Issue paper for Session 1

Employability: Education, skills development and technology

Bridging knowledge gaps

Globalization places a high premium on education and skills

Globalization has intensified international competition between companies and countries in products and services, their design, distribution and cost. As a consequence, it has placed a premium on developing a high-quality labour force. Demand has increased most for professionals, technicians, managerial staff and skilled and educated production workers and office staff able to perform tasks to standards, continuously innovate and improve processes and products through the application of new technologies.

At the same time, new thinking about how people learn is being used to adapt education and training systems and improve the competencies and employability of the workforce. Competence is a broader concept than skill, embracing the abilities of individuals to apply and adapt their knowledge, understanding and skills in a particular occupation and a given working environment. It aims to bridge the gaps between knowledge acquired in formal education and that learnt in work, a long-standing but now ever more acute problem in many countries.

The importance of investing in high-quality education and training systems is confirmed by many studies including by the ILO, UNESCO, the World Bank, the OECD and European Union. The benefits include:

- better educated and trained (competent) workers produce and earn more;
- education and training improves a person’s employability and labour mobility, and also increases the ability to research and innovate and adapt to changing technologies;
- abundant education and skills influence the path of national economic development, attract foreign investment and promote growth;
- countries with a greater share of educated and skilled workforces have raised productivity at a higher pace;
- education and training generate other significant social benefits – reduced dependence on income support for the unemployed, reduced incidence of crime, improved lawful behaviour and health awareness.
The challenge of adapting education and training systems

While the resource constraints are dramatically different – between for example the least developed countries and industrialized economies – practically all countries face major challenges in reorganizing their education and training systems to meet changes in the demand for skills and to improve the learning environment at work and in education establishments.

Making the school-to-work transition

Ensuring that young women and men make a good start in working life is an issue of global concern and a priority in the ILO’s Decent Work Agenda. ¹ A key element is the ability of young people to acquire and retain decent jobs in employment or self-employment. Youth without proper education and marketable skills have fewer chances of being employed in decent jobs, generating reasonable income, or continuing studies. For employers, it is a high risk to invest in new production technologies if relevant skills are scarce and the culture of learning is weak.

Industrial and some developing countries have invested considerable public funds in secondary, tertiary and vocational education and training, and the share of labour force with tertiary education over the last ten years has grown markedly. In only a few countries, however, has productivity grown at the same rate as the tertiary educational attainment of the workforce and in many countries youth unemployment remains a major concern. Together with evidence that the skills of graduates do not well match those needed by employers, this has led to questioning of the content and quality of further education.

Part of the problem of youth employability is the relevance of acquired knowledge, skills and educational and training qualifications to current labour market opportunities. The response consists of:

- extending career and vocational guidance to youth;
- developing new or revised occupational standards for educational and training awards through improved partnerships with industry;
- assuring quality of education and training delivery through introducing National Systems of Vocational Qualification, competence-based training and skills assessment;
- making progress in the labour market demands analysis particularly at the industry sector, regional and local levels;
- further professionalization of vocational education and training management.

Lack of education and training capacity continues to hold back many developing countries despite the well-researched returns to such investment in terms of wage increases, health improvement and prevention of HIV and AIDS. Providing girls with one extra year of general education has been estimated to boost their eventual wages by 10 to 20 per cent. The situation in Africa is especially dramatic. Over 40 million children are out

¹ See also Forum issue paper for Session 6 on “Decent work opportunities for young women and men: Overcoming discrimination and disadvantage”. 
of school in sub-Saharan Africa. Over 60 per cent of children drop out of school in Chad, Guinea Bissau, Equatorial Guinea, Madagascar and Rwanda. Provision of free basic education for all is required for contemporary Africa to equip people with basic skills such as literacy, numeracy and computer skills.

In many developing countries, especially the least developed, productivity in informal economy enterprises remains at a low level, while agricultural technologies and farmers’ yields have stagnated. Linking new and higher skills with the introduction of new technologies lies at the heart of the potential for improving productivity of workers, farmers and firms. However it is important to view “technology” as more than simply capital equipment. The “know how” that users of new technologies need to be able to adapt and use technologies is equally if not more important. Training of professionals, technicians and skilled workers is vital and evidenced by the number of developing countries experiencing both large-scale labour underutilization and serious skill shortages. This is holding back growth and thus inhibiting a faster pace of poverty reduction.

Breaking out of the low skill, low productivity, low wage, low investment trap

Breaking out of the “low skill, low productivity, low wage, low investment” trap requires a focus on school-to-work transitions. In many countries, the entry educational qualifications for accessing publicly funded technical and vocational education and training (TVET) is a Grade 8 certificate. This effectively excludes a large proportion of youth, many of whom have a low level of literacy and numeracy from structured vocational training. At the same time as improving school education to ensure that many more youth reach Grade 8, there is a need to develop vocational qualifications at an intermediate level and mechanisms for the recognition of skills acquired on the job.

To compensate for the weaknesses of the public TVET, private education and training centres are mushrooming, particularly in Asia, where the demand for a skilled workforce is high. Access to private systems generally depends on being able to pay fees. It thus risks widening still further the gaps between a middle class, able to pay for their children’s education, and the mass of families dependent on a weak state system. While some private training is of high quality, regulation is weak, leaving clients vulnerable to exploitation.

Modernizing to meeting these new challenges will place a considerable strain on existing education and training systems, particularly in developing countries. ILO studies demonstrated that graduates’ employability was constrained by the quality of training as well as by their over-supply in most popular basic industrial trades – welder, electrician, fitter, etc., resulting in high risks of unemployment. Furthermore few TVET systems provide training in the basic entrepreneurial skills needed by self-employed workers and small businesses. Lack of investment has held back the introduction of new learning programmes, training equipment and materials and employment of capable instructors. Many are unable to maintain the quality of the existing inadequate provision, let alone

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respond to the demand for new competencies and new techniques able to enhance the skills of workers with low educational attainment.

Alongside increased investment, a skills strategy for development requires a focus on the development of a new relationship with employers to ensure that competencies more closely match demand. The development of competence-based national qualifications in close cooperation with industry would result in more adequate reflection of job requirements and would make skills training more relevant and skills more employable.

Priorities for education and training systems in developing countries are:

- meeting the Millennium Development Goal of ensuring that all boys and girls complete a full course of primary schooling and the Dakar Framework for Action on Education for All;
- closer collaboration between public and private sectors on the development of education and training systems;
- improving labour market demand analysis for education and training provision;
- expanding provision of entrepreneurial training along with trade training;
- supporting private training institutions and overseeing their quality.

**Public–private partnerships in improving provision of education and training**

Useful knowledge and skills can be acquired in many ways. General education is supposed to deliver the foundation knowledge and abilities to read, write, understand and apply numbers. Basic computer literacy has become the most recent addition to foundation skills. However, at work further general skills are required for employees to become productive and efficient. These include the ability to communicate, analyse and solve problems in production; to work to quality standards, handle relations with customers, clients and fellow workers, and supervise others. In addition, most workers need a specific professional competence in their chosen occupation to perform a certain set of tasks according to the occupational standards.

National education and training policies and systems increasingly face the challenge of continuously adapting to the demands of competitive markets and industries, as well as to the learning needs of individuals. The school-based education and training systems by their nature appeared to have a limited capacity to develop the more specific work-related competencies and therefore workplace learning and company training have become indispensable. Furthermore, skills training developed predominantly by government agencies alone without strong participation and leadership of experts from employers’ organizations and trade unions is often of questionable quality. Reforming systems to ensure a strong public–private partnership on education and training is high on the agenda all over the world. The issues include:

- development of national education and training policies;
- setting up and composition of local and national bodies with employers and unions as well as other stakeholders’ representation to advise on policies and implementation;
- assessment and projection of the industry and occupation-specific demand for skills given the international markets and new product and technological development;
leading the process of development of occupational standards for trades and professions;

determining the ways of how the skills and competencies need to be assessed and certified;

advising on the types of equipment and technologies to be used by TVET institutions;

increasingly accepting students for longer periods of on-the-job training and directly providing workplace training facilities;

developing new approaches to skills upgrading for informal economy operators.

Employability and skills training in the informal economy and communities

A strategy for upgrading the informal economy cannot rely solely on graduates of formal training systems taking their skills into small businesses in the informal economy. The main focus of skills development in the informal economy therefore falls on raising the skills of women and men working informally and of finding ways to have their often considerable skills formally recognized.

Informal apprenticeship represents the most important mode of skills development in many developing countries where millions of young people acquire skills from a master craftperson or experienced entrepreneur in a process of learning by doing and training on the job. Informal apprenticeship, however, faces serious shortcomings. A critical one is that apprentices hardly ever acquire theoretical knowledge or non-traditional and advanced skills since training is limited by the master craftperson’s own skills and competence. This static nature of skills development in informal apprenticeship is a serious obstacle to technological progress in informal economy enterprises and on farms.

The major dilemma is whether or not governments should intervene in the informal apprenticeship systems to improve the quality of learning and employability of young trainees. This could involve regulations which would be very difficult to apply in practice. It is also hard to find boundaries between skills development in such informal apprenticeships and the community learning where people of all ages learn by doing their everyday work in agriculture, through maintaining their households, taking care of children, and doing casual craft work. Given the enormous numbers of people living in communities without access to formal means of acquiring skills, community learning has a significant potential for improving peoples’ capabilities to reduce their poverty. Many training programmes through private business services, NGOs and public training institutions deliver short-course training in narrowly defined occupations (food preparation, construction, agricultural production, marketing, etc.) which can have an immediate material impact on income and employability (as documented in the ILO’s Training for Rural Economic Empowerment (TREE), projects in Pakistan and the Philippines).

The principal issue is that learning and post-learning processes need to be connected to information, tools, credit, and value chains enabling participants to significantly improve cost-efficiency and productivity of their scarce assets. The ILO’s TREE approach to improve employability and income-generating capacity of the poor begins with community-based training but goes on to provide access to the kinds of post-training support that can turn a newly gained skill into a job or self-employment – credit access, entrepreneurship training and market assessment, for example. Learning also implies being able to make an informed choice from a wider set of options. This is increasingly
important in the poverty-prevalent agricultural sector. Knowledge about different crops or animal stock may help to combine the advantages of higher cost-efficiency with high labour intensity resulting in greater employment and wealth creation. For example, an ILO/FAO comparative study of crops in Liberia to identify those with the best potential for generating employment and wealth found that growing rice can generate four times more jobs than growing maize per acre, while, under present cost structures, the average cost-efficiency of growing rice is only 40 per cent below that of growing maize.  

Mobilizing international action for skills development

The relationship between skills development and employability, on the one hand, and economic growth and poverty alleviation, on the other, is central in the ILO Global Employment Agenda and Decent Work Country Programmes. Skills development is also an important strategy against exclusion and vulnerability. The agenda for action differs between developing and industrialized countries; however there is much common ground which is well set out in the recently adopted ILO Human Resources Development Recommendation, 2004 (No. 195).

Recommendation No. 195 recommends that member States recognize that education and training are a right for all. It further provides guidelines for the development and implementation of training policies, public–private partnerships in training; policies for pre-employment training, development of competencies and frameworks for skills recognition and social inclusion.

Development of national policies and institutional mechanisms for their implementation typically raises two key issues: the need for inter-ministerial coordination because policy responsibilities are commonly dispersed across education, training and employment ministries, and the need for sustained opportunities for employers’ organizations and trade unions to bring their practical knowledge of the world of work into the processes for policy development and implementation, as exemplified in a few countries such as Germany and Austria.

For the ILO, the next step is to assist countries in developing national training goals, priorities and benchmarks and in assigning responsibilities for providing and financing education and skills development between the government, the social partners and other stakeholders. Such assessments are likely to result in country programmes for investment and reform that will need substantial international support.

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6 The agenda for the 97th International Labour Conference in June 2008 includes a general discussion on Skills for productivity, employment growth and development.
Issues for discussion

Growth in the globalized world economy is skill-biased but education and training systems are slow to respond to the changed and increased demand for higher skilled workers. Furthermore, skill shortages may be one of the main causes of widening income gaps. More and better education and training is central to decent work for a fairer globalization and to halving poverty by 2015.

- Should a major global effort be mounted to improve the employability of graduates at all levels of education and training systems?
- How can we ensure the early identification of skills required in the future? Can international and regional organizations play a role?
- How can employers’ organizations and trade unions increase their involvement in determining education and training policies?
- What policies, incentives and mechanisms are needed to activate public–private partnerships in skills development?
- How can TVET systems be modernized to meet new skill demands and to use improved training techniques?
- Are private training systems which charge student fees or government-provided training loans a means of finding resources for skills development in developing countries?
- Do community learning or informal apprenticeships have the potential for speeding-up the growth of local economies and reducing poverty? Can projects be scaled up to full-scale programmes with a wide participation?
- Is there in general a lack of policy coherence between ministries and public agencies responsible for education, on the one hand, and technical and vocational training, on the other? What can the multilateral system, especially agencies such as the ILO and UNESCO, do to overcome such problems?