At the heart of the education reform process

This particular dossier is being published at the same time that Education International (EI) is organising its first world Round Table on Vocational Education and Training, in accordance with the working program adopted by the World Congress.

In organising this round table and in publishing this dossier, EI is expressing its determination to take an active part in the widespread debate on Vocational Education and Training. EI is equally determined to express its position on a certain number of issues within those intergovernmental organisations that are also active in the field of vocational education. The World Bank has already published a number of studies on the subject while UNESCO organised a World Congress on Technical and Vocational Education (held in April 1999 in Seoul, Korea). The ILO is currently preparing a tripartite debate on general policy between governmental representatives and employers' and workers' organisations, scheduled to take place during the next session of the International Labour Conference in June 2000.

It is therefore vital that education trade unions, individually at the national level, but also collectively at the international level within the framework of EI, express the concerns of teaching personnel within this debate. This is our objective.

Vocational education, like primary, secondary and higher education, lies at the heart of the process of education reform.

Public opinion, managers, parents and young people wish, and rightly so, to see the development of education systems which prepare young people in the best possible way for insertion into economic life. The world of work is becoming ever more international, jobs require more and more new skills, new jobs are constantly appearing which require qualifications of an ever greater technological nature. As a result, vocational training must therefore be rethought, for fear of condemning large numbers of young people to unemployment and in order to demonstrate the current incapability of public education systems to rethink themselves in relation to the new needs and demands of the economy.

The reform of vocational education also features in the wider debate regarding the roles to be played by the public sector and private enterprises in the process of developing, implementing and evaluating new training contents. The debate on this necessary reform of vocational training must also take account of the wider project on life-long learning, which the OECD and ILO are currently working on in close collaboration with employers organisations and workers' trade unions.

Finally, the debate on the necessary reform of vocational education must not overshadow another, equally serious problem: that of the absence of vocational training programmes in the majority of developing countries, countries where the need for specialised workers, technicians and engineers, is very real. This absence of training is most dramatic for young people themselves, who are thereby condemned to unemployment, economic marginalisation and social exclusion. However, this absence of training is equally dramatic in that it does not allow for the continued maintenance of collective equipment, acquired through technical cooperation or actual investments, much of which cannot be effectively realised due to the limited financial means available.

Everyone therefore acknowledges the importance of issues related to vocational training, issues which are, ultimately, real problems of society. It is hoped that this dossier will enable a greater understanding among teaching personnel of the importance of such a debate and the necessity for the trade union movement to take an active role in expressing appropriate objectives and proposals. ◆

Elie Jouen
EI Deputy General Secretary

CONTENTS

INTRODUCTION

EI - MARCH 2000

Vocational education and training worldwide

When comparing the systems for vocational education and training in different countries, a first conclusion is that there is considerable variety in the way they are organised.

Differences include: whether vocational education and training (VET) is provided mainly at upper-secondary or post-secondary level; whether provision is mainly within the framework of upper-secondary education or through a separate system and whether VET takes place mainly in companies as apprenticeship training or in schools. Moreover, vocational and technical education and training is institutionalised in some countries, while in others there are few or no institutions or regulations.

VET share of all education

The share of VET as a percentage of all education for young people differs greatly between countries. In some cases it is hard to make a clear distinction between what could be regarded as general secondary education and vocational education and training.

The table shows the net enrolment rates for different types of upper secondary programmes for the ages with the highest enrolment in the **OECD countries** and in some others. We find the highest enrolment in vocational and technical programmes in the **Czech Republic** (84%) and the lowest in **Paraguay** (3%). The average enrolment rate for vocational and technical programmes in the OECD countries is 40 % at the age of 17. In many developing countries a very small proportion of all secondary students is enrolled, for example in **Congo** 3.3% and in **Zimbabwe** 2.2%.

The enrolment of girls in VET

Unfortunately there are no international statistics indicating to what extent girls are enrolled in VET. We have some national examples: In **Zimbabwe,** 30% of students in VET are girls, while in the **UK,** 54% are girls. Not unexpectedly, the courses within VET with the highest percentage of girls are courses in subjects that are generally considered to be "female" subjects, such as nursing, fashion, clothing, home science and secretarial studies. At the same time the lowest percentage of girls is found in what could be considered typical "male" courses, such as technical mathematics, military subjects, metal industries and mining.

Apprenticeship

The centre of attention in many of the discussions on vocational education and training is the so-called dual system which exists, for example, in **Germany, Austria** and **Switzerland.** The philosophy of this system is that VET should be closely linked to practice and should take place to a substantial degree in companies. One of the advantages of this system is that vocational training takes place under conditions and on machines and equipment which represent the state of the art. For financial reasons school workshops can seldom afford to have the most modern equipment and machines.

The disadvantage is that the training could be too workplace-specific. If the training is mainly oriented towards the machines, the equipment and the routines of certain work places, the training is of limited value for industries other than the one where the training was received.

In a general sense, all systems for vocational education and training can be seen as dual systems, as they combine theory and practice. The difference lies in how these elements are organised. In most countries there is close co-operation between the private companies providing apprenticeship and the vocational schools.

What qualifications?

Another area of concern when we compare the systems is which general qualifications the students are given. In all systems, at the end of the training students get some kind of certificate allowing them to work in a certain vocation. In many systems there seem to be possibilities to get further training and education for the students. **German** students can continue to Technical School (Fachschulen). The **Norwegian** system stresses the goal that students from all streams of upper secondary education should be able to qualify for higher education. In **Spain,** Institutes for Higher Vocational Education are under construction. In **Slovenia** a large proportion of students from professional schools continue to higher education. In **Sri Lanka** there is a huge variety of diplomas and certificates, but at least those awarded by Technical Colleges seem to give access to higher education.

The advantage of giving the students a qualification allowing them to continue their education in colleges, high schools or universities is obvious. There will be no dead ends in the system and the student can always change her/his mind about education plans. The disadvantages are just as obvious: to receive a more general qualification the students must spend more time studying general subjects, and many students might have applied for vocational training because they preferred not to pursue more general subjects.

What starting age?

Given that VET is more of specialised than general education, a crucial question is when should the student be allowed to choose between a more generally oriented education or a more specific vocational education and training. The **French** students can start their vocational training when they are 14, the **Germans** when they turn 15 and the **Norwegians** at age 16. In **Spain** current educational reforms are moving the starting age from 14 to 16.

An early start will make it possible for students who are tired of mainstream schools to do something else and could prevent them from being drop-outs. A late start to vocational training will give the students more possibilities to think about what they would like to do and to make this choice more independently of their background.

Separate or integrated systems?

As noted at the beginning, the organisational framework of VET may vary significantly. In **Germany,** schools for VET are separate from the schools where upper secondary education takes place. In **France,** there are vocational lycées, technical lycées and general lycées, so there is partial integration. In **Australia** the TAFE colleges have been established as a separate part of the education system. In **Norway** all upper secondary education takes place in the same system, often even under the same roof. In **Slovenia** there are separate schools for general secondary education and different types of vocational and technical education and training. The **Spanish** reforms intend to integrate vocational subjects into general lower-secondary education and then have separate schools for general secondary education and vocational education and training at upper-secondary level. In **Sri Lanka** some elements of vocational education are included in secondary education, but most takes place in separate institutions. In **Congo** some vocational education and training takes place in secondary education, but large parts take place in separate institutions.

Privatisation

Ideas and suggestions on how to privatise education have been widely discussed. International education statistics show that, so far, only minor parts of the education sector have been privatised. Although the statistics do not indicate that there is a large private sector within the education sector in many countries, growing numbers of private institutes offer different types of VET that are not necessarily covered by the existing statistics. VET outside the public sector can be provided by a variety of agencies, institutions and private companies, among them some NGOs and unions.

In most industrialised countries the largest proportion of initial VET is provided within the public sector. In many third world countries VET takes place in several different kinds of institutions, more or less loosely integrated with the educational system. Some institutions might be set up by government agencies, but some are run by NGOs or private enterprises. In **Honduras,** for example, 77% of the vocational schools are run by organisations outside the public sector, in **Congo** 70-75%, whereas in **Sri Lanka** almost all VET is implemented outside the public sector. ◆

NET ENROLMENT RATES FOR THE AGES WITH THE HIGHEST UPPER SECONDARY ENROLMENT

Country	General programmes		Vocational and technical programmes	
	Age	% of all persons enrolled	Age	% of all persons enrolled
Argentina	15	37	17	19
Australia	16	64	18	19
Austria	15	27	16	70
Chile	16	40	16	32
Czech Republic	15	15	16	84
Denmark	18	49	17	25
Finland	16	56	17	36
France	16	46	17	48
Germany	17	25	18	55
Greece	15	73	15	21
Hungary	15	26	15	62
Iceland	16	71	18	20
Indonesia	17	18	17	11
Ireland	16	81	18	21
Japan	15	73	15	28
Jordan	16	45	17	12
Korea	16	55	16	40
Luxembourg	17	26	18	42
Malaysia	15	61	16	8
Mexico	16	25	17	4
Netherlands	16	33	18	48
New Zealand	16	81	17	16
Norway	18	48	17	50
Paraguay	17	25	16	3
Poland	15	29	16	62
Portugal	17	42	17	19
Russia	15	49	17	22
Spain	15	68	17	20
Sweden	16	45	17	65
Switzerland	17	24	18	53
Thailand	16	26	15	23
United Kingdom	14	98	16	44
Uruguay	16	40	18	7

Source: Education at a Glance. OECD Indicators. (OECD, 1998)

Ulf Fredriksson
Education Coordinator

ILO

On the agenda of the 88th International Labour Conference

The ILO Governing Body has decided to put the item "Human resources training and development: Vocational guidance and vocational training" on the agenda of the 88th Session of its International Labour Conference in June 2000.

Since its inception, the International Labour Organisation (ILO) has fostered vocational guidance and training as being of crucial importance to employment promotion, economic prosperity and social justice. ILO has dealt with vocational education and training (VET) in two ways: by organising different types of vocational training programmes and by adopting recommendations and conventions.

http://www.ilo.org

Are present standards accurate?

During the last two decades, critical economic and social phenomena have helped re-evaluate the importance of employment-related training. Training, it is argued, should be regarded as a public asset, an investment as important as physical investment. This affects the conceptual approach to training, its objectives and priorities, and the policies, systems, strategies and programmes that countries adopt. The development of intensified competitiveness, major economic restructuring, atypical employment patterns, profound transformation of work organisation and production, and new and changing job content, are generating increased and diversified skills needs. At the same time fiscal policies, structural adjustment and government reorganisation have resulted in reduced availability of public funds for skills development.

Key areas of training reform are the new roles of the State and the private sector, including a proactive regulatory framework, decentralisation, the development of a training market, and co-ordination mechanisms among the various actors involved; innovative and diversified financing mechanisms; increased responsibilities and participation of enterprises and individuals; the greater involvement and participation of, and new forms of dialogue between the social partners; and the enhanced relationship between training and evolving labour market needs.

What will happen now?

The Workers' Group of ILO's Governing Body has requested the inclusion of vocational training in the portfolio of standard-setting activities. Workers' unions suggest the adoption of a new Convention to supplement Convention 142.

Recommendation 150 is considered to include weaknesses:

- lack of consideration for accelerated economic transformation, organisational changes and social dynamics;
- lack of focus on the impact of training on productivity improvement, an implicit emphasis on government-sponsored training, as opposed to the need to foster greater involvement of the private sector and partnerships between the various actors involved;
- a supply-driven, rather than demand-driven approach;
- the lack of any reference to the financing of training, which has become one of the most critical obstacles to more and better investment in skills development;
- silence on the institutional framework of training systems;
- insufficient stress on the role of enterprises and on innovative forms of their involvement in training; the rather passive role attributed to the social partners;
- poor attention to the needs of small and micro-enterprises and the informal sector;
- disregard of the linkages between skills and technology and of the contribution of training to technological transfer and innovation; similar deficiencies regarding environmental issues;
- neglect of particular attention to youth training and the employment prospects of the young;
- scarce attention to the training and retraining of unemployed, redundant and displaced workers; and the insufficient importance given to continuous training for all workers throughout their working lives.

In June 2000 a general discussion will be held on this topic at the International Labour Conference and based on the discussion it will be decided how ILO will continue to work with this issue. ◆

In 1975, the ILO adopted the Human Resources Development Convention (142) and Recommendation (150) which concern vocational guidance and vocational training in the development of human resources. Convention 142 has been ratified by only 57 member States, a rather limited response from member States.

Existing instruments in addition to Convention 142 and Recommendation 150 :

- 140: Paid Educational Leave Convention (1974) and Recommendation 148;
- 159: Vocational Rehabilitation and Employment (Disabled Persons) Convention (1983) and Recommendation 99;
- 136: Special Youth Schemes Recommendation (1970);
- 138, 122 and 111: Minimum Age Convention (1973); Employment Policy Convention (1964) and the Discrimination (Employment and Occupation) Convention (1958);
- 100: Equal Remuneration Convention (1951) and Recommendation 90;
- 97 and 143: Migration for Employment Convention (Revised) (1949) and Migrant Workers (Supplementary Provisions) Convention (1975) and Recommendation 151;
- 107 and 169: Indigenous and Tribal Populations Convention (1957) and Indigenous and Tribal Peoples Convention (1989);
- 156: Workers with Family Responsibilities Convention (1986) and Recommendation 165; and
- 162: Older Workers Recommendation (1980).

LIFE-LONG LEARNING

The idea that people will return to study and training throughout their lives encompasses more than job-related education. But the concept is driven most forcefully by changes in the world of work – by the inescapable fact that a single period of vocational preparation can no longer be sufficient for a working lifetime of 35 to 45 years.

Since Jacques Delors popularised the idea of life-long learning just five years ago[1], it has become embedded in the political rhetoric of our time – even in the communiqués of the G8. But there is still a long way to go in order to translate the concept into national policy and practice. Governmental policy makers are just starting to work through the major changes required. The implications for our profession are far-reaching. They require that we engage more than ever before with fellow trade unionists, because all industrial sectors are affected. And they also require that we engage with employers. Here are just some of the issues to be considered. Already, they are part of the debate in the OECD and its member countries. Increasingly, these same issues will come to the fore in developing countries as well, even as they continue their essential drive for general education for all.

Who provides?

There is already a diversity of provision for vocational education and that diversity will increase. Naturally we think first of educational establishments – secondary and post-secondary – notably in France, but also throughout the OECD membership. There is a great deal of education and training within enterprises, beyond the traditional apprenticeship approach seen in countries like Germany. Many countries have a variety of private providers, especially for languages, commercial training and computer courses. In Britain, trade unions are also becoming providers of vocational education for their members.

Who determines the content?

In the first place, the provider. Employers are seeking more say in the setting of course objectives. Interestingly, they now place more emphasis on general objectives such as the development of critical thinking, learning how to learn, and the ability to work in teams. Most large enterprises now have human resource departments that organise in-house training and orient employees towards outside courses, which they then seek to influence.

Who teaches?

In educational establishments, qualified teachers, with experience in the specific fields. In enterprises, teachers may be qualified but often are not. Other private providers often engage unqualified teaching staff, mostly part-time, and usually with poor pay and conditions.

Who gets access?

Canadian studies show that those who get access to further education and retraining are mostly those who already have a good level of education, and have successfully completed earlier courses. Those who missed out earlier, for whatever reason, tend to have difficulty getting later access, so inequalities increase. Women get markedly less access than men. OECD Education Ministers stated in 1996 that their goal was *making life-long education a reality for all.*[2] But the growing knowledge gap is one of the major challenges to be addressed.

Who gives credentials?

Diplomas and certificates are often defined by public

Canadian studies show that those who get access to further education and retraining are mostly those who already have a good level of education, and have successfully completed earlier courses.

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Finding a dynamic equilibrium

authorities, but can be determined, as in the United States, by educational establishments. Business and community interests are often represented on bodies that determine these credentials. Trade unions need to be there, too, to represent the interests of employees, and particularly to insist on the portability of recognition for courses completed. As for certificates awarded by private providers, often for short-term courses, the market tends to sort out those that are meaningful from those that are not, in the sense that employers quickly learn to distinguish between them. For employees, however, the risks of unregulated certification are high, because they can invest in courses hoping to improve job prospects and find later that the credentials are worth little. More broadly, the trade unions agenda includes insisting that good vocational education is about personal development too.

Who pays?

This is the big question. In 1998 the OECD secretariat argued that public resources for education had reached their limit and that additional resources for life-long learning would have to come from the private sector and from individuals, through the payment of course fees. The OECD Education Committee modified this position after TUAC[3] and EI pointed out that public financing was necessary on grounds of equity and social cohesion as well as investment in human capital. BIAC,[4] representing the employers, supported our position, adding that small and medium-sized enterprises could not be expected to carry the burden, especially as mobility was increasing. In Sweden, tripartite consultations between government, unions and employers have led to a consensus that the costs of lifelong learning should be met in roughly equal proportions by public authorities, enterprises and individuals.

Partnership and policy

TUAC and EI have argued forcefully that the only way to address all these issues effectively in each country is through a partnership approach – involving government, unions and business. Governments have to involve at least their education and labour ministries and unions must engage their national trade union centres as well as education unions. Such an approach works in Denmark, which has the best record of any OECD country in overcoming youth unemployment. Another positive example is that of Ireland, where the partnership approach has paid off in terms of economic growth. National (or State) legislation can set frameworks for the regulation of standards and credentials, for teacher qualifications, for equitable, non-discriminatory provision and access, and for financing. Detailed policies and practices often need to be worked out on an industry basis or at the level of each enterprise – whether public or private. Special provisions are needed for the unemployed (usually through Labour Ministries) and for employees of small businesses (through 'training banks', for example).

Creative collective bargaining

In an era of diversity, mobility and change, legislation can provide a framework but cannot specify all details. We have argued that creative collective bargaining provides the way forward. It is now common for collective bargaining agreements to include detailed arrangements for further education and training, including provisions to apply in the case of re-structuring. Retraining should be part of any social plan.

Monitoring

OECD's influence on national policy makers is enhanced by its work on educational indicators.[5] EI has been invited to participate in future work on indicators, with the involvement of its national member organisations. Meanwhile OECD has also initiated work on how the knowledge base of an enterprise can be shown in company accounts.

Growth

OECD and G8 communiqués now regularly underline the importance of investment in people and in life-long learning as a key factor in economic growth. In each country there are major issues to be addressed, including the links between general and vocational education, as well as privatisation and globalisation, issues placing vocational education on the front-line. National sovereignty in determining policy risks is confronted increasingly by powerful economic interests.[5] We can also expect rapid growth in the number of teachers employed in vocational education, but their conditions of employment will become more precarious unless we can develop ways of helping them to defend their interests in a new and more uncertain environment. Given the growing diversity of vocational education providers, and the mix of public and private provision, organising the growing numbers of vocational education teachers will present important challenges for education unions. These challenges are similar to those faced by unions in new technology and service industries, and education unions can help to show the way. ◆

This article provides only an overview, given that national policies and practices are evolving rapidly. TUAC and EI would welcome information and comments from EI member organisations and readers on developments at the national level on the issues mentioned.

Bob Harris
Chair, TUAC Working Group on Education, Training and Employment

1 Delors, J. et al: Education – *The Treasure Within; report of the International Commission on Education for the 21st Century, UNESCO, 1995*

2 Communique of the meeting of the OECD Education Committee at Ministerial level, January 1996

3 TUAC - Trade Union Advisory Committee to the Organization for Economic Cooperation and Development (OECD), Paris

4 BIAC – Business and Industry Advisory Committee

5 *See Education at a glance*, published annually by the OECD. While indicators have until now dealt with literacy, mathematics and science, a project entitled DeSeCo (Determination and Selection of Competencies) is working on indicators of more general educational outcomes.

The development of cooperative relationships, as advocated by EI, can help strike a balance between the educational dimension of schooling and vocational training on the one hand, and the professional dimension linked to activities of production on the other.

Numerous social actors therefore find themselves playing a role in a variety of relations: the State and public authorities, organisations of a productive nature (enterprises, social and public services) and their representatives (employers' organisations and trade union confederations), and training establishments and their representatives, notably teachers' and trainers' trade unions.

New information technologies, together with the new organisation of work and the accelerated renewal of knowledge and skills, force us to ensure that all young people and all adults receive the continuous training, qualifications, knowledge and attitudes which are most likely to help them face their first job and, above all, to enable them to master the continued changes in job content within ever-more flexible and evolving enterprises. Vocational education and training (VET) therefore has a decisive role to play in job and employment security.

Role and function of the State and public authorities

The liberal approach defends the idea that the market is the most appropriate means for regulation: those demanding training, enterprises and individuals, must make profitable investments in training and the suppliers of paid training must operate in competition with one another. The role of the State is then reduced to that of simply controlling the quality of training establishments.

EI and its member organisations defend the idea that VET constitutes a public good, that it has an educational role to play in its own right, and that it must therefore be a carrier of values such as social justice, equality, and economic and social efficiency. As such, VET is an integral part of the public education system to which the State guarantees access without discrimination.

In reality, the public sector generally coexists with the regulated private sector.

Role of the social partners

Standing alongside national, regional or local public institutions, social partners play an important role in developing training content and diplomas, in the control and sometimes even the organisation and financing of VET.

Representatives of salaried workers, notably trade union federations, can gain support from the quality of training and the reliability of the qualifications gained through such training in order to ensure their recognition within the levels of classification they have negotiated within enterprises and professional branches.

Employers, through their participation in consultative and even decision-making organisms, can ensure that the needs of enterprises in terms of work content and the expected capabilities of future employees are taken into account. A system of reliable diplomas provides essential benchmarks for their recruitment policies.

What of teachers and their trade unions?

Whatever the system of regulation, teachers and their trade unions are the bearers of those interests, values and concepts which characterise a wide-ranging and ambitious educational vision of VET. In particular, they contribute to the development of educational content and learning situations which provide the most up-to-date and appropriate training and which achieve the greatest balance between professional and social qualifications. It is also a question of training individuals to be active and creative, and to be critical citizens.

Experience in the workplace

No matter how they are organised, the integration of workplace experience and activities into a training course and into diplomas and certificates must meet a variety of different objectives. The latter can be listed as the discovery of specific practical and theoretical knowledge, the acquisition of capacities for achievement, a sense of responsibility, as well as learning to work in a team. The question is one of finding the best forms of cooperation between enterprises (employers, salaried workers, tutors, etc.) and training establishments (educational teams ...) so that such experiences provide the best possible training and are the most effective for those young people following the training in question.

There is no easy or simple answer to these questions. Each national system of VET, through evolution and reform, seeks to develop these multiple partnerships under very different conditions, according to methods that have been marked by specific national experiences and circumstances.

In any and every case, the objective should be for VET to constitute one of the main factors in the transformation of societies towards greater social justice and greater economic and social effectiveness. ◆

Training has become a decisive condition of job security.

Yves Baunay
SNES National Secretary, EI Consultant

UNESCO

Knowledge and skills will fuse

Those entering the world of work in the 21st century will face many new challenges. These will be driven, among others, by the rapid developments in the information and communication technologies (ICTs), the impact of globalisation, and the ever-widening demand for new services. The future world of work will be increasingly knowledge-based and technology-driven. With technology replacing labour, more individuals will shift to self-employment and entrepreneurial activities. These challenges will require them to be flexible in their ability to acquire new knowledge and skills, adapt to constantly changing production processes, and function in new work environments.

From the viewpoint of the professional, education and training will be inseparable. Knowledge and skills will fuse. Content will evolve constantly. Conventional levels and classifications will coalesce and regroup around new breakthroughs. The "education chain" will stretch lifelong. A single person will make many demands for education and training over a lifetime.

The Seoul Congress[1] produced a new vision of TVET[2]. This gave to it a centrality of place in the world of tomorrow as the core function preparing and developing the individual for employment and self-fulfilment. Education and training will be twin requirements, providing the required combination of personal abilities, technical knowledge, generic and technical skills, values and attitudes required for each employment situation. The congress recommended that TVET content be introduced in the school curriculum and continue after school. At the same time, technical and continuing education must be incorporated with training in the workplace and be available for self-development. For the individual, lifelong learning would be the "Bridge to the Future". For a country, a sound TVET system was an indispensable component of the national development framework.

The congress produced a set of Recommendations captioned *Technical and Vocational Education and Training: A Vision for the Twenty-first Century*[3]. These recommendations constitute the foundation for UNESCO's new programme in TVET, which commenced in January 2000. The programme will pursue three main objectives. They are

- To strengthen TVET as an integral component of lifelong learning,
- To orient TVET for sustainable development, and
- To provide TVET for all.

The programme actions will work towards achieving these objectives by adopting three distinct modalities. They will consist of *improving Member States' TVET policy-making capacity, assisting Member States in their institutional capacity building and enhancing international cooperation.* In practical terms, UNESCO will conduct meetings, seminars and training workshops for TVET policy- and decision-makers, teacher trainers, teachers and curriculum developers. These activities will be organised and conducted by UNESCO Headquarters and its Field Offices around the world.

In order to promote regional and sub-regional cooperation, UNESCO will confer the title of *Regional Centre of Excellence* on selected TVET institutions and use them for providing training for policy-makers and specialists from neighbouring countries. An *International Prize for Innovation in TVET* will also be awarded every two years to an institution which made successful innovations in its TVET programme to yield demonstrably improved prospects for its alumni.

UNESCO will harness the ICTs to enhance the quality and reach of all its TVET programmes. It will establish International *Centre for Technical and Vocational Education and Training* in Bonn, Germany. This Centre will serve as a repository of TVET information and be the hub of the *UNEVOC Network*. Selected TVET institutions worldwide will be linked through the latter to facilitate information exchange. The Bonn Centre will also maintain a dedicated interactive TVET website which will provide online information and technical assistance support for policy-makers, teachers and other members of the TVET community.

It is hoped this UNESCO programme will help its Member States to construct bridges to a more prosperous future in the new century.

Notwithstanding new methodologies for electronic and distance delivery, the teacher and trainer remain the most vital elements in the TVET processes. It is therefore of momentous importance that Education International has organised this Round Table as a follow up of Seoul. This must be but a beginning – of your assimilation of the New TVET and the exposition and development of your roles. UNESCO will partner you along the road and looks forward to your continued support of its programmes in pursuit of our common endeavour. ◆

Notwithstanding new methodologies for electronic and distance delivery, the teacher and trainer remain the most vital elements in the Technical and Vocational Education and Training processes. The company of "vocational educators" will progressively embrace all those concerned over the education chain.

A. Parsuramen
Director Division for Renovation of Secondary and Vocational Education - UNESCO

[1] Second International Congress on Technical and Vocational Education, Seoul April 1999
[2] It was at Seoul that ILO and UNESCO agreed to adopt the common term "Technical and Vocational Education and Training". This was included in the congress' Recommendations
[3] Recommendation of the Second International Congress on Technical and Vocational Education, UNESCO July 1999.

GERMANY

The "dual" German model

The high degree of dependence on economic developments of the training system in Germany has become the prime cause of its current crisis.

Germans have always confidently promoted the good reputation of the dual vocational education and training system (VET) implemented in Germany, stressing its advantages:

- The early link with practical experience in the workplace and the smoother integration into the world of work at the end of training;
- The high proportion of young people who have successfully gained qualifications using the system;
- The fact that young people are paid during the training period;
- Co-determination on vocational training by the social partners, including the trade unions;
- The link between vocational education and collective bargaining policy, so that people completing a period of vocational training are entitled to receive collectively agreed remuneration.

In the meantime, voices of dissent have arisen, especially now that the situation has changed radically. Quantitatively, the German dual training system can no longer reliably offer sufficient, wide-ranging training opportunities on a long-term basis. Qualitatively, the variable quality and value of training have become apparent over the past few years.

Alongside the dual training system, there is a wide range of training courses that are college-based or conducted outside the workplace. As a result, the system of VET in Germany has in reality developed into a mixed system comprising different training sectors, characterised by:

- varying acceptance as regards society and employment policy;
- heterogeneous training conditions;
- a lack of transparency and inadequate linkage;
- different quality standards;
- national policies on vocational education and training, and job creation, which largely fail to take account of demand, needs or quality-related aspects.

It is against the present backdrop – a grave crisis in an important sector of education policy –that the debate on the VET reform is taking place. The government has not yet addressed the root of the problem. Essentially, it is continuing its policy of baling out a leaky boat, persevering in the hope that demographic changes will relieve the pressures within five to seven years, by which time the system will function smoothly again.

Initiatives advocated by trades unions

The German trade unions are firm advocates of the dual system. They are seeking to overcome the qualitative failings of the system by reforming it; on the other hand, they also believe that quantitative problems should be addressed by a new system for financing training. At present they are participating in the initiative Bündnis für Arbeit (the Alliance for Work, tripartite talks comprising representatives of the trades unions, employers and the government).

The GEW (education and science trade union Gewerkschaft Erziehung und Wissenschaft), by contrast, has been conducting an intensive debate on this matter for some time. There is a growing belief that the measures employed to date simply do not go far enough.

However, the needed reforms to the German system of initial and continuing vocational training must be guided by the overriding principle of offering the next generation a wide range of training courses leading to improved qualifications. The de facto plurality of the vocational education and training system must be acknowledged and its development consistently furthered, taking account of pre-defined quality standards, the ultimate aim being to create a pluralistic system of VET where individual sectors are considered to be of equal value and interlink effectively.

Such a concept of reform would consist of two elements:

- The dual system of in-company vocational training should be preserved and reformed.
- The dual training system should be systematically supplemented by other courses offering training of an equivalent quality.

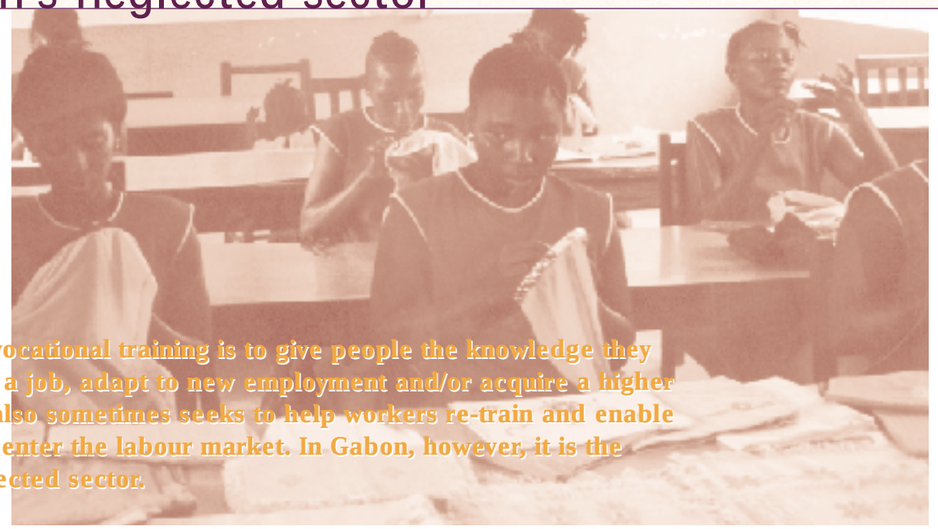
There are examples in other European countries of such equivalent parallel structures for training apprentices and for other, college-based, training (e.g. in Austria, where the tradition is comparable to that in Germany). Of course, before such a plural system can be fleshed out, a whole series of tasks would have to be taken on board and problems overcome. ◆

The 1999 figures for apprenticeships show that despite all the measures taken at national level, around 20,000 young people still left school without any qualifications, not taking into account the many people who were "accommodated" in substitute schemes. The German federal government is trying to counteract the failings by implementing a series of measures.

Ursula Herdt
Head of the Vocational Education Department, Gewerkschaft Erziehung und Wissenschaft (GEW)

GABON

Education's neglected sector



The purpose of vocational training is to give people the knowledge they need to perform a job, adapt to new employment and/or acquire a higher qualification. It also sometimes seeks to help workers re-train and enable young people to enter the labour market. In Gabon, however, it is the education's neglected sector.

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Ever since Gabon gained its independence in 1960, the country has suffered from a labour shortage in terms of both quality and quantity. The government opened two training centres at Libreville and Port-Gentil, and enterprises were later obliged to organise refresher training for their own staff. At the same time, the State set up the Agence nationale de formation professionnelle (National Vocational Training Agency) in 1973, and the Ministry of Vocational Training in 1977, with a view to ensuring that proper planning went into this area of training. The new Ministry backed the opening of training centres in the interior of the country, and other establishments were simultaneously funded by the Ministry of Education: these included technical education colleges, technical 'lycées' and, since 1995, professional 'lycées'.

Gabon now has over 36 private and public education and vocational training establishments providing basic and continuing training courses.

The government has a budget of 210 billion CFA francs (320 million US dollar) for the eleven professional establishments, and 900 million CFA francs (1.4 million US dollar) for the five public vocational training centres. On the face of it, these sums appear quite substantial, but given the country's problems, they are paltry; they also come close to a refusal to credit the sector with any importance at all. No investment is forecast, with the result that teaching materials, which are usually inadequate, have been neither renewed nor adapted to developments in new technology.

An analysis of vocational training reveals three shortcomings: the fragility of the system, its ineffectiveness, and the fact that it has not been adapted to the needs of the Gabonese people. This is largely due to the fact that efforts have been mainly directed at setting up inadequate, ill-equipped infrastructures instead of training activities and sound organisation.

The National Vocational and Refresher Training Agency can no longer meet employers' needs, and nearly all-vocational training centres in companies are closing down. Worse still, the only school that has attempted to provide agricultural and livestock training has also closed.

Reforms were clearly called for in the light of litany of failures, and in 1990 the State began to give serious consideration to ways of remedying the situation. However, although things remained unchanged at the level of the Ministry of Vocational Training, the reform prompted the Ministry of Education to introduce a broad-based programme of reform in training establishments.

Results since 1995 have been impressive: they include specialisation in two cycles and the conversion of some technical education colleges into professional and industrial 'lycées' that provide training for car mechanics and in vocational skills in the wood sector.

Lastly, like the rest of the education system generally, vocational training in Gabon is undergoing change. This flows not only from political aspirations, but also, and mainly, from a process of democratisation that is taking place in the country and from a trade union campaign for higher educational standards. Like so many other things, we'll believe it when we see it. ◆

Emmanuel Obame Ondo
Syndicat de l'Education Nationale
- SENA - Gabon

AUSTRALIA

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A case of educational convergence

Recent changes to vocational education by the national Government have considerably altered the balance of decision making over vocational education training reforms in favour of industry and business. The VET system has become less educationally focussed and more 'industry driven'.

Vocational education programs are run through an extensive network of publicly funded vocational education and training (VET) institutions called TAFE Institutes. These institutes provide 'second chance' education for school leavers and the unemployed, courses for migrant and refugees, further education for workers seeking to enhance their career opportunities and retraining for those affected by technological changes or industrial restructuring. TAFE also provide non-university course options for school students.

The network of 90 TAFE Institutes enrol nearly 1.7 million students each year or 12% of all 15-64 year olds, and employs nearly 60,000 teaching and allied staff. Courses are offered from pre-trade through trade, advanced diploma and up to sub-degree advanced diploma level.

The medium age of TAFE students is 29 and young people constitute 38% of all TAFE students. Over 56% of TAFE participants are women and there is a high rate of Indigenous student participation. Vocational education course options are becoming popular in secondary schools and university graduates take TAFE courses to acquire 'practical' skills to add to their university qualifications.

Australian qualification system

National and state governments have co-operated in the development of a national qualifications system based on the following broad objectives:

- encouraging greater participation in post-compulsory education for those in work and those seeking work;
- enhancing the role of industry representatives in setting the competency standards required for workplace performance;
- encouraging convergence of general and vocational education; and
- making vocational education and training more accessible to all.

Recent trends

A deregulated training market of public and private VET institutions compete for declining government funds while businesses seek access to government funds through 'user choice' to replace their own training obligations. The changes have impacted widely on TAFE Institutes. As a result most TAFE Institutes have moved towards:

- new operational structures and staffing arrangements;
- competition with industry and other VET Institutions;
- designing more on and off-the-job training programs to meet industry needs;
- flexible delivery of training, including distance and on-line learning;
- more fees for service courses;
- expansion and promotion of vocational education courses overseas

Quality of VET

Competition for declining government training funds, compounded by the expansion of private VET institutions, has increased pressure on the public TAFE Institutes. Recently a major study of quality of on the job training found that some students trained in the workplace were unaware that training had taken place.

A parliamentary committee found fraudulent practices by employers who had reclassified workers as 'trainees' in order to attract government traineeship funding at the expense of the public TAFE system.

The national government has established an inquiry into the quality of VET. The AEU in its submission has argued for greater regulation of VET Institutions and the development of national quality standards for vocational education and training, including increased funding to TAFE to increase access for students. ◆

TAFE works

In Australia, participation in vocational education and training measured by key equity criteria reflects positively for government funded TAFE Institutes. Student participation rates in terms of age profile, Indigenous enrolments, gender balance, women's participation in non-traditional occupational courses, geographic distribution and socio-economic mix indicate the policies and strategies to achieve equity outcomes from training are beginning to work.

GIRLS IN LEAD FOR TERTIARY PLACES

Girls who take vocational subjects at school are more likely to go on to university or TAFE study than their male counterparts, who are more likely to be offered apprenticeships, suggests an Australian study of nearly 2,500 students who graduated from year 12 in 1997.

The findings, compiled by Melbourne University's Associate Professor Richard Teese show that one-quarter of girls with vocational qualifications enrolled in university compared with 15.8% of boys. In contrast, 23.2% of boys entered an apprenticeship or traineeship compared with 11.2% of girls. Of these, nine out of 10 boys gained employment as apprentices, while nine out of 10 girls were offered positions as trainees.

More than 9660 students enrolled in vocational education and training (VET) in 1997. Information technology was the most popular subject for vocational year, followed by accounting and business management. Students not taking vocational subjects favored the more traditional maths and science subjects.

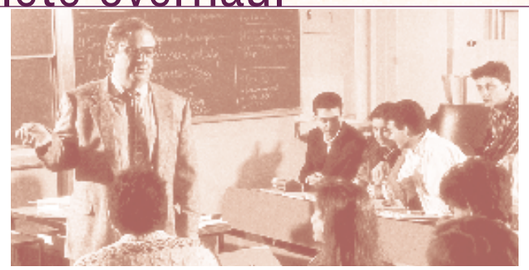
However, the proportion of school leavers with vocational qualifications who apply for entry to university and TAFE is significantly lower than for other students. One-third of vocational students do not apply for university or TAFE entry compared with about one-fifth of other students. The study found that 20.5% of year 12 VET students enrolled in university, 31.5% went on to TAFE, 17% entered an apprenticeship or traineeship, 13.7% were in full-time work and 5.3% were working part-time.

The 1997 study showed that unemployment rates for school leavers with vocational qualifications had improved from 7.4% to 5.6%.

Rex Hewett
Federal TAFE Secretary
Australia Education Union (AEU)

Education system to get complete overhaul

Official technical education in Honduras does not meet current needs because there has been no study aimed at identifying the country's real needs. The system currently being drawn up seeks to address this shortcoming.



Improvements to the Honduran education system, and to technical training in particular, are among the concerns currently facing the country. In November 1994, a National Convergence Forum (FONAC) was set up with a view to examining urgent national problems. They included a reorganisation of the education system.

The FONAC brought together broad sections of civil society and government representatives. The process includes consultation meetings that have been organised at municipal, regional, departmental and national level; these give people an opportunity to voice their opinions not only on the kind of society they want to see developing in the country, but also on the kind of education they want for their children. The viewpoints expressed were analysed by a special commission, which then drew up a proposal-document that will subsequently be turned into legislation. A fairly comprehensive draft is already in existence, and will be finalised towards the middle of 2000. At this stage, the document provides for a complete reorganisation of technical training: this will involve giving the sector its own structure, together with precise objectives and a philosophy adapted to its specific needs and characteristics. Consideration is currently being given to the idea of decentralising educational administration into 18 departmental directorates.

All concerned actors – parents, employers, teachers, workers, political and religious leaders, university professors, social actors and many others – are currently involved in restructuring education.

Gloria Marina Chinchilla
Secretary with responsibility for external affairs
Primer Colegio Profesional Hondureño de Maestros (PRICPHMA)

Snapshot of the current situation

At the present time, 220 secondary institutions deliver 'official' technical training, that is to say training that leads to a recognised diploma. These institutions employ 10,000 teachers, most of whom have completed their specialist studies at the Francisco Morazán National Teachers' University or at foreign universities.

Of the students enrolled at these secondary schools, about 30,000 every year are awarded a diploma in one of several technical subjects (three years' study after primary schooling), a technical baccalaureate or a primary school teacher's qualification (three years' study after the basic post-primary cycle). Youngsters studying towards a baccalaureate choose from the following options: agriculture, aquaculture, coffee growing, agricultural technical sciences, forestry sciences, ecology and the environment, management, industry, services and information technology. Each of these options in turn includes 8-10 specialist areas, giving a grand total of 70 baccalaureates, all of them enabling successful students to enter the labour market or – and this does not apply to all – go on to study their respective subjects at university. As many as 70% of the institutions offering technical training in Honduras are private; only 30% belong to the public sector.

The National Vocational Training Institute (INFOP) was set up in 1972, and is the most important organisation dealing with the non-formal education sector. It aims to 'direct vocational training policies that are designed to stimulate the country's economic and social development in all branches of economic activity, by providing Honduran workers with the skills they need to cope with the demands of modern society.' The INFOP trains young people from the ages of 15 to 23 in over 50 specialist areas of industry, agriculture and the tertiary sector. It is mainly financed by subsidies from the central government, the funds of private enterprises and international loans, and is therefore completely free.

Additionally, many non-governmental organisations (NGOs) contribute to technical training through training courses and advice, and mainly in the fields of agriculture, industry and general housekeeping.

Two State universities and six private universities also provide higher education technical training. The National Autonomous University of Honduras (UNAH) offers over 20 technical courses in all subjects. Also of interest is the private Technological University of Central America (UNITEC), which is best known for its courses in marketing, information technology and management; it works closely with the Instituto Tecnológico y de Estudios Superiores de Monterrey (Monterrey Institute of Technology and Higher Studies) in Mexico.

Both the government and civil society are fully aware that, at a time when extraordinary technological changes are taking place, the main challenges posed by global competition can only be successfully met if appropriately skilled human resources are available. ◆

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In the debate on child labour and how best to provide education for children denied access to schooling because they are at work, technical vocational education is a central issue.

The debate on child labour and education has gone full circle. Many believed that the provision of technical skills to child labourers to improve their skills for the local job market was what should be provided and, if a couple of hours here and there could be devoted to teaching these youngsters to read and count, that was an added bonus. It is now realised that this will never make any real change in the situation of child labourers.

If education is to respond to the problem of child labour and be an important part of the solution, innovation and non-traditional techniques will have to be incorporated into the education system.

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Examples of good practice used in communities where child labour is prevalent to retain or bring children into school show that a good quality education programme, whether at primary or secondary level, that includes a well structured technical vocational component works well. Children and parents alike appear to see the skills training as a valuable part of education.

In Egypt, "one-room, multigrade, community-based schools", target girls who were not in school, combining academic skills, life and technical skills – albeit the skills traditionally expected of girls. Based on the successful development of more than 200 community schools in Upper Egypt, the Education Ministry currently supports over 2,000 small schools throughout the country that emphasise vocational as well as academic training at the primary level.

In the Caribbean, where boys constitute the biggest drop-out problem from school, non-formal education projects that include a technical vocational component as well as teaching academic and life skills are reporting success.

Gender sensitive education plays an essential role in encouraging both girls and boys to stay in school. As can be seen in the Caribbean and as is now being noted in some parts of Africa, boys are not performing as well as girls in school and increasingly are dropping out and taking on unskilled work. In other parts of the world, girls still are in the minority and much remains to be done to ensure that the education provided meets their needs. This applies equally to technical vocational education and academic studies.

Concern must also be expressed about the provision of technical vocational education in the developing world. The gap continues to grow between the 'haves' and 'have-nots' as far as new technology is concerned. The programmes that have been developed in the formal education system as well as in many non-formal education projects teach traditional skills to young people. The children of the developing world also deserve, as part of their right to education, access to the technology that will help them prepare to work in the knowledge society.

Education and child labour interact profoundly. The type of education provided plays a role in whether pupils and students stay in school. While technical vocational education has an important role to play in this regard, it must not, however, be seen as education suitable only for the children of the poor or to encourage school drop-outs to return to school. Quality education requires that all students receive some form of technical, vocational education. If young people are to make informed choices about career options they obviously must be provided with the opportunity to experiment and explore all aspects of education. ◆

Sheena Hanley
Deputy General Secretary