportunities while engaged in productive work. This suggests that traditional curriculum approaches and mass delivery of common training may not succeed with today’s diverse clients, who all have differing needs and learning styles.

3.3.3 Quality standards and assurance for all providers

Regulation and monitoring of VET ensures training is appropriate and useful to both supply and demand sides, while safeguarding public and private sector interests, especially the use of public funding. These processes and procedures are set within national policy frameworks and, with increasing decentralization and transparency, involve more stakeholder groups than previously. Additionally, the impact of globalization may also affect monitoring and, indirectly, regulation, of local training. Examples include multinationals opening manufacturing outlets in other countries, such as the Japanese automobile industry, and the Europe-based chemical and pharmaceutical industry. More transparent monitoring by inspectors and expert groups has generated wider interest in existing training programmes and their outcomes, and greater discussion and debate by all the stakeholders about future needs and how to adapt existing provision to meet them.

Quality assurance can be achieved by monitoring a providing institution’s internal control mechanisms or the output of its training programmes, or both. The output can be assessed in various ways including internal and external examinations, personal evaluations, self assessment or a combination of methods. The use of performance indicators in education and training to monitor institutions and programmes has grown rapidly in recent years. These indicators have helped introduce greater transparency, and to clarify objectives, targets and criteria. They also provide consistency, comparability and feedback on best practice to support future development and planning. They can be used to guide the allocation of government funds on a more equitable basis than previous systems of patronage. Indicators can also be designed to measure improvement in an individual programme, although desired outcomes must first be specified and criteria agreed for their measurement. For example, destination studies have been adopted to record how many trainees are in relevant employment at a given time after completing their training, or how many progressed to further training.
3.4 The special problem of training in small firms

Over the last 15 years or so small firms have become increasingly important to national and regional economies and have strongly influenced competitiveness, working conditions and living standards. At the same time, there has been a growing recognition that the competitive capabilities of individual small firms, and accompanying incomes and working conditions, are crucially affected by the quality of inter-firm and firm-institution networks in which the small firm is embedded. Consequently, much policy attention is now focussed on addressing the needs of whole groups, networks or sectoral clusters of firms, rather than dealing with enterprises solely on a one-by-one or individual basis.

More attention is also being paid to acquiring and disseminating knowledge as a crucial component of competitiveness. This is the case with less developed countries trying to catch up with more advanced parts of the world, with transition countries trying to find new ways of organizing their economies, and with highly industrialized countries trying to move their economies along high value adding paths of development.

The horizontal cooperating or business network, or, (as it is known in the United States), the flexible manufacturing network, is a relatively strong form of cooperation between enterprises. It goes beyond the scope of the softer forms of association typical of trade or business associations, in order to pursue specific business objectives such as joint marketing or joint product development. A horizontal business network usually involves a small group of somewhere between 4 and 15, mostly small, firms. These members are typically not competitors, but pursue complementary activities, often in the same broad sector such as clothing manufacture or footwear production.

Quite often the collaborating firms in this form of organization will create a separate, legally defined network company which is jointly owned by the participating firms and which carries out the activities of the collaboration. Over the past 5 to 10 years many countries have set up programmes aimed at developing horizontal business networks of this type, particularly for small firms. The movement appears to have started mostly in the industrialized countries, with the experiences of Italy and Japan being particularly influential. Now, many states have programmes, including Australia, Canada, the Netherlands, New Zealand, Norway, Spain, Sweden, the United Kingdom and the United States, amongst others. In more recent years newly industrializing countries and emerging economies such as Brazil, Chile, the Republic of Korea, Mexico and South Africa have also developed programmes.

Typically, these programmes involve intermediary organizations which facilitate or broker cooperation amongst small firms, and then help them link up with a range of support services, including training providers. The trend is to encourage the small firms, often acting as group entities, to define their needs and drive the process of service provision, including the provision of customized training. The intermediary institution is often a government or quasi-government agency, but there are also prominent examples of NGOs and the private sector itself taking on the role.

A second form of networks arises from small firms=position within vertical supply chains led, normally, by a large firm. Interest in programmes designed to strengthen vertical supply chains is widespread. For large firms, the capabilities of their supply chains have become very important, especially in sectors such as the automobile industry and electronics. This
importance is so great, in fact, that some people now talk about competition between supply chains rather than competition between individual firms. This kind of competition is accompanied by wholesale restructuring of supply chain organization and competencies, affecting delivery, quality, innovatory capability and other areas, as well as cost controls. For many small firms, achieving the new standards that their lead firms customers expect has become a major issue.

In some cases, large firms are themselves developing their supply trains by helping suppliers upgrade their competencies. Very often, however, and probably in the majority of cases, lead firms do not become actively involved. This has led to increased pressure on small firms to upgrade their competencies themselves. Intermediary institutions are assisting in this process. Programmes to promote horizontal business networks (as described earlier) can design their objectives to include making small firms acting as cooperating groups more attractive potential suppliers for large customers at the head of supply chains. This is especially relevant given that through horizontal cooperation small firms are able to acquire the scale and combined competence to serve as first-tier suppliers or systems integrators for major lead companies or OEMs.

Cooperation between small firms does not have to involve tightly knit small groups with specific business objectives to be effective. Small firms might collaborate through broader associations on relatively softer (but no less important) issues such as sharing information or jointly organizing training or upgrading programmes, which raise their capabilities, and make them more attractive suppliers for lead firms.

In Thailand it seems likely that the rising standards expected from their suppliers by major inward investors in industries such as automobiles have played an important part in motivating collective initiatives by small metalworking firms to raise their competencies. Creating a situation in which small firms can help themselves by forming collective associations is an important part of the strategy of the Metal Industry Development Institute (MIDI), an intermediary institution which has been given a mandate to help Thailand’s metalworking SMEs upgrade. MIDI provides a range of technical support services in areas like testing, information dissemination, sector specific research studies, technology transfer and especially training. By 1996 MIDI was providing an estimated 60 courses a year, each one typically lasting about five days (Box 3.3).
An alternative, or possibly an addition, to focusing upgrading activities on horizontally cooperating groups of small firms and associations, is to engage firms vertically, all along the supply or commodity chain. Groups of this kind could include both lead-firm (possibly large) customers and small and medium-sized suppliers, and aim to raise standards in areas like quality control, delivery, and productivity. Developing consistent procedures and inter-firm collaboration would allow information and materials to flow along the chain, with, if needed, just-in-time timing, in a synchronized manner.

Another type of network organization is the sectoral cluster. In its simplest form such a phenomenon is a geographical concentration of small, and possibly large, firms, sometimes many firms, that are related to one another by virtue of similar product orientation (such as automobiles or clothing products), and drawing on similar needs and competencies. In the most advanced forms, a whole range of upstream and downstream suppliers, sub-contractors, providers of services and raw materials, and appropriate institutional infrastructures can be found in a cluster.

---

**Box 3.3 The Metal Industry Development Institute in Thailand**

The Metal Industry Development Institute (MIDI) is a government agency, which in 1996 employed 60 people, with the mandate to upgrade metalworking in small and medium-sized enterprises (SMEs) in Thailand. Founded in 1988 it is located in Bangkok.

Activities include technology transfer through:
- training (mostly short courses);
- extension services (mainly related to production technology);
- translating publications into Thai;
- disseminating technical information and information on new technologies;
- experimental design and engineering work;
- technological and economic studies of sectoral needs;
- producing proto-type machinery; providing testing services; and
- encouraging the private sector to form sectoral associations.

Promoting industry associations is considered an important part of the upgrading process. Through associations, industry can be encouraged to help itself; services from MIDI can be made more accessible; and by working with associations, MIDI is made more aware of the private sector's needs. Associations which MIDI has helped to form include the Tool and Die Industry Association with, in 1996, about 500 members, mainly small and medium-sized firms; and the Thai Foundrymen's Association with, in 1996, 158 small-firm members.

MIDI's future activities are expected to include encouraging both vertical (large firm/small firm) supply chain linkages, and horizontal (small firm/small firm) linkages, as well as connections with research institutes and colleges.

MIDI does not provide all the support functions that small and medium-sized firms need, but other agencies which can meet those specific needs do exist. It is expected that in the future MIDI will operate more as a facilitator and coordinator, linking up with other service providers.

Sources: Interviews and MIDI literature. (originally from Pyke, F. A background paper prepared for the ILO World Employment Report, 1998-99)
More recently, there has been a growing awareness of the number of clusters in other parts of the world. Examples include the electronics clusters of newly industrializing countries and emerging economies like Singapore, the electronics, machinery and other clusters in the Republic of Korea, the Sinos Valley footwear cluster (and other clusters) in Brazil, and the footwear clusters of Mexico.

In least developed countries, too, research has demonstrated the widespread nature of the phenomenon. Some countries such as India, Pakistan, and Indonesia are particularly strongly represented, and other countries such as Kenya, Ghana and Peru also offered prominent examples.

Training and skills development, and more broadly the acquisition and dispersion of knowledge, are clearly very important for the dynamic growth of sectoral clusters. In the case of the newly industrializing countries of East and South-East Asia, the importance of strategies to capture or import the latest knowledge and techniques from abroad for the early growth of electronics clusters has been documented. These strategies included facilitating technology transfer through licensing and other arrangements, receiving assistance from consultants and experts from major customers, sending people abroad to train, etc.

Further examples such as the Changwon machinery cluster in the Republic of Korea suggest that the strategy has not been confined to electronics. Moreover, the experience of the Sialkot surgical instruments cluster in Pakistan and maybe phenomena such as the growth of the automobile cluster in North-East England in the United Kingdom suggest that being able to attract and extract knowledge and use it for local economic growth has a general significance for a region.

Knowledge and technology transfer can occur in a variety of ways, including direct links to transnational companies. Local institutions such as technology transfer centres, business associations and universities and higher educational institutions can play equivalent transfer roles. Witness, for example, the key role that the United Kingdom’s Cambridge University appears to have played in the development of what has been described as the fastest-growing high-tech cluster in Europe, involving over 1,000 small firms. Not only does the university develop new product ideas and offer a range of services, including technology transfer, but, perhaps even more significantly, it trains a highly qualified workforce from which the local high-tech cluster can, and certainly does, draw.

Knowledge imported from the international sphere interacts with the generation and dissemination of knowledge at the local level. Much training and knowledge acquisition actually occurs within the workplace, either as part of formal apprenticeship schemes or simply through informal day-to-day experience on the job. It may be spread through a cluster through a variety of mechanisms, including spin-offs as people set up their own businesses, through normal labour market recruitment operations, and/or through informal daily contact in the street, or common membership of clubs and associations. Learning from other firms customers, suppliers and peers is also important, and indeed there has been noticeable growth in programmes to encourage learning best practice from other firms, whether through classroom mentoring seminars or through factory visits.

Bringing in knowledge from the world scene, then building upon it, or leveraging it, to promote indigenous capabilities through local institutions and cooperative initiatives has been
characteristic of East and South-East Asian strategies of extracting knowledge from the global scene referred to earlier. In the Changwon machinery cluster in the Republic of Korea, for example, once basic knowledge had been acquired from world sources, active development of local capabilities to develop technologies followed. Firms invested significant resources to develop their own products, including mechanical presses, remote control systems, assembly hoists, engine parts, disc brakes and more. To such ends, small firms in the cluster cooperated through media such as research and development and sectoral trade associations. This is not to suggest that sectoral development and upgrading must necessarily start by relying exclusively on external sources; rather, that indigenous development and the leveraging of global knowledge can be mutually supportive.
4. Training in the informal sector and equity - exclusion of vulnerable groups from training and employment

4.1 The growing informal sector in Asia

The ILO World Employment Report 1998-99 warns that: "Low productivity and low incomes in the informal sector pose a dilemma about the kind of policy that should be adopted towards it. Should it be encouraged to expand and perpetrate low incomes or should it be relegated to marginal status?"
The report goes on to indicate that part of the solution lies in successful macroeconomics by thus stimulating strong growth and employment, the informal sector will flourish. While this is true, in the short term there is a need to develop strategies for optimizing existing income-generating activities within the informal sector.

The profile of the majority of those seeking an income from informal sector activities is social exclusion and vulnerability due to the lack of access to resources, including land, education and skill training for employment. As a general rule, social services and support mechanisms do not exist in developing countries, and therefore women, people with disabilities and the young are among the most vulnerable. Recent changes in the way in which work is organized, improved technology and requirements for high levels of skills has resulted in low-skilled workers, with little education, joining the ranks of the vulnerable seeking income through informal sector activities. Moreover, the increase in casualization of jobs and labour, once more prevalent in urban areas, is becoming a more conspicuous phenomenon in both urban and rural areas.

Informal sector enterprises employ the largest number of people in most developing countries in Asia. Rapid technological change, the Asian financial crisis and governments divesting themselves of their state-owned enterprises (China, India and Pakistan and others) are stretching informal sectors to their limit in many Asian countries. Consequently, training and employment issues within informal sectors must be addressed; however, this should be done without the introduction of measures that will over-regulate and constrict them. Instead, strategies should aim to create an enabling environment that stimulates income generating activities, provides skill training and, where required, offers business training and access to credit, particularly for socially disadvantaged groups.

4.1.1 Training for employment in war-affected countries

There are a number of models that have been developed to address skill needs in the informal sector, some of which are very effective. One very successful model was developed in Cambodia from 1993 to 1998. According to the ILO World Employment Report 1998-99, underemployment in the informal sector is becoming just as much of a problem as unemployment. The Cambodian model seeks to address the problem of unemployment and to contribute significantly to the issue of underemployment in a number of skill areas by providing additional or linked skills for part-time or seasonal income-generating activities.
In the context of the rehabilitation of Cambodia, where conflict was continuing and employment opportunities were limited, the ILO responded to a request from the UNDP to develop a project providing skill training linked to income generating activities for refugees and internally displaced people. The Vocational Training for Employment Generation (VTEG) project was one of three ILO projects within the Employment Generation Programme (EGP), the other two being a labour-based infrastructure rehabilitation project and a small enterprise development project. A second-phase project, the Vocational Training for the Alleviation of Poverty Project commenced in July 1996 and was completed in October 1998.

The VTEG project was originally designed as an emergency response to provide skill training as quickly as possible for the large numbers of returnees from border camps and internally displaced persons. The limited opportunities for wage employment meant that traditional training methods were not appropriate, and so the project staff looked for an alternative. Working closely with the other two EGP projects, particularly the small enterprise project, they developed a new model, providing skills training with links to business training and to credit.

While a number of training programmes were based in the project’s training centre, half of all the courses provided were mobile, conducted in villages and communes. When a training programme had satisfied identified needs in one area or province, it was transferred to another with similar needs, along with the instructors, equipment and materials needed to run it. This was an important strategy in that it ensured that training opportunities were identified locally, helping prevent trainees drifting to Phnom Penh or urban towns once their training was complete. Mobile training provided better access to women, the disabled and agricultural workers, who were able to return home each day. Furthermore, the training schedule was often adjusted to suit the target group, whose members sometimes needed to be home or tending their crops at certain times of the day or year.

This training system’s real strength lay in its flexibility. Flexible delivery allowed it to match training with identified income-generating activities. The systematic identification of training needs, feasibility studies, implementation of training, monitoring and follow-up of ex-trainees at three, six, and nine-to-twelve month periods proved very successful. It was also found that people who had been trained and had since found jobs or become self-employed sent their children to school, improved their diet and used extra funds to purchase consumer goods.

4.1.2 Training for rural employment in China

China has a rural surplus of labour caused by the process of rural economic reform, which began at the end of the 1970s, sending large numbers of people in search of work in urban areas. However, during the past two years, lay-offs from state-owned enterprises have made work in cities more difficult to find. In 1998, the number of laid off workers was estimated at approximately 7 million.

In an attempt to alleviate the pressure on urban employment and also to address the issue of employment for the surplus of labour in rural areas, the Government adopted a new policy, the Combination of Development and Employment of Rural Surplus Labour in the Localities with Migration into the Cities in an Orderly Way. The decision is realistic, given
Skills in Asia and the Pacific: Why training matters

the reform process and rapid economic development. Estimates of the potential for employment in non agricultural activities are huge, and therefore, the exploration of new ideas and approaches to job creation and income generation must be encouraged.

An examination of these issues by the Government, assisted by the ILO, found that job creation and farmers’ income-generating activities are often restricted because of a shortage of capital and a lack of technical skills, particularly in areas calling for non-traditional skills. They also lack innovative ideas, business and marketing skills as well as management and bookkeeping knowledge. The findings were supported by responses from farmers in Gansu and Jiangxi provinces, who were interviewed by ILO project staff. Furthermore, the farmers stated, if they were able to generate an adequate income locally, they would not move to urban areas.

In order to stimulate new ideas and create employment and income-generation opportunities in rural areas in China, the capable person concept was introduced as part of the Promotion of Employment Project. In China, a capable person is someone who has moved from a rural home to an urban area, and has returned to establish a business armed with vocational and money-handling skills, innovative ideas and market information. Capable persons generally make successes of their businesses, helped by training they received in private enterprises in one of China’s cities or overseas.

Training in China has, in the past, been supply-driven, provided through government training institutions or within state-owned enterprises. As a result, local labour administrative departments have little background in organizing and implementing training in small enterprises. This and the fact that private sector organizations and NGOs, a main source of non-formal training in many countries, generally do not exist in China, means that there is very little in-country experience to draw upon. The urban administrative authorities have been the only available source of knowledge.

Training methods used in urban areas and rural areas are very different. Rural training needs to take account of the diversity of the requirements of the trainees, the difference in levels of education and wide disparity of ability, and trainees’ geographic scattering among different villages. Non-formal training for informal grassroots activities must be decentralized, flexible, practically oriented and often part time. It must also often coincide with rural farm activities and seasonal differences.

In 1998, the second year of the project, the ILO Community Based Training (CBT) model was introduced for a trial period. Initial follow-up of pilot training programmes in Xingtang County, Hebei Province, produced indications that the CBT model had been a success. Farmers were happy with the outcome of CBT training activities, and government officers considered it effective. The CBT was initially adapted to local conditions and requirements during the pilot training programmes and further action research on Market Opportunity Survey and Review of the CBT Tools in the Chinese Context has been conducted in Min County in Gansu by China’s Institute for Labour Studies. The findings will be used to help formulate a CBT model that suits the specific requirements of China.
4.1.3 Training authorities and the informal sector in the Philippines

Technical Education and Skills Development Authority (TESDA) in the Philippines, was established by merging three different public agencies engaged in skills development. Its objective was to improve the quality and relevance of training programmes throughout the Philippines.

Although TESDA’s main focus is on coordinating and developing training programmes, administering the accreditation system and allocating resources among the various vocational schools and institutes, it has made a serious effort to improve the skill levels of informal sector operators. TESDA works in collaboration with local government units to provide skill upgrading programmes specifically targeted at non-formal training for informal sector operators. Trainers and facilities are provided by TESDA and the participation and involvement of informal sector operators is quite high.

Food vending is a popular training course, attracting mainly women, who constitute a large proportion of the informal sector in the Philippines. The success of informal sector training programmes has motivated TESDA to develop training modules, particularly for food vendors, that can be used by trainers who provide training for informal sector activities. Trainees attending non-formal courses implemented by TESDA receive certificates, which may eventually be useful in facilitating employment in formal sector activities.

TESDA recognizes that skills training is only one element in improving productivity and security in the informal sector. Other issues that need to be addressed include improving working conditions, social protection and establishing an enabling regulatory environment within the informal sector. Furthermore, many occupations in the informal sector require post-training support. TESDA is not in a position to make a direct contribution to resolving these issues; however, attempts are now being made to address these issues by networking with other departments, NGOs and private agencies.

4.1.4 The informal sector and unemployment in the Pacific

Securing productive employment in Pacific island countries (PICs) is a major concern. Among the large number of PICs it is estimated that 70 per cent of the population lives in rural areas; while formal employment takes in around 20 per cent of the labour force. Low levels of education coupled with the introduction of modern production methods makes the possibility of wage employment low for the majority of Pacific Islanders.

Although the numbers of non-formal training courses have increased in many PICs, opportunities for income generation are few. Training and education in many PICs is carried out by NGOs and church-based organizations, with rural training centres forming a major source of skill training. However, large numbers of Pacific Islanders seek employment overseas, particularly those with who have received some education or skill training. Thus, there is an extreme shortage of qualified teachers, trainers, skilled persons and resources. While PICs have tried to implement strategies to develop their economies, relying mainly on fish products, tourism and remittances from islanders’ relatives overseas, the GDP of most is extremely low, and little government revenue is generated from employment or exports. ILO work in the area of vocational skills training, particularly on developing training systems, holds particular relevance for Pacific island countries, and ongoing technical assistance is helping to build capacity in these countries.
4.2 Open links and pathways within and between education and training institutions

Open links and pathways within and between education and training institutions do not always sit comfortably with traditional methods and perceptions, or with the need to demonstrate the rigour and integrity of each route. Structural changes will require transfers of authority and accountability, and new institutional relationships can only be effective if they are based on partnership, rather than patronage. Barriers to pathways presented by examination and other entry requirements, particularly at secondary and tertiary levels, will need to be reviewed. The streaming systems will also need to be changed to allow more freedom to move, and staff development and facilities will be needed to support new teaching and learning methods. Developing a knowledge-based learning society will depend upon removing these restrictions. Perhaps the most crucial constraint to be overcome is the inertia and resistance to change found in most public institutions of education and training, particularly in the traditional universities. The determination and capacity to resist change should not be underestimated, but there is no reason why the concept that education is not for life, but for life-long learning, should not apply to teaching staff as well as their students.

4.3 Youth unemployment

For young people, unemployment at the beginning of their working life can lead to serious problems. Lack of employment lowers household incomes and blocks the crucial development of skills that come from work experience and on-the-job training. Early development of workplace skills is crucial to future earnings growth and to lowering the risk of unemployment for young people. Furthermore, youth unemployment has been linked to chronic unemployment and various social problems that extend well into adulthood.

Many training programmes for unemployed youth, particularly those aimed at self-employment, fail due to poor design. If they are to be successful, training programmes for youth must take into account the fact that a lack of skills is not the only barrier to employment that many young people confront.

Because poor skill levels are only one of a myriad of factors leading to youth unemployment, labour market policies for young workers need to include training as a part of an integrated and targeted package. Programmes that provide some form of work experience can both help to overcome employer attitudes towards young inexperienced workers, and allow for essential on-the-job training opportunities. Targeted programmes that combine work experience with classroom training and job-search and career counselling can also be effective for many unemployed young people who need help to attain the social skills and work habits needed to enter into good employment.

4.4 Long-term unemployed

Finding effective policies to assist the long-term unemployed to find jobs has proven difficult. However, a number of features are emerging that may serve as a guide to more effective policy design. For example, it is essential to carefully target measures to improve workers=
employability but it is also essential to make sure that available resources are used as efficiently as possible to put these programmes into place. A worker's existing skills, attitude and particular needs must be properly evaluated before training or assistance begins. Measures need to be introduced to address the mismatch between the skills, attitudes and needs of the worker and available employment. Some workers may only require proper identification of employment opportunities, others may need to improve their skills or education level, while others may even need long-term counselling that continues after they have found employment. All these schemes take time and resources to develop and implement.

4.5 Older displaced workers

Age discrimination has combined with changes in work organization, higher skill requirements, social security, policies and the economic environment to make many older workers more vulnerable to redundancy, lay-off and pressure to withdraw from the labour market. The likelihood of long-term unemployment is higher for displaced workers over the age of 55, particularly the less skilled. Older workers, once they are unemployed, have very little chance of finding employment. For many, job loss ultimately leads to discouragement and withdrawal from the labour force. For older workers in developing countries, with little access to resources such as pensions, social services, land or family support, the only option available is to seek labouring jobs or self-employment in the informal sector.

4.6 People with disabilities

In the present economic climate in the region, vulnerable groups including older displaced workers, young-at-risk workers, the long-term unemployed and the disabled have less job security, and are at even greater risk of exclusion. The shift in demand away from relatively low-skilled workers towards people with higher skills and multi-task capability has made these groups less employable. People with disabilities are facing an extreme crisis in securing meaningful employment, since they face growing competition from highly qualified, non-disabled job-seekers.

Several aspects of the organization of training programmes for people with disabilities are cause for concern. In most countries of the region, training is generally provided in special centres. This training is often built around production, with contract and production work serving as the basis for the training programmes, and providing the centres with some income to supplement their public subsidies. In many cases there is only a very tenuous link between the training provided and opportunities in the labour market, and the skills acquired are not always transferable to employment settings. Training equipment is often outmoded, and the course content frequently does not reflect the skill requirements of enterprises. As a result, segregated training does not always equip a disabled person with the skills needed to find and keep a job.

Another common problem is the fact that, in many instances, the courses offered in special centres cover the same skill area as courses in nearby centres for non-disabled people, but follow a different curriculum, often involving lower standards. To overcome this, some countries have recently adopted a policy of mainstreaming training opportunities for disabled
people in other words, opening access to the ordinary vocational training programmes to people with disabilities. In order for such an approach to be effective, however, the mainstream centres need to be made accessible, and a range of supports put in place to ensure that the disabled trainees can benefit from the training programmes. In addition, induction training needs to be provided for mainstream instructors to ensure that they can meet any specific requirements that this new group of trainees may have. These necessary measures are frequently neglected, with the result that attempts at mainstreaming have been minimally successful to date.

People with disabilities in some countries now have a greater choice of training options, although this is nowhere near as wide as the choices open to non-disabled young people leaving school, or the retraining opportunities available for non-disabled people who wish to change their careers later on. The choice is greatest in countries which have adopted policies that clearly advocate a shift in services from sheltered employment to supported and open employment. If people with disabilities in this region are to have more choices, then more resources need to be invested to make mainstream training programmes accessible, and to introduce the requisite support services.

4.7 Specific difficulties of exclusion for women across all groups

Lack of access to education and exclusion from workplace-based training is one of the main forms of discrimination against women in many countries. While policies to monitor or counter discrimination against women can be introduced, they are difficult to police. Employers are often reluctant to provide training, citing reasons such as the likelihood that a woman will resign in order to married, bear children, and unreliability because of family care and monthly periods. Furthermore, women often lack access to property, credit, legal services and government training programmes, making employment and self-employment difficult.

In many developing countries (and a number of industrialized countries), women do not have access to skills training programmes other than those aimed specifically at women. Moreover, in many developed countries statistics indicate that women have significantly less access to employer-funded training.

The extreme difficulties that women face in a number of countries require affirmative action to counter exclusion. To this end the ILO and the Government of Bangladesh jointly implemented a project aimed at training and empowering women. The Technologies for Rural Employment with Special Reference to Women and Sustainable Development Project focuses on giving women in rural areas access to appropriate technology, skill development and micro-credit.

The project operates in 40 locations spread over Bangladesh. Officials of the Women's Affairs Department (WAD) supervise activities in the field. The end beneficiaries of the project in first phase were 3,600 rural poor and underprivileged women who were directly helped by the project. Additionally, the project developed the WAD's capacity to implement, supervise and monitor activities and provide training through workshops and on-the-job experience. The project's indirect beneficiaries were an estimated 21,600 family members of the end beneficiaries.
Working at the grass roots level, the project sought to build an institutional base to strengthen and empower women. It achieved this by establishing women's groups to raise women's awareness of their own potential, and their economic base. Its strategy of developing human resources through skill training, organizational management, and training in basic account keeping was very successful. It showed women how to use appropriate technologies in order to increase the quality of products, and to reduce the stress of daily activities. It established a micro-credit revolving loan system to provide access to credit for women.

4.8 Promoting access and equity

As knowledge and skills are rapidly becoming the key source of competitiveness, employability and job security, those who do not have access to training are increasingly likely to be marginalized. This raises the important question of equity in training.

The question of access is the concern not only of specific groups but also of sectors and industries which are facing constraints. These latter include the declining sectors, informal and rural sectors, as well as certain types of enterprises such as the small and micro enterprises.

The changes globalization has wrought on today's environment have made equity in training an even more important concept. The principle of the right to education is now being extended to the right to training and is gaining recognition in policy statements. Particularly noteworthy examples include Canada, France and Denmark. The question of the right to educational leave is now often included in collective agreements.

Equity has three dimensions: first, whether training is relevant to labour market requirements; second, whether training opportunities are physically accessible and available to all; and third, whether the individual is able to assimilate and use what is learnt. This last point means considering constraints on individuals, including learning disabilities, physical disabilities, or lack of basic education. Government initiated and funded training measures tend to take the form of targeted measures for specific groups. However a more broad-based approach would be more appropriate.

Two strategic approaches can be used to promote equity in training. The first is the preventive and longer-term approach, which consists of improving the mainstream training system making it more relevant, more flexible and more accessible. Preventive measures aim to minimize marginalization and exclusion, and reduce the need to resort to emergency measures. Policies and measures therefore need to be devised, as far as possible, within the context of mainstream training delivery.

The second strategy uses remedial action, by devising specific measures to help people who face specific constraints, and who are marginalized. A distinction should be made between persons who are in danger of marginalization and those who are already marginalized. Preventive measures need to be devised to reach these groups before they become marginalized. For example, preventive measures could help workers facing retrenchment because of restructuring. Advance notice of termination of employment from their employer, training and various forms of job support could significantly reduce the incidence of marginalization.
Broadening the representation of stakeholders in decision-making in training can also be an important, albeit rarely used, strategy. Canada provides an example of this approach. In addition to business and labour representatives, training governance bodies include representatives from various equity groups representing women, aboriginal peoples, persons with disabilities and visible minorities. The overall goal is a coherent and coordinated system of labour force development that is equitable, effective and efficient.

Decentralizing training governance, management structures and the decision-making powers of the training system, and adopting policies to promote local and regional training initiatives can be a very effective means of mobilizing local potential. This can also help strengthen the social partners’ commitment to equity.

Equipping individuals with a wider range of choices, and developing entrepreneurial attitudes and skills can do a great deal to help promote equity and produce a more adaptable workforce in the longer term. Unfortunately, orientation of vocational training to self-employment and entrepreneurship is a rare policy, although some countries such as Indonesia and Kenya have made specific efforts in this direction. (Box 4.1)

Box 4.1 Kenya: Informal Sector Training Fund for equity and growth

Kenya has recently established a micro and small enterprise training fund to upgrade skills in the informal sector in an innovative partnership between the Government and the Jua Kali Association for the Informal Sector (Jua Kali, meaning hot sun). The training fund aims to develop demand-driven training and enhance cost sharing for enterprise-based skills upgrading. Public funds will be channelled on a competitive basis to training providers. The fund is managed jointly by the public and private members appointed by the Minister for Research, Technical Training and Technology, with three representatives of the Kenya Federation of Jua Kali Associations (formed in 1992), three from the Government, and four from organizations working with the informal sector. Training vouchers are also used to encourage training in small firms.

Source: International Institute for Educational Planning (IIEP), 1997

Another important policy measure which could promote equity is the transition from time-based to competency-based training. Recognition of prior learning can improve access to training by giving credit for knowledge and skills acquired through practical experience. One example is the adoption of a national standards framework in South Africa, which will in time formally recognize the competency of workers who trained informally through practical work, paving the way for them to gain access to further training.

Targeted training means reconciling social constraints with the economic objectives of training. Skill development has to be in demand areas, growth sectors and occupations in which investments are being made (which often is not the case when the focus is only on the social constraints). In short, targeted training must be economically viable, and the enterprise sector could make an important contribution to this effect. Making sure that the target group concerned is directly involved in seeking solutions to its problems is critically important,
making success much more likely, and helping to empower the group. Enterprises can be encouraged to improve equity in training when governments use financial and other incentives to motivate them to train disadvantaged groups. Most schemes of this sort stipulate that the training provider is paid if the specified objectives and outputs are achieved. These may be defined in terms of the employment of the trainee and/or the attainment of a specific skill standard.

Targeted training needs to be accompanied by an integrated package of measures and services designed to address specific constraints. These measures and services include, inter alia:

- providing information on training and job opportunities;
- occupational guidance and counselling;
- remedial basic education;
- providing initial training or retraining;
- placement services; and
- various forms of support services ranging from micro credit, to organizing group production or group credit, to providing financial or food assistance during the training period.

Despite the important role of small and medium-sized enterprises in employment generation and economic growth, their limited access to training opportunities and services and measures to improve this are often not adequately addressed in training policy. A variety of factors often limit these enterprises’ training access. Among these there are, difficulties detaching staff for off-the-job training, inadequate information on available training opportunities, limited internal training capacity, and inability to finance training. Economy of scale is a major issue. Smaller enterprises often cannot afford capital investment in equipment, material and trainers, and generally lack expertise to identify training needs or prepare training plans. Last but not least, many simply do not recognize the relevance of training to productivity. Economy of scale questions can also work against government efforts to encourage training. While many governments offer exemptions on payroll levies and other similar incentives to encourage training, in the case of smaller enterprises, the sums involved are often too small to be effective.

The equity issues are often not adequately addressed in training policy because people working in mainstream training systems lack knowledge, information and general awareness of equity issues and measures. The mainstream training systems need a better understanding of the constraints and needs of groups, enterprises, sectors and industries which have difficulties gaining access to their services, so that policies and measures can be designed to overcome the barriers. The informal urban and rural sectors need particular attention.

The current trend towards market-driven training systems and the extent to which delivery is assumed by enterprises is likely to accentuate existing inequalities. The unemployed and people who work outside formal employment structures will have no access to enterprise-provided training. Job-specific training is less likely to lead to worker mobility. In-service training often favours managers and male workers. State intervention, therefore, is essential to ensure equity. A variety of policy and regulatory tools and strategies will be needed to create incentives and disincentives aimed at all those who provide training, including enterprises.
5. Partnerships and alliances in training

5.1 The roles of the public and private sectors in training

The widespread review of VET provision in all developed and many developing economies has included reconsidering public and private roles (Box 7.1), defining objectives more clearly in terms of national policy and priorities, and reappraising outcomes in order to improve efficiency and relevance. In addition to meeting the needs of the new workplace this process has been driven by:

- the growth in unemployment, particularly among the young and unskilled;
- substantial empirical evidence of a positive relationship between educational attainment and individual earnings and employability;
- some evidence of a link between higher levels of education and social benefits such as lower demands on welfare resources and reduced crime rates;
- emerging evidence that high levels of education contribute to economic growth within an appropriate development strategy;
- pressure to contain public expenditure by improving cost effectiveness, prioritizing and encouraging the private sector to play a greater role;
- acceptance that improving competencies nationally requires a comprehensive strategy involving public and private employers and training providers, trade unions, trainees and families;
- a belief that some forms of training such as programmes targeting entrepreneurs and small businesses are cost effective in job creation;
- confidence that training and active labour market policies help the long-term unemployed to maintain contact with work and improve the employment prospects of the low skilled;
- a realization that many existing schemes have often been expensive, ineffective or both; and
- a potential conflict between government roles as sole owner and evaluator of training.
Box 5.1  Malaysia: Partnership for competitiveness in global markets

The basic objective of Malaysian training policy, as established in the Second Outline Perspective Plan, 1990-2000, is to create a strong basis for education and training in order to prepare the economy for global competition. Integral to this policy is greater involvement by the private sector in the provision of industrial training. Under this system, the involvement of the private sector will include the development of curricula, the provision of enterprise-based training, the development of skills for new technologies and job placement for apprentices. Two initiatives adopted under the plan cover the industrial attachment of trainers and the sharing of public/private sector facilities and instructors, especially through the skill development centres set up in various States. One example is the Penang Skill Development Centre for the electronics industry, which is based on a partnership between the State, private enterprise and academia. The centre was established by multinational enterprises and the Penang State Government and is managed as a business by a management council composed of public and private sector representatives. The State provides cash grants, trainers, equipment, training materials and premises. The private sector supplies financing, equipment and trainers. The centre is used both by the Government and the private sector. There are user fees for courses and membership fees. A one-time founder member fee is S$15,000, which offers a 10-30 per cent discount on course fees. Full membership is a one-time fee of S$20,000. The ordinary membership fee is graduated according to the size of the firm, ranging from S$5,000 to S$15,000.


Numerous models are emerging worldwide as governments recognise the importance of VET and explore new methods for its operation and evaluation. In addition to the emphasis on flexibility, two other assumptions form the basis of recent reviews. The first is that the solution to unemployment is multifaceted, and VET is only one, albeit crucial, component. The second is that government role as sole supplier and manager at the macro level should shift to that of hands-off broker, providing resources and incentives to sponsor and facilitate high quality training and attracting additional resources to support activities at the micro level. These assumptions lead in turn to a clearer picture of the potential roles of partners in developing and providing VET. The government role becomes to:

- improve levels of basic education the foundations of education for life;
- decentralize authority and decision making to maximize responsiveness in recognizing and satisfying market needs;
- establish and maintain procedures for monitoring and evaluating quality and cost effectiveness;
- concentrate public spending on priority training areas, for example poor and disadvantaged groups;
- provide incentives to encourage participation in policy making and provision by the private sector, i.e. employers and training providers;
encourage collaborative schemes; and to
- broaden and facilitate access.

The private sector:
- contributes to policy making at both national and local level;
- supports training activities either on the job or in training institutions;
- contributes to quality control and assurance mechanisms.

The public and private providers should:
- contribute to policy making at local level;
- be sensitive and responsive to local markets and special needs of trainees;
- be held responsible and accountable for resources deployment; and
- be committed to quality of content and delivery.

The global trend away from predominantly government provision of training towards decentralized structures and strategic partnerships involving government, enterprises, trade unions and training providers has generally been more successful in meeting market needs. In these models the government distances itself from the day-to-day supervision and operation of training but retains a role as policy maker, quality controller and regulator. It also acts as a broker, bringing together appropriate experts and groups. This approach makes sure that responsibility for deciding what training, for whom, where and by whom rests with people who are closer to the market place. The brokerage role has been executed in a variety of ways B some of these include setting up and financing industry-led advisory groups at national and regional levels, providing various incentives, and generating competition for funding. The combination of demand-driven training designed by collaborative partnerships between the directly affected groups, and government support and monitoring, means that planning and implementation is much more likely to be effective and efficient.

In many countries and at all levels B national, regional and enterprise B social dialogue has resulted in agreements to promote access to work-related training. In economies progressing from agriculture to manufacturing the need for training is paramount but it is unrealistic to rely on private sector support. In the poorer countries, the lack of resources dictates that priority must be given to basic education. In countries that are making further progress towards value-added manufacture, and then to knowledge-based societies, the supply of relevant training is even more important, and there is already evidence of significant private investment. New modes of social dialogue and means of strengthening contributions from all partners are being explored. Decentralization means that more sections of the community need to understand that the government is playing a new role in training, as a broker and partial funder. People in the community also need to understand the responsibilities and accountabilities this brings to the new decentralized governance and management of training systems. Workers—and employers—representatives together with other community groups have a much more influential role to play in directing and managing training B but they need a clear understanding of this role and of training issues in general to be able to do this effectively.
5.2 Public and private stakeholders and their comparative advantages

Because enterprises are market-driven and need to respond rapidly to change, they tend to possess precisely the qualities that are lacking in the state-driven VET systems. Successful private enterprises succeed because they are able to provide practical, on-the-job skills that reflect market requirements. They are therefore in a position to make a strategic contribution to the relevance, effectiveness and efficiency of training systems by improving the quality, capacity and productivity of the training provided. Their concern with skills development, however, is generally driven by the short-term objective of meeting their own needs for increased productivity and better-quality goods and services. Training provided by employers themselves is often job-specific and focused on workers who already have better-than-average skills, and may not be systematic. Neither is an employer likely to provide training designed to make individuals more flexible and mobile, or to take much account of the kinds of training needed to achieve national social and economic development. Individual employers design their training to meet the needs of their own enterprise. In addition, by its very nature, enterprise training leaves out the unemployed and those who work outside the formal employment structure - the self-employed and informal sector workers. Nevertheless, within training policy and governance forums, the role of employer organizations is vital. Employer representatives make sure that enterprises’ concerns are heard, and help guide long-term investment in continuing training in line with industry projections of growth and labour requirements. This involvement also means information about training systems and services flows back to employers, improving enterprises’ awareness of learning opportunities and their importance.
The State can contribute to enterprise effectiveness by promoting economic growth and employment creation. It can also promote a broader and longer-term perspective for national training policy and systems, and keep a balance between efficiency and equity in training. Greater enterprise involvement in the providing training can free the State’s resources, allowing it to focus on areas which might otherwise receive little attention.

The comparative advantage of the non-profit voluntary sector lies in its ability to reach the grassroots level even in remote areas, and to provide training for the poorest and most disadvantaged population. Public providers often have difficulty reaching these people, while enterprises have little interest in doing so. Voluntary agencies, however, often fail to have a large-scale impact. Seeking ways in which public policy and measures can be used to support voluntary sector initiatives is an important task for the future. Finding

---

**Box 5.2 Latin America: Training initiatives by employers-organizations**

In Latin America, employers have assumed a leading role and are playing an increasingly influential part in terms of training infrastructure, knowledge, conceptualization and political influence. The move to create vocational training institutions in the region can be traced back to the birth in Brazil of two bodies associated with employers-organizations: the National Industrial Training Service (SENAI) in 1942; and the National Commercial Training Service (SENAC) in 1946. These pioneering institutions have left a deep mark in Latin America. They were attached to employers’ federations in the industrial and commercial sectors, and remain so to this date.

Employers-organizations consider training a central element of strategies to raise competitiveness and productivity. They are concerned with various aspects of training, including management, financing and methodologies, and strive to participate actively in vocational training institutions. Training institutions which successfully adapt to the current productive, labour and technological context invariably owe their success to a permanent dialogue and interaction with enterprise. Training is also perceived by employers as an instrument to upgrade the skills of both its middle management, executives and employers themselves, as well as workers.

Employers-organizations have introduced their own concepts and notions of training through national tripartite or bipartite agreements, sectoral arrangements or bargaining at the enterprise level. The initiatives include:

$ \begin{align*} 
& \text{direct management of vocational training institutions by entrepreneurial chambers} \\
& \text{such as in SENAI and SENAC in Brazil, ICIC in Mexico, INACAP in Chile,} \\
& \text{INFOCAL in Bolivia, SENATI in Peru, SENAT in Brazil, CIED in Venezuela} \\
& \text{and others;} \\
& \text{some sectoral chambers providing research and development and technical} \\
& \text{education for their members such as the Chilean Construction Chamber, the} \\
& \text{employers of the agricultural sector under the National Agriculture Society} \\
& \text{and through its Social Development Corporation for the Rural Sector (CODESSER),} \\
& \text{and Production and Commerce Confederation through INACAP;} \\
& \text{in Mexico, the work of the National Chamber of the Textile Industry} \\
& \text{(CANAINTEX) through the Textile Training Centre} \\
\end{align*} \\

Source: *Training, labour and knowledge*, ILO CINTERFOR, Montevideo, 1999
innovative ways to link the public sector with voluntary efforts will help make these voluntary schemes more effective, and help them to reach more people.

Individual workers and trainees play a vital role in managing their own learning and investing in personal development. Workers can do much to ensure access to broad-based and portable skills that make workers more mobile. They can also give a voice to those who are outside formal employment structures, the unemployed, the self-employed, the informal sector workers, and play a critical role in creating a learning culture among workers.

**Box 5.3  A role for trade unions**

The crucial role of unions in workforce training is emphasized in many countries. A new report by the National Institute of Adult Continuing Education (NIACE) in the United Kingdom commissioned by the Department of Education and Employment and the Trade Union Congress highlights their role in stimulating demand for learning from the workforce, and creating the conditions necessary to transform workplaces into learning organizations.


The Danish Federation of Trade Unions (LO) estimates that up to 1 million private sector workers out of a total workforce of 2.9 million are entitled to one week of technical training every year. Enterprise-level agreements and creation of awareness among workers are essential to ensure that the right to training is actually used. Shop stewards acting as ambassadors of training are to mobilise workers to take advantage of learning opportunities. Source: Olesen, 1998.

In many instances unions assume direct management of vocational training institutions, foundations and programmes. In Malaysia, the Workers Institute of Technology in Port Klang and Ipoh offers training for young people inter alia in auto mechanics, electricity, computer sciences and architecture. Collaboration with multinationals such as Volvo, Bosch and Siemens is also helping workers to upgrade their skills.

In Argentina, the Construction Training Foundation is associated with the construction workers union (UOCRA). Similar arrangements were made by unions in various sectors, including commerce, services, insurance and metal industries. Several unions jointly formed the Trade Union Forum for the Integral Training of Workers. In Brazil, major union federations CUT, Forca Sindical and CGT carry out training programmes at central level and through their branch affiliates. In Argentina, trade unions offer vocational training on a regular basis with a significant coverage where enrolment is larger than in public training institutes. Unions are also involved in specific technical aspects of training, for example certification of occupational competencies such as in Mexico. Some central unions carry out research on training to develop conceptual information and act as think tanks for workers organizations (Argentina, Brazil, Venezuela).

5.3 The State and society: towards an interactive and complementary partnership

The level of development and the size and strength of the private sector determine the respective roles of the government and non-government sectors in VET, and to what extent a demand-driven approach can be introduced. In low-income countries with a weak private sector, for example, the government needs to play a strong role in financing and delivering training until the private sector is ready to absorb a larger share of the task. In middle-income countries with a large industrial sector and widespread basic education, on the other hand, the private sector can assume a more active role. In rapidly growing economies with a strong private sector, the delivery of VET is usually left largely to the private sector, so that business and industry are able to take on and carry out most of the training functions. Ultimately, it is the overall policy environment that will determine the investment decisions of enterprises and influence individuals’ decisions to acquire skills. The higher the demand for training, the greater the incentive for private training providers to offer their services will be.

 Although the trend towards demand-driven and private-sector-led VET centred on enterprise needs is gaining ground, the supply aspect of training should not be forgotten. Enterprise-led training should improve the effectiveness, efficiency and relevance of VET and the speed of its response to market requirements. It is also important to remember that demand-driven VET tends to have a short-term vision of human resources development, favouring job-specific training to meet immediate and foreseeable needs. Moreover, technology and the working environment are changing so rapidly that longer-term demand is not always clearly predictable. This needs to be counter-balanced with sound basic education and broad-based initial training to provide the workforce with a flexible and adaptable skills base. The government needs to give a long-term perspective to the development of a skilled national workforce, emphasizing broader, multiple skills which enhance worker employability and equity.

 To sum up, the role of the State today is shifting from direct delivery of training to creating the right conditions to ensure the efficient operation of markets, providing financial incentives and taking appropriate initiatives to fill any existing gaps. As the participation of the private sector in vocational education and training grows, the State increasingly assumes the role of catalyst, promoter, supporter, motivator, finance provider and regulator by supporting the public and private agents operating in the training market in order to satisfy unmet needs. The promotion of an open training market frees the State from direct provision

Box 5.4 Trade unions as training providers

The Irish Congress of Trade Unions (ICTU) has established a training company, the Education and Training Services Trust (ETS) which acts as a training provider and broker of training services for members. Together with the National Council for Vocational Awards, the ETS delivers training in areas such as pneumatics, hydraulics, electronics and in core skills such as team working and problem solving. Courses include tests leading to certification.

of training services and shifts its attention to governance of the VET system as a whole. The State provides the overall policy framework for training, sharing the process of decision-making with its private partners while leaving the delivery largely to the private sector.

**Box 5.5  Skill development councils in Pakistan**

The Skill Development Council (SDC) Lahore, was established as an employer-led organization. It was an important component of the second phase of an ILO multi-donor component of the National Vocational Training Project. Donors included the World Bank, the Employers’ Federation of Pakistan, and the Ministry of Labour, Manpower and Overseas Pakistanis (MOLMOP), Islamabad. Established in 1995, the SDC seeks to enhance the participation of employers in private sector skills training activities, create a training culture in industry, and build a competent, flexible workforce for industry in order to face the challenge of competitiveness in local and global markets, and of adapting new technologies.

The SDC establishes links between employers and training providers, including government institutions, to promote the development of skill training and re-training programmes in order to improve the quality of the workforce in Pakistan. It focuses on specific skills and competencies required for industry to develop new skills and technologies. It provides in-service training programmes for employers, including upgrading of skills to improve efficiency and competence in specific areas. The SDC also provides skills upgrading and training opportunities for youth to enable them to become employable or self-employed.

The SDC also provides advice and consultancy services to employers focusing organizing training of employees to improve their productivity and bridge the mismatch between existing skills and skills required for productivity. To this end it organizes training courses, seminars and workshops. The SDC also provides assistance to poor students to complete training and apprenticeships. There is also an underlying agenda within the SDC to create a culture of work, develop a positive attitude towards work and a consciousness of the importance of improving quality, productivity and safety within the workplace. Its ultimate goal is to be able to meet international quality and productivity standards. The success of the SDC has prompted a closer examination of the concept by governments and organizations in India, Sri Lanka and Bangladesh.

Source: ILO South Asian Multidisciplinary Advisory Team (ILO SAAT), 1999

This sharing of roles and responsibilities depends on the extent to which the State is ready to delegate its perceived authority as principal actor and provider of training to the private sector, as well as the extent to which the private sector is able and willing to assume this delegated authority. This is where the provision of financial incentives by the State comes into play.
The extent of private sector involvement is determined by the specific circumstances of each country and the capacity of the State and the private sector. In addition to the political will, the involvement of the private sector depends upon strengthening the capability of employers and workers and of their organizations to play a more effective part in the governance of VET. This means expanding social dialogue with public and private stakeholders, particularly those responsible for planning and implementing vocational education and training. It also means promoting a culture of learning among the private stakeholders, and an enterprise culture in the public VET institutions.

The primary concerns of the State and of the private actors over VET are, of course, not the same. The primary concern of the enterprises is in-service, thus continuing, training, while the State is most concerned with those who are outside the employment structures with the initial training of youth and targeted training of the unemployed, the disadvantaged and at-risk workers. In the past, the public and private sectors have assumed separate tasks: initial training for the former and in-service training for the latter. In today’s constantly changing environment, however, the question is posed somewhat differently. Given their different concerns and comparative advantages, the major challenge emerging is this: How can government and the private sector best work together, as complementary partners, to assume joint ownership of a vocational education and training system which promotes lifelong learning and enhances workers’ employability? The answers to this question will be as different as the countries which are seeking them, but they should all produce the same end result: a labour force with the sharpened skill profile that is required to provide a competitive edge in a globalizing and increasingly technology-driven world.

**Box 5.6 A new role for training institutions: Advisory services to the private sector**

In Brazil, SENAI converted some training centres of excellence into technological centres. While continuing their principal activity of training they also offer advisory services to the private sector in areas such as tanning, footwear, precision mechanics, chemistry and textiles, welding, furniture making, electricity and electronics, food industries, transport, metal mechanics, graphic arts, paper etc. The aim is to transfer modern technologies to enterprises, particularly small and medium-sized firms, which involve engineering and design, research and development and technical support for innovation, i.e. consultancy services linked to business and production management, laboratory tests, specification, selection, testing and installation of new equipment.

Selected documents consulted*

10. OECD: *Assessing and Certifying Occupation Skill and Competencies*
23. Ibid.


31. Kang, Han-chol, ibid.


* Please note: this is a provisional list and will be revised.