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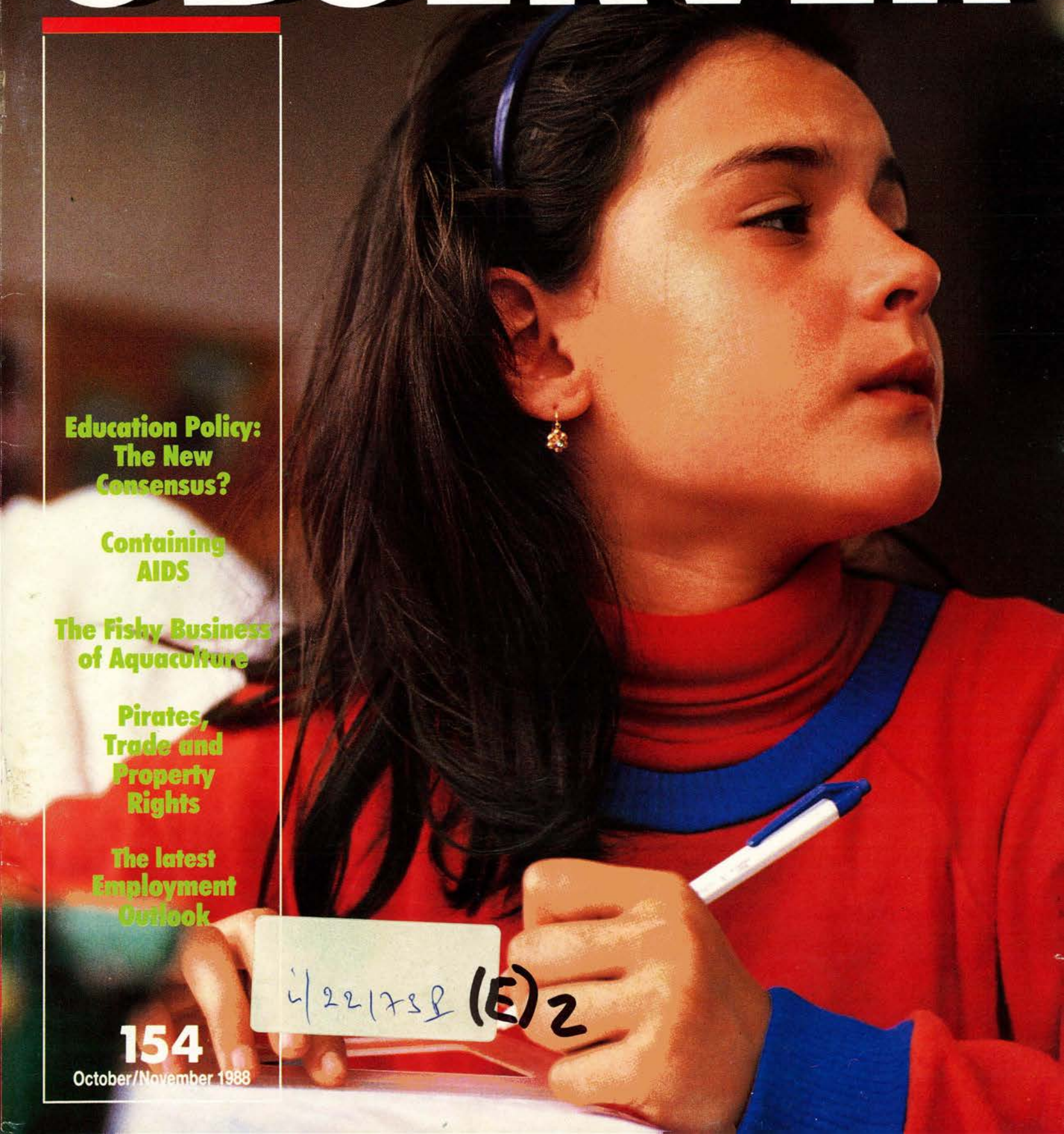
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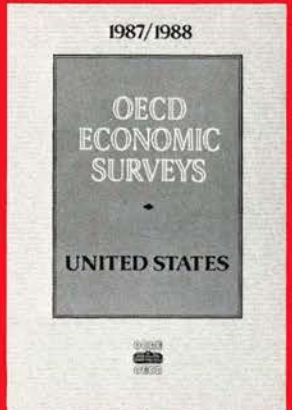
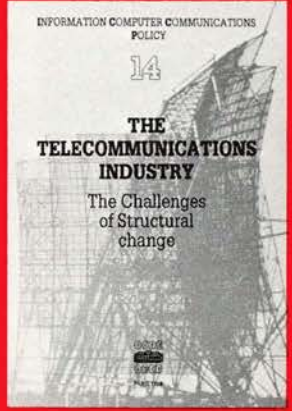
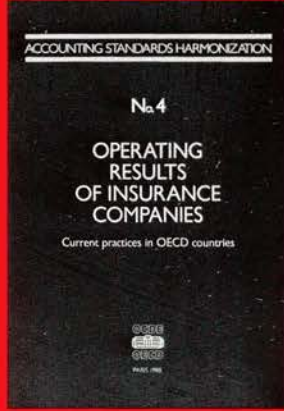
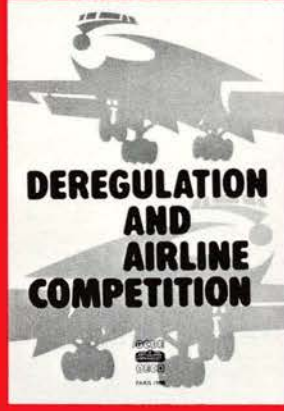
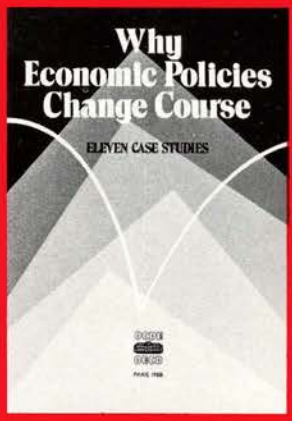
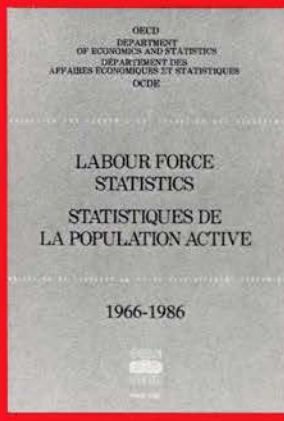
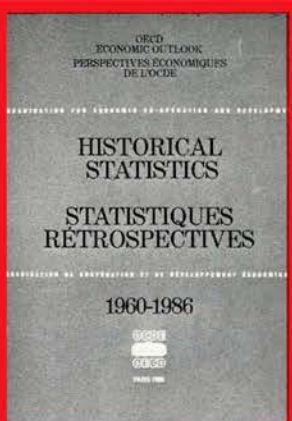
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# Education: The Search for a New Consensus

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*George S. Papadopoulos*

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*First, a solid grounding in general subjects—and only then specialised training.*

*There is a resurgence of interest in education. It is seen, variously, as the gateway to future economic prosperity, the means to combat unemployment, the driving force behind scientific and technological advance, the sine qua non for the cultural vitality of leisure-intensive societies, the spearhead of social progress and equality, the safeguard of democratic values, the passport to individual success.*

*To achieve such a demanding set of objectives has led to an increasing number of calls for educational reform. These come from many quarters, but by far the most urgent pressure for change currently emanates from people seeking to enhance education's contribution to employment and the economy.*

**H**uman resources' occupy a crucial place in the economic vitality of advanced industrialised countries and their capacity to compete, both with one another and with the rest of the world. Here education plays a leading role: it provides and updates the skills and competence of individual workers, which is essential for a flexible labour force capable of responding to the continuous changes that result from economic restructuring, itself strongly propelled by rapid

technological change. It also ensures the advancement of scientific knowledge, through research, and its applications in production.

The arguments themselves are not new. But they are given new, and often dominant, weight by the economic imperative and the force and urgency with which educational reform is *politically* advocated to respond to this imperative. Education has thus come to the fore in the economic and political debate in OECD countries, though often viewed more as an instrument of other policies rather than a policy sector in its own right.

The consequences of this renewed attention are basically two-fold:

- a broadening of the policy and decision-making structures of education and even of provision, bringing in new interest groups beyond the traditional educational establishment and encompassing the rapidly growing range of learning activities (including training) that take place outside formal educational institutions and under other auspices than those of the traditional governmental departments or ministries of education

- a concomitant weakening of the consensus on educational objectives and priorities, as different groups in society strive to see their viewpoints prevail in the structure of the educational system, the organisation of schools, curricula and teaching methods.

Two factors combine to amplify this conflict: reductions in government funding for schools and pressures for accountability in the way these resources are used. Education has thus become increasingly politicised, affecting not only attitudes to its content and methods but also the criteria for evaluating its performances.

### **Wide Agreement over Long-term Aims**

No one's interests are likely to be served by exposing education fully to

the vagaries of day-to-day political debate. It is important, therefore, to look for substantive areas of accord around which a new social consensus can be built.

Everyone recognises that education serves a variety of purposes—social, economic and cultural—and that its effects are cumulative and long-term rather than immediate. It cannot therefore be planned, organised or directed merely in response to the transient demands of economic cycles or fashionable social philosophies. In the turbulent world of today, with fragile family and other social institutions, this consideration is all the more important: education becomes the main vehicle for maintaining and transmitting the basic values on which the cohesion of future societies depends. A certain abstraction from its immediate environment is thus essential for education if it is to fulfil this role.

Whatever the systems and organisational arrangements through which education is provided, its end product is ultimately its effect on individuals. It is the vehicle for their basic preparation for active life—as workers, but also as citizens, consumers, parents and in their other roles in increasingly complex and unpredictable societies. It is a mistake to think that these roles are mutually contradictory; on the contrary, they support one another. Preparation for each of them must be seen as complementary parts of the full preparation for active adulthood.

This process does not stop with the end of formal schooling. Particularly in rapidly changing societies, individuals have to go on learning throughout their lives, and not only updating professional skills. In societies flooded with information and cultures that are technologically intensive, the very notion of 'functional literacy' changes constantly. A propensity for further

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learning thus becomes a vital objective of basic education.

Moreover, in democratic, and increasingly multicultural, societies, differences between individuals must be recognised and met through differentiated educational approaches and learning styles. This is particularly true of people who are disadvantaged, whether through personal, social or domestic circumstances. Education has always been especially concerned to remedy disadvantage, often by 'positive discrimination'. Indeed, it has traditionally been seen, both by individuals and society at large, as the royal road to social mobility and the

reduction of social inequalities. This role is often exaggerated and education cannot do it alone: despite the massive post-war expansion in education, glaring inequalities remain. But in times of economic hardship educational failure is translated more dramatically into unemployment and, indeed, unemployability, and the fight against failure at school remains thus an agreed priority for all educational systems.

### **Coping with Change**

Opinions are converging on the overriding importance of high-quality basic education. Some central questions

remain: how precisely education, and appropriate standards, should be defined, and how this basic learning can be made available to everyone. It is, remarkably, largely agreed that such education should be of a general character, covering both cognitive and affective aspects of child development. It should provide the core of basic knowledge, skills, and attitudes as the foundation on which subsequent educational and professional careers can be built and the capacity of individuals to cope with change developed. In this, employers are at one with educators in seeing a solid general grounding as essential for flexible workers, capable of adapting themselves to the new skills required by changes in job functions and work practices which result from technological advance. The acquisition of specific vocational skills is thus postponed to later stages of schooling, the work place or combinations thereof. This, of course, does not imply—far from it—that it is not part of the function of basic general education to bring children closer to the realities of the world of work and to inculcate in them a stronger sense of the value of work and of 'learning by doing'.

There is universal agreement on the crucial role of the teacher in realising all this and hence on the importance of a well-trained and motivated teaching force. There is less agreement on practical measures to achieve this end: the debate tends to focus on the status of the teaching profession and its conditions of work.

Beyond compulsory schooling, a wide and flexible system of education and training opportunities should be available, involving both the public and private sectors, often combining the two, to facilitate the entry of young people into further education and/or work and help them avoid the unemployment trap.<sup>1</sup>

All agree on the importance of the expansion of, and a more systematic



*There is now widespread agreement that continuous on-the-job training is largely the responsibility of employers. It is with the (re)training of the unemployed that government steps into its own.*

1. See pp. 12–14.

approach to, the continuing education and training of the adult labour force. Primary responsibility for attaining this objective rests with employers, although governments also have a role to play in providing a framework of incentives and ensuring the equitable distribution of training facilities across all groups concerned. They also have, of course, a primary role in retraining the unemployed.

### Higher Education under Scrutiny

The world of higher education is a different one with rules of its own, entrenched traditions, power structures and institutional idiosyncracies, within which the search for consensus becomes much more elusive. Yet it has not been immune from scrutiny, giving rise to lively debates often in the form of confrontation between academia and governments. If there is one area of common accord, it is that institutions of higher education, particularly universities, should be more responsive to emerging social, and especially economic, requirements. But it is equally recognised that such responsiveness to external pressures should not vitiate the traditional functions of such institutions as centres for cultural development, for the advancement of knowledge through disinterested research, and for independent analysis. Much of the current debate about higher education revolves around the search for solutions to the dilemma of realising both adequately—with questions of finance as the main catalyst.

### A Practical Political Priority

All these factors, in schools, immediate post-compulsory education and in training, and higher education, have brought an increased degree of pluralism to decision-making. But this in turn raises sharply the question of coherence. Education policies are, *par*



*Everyone agrees on the importance of a committed teaching force. But how should teachers be trained and motivated?*

*excellence*, national policies and should reflect the values, traditions and political circumstances of individual countries. The political pressures on education are, therefore, intense: how to negotiate specific interests into a coherent national policy and how to translate the rhetoric of broad aims into practical policy measures and investment decisions.<sup>2</sup>

More specifically, how can targets of educational output of different kinds and at different levels be established, and on what basis are these defined? How are priorities established between, for example, youth and adult education, and between formal and informal education? And how are the two to be co-ordinated? What additional investment is required to meet these targets? How can existing resources be more efficiently used to this end and what scope is there for their redeployment? How can additional resources be tapped from

sources other than public budgets, including the private sector and the community, and in ways that are educationally relevant, economically efficient and socially acceptable?

Another central issue in the current educational debate has to do with the perennial question of ensuring quality and relevance. This is essentially a question of the curriculum: how it is defined, in content and objectives, how it is applied in the classroom, how achievement is evaluated or assessed.<sup>3</sup> These considerations in turn raise questions of monitoring and control and the relative roles of teachers and principals as the professional guardians of what goes on in schools, and of the regional or central authorities who must ensure national objectives and standards. ►►

2. See pp. 9–11.

3. See pp. 15–17.



*Economic imperatives bear down ever more heavily on institutions of higher education—yet they must remain centres of excellence.*

A specific set of issues has emerged from the recent trend towards the increased, and, some think, excessive, career-orientation of educational courses, particularly in post-compulsory and higher education. It is directly related to the impact of depressed labour markets on student choices, since people with technical or professional skills in general have a better chance of finding a job.

### **Training for Jobs or General Competence?**

The degree of this impact may be cyclical, but it does pose afresh an old challenge to policies: how to break down the traditional dichotomy between general education and vocational education and training, now that

- technology has become part of the general culture
- vocational specialisation depends increasingly on an extended general preparation, reaching into higher education courses themselves
- the rapid growth of a service-oriented, even though technology-based, economy means that the kinds of personal attributes developed by the social sciences and the humanities—in perceptive aptitudes and communication skills—will be in even more demand than in the past.

□ □

Employers will be the first to admit that they can best train the specialists they require themselves if only the education system can take proper care of its realm of comparative advantage: producing knowledgeable and adaptable people with the capacity and motivation to engage in further learning throughout their lives. ■



# Education, Economy and Political Will

Gregory K. Wurzburg

*How closely intertwined are education and the economy? The inter-relationships were examined at a recent high-level gathering at the OECD of ministers, with portfolios ranging from education to employment and economic affairs, senior policy-makers, employers and trade unionists, the results of which will shortly be published.<sup>1</sup> To grasp these inter-relationships fully, 'education' must be defined very broadly to encompass all kinds of formal and non-formal education and training, for all age-groups, as well as research.*

**T**he recent past has seen a growing awareness on the part of economic policy-makers of the importance of education in economic performance. The views of educators and other interested parties, have tended to converge on the changing role of education and the way in which it is provided. This new thinking reflects the recognition that macro-economic policy alone cannot steer economic performance on to a path of fast growth and high employ-

Gregory Wurzburg is a labour economist whose brief in the OECD Directorate for Social Affairs, Manpower and Education covers the relationship between education and the labour market.

1. **Education and the Economy in a Changing Society**, OECD Publications, Paris, forthcoming Winter 1988.



*Education and economy are more and more closely intertwined and the functions of educational establishments increasingly supplied by businesses, unions and an incalculable number of training organisations.*

ment. Rather, it has to be co-ordinated with a broad spectrum of micro-economic policies to facilitate structural change in the allocation of resources (not least human resources), the volume and nature of output, and competitiveness.<sup>2</sup>

An important impetus had already come in 1984 when OECD education ministers met and concluded that 'education develops and renews the knowledge and professional qualifications on which society, and in particular the economy, depends'.<sup>3</sup>

Yet the political momentum to pursue the logical consequences of a tighter link between education and the economy has been slow in building up, probably in part because of a certain intransigence in sections of the education community. In opening the 1988 OECD Intergovernmental Conference, the chairman, John Dawkins, Australian Minister for Employment, Education and Training (the title of his portfolio is significant) suggested that:

there has been a resistance among some educators and academics to accept this connection, because they believed that a link between education and employment threatened the fundamental nature of learning. For my part, I do not see that an extended education and training system does destroy the basic features of imparting knowledge, encouraging curiosity or developing an ability amongst people to reason and to solve problems. But I think we politicians, at any rate, for too long allowed these quality issues in education and training to be dominated by the teachers and academics themselves.

Institutional inertia notwithstanding, the last few years have witnessed a remarkable evolution. Education is no longer reserved for the young, is no longer confined exclusively to the

classroom and school, nor to teacher and student, and is judged less and less on the basis of traditional educational criteria (such as 'norm-referenced' tests or time spent in school). Furthermore, the monopoly that schools once enjoyed has disappeared. Education is provided increasingly by government training programmes, employers, and trade unions, as well as by countless other 'informal' organisations and institutions. Public authorities in some countries channel much of their training resources into remedial education for youngsters leaving school early; employers sometimes do the same.

Community leaders, employees and trade unionists have at various times argued that this expansion of education outside schools stems in part from the reluctance of teachers, administrators, and others involved in the formal education sector to accept fully the employment consequences of educational under-achievement and be held partly accountable for them. In so doing, they have abdicated a degree of responsibility for education policy that others have taken on.

But even to the extent that this is true, it does not explain everything. Although over-cautious arguments for preserving the 'independence' and 'quality' of education may have slowed a thorough re-assessment of the relationship between education and the economy, it did not stop it. It was, after all, the Education Committee, representing national education ministries, that spear-headed the OECD work on education and the economy.

## The Political Dilemma

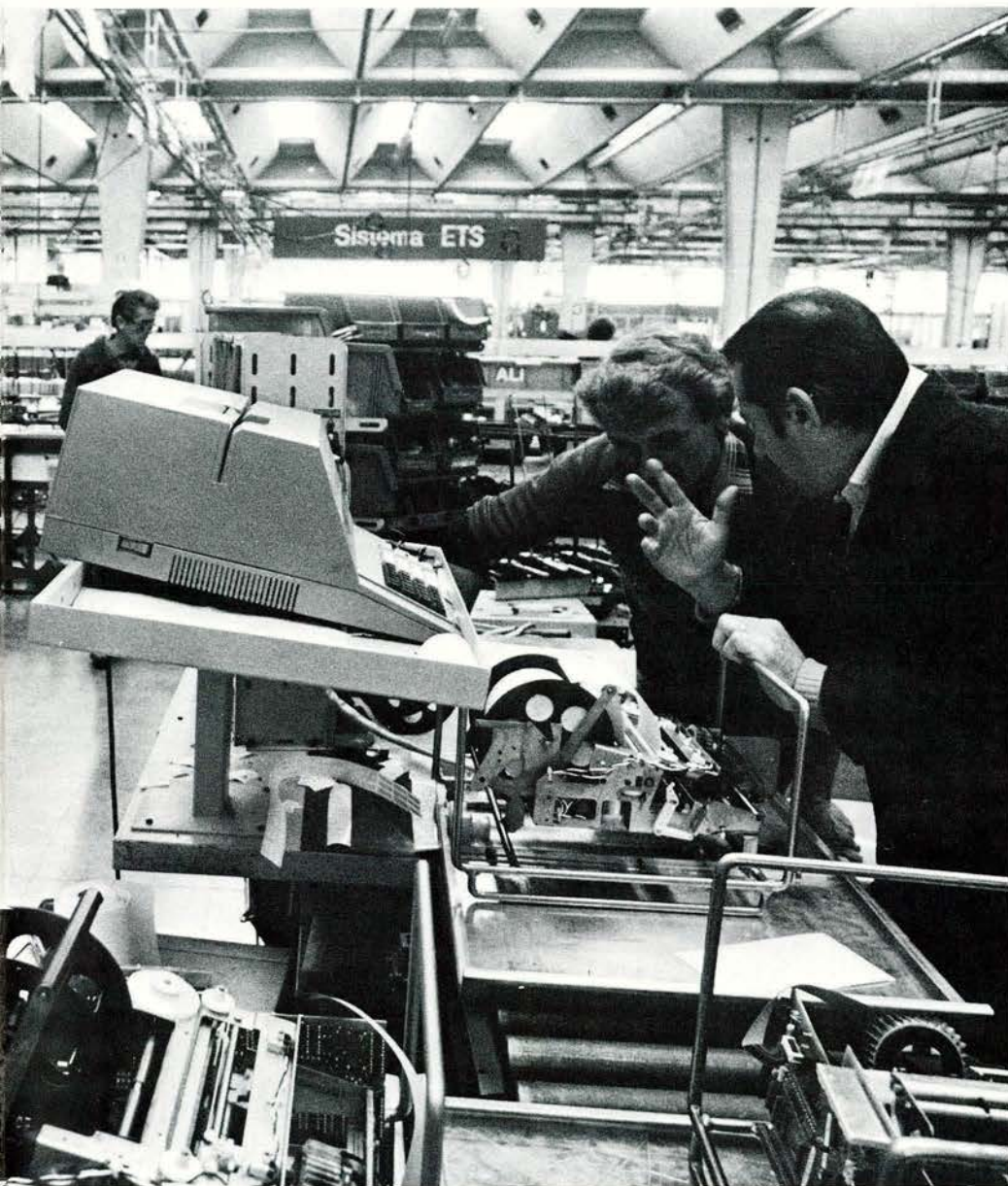
Can the policies and institutions that govern the acquisition of qualifications by workers (and that thus condition the economic performance of individuals, firms and entire economies) be adapted fast enough to keep pace with the changing demand for skills and abilities?



The dilemma for public authorities is that, just as human resources assume more economic importance, the processes for their development are becoming more complex and more widely dispersed. First, the policies and institutional arrangements for educa-

2. See, for example, *Structural Adjustment and Economic Performance*, OECD Publications, Paris, 1988.

3. *OECD Ministers Discuss Education in Modern Society*, OECD Publications, Paris, 1985.



*Education must take forms that allow young people to continue learning, whether at work or elsewhere.*

tion and training are increasingly a part of labour and regional policies and hence lie beyond the traditional educational authorities alone. Second, the formulation and implementation of policies must take notice of, and ideally reinforce, the requirements of employers and trade unions and the corresponding training activities they undertake themselves—whether these are prompted by independent action, collective bargaining, or other forms of employer/employee consultation.

Some broad implications for policy can be drawn from the developments. Education as preparation for working life is not the once-and-for-all proposition that it was. The 'half-life' of any given vocational qualification is shrinking in the face of technological innovation and rapid changes in working techniques. Consequently, there is an increasing premium on such types of formal education that provide people with the kinds of skills and competences that improve, first, their

adaptability (rather than giving them over-specialised qualifications), and, second, their ability to learn on the job and undertake further education and training to update their qualifications and qualify them for different occupations when conditions in the labour market call for mobility.

□□

To realise these changes, more versatility is required in the formulation and implementation of education policy in its broadest sense. This calls for much more consultation between the growing number of institutions providing education and training, its increasingly discriminating consumers, and the local and central governments whose policies and practices directly and indirectly affect provision and consumption. They must all be better informed about education and training opportunities and resources, the demand for skills and competences, and the qualifications—formal or otherwise—of individuals in the labour market. They must understand what facilitates and what obstructs the achievement of their objectives.

The OECD 1988 Intergovernmental Conference has assisted in clarifying aims and enhancing understanding of the complex relationships involved; implementation at the national, regional, and local levels is the next step—more prosaic, perhaps, but more difficult to achieve. It requires directing the actions of different groups who, through having some shared interests, are pulled in different directions by their diverse objectives and concerns. The Conference made a good start in suggesting how progress could be made, in ways that will rely more on establishing consensus than on imposing solutions. ■

# School and Beyond

Dorotea Furth

*Education and training for the 16–19 age-group (the 'post-compulsory stage') now involves a vast range of courses to prepare students who have completed their basic schooling either for further education or for the world of work. The main institutional structures within which these courses are located are relatively well known.<sup>1</sup> Much less attention has been given to the contents and organisation of the courses themselves.*

*An OECD report, based on case studies in twelve member countries, seeks to bridge this gap.<sup>2</sup>*

**T**he institutional arrangements within which post-compulsory education and training take place vary considerably across the OECD region. Typically, curricula have varied less. Programmes can be divided, in many countries, into three broad types:

- general, often (though not always) geared to preparing students for higher education
- technical, professionally-oriented and middle-level



*Traditional academic schooling—for A-levels, Baccalauréat, Abitur, Matura, and so on—seems largely to escape the impact of the 'technological revolution'. For how long?*

● vocational, aimed at skilled and semi-skilled employment.

This division largely survives, but the contours are changing and the boundaries blurring, subject to pressures that are at once educational, social, economic and technological.

*General* streams have in some countries expanded, but in so doing have become differentiated either by subject-group (whether arts or science, mathematics, or another, less prestigious subject), or by the usual destination of students following the course (higher education or the labour market). Other distinctions by ability and status sometimes overlap with these divisions; in the United States, the so-called 'academic' courses that prepare for college entry are clearly demarcated from the low-prestige 'general' programmes.

Academically oriented upper-secondary courses, such as those in the European countries that lead to the Baccalauréat, Abitur, or Matura, are notable as the most unchanging features of this 'post-compulsory map'; indeed, they are arguably the most resistant to change of any part of the entire education and training system. Viewpoints differ widely on whether this resistance represents the protection of academic standards, or, instead, inflexibility in the face of widespread socio-economic change.

In *technical* streams, technology is beginning to transcend the technical. Instead of being predominantly linked to the specific elements and processes of a given field (such as surveying, draughtsmanship, or metalwork), these programmes must now respond to more generic systems of information and control. Clear demarcation lines are blurring here too—in many countries, it is increasingly difficult to distinguish technical streams from general education at the top (more theoretical) end, and from the vocational programmes at the lower (more practical) end.

*Vocational* streams have been subject to change which, if anything, is

more marked still. A major factor impelling reform has been the clear trend for many more 16–19-year-olds to stay on in the education and training system than before, faced with severe difficulties in securing early entry to the job market. This change has heralded the corresponding arrival of new groups of youngsters seeking a very different diet of learning from traditional academic fare. The decline of traditional craft-based occupations and the rise of service employment requiring multiple skills have also had a powerful impact.

Each of these factors has resulted in the expansion of options and in clear shifts in contents of vocational education and training in many countries: some, though not all, have sought to broaden the 'knowledge base' of courses in order to enhance individual flexibility and adaptability, while at the 'lower' end youth unemployment has been an impetus to the establishment of courses that are essentially remedial or recuperative. Indeed, in these cases, it is arguable whether the term 'vocational' can be strictly applied.

## Keeping Ahead

The expansion and diversification of learning opportunities for this age-group, and the rapid change in the job market that lies beyond, have placed a premium on students' being able to make knowledgeable choices that keep them up with or ahead of their contemporaries. It has favoured the adoption of strategies by youngsters and their families to ensure that they pursue programmes that are valued and recognised by employers or that lead to the most attractive choices in higher education. In all this, access to and use of information is vital. The perennial problem of equality is thus raised sharply: less privileged youngsters tend to be left behind by those who have the experience and social capital to adopt strategies and deploy information that ensure their dominance in the more valuable courses.

Diversity—of courses, of aims and contents, methods and settings, financial arrangements—is now a dominant requirement of the provision of education and training for 16–19-year-olds. Its supply must cater for the very diversity of youngsters who now stay on and it must feed the differing worlds of both higher education and the labour market, each with their varied demands.

## Diversity versus Coherence

Adapting education and training to enhance the employability of as many young people as possible has been a driving motivation of policy throughout OECD countries. Introducing flexibility into the traditional routes of access to higher education has proved more of an uphill struggle. Nevertheless, there are some indications that the world of higher education, partly from necessity, has opened its doors some way to the student arriving by less traditional routes. But the gap in the cultures of academia and employment often remains a difficult one to bridge. There are dangers, too, in strengthening the theoretical content of vocational and technical courses (and hence their transfer value to higher education) to such a degree that employers consider their relevance to employment to be impaired.

The obverse—and adverse—side to diversity is always incoherence. And post-compulsory education and training has to be coherent if youngsters, their parents, employers, as well as older adults seeking to participate in

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1. **Education and Training after Basic Schooling**, OECD Publications, Paris, 1985.

2. **Pathways for Learning: Education and Training from 16 to 19**, OECD Publications, Paris, forthcoming autumn 1988. The country studies, available as OECD Education Monographs, are: Canada (Quebec), Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom (one for England and Wales, one for Scotland), United States, Yugoslavia.



*Even vocational training has to allow young people to acquire a sufficiently general base to enable them to apply for a wide variety of jobs.*

the same courses, are to understand what resources and opportunities are available and make proper use of them.

### **Which Way for Policy?**

The OECD report concludes that a guiding concept for the design of overall provision for 16–19-year-olds is that it should constitute a foundation stage, in the sense of imparting the knowledge and skills broad enough to underwrite work or study not in one specific job or task but in a range. A foundation of attitudes and values is

also crucial, both for personal and social development and for the successful entry into the new worlds of the workplace or college that await the adolescent. And youngsters must have completed their education at this stage with a sense of competence in a particular activity, whether academic or directly vocational, as an important foundation of adult identity.

A number of specific directions for policy can now be suggested following this guiding concept, and taking account of the other developments considered in the OECD report:

- advanced information and guidance systems are clearly required; the

potential contribution of information technologies themselves could be significant

- criteria of assessment should be scrutinised to ensure that success is counted not only in terms of the narrowly defined academic dimension but reflects different types of ability and skills

- a common currency of qualifications is required to allow each programme and type of education to be more clearly related to others, to higher education, and to the labour market

- coherence among the diverse programmes should be strengthened, perhaps by establishing consortia or federations of providers, involving both public and private bodies; new networks of courses and qualifications spanning both the post-compulsory and post-secondary education should also be given attention

- the crucial role of teachers and trainers requires that they become a more prominent priority for policy: they have to be aware of the importance of foundation knowledge, skills, and attitudes, of the example they provide as role models, and of the impact of different learning environments on students and trainees; and they must be equipped to impart information and guidance.

□ □

But in understanding post-compulsory education, it is necessary to go beyond the purely structural variables of institutional patterns, curricula and qualifications to comprehend the less tangible factors of culture and ethos. Some of the most important effects of education—on students themselves and on their readiness for further study or work—are its less overt transmission of values and attitudes. Laying a suitable foundation for 16–19-year-olds may well necessitate more explicit attention to this so-called 'hidden curriculum'. ■

# Policies for Quality in Schooling

David Istance

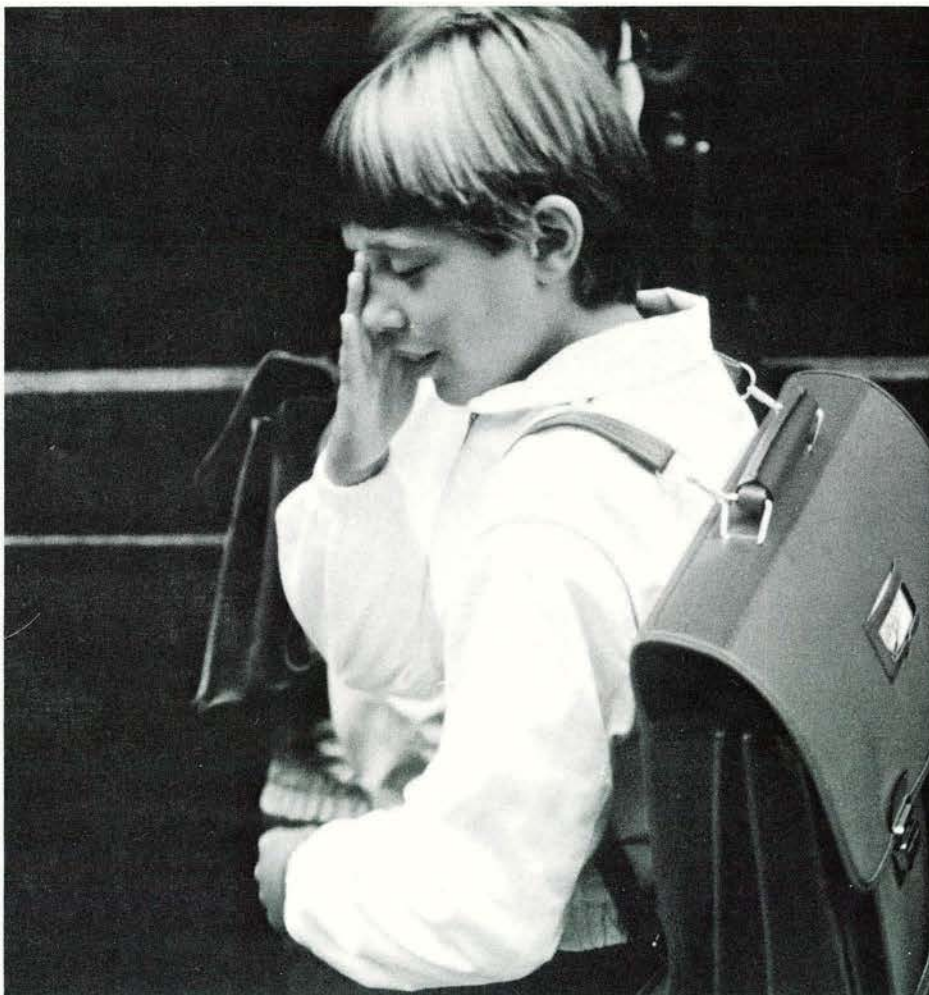
*Quality in education is an elusive concept, and discussion of it is politically charged. Yet while opinions about educational shortcomings vary considerably, the call to raise quality, particularly of schooling, is heard widely and persistently throughout many OECD countries, in part because of the desire to improve schools and standards—but also because of dissatisfaction with what schools are perceived to be doing and how well young people learn.<sup>1</sup>*

**C**lose inspection of the reasons for concern about the performance of schools do not suggest any single main cause, nor has there been any dramatic and universal fall in educational standards. Indeed, the indicators suggest no clear trend and, in any event, objective discussion of 'standards' is made notoriously difficult by political controversy.

In spite of the clear and growing importance of recurrent periods of education and training for most individuals, and in many different settings

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1. **The Quality of Schooling**, OECD Publications, Paris, forthcoming winter 1988.

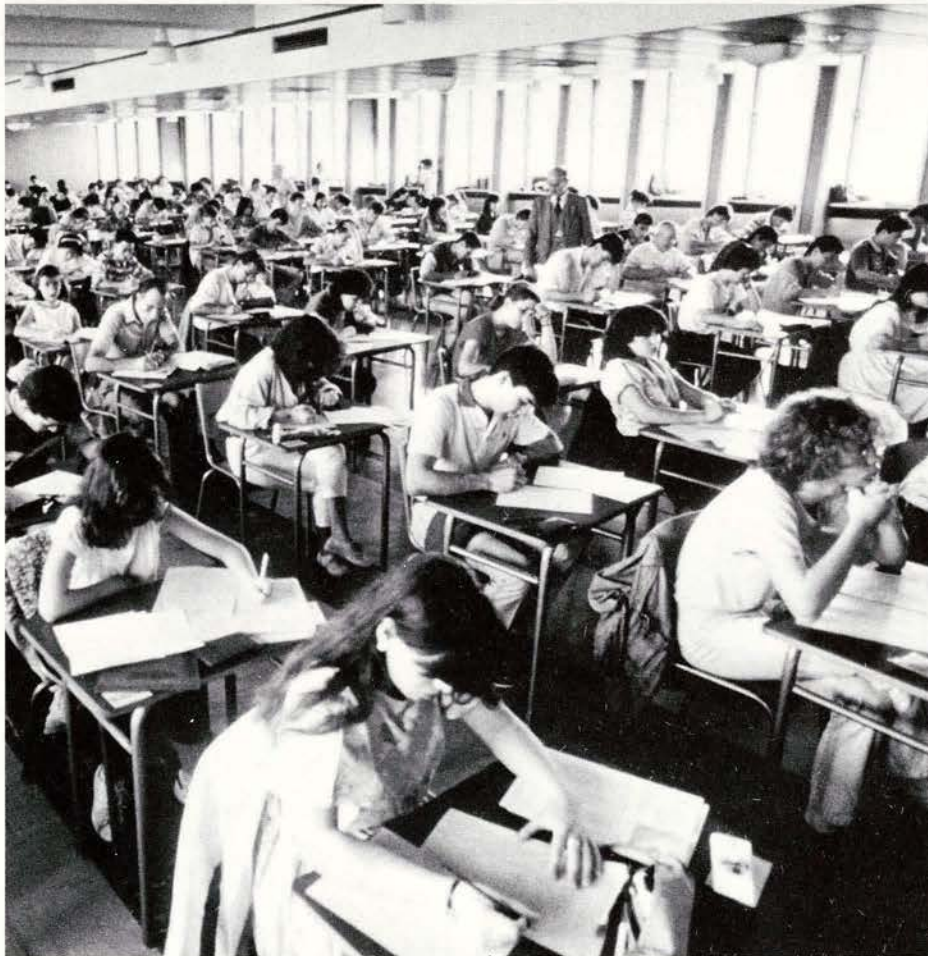


*Tired of school hours? The organisation of the school year and its sub-divisions are much more amenable to policy changes than is generally imagined—but it requires political will.*

(including colleges, labour market programmes, and enterprises), 'education' is still synonymous with 'schooling' in the public consciousness so that deficiencies of knowledge and skill are blamed disproportionately on schools alone.

The expectations of schools held by parents, children, employers, poli-

ticians and the press continue to rise. Schools may thus be said to be 'victims of their own success'—rising general standards of education leading to still stronger demand. Rather than falling appreciably, the cause of the disquiet may well be that standards may not have risen quickly enough to keep abreast of rising demand. ▶▶



*Victims of their own success? The higher the standards that schools attain, the more is expected of them.*

And now that a high proportion of parents are working, with the increasing numbers of single-parent families facing particular problems,<sup>2</sup> and that many young people have continuing difficulties in entering the labour market, the custodial function of schooling has grown in importance. A sizable group of youngsters now remain in school who before would have left, rendering the tasks of the secondary schools more diversified and difficult; meanwhile, poor performance by these students focuses criticism back on schools.

There are also direct economic pressures at play: intense international competition and rapid technological

change cause the blame to be laid at the doors of teachers and schools when national competitiveness slips. There is no doubt a measure of justification in this charge, although schools again tend to be caught in a confusing crossfire: there are no clear signals that societies want the economic aims of schooling to override all others, nor is it clearly understood, in any case, how this economic potential is maximised through primary and secondary education. And the curtailment of public expenditure has intensified the search for qualitative reforms, rather than purely quantitative, financial solutions to educational problems.

Some commentators—politicians, teachers, parents, employers and others—promote quality as a direct reaction against what they see as the excessive weight given to goals of

equality before the economic crisis of the 1970s. But it is misleading simply to contrast these two broad aims since it is precisely for the low-achiever and the disadvantaged student that improved achievement is most urgently required. It can even be argued that a school system attains higher quality the more that it affords a genuine opportunity for everyone to achieve advanced standards of learning.

### **No Easy Definitions of Quality**

The report eschews an 'OECD definition' of quality on the grounds that it would distort the general, multi-faceted—even metaphorical—nature of the concept of quality into a small number of simplistic axioms and prescriptions. To start from such a definition risks introducing unacceptable political bias, such is the controversial nature of the concept. Much of the report is nevertheless devoted to the delineation of the conceptual and policy dimensions that constitute different interpretations of educational quality, in two contrasting but complementary ways.

First, in fixing broad aims, the following questions should be addressed:

- *What tier of provision is under scrutiny—individual institutions, those in a town or region, the school system as a whole? Are all schools concerned or mainly those with below-average results?*

- *What are appropriate goals and objectives by which quality is to be assessed? Are they only those concerned with pupil learning (and how far should that extend beyond the cognitive realm, to embrace attitudes, moral or aesthetic appreciation), or is the success or failure of the school system to be defined more broadly to include its other aims? Whose objectives should prevail when these matters are in dispute?*

2. See Elizabeth Duskin, 'Lone-Parenthood and the Low-Income Trap', *The OECD Observer*, No.153, August/September 1988, pp. 22–25.





*The quality of an education system can be measured in the opportunities it offers to every individual to aspire to advanced instruction.*

● *Quality for whom?* While official concern is, of course, for all pupils, the priority given to the high-flier or the low-achiever varies. And there is a danger here: concentration on either end of the spectrum should not involve the neglect of the large middle group of students of average ability.

Yet apparent differences in policy ambition—between raising standards of achievement and addressing the problems of the disadvantaged, or between emphasising cognitive performance and increasing equality of opportunity—are false dichotomies even if their interpretation can vary in practice. Attention to cognitive achievement should not be viewed as a retreat from the earlier enthusiasms for redistribution of opportunity; equally, it is little short of hypocrisy to bemoan the sizable numbers who leave school

with little to show for it unless they are made a priority, with a corresponding redirection of resources and effort towards the rectification of their difficulties.

Second, in discussing specific policies, the different elements that contribute to improving quality throughout a school system should be identified. A basic, if minimal, list of such elements<sup>3</sup> will include:

*The curriculum.* There is a 'core' of learning that all children and youngsters, regardless of sex, ethnic origin or domicile should be taught as the basis of participation in modern society. But agreement has yet to be reached on how far differentiated provision and teaching styles, adapted to the diverse interests, backgrounds, and abilities of pupils, can be taken before they begin to involve unacceptable inequality of educational opportunity.

*Evaluation and monitoring.* It is essential not only to identify what a student does not understand, but also to discover why, so that it can be remedied. In national and regional education administrations, it will prove very difficult to know how well the system is performing or where weaknesses lie without good information on these matters.

*Teachers.* Recruiting and maintaining a competent and committed teaching force is commonly agreed to be essential, but it is not always clear what is expected of a good teacher nor are adequate resources and incentives always found to reward a committed professional appropriately.

*School Organisation.* The organisation of the school day or year, the use of teaching resources, school size, and so on, might appear to be the most firmly rooted in the traditions of each country, but in truth they are amenable to major policy change. The international exchange of information on national

3. Each of these subjects receives a separate chapter in *The Quality of Schooling*.

organisational arrangements is thus especially valuable.

*Resources.* At present, most education systems cannot hope to obtain much more money from their governments and, moreover, they are under pressure to demonstrate that they are obtaining full value from the resources already available. Paradoxically, most of the specific recommendations for improving the quality of schooling, including those proposed by value-for-money advocates, postulate large-scale increases in expenditure.

One result of the pressure for quality is that educational research has sought to refine understanding of what distinguishes the good school from the mediocre. The factors that emerge from detailed study of 'effective schools'—such as a shared commitment to clear goals, collaborative and innovative staff effort, the maximum use of learning time, good contacts with parents, and support from the responsible educational authorities—are almost commonsensical as statements yet are often frustratingly elusive to realise in practice.

□ □

Schools may or may not change significantly as institutions in the foreseeable future under the pressure of rising and diversifying demand. But it is inconceivable that child care, socialisation, and the transmission of knowledge and skills will cease to be entrusted to a specialised educational agency. The conviction that has characterised the shift in policy focus towards the explicit pursuit of quality is that schools, however transformed, are at the heart of the debate: different forms of educational organisation and governance are only as good as the quality of the teaching and learning that take place in schools themselves. ■

# Education in Turkey

John Lowe

*Turkey, the subject of an educational policy review by the OECD,<sup>1</sup> occupies a unique geopolitical position at the intersection between Western Europe, Eastern Europe and the Arab world, sharing a common frontier with no fewer than six countries. It is one of only two OECD countries where the population has continued to expand in recent years: more than one million children are born each year, and the present forecast is for 50 million inhabitants in 1990, compared with 20 million in 1950.*

**T**urkey, unlike other OECD countries, is still completing the process of becoming a fully industrialised and service society. Half the population still lives on the land. And 99% of the population are Moslems.

One striking feature of Turkey's history has to be mentioned if the context in which the education system has evolved is to be fully understood. It is the legacy of Mustafa Kemal, internationally known as Atatürk, father of the Turks, whose portrait dominates every classroom and principal's office. It was Atatürk who founded the Turkish republic in 1922, disestablishing Islamic laws and replacing them with a civil and penal code along Western European lines, establishing civil rights,

introducing equal rights for women, and adopting the Western alphabet. And it was he who created the modern education system.

## Atatürk's School System

Innovations in education were among the most important reforms in the 1920s after the foundation of the republic. Under the Ottoman Empire barely 10% of the population could read and write, since schools were open only to the sons of a narrow administrative and military elite. The social, religious and political system was so hostile to change that a wide dissemination of knowledge and science was inconceivable.

Under Atatürk the religious schools were closed down and a government system of primary and middle (lower

secondary) schools was established with a new teaching force instructing along lay guidelines. Colleges of further education and a university system were gradually developed to train the technicians and engineers the country desperately required for modernisation. The new alphabet much facilitated the ability of people to read and write. A series of mass literacy campaigns was so successful that today over 85% of the population is literate.

Nevertheless, despite its signal achievements, the education system has far to go before it can fully satisfy the rising expectations of the people and the demands of the economy. Many children still do not complete middle school. Failure rates are high. Standards are acknowledged to be unsatisfactory. Coping with the sheer



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1. *Reviews of National Policies for Education: Turkey*, OECD Publications, Paris, forthcoming winter 1988.

necessity of finding sufficient places for an ever expanding school-age population has taken preference over concern for quality.

The Ministry of Education is well aware of the importance of meeting the demand for secondary places and of raising standards. Its aims are to provide basic schooling for all young people up to the age of 14, to pay special attention to the learning requirements of those in disadvantaged rural and urban areas and of girls and women, and to make the education offered more relevant to national and individual requirements. To this end, it is committed to reforming the basic school system, shifting the emphasis from academic to vocationally and technically oriented education for pupils who have finished their compulsory schooling, improving the effectiveness of the teaching force, and making the education service more efficient.

### Basic Education for Everyone

Basic education covers a period of eight years, normally divided into five years of primary and three of lower secondary. The intention is gradually to extend access to the entire age-group. Meanwhile, the pressure for places is so intense that a number of urban schools operates a double shift and the pupil/teacher ratio may be as

Table 1  
MINISTRY OF EDUCATION BUDGET

|      | as % of total budget | as % of GNP |
|------|----------------------|-------------|
| 1975 | 12.3                 | n.a.        |
| 1980 | 11.0                 | n.a.        |
| 1983 | 11.2                 | 2.5         |
| 1984 | 10.6                 | 1.9         |
| 1985 | 8.6                  | 2.0         |
| 1986 | 8.7                  | 2.1         |

Source: Ministry of Education, Ankara.



high as 80:1, twice the officially acceptable ratio. Books, paper, pencils and so on are usually purchased by parents since the Ministry's budget for consumable school materials barely reaches US \$2 per pupil. Parents' associations often assist poor families that cannot find the average US \$43 of estimated expenditure required per child, including the purchase of a school uniform.

A policy of providing a school for each of the 50,000 villages, designed to preserve the viability of sparsely populated rural areas against a background of a powerful migratory movement to cities and a chronic teacher shortage in the Eastern regions, is pursued with steadfast determination. A few rural schools are being closed down. Many are relying on multi-grade teaching, that is, a single teacher dealing with two or more age-groups in the same classroom.

The basic curriculum is still being consolidated: parts of it are being treated as experimental and parts are being revised. Dissatisfaction with it is shared by teachers, principals, inspectors, administrators and politicians alike, although parents and pupils do not appear to complain. The gradual expansion of the lower secondary sector makes obsolescent a curriculum originally designed for a small minority preparing for upper secondary educa-

tion and thereafter university entrance but which must now cater for a large majority destined to leave school at the age of 14 or before.

### Strong Points, Weak Points

The system does have some valuable assets. Teachers are committed to their tasks and seldom absent. Schools are well run by principals and senior teachers. Pupils are motivated and well-behaved, if anything in too

Table 2  
NUMBER OF INSTITUTIONS, TEACHERS AND STUDENTS IN COMPULSORY SCHOOLING  
School year 1985-1986

|                                 | Schools | Teachers | Students  |
|---------------------------------|---------|----------|-----------|
| Pre-school education            |         |          |           |
| 5-6(7) years                    | 3,339   | 5,038    | 93,810    |
| Primary schools                 |         |          |           |
| 6(7)-11 years                   | 49,200  | 214,193  | 6,637,023 |
| Middle school (lower secondary) |         |          |           |
| ● general                       | 4,598   | 42,951   | 1,674,593 |
| ● vocational and technical      | 593     | 1,329    | 180,437   |

Source: Ministry of Education, Ankara.

disciplined a fashion. Virtually all parents are concerned about their children's education and support their schools, often with substantial financial assistance. Teachers regularly consult parents. Community contributions and private donations to the President's 'Build Your Own School' campaign are impressively generous. Buildings are solid, with ample courtyards, comfortable classrooms, large circulation areas and spacious administrative wings.

Against these assets there are weak points beyond the overcrowding in some urban areas and the unreformed curriculum. National examination results are disappointing. Foreign languages are badly taught. The curriculum is overloaded and fails to concentrate on core subjects and basic skills. The centralisation of decision-making and control inhibits regional, local and school-based initiatives. Bottlenecks in financing frequently occur. There are regional disparities in provision.

There is scope for improvement. Support services for clusters of eight or so villages could be centralised. *Ad hoc* emergency programmes for disadvantaged urban areas could be adopted. Some freedom to design curricula could be delegated to communities and schools. The supply of textbooks and learning aids could be increased, and teaching effectiveness improved.

## What Happens after Basic?

Approximately 30% of the 15–17 age-group remain in school after their basic education. The number of boys significantly exceeds that of girls and participation rates in the cities are considerably higher than in the rural areas, particularly in the East.

A policy intended to enable young people to make the transition from school to adult and working life has thus to focus on two target groups: the pupils who stay in the formal system and those who do not complete basic

schooling or leave when it is finished. A large majority of the second group finds neither stable employment nor support from the informal education and training system that is developing. A minority takes up apprenticeships, the quality of which is often criticised. The policy of the government is to reform the apprenticeship system, to adopt a form of the 'dual system' associated with Germany and Austria, and to ensure that 60% of the age-group in school follow a technically and vocationally oriented track rather than, as at present, attending universities and other academic institutions.

To modernise and extend the apprenticeship system, Turkey has enacted legislation to combine on-the-job training with eight to ten hours a week of theoretical instruction in apprenticeship training centres that offer both general and vocational education. Alternatively, theoretical training may be provided in training units within enterprises recognised by the Ministry of Education. The plan is to extend the government network systematically to all regions where there is a critical mass of small and medium-sized firms that have traditionally offered training places for apprentices. Minimum requirements for access are entry at or after thirteen and completion of five years of primary schooling.

The success of this new apprenticeship scheme will depend not only on the readiness of firms in traditional crafts and industry to provide more exacting training and on the rapid expansion of the government network of training centres but also on the maintenance of high standards. Much will hinge on the ability of the authorities to recruit competent teachers to the centres and of firms to employ experienced master instructors. Crash training courses for both teachers and master instructors will be essential.

About 90% of the pupils completing basic education go on to one of the three types of upper secondary school:

the general *lise* or grammar school, which takes approximately 60%; the vocational *lise*; and the technical *lise*. The government's intention to decrease the intake to the general *lise* may be assisted by the fact that many students will either not gain a leaving diploma or, having got one, will fail to gain university admission because of the *numerus clausus* now being applied to restrict entry to courses deemed over-subscribed. On the other hand, the increasing attractiveness of the vocational and technical *lises* is constrained by a lack of places.

To enlarge the intake capacity of vocational *lises* and to strengthen their programmes ambitious reforms have been initiated, the main objective of which is to use the world of work as a second learning setting and thereby to develop a dual system. Firms with 50 or more employees are obliged to provide skill training for students of vocational *lises*, their number corresponding to 5–10% of the workforce. The first year will be devoted to full-time schooling, although in the second and third years the school component will be reduced to 12–16 hours per week. Students are entitled to a training allowance paid by the firm, health insurance costs being paid by the state. The success of the reforms will depend on the ability of the authorities to identify training places in large numbers in most parts of the country and, once again, to guarantee high-quality instruction in the *lises* and the firms.

Reducing the intake to the general *lises* should eventually put an end to the overcrowding that now exists. It will still remain essential to reform the curriculum, which is at present overloaded and unduly influenced by the demands of university entrance. A particular priority is how to improve the quality of the teaching of foreign languages, an area of competence which Turkey holds in exceptional esteem because of its desire to multiply international contacts.



*Universities are now entirely responsible for the initial training of teachers so as to improve standards.*

In spite of its rapidly increasing birthrate Turkey has been remarkably successful in recruiting and training enough teachers to meet the demand for school places and in keeping the aggregate teacher/pupil ratio within reasonable bounds, although, as pointed out above, some notable imbalances occur between under-populated rural and over-populated urban areas. Indeed, the authorities' main concern is not about the quantity of teachers now employed but about their quality. Like other OECD countries faced with expanding demand for school places, Turkey took on many teachers whose competence is now in question. This weakness imposes the necessity of somehow raising the general educational standard of the existing teaching force and at the same time ensuring that all newcomers are suitably qualified.

## **Improving Teaching Quality**

With the aim of raising the educational standard of new teachers the authorities have transferred full responsibility for initial training to the

universities. Student teachers preparing for primary schools follow a two-year course and those preparing for secondary schools a four-year one. Eventually, it is intended that all courses will cover four years and lead to a degree. The transfer to the universities has had one unexpected and disturbing effect. The student intake is coming from the bottom quarter of those achieving university entrance, whereas recruits to the institutions that prepared for primary-school teaching were of high academic ability. There are, in addition, complaints that the universities are not equipped to provide appropriate training, particularly in pedagogy. It is clear that measures will have to be taken to improve the quality both of the intake and of the courses provided.

Turkey provides an in-service training programme that compares favourably in size and scope with that of most OECD countries. It has also resorted to the use of 'distance learning' on an internationally unprecedented scale. In 1986-87, 133,000 primary school teachers (two-thirds of their total) enrolled voluntarily for a two-year crash course. This is a rea-

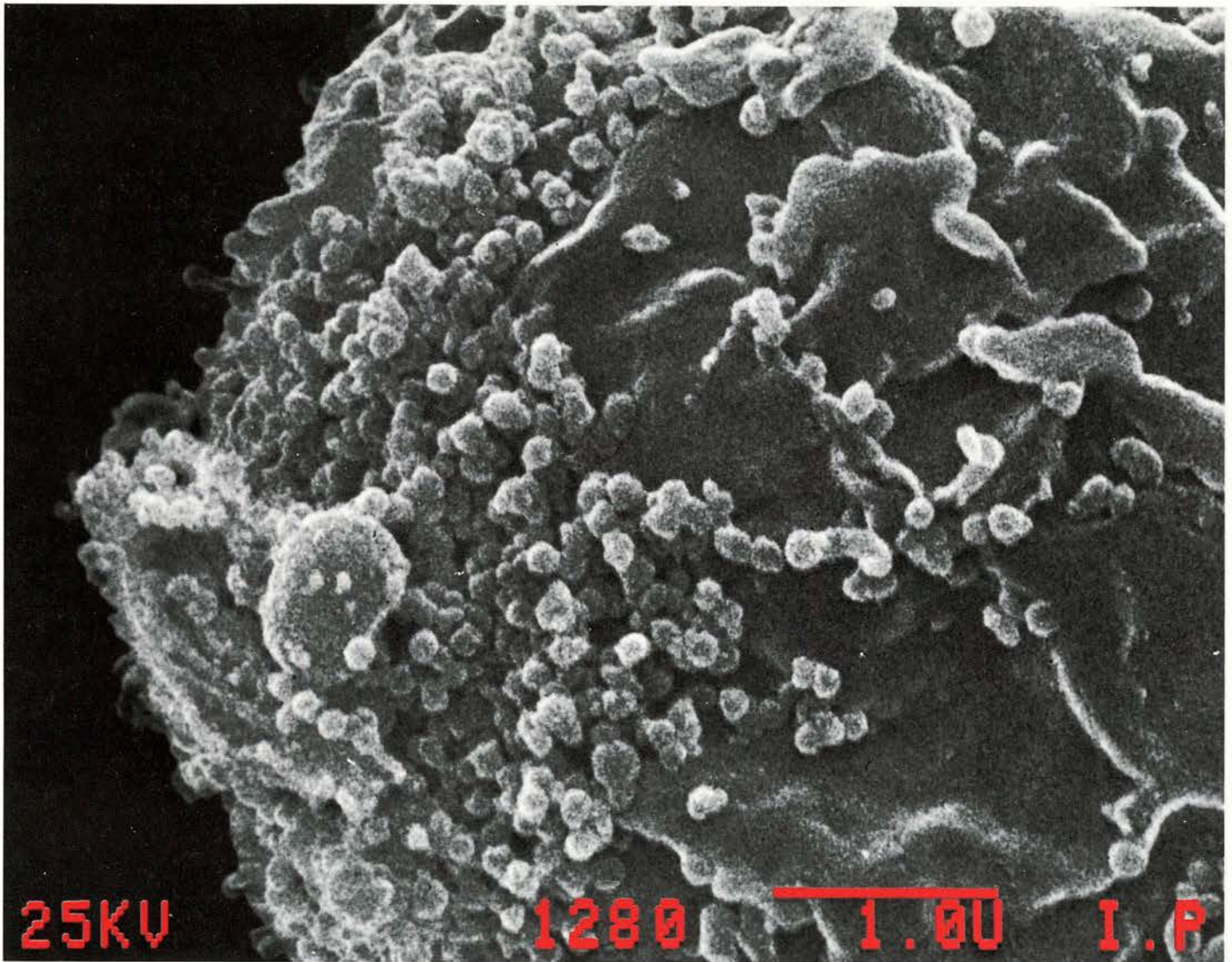
sonable stop-gap solution to a huge difficulty, but it may do little to improve the teaching effectiveness of those who complete the course.

Yet there remain the particular difficulties caused by the acute shortage of professionally competent vocational and technical teachers both in schools and firms. It can be solved only by an intensive recruitment campaign and an equally intensive pre-service training programme. Emergency training programmes are required if the technical and vocational teachers already in service are to improve their professional knowledge and skills.

□□

The functioning of the education system as a national service must be streamlined and strengthened. Under Atatürk and a long while thereafter the system had to be firmly controlled so that a viable, nationwide service could be solidly established. Now it is top-heavy. Some powers and responsibilities could be delegated to the regions, communities and schools. The system also requires opening up to wider external influences. More co-ordination of education with other national policies would help facilitate implementation of Turkey's five-year plans. The Ministry of Education could be restructured and the administrative competence of its staff improved. Educational research and development capacity require considerable strengthening and more effective instruments should be devised to monitor the effectiveness of all parts of the system. One desirable measure, for example, would be to assign a specific monitoring role to national and provincial inspectors.

The education authorities are aware of all these requirements and are beginning to take measures to meet them. In doing so they have the satisfaction of knowing that the provision of a comprehensive education system of quality is a recognised national priority and that both pupils and parents are strongly motivated. ■



*HIV<sub>1</sub> viruses attack by penetrating the T<sub>4</sub> lymphocyte, one of the main defence mechanisms of the body.*

*The most recent statistics of the World Health Organisation (WHO) suggest that there are now some 110,000 cases of AIDS registered in 140 countries. The United States reports the highest official figures, with almost 70,000 cases. Since not all AIDS cases are yet reported, the WHO estimates the real cumulative number to be at least 200,000. In addition, there have been 300,000 to 500,000 cases of AIDS-related conditions.*

*Five to ten million people are thought to be infected with the HIV virus world-wide. The number of actual AIDS cases may go up ten to twenty times in the next five years. How much progress is likely to be made in that time?*

# Can AIDS be Contained?

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Carl Wahren

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**W**hy so much noise about a disease which so far is responsible for only a fraction of the number of deaths related to other scourges of humanity? AIDS is incurable and may remain so, according to some scientists. AIDS leads to an explosion of other diseases and is terribly painful. AIDS hits the young. AIDS spreads quietly and hits the most vulnerable groups hardest. To some communities AIDS could prove devastating. The present scope and potential scale of the AIDS pandemic implies an increasing burden for national development efforts and a serious threat of overloading for some national health-care systems.

Throughout the world, people are infected by the HIV virus in the same basic ways: through sexual contact, blood and from mother to child. Trans-

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mission through blood can occur in transfusion, in sharing needles among intravenous drug users and in the use of contaminated needles for medical injections. World-wide, 75–90% of HIV infections and AIDS cases occur in the 20–40 age-group.

Between 10 and 30% of HIV-infected people will develop AIDS in the first five years after infection. An additional 25% will develop other lesser clinical manifestations of disease over the same period. Within 10 years of infection 50% will develop AIDS. It is not known whether everyone who is HIV-infected will ultimately develop AIDS or related diseases.

## Where, and How, AIDS Spreads

There are indications to suggest that AIDS strikes in a linear fashion. In other words, because vertical transmission from mother to child is relatively common, deaths caused by AIDS will not be limited to people of reproductive age.

Although homosexual transmission has stabilised or even gone down in some areas, heterosexual transmission is on the rise. Young women are increasingly being infected by older men, and in this way HIV is now spreading among teenagers.

Epidemiological patterns show considerable geographical variation. The WHO distinguishes three distinct patterns. Pattern I includes Western Europe, North America, and some areas in South America, Australia and New Zealand. In this group of countries, homo- and bisexual men and intravenous drug users are the main groups affected. But now heterosexual transmission is beginning to spread, although relatively slowly.

Pattern II includes, basically, Central, Eastern and Southern parts of Africa, and also parts of the Caribbean. Transmission is predominantly heterosexual and thus largely affects the same number of men and women. In some urban areas up to 25% of the 20–40 age-group may be infected. Up to 75–90% of prostitutes in some pattern-II areas are infected. And peri-

### CUMULATIVE AIDS CASES

*Figures reported to the World Health Organisation as of 31 July 1988*

| Continent | Pre-1979 | 1979 | 1980 | 1981 | 1982  | 1983  | 1984   | 1985   | 1986   | 1987   | 1988    | Total   |
|-----------|----------|------|------|------|-------|-------|--------|--------|--------|--------|---------|---------|
| Africa    | 1        | 0    | 0    | 0    | 3     | 17    | 99     | 710    | 3,758  | 11,818 | 14,785  | 14,786  |
| Americas  | 0        | 14   | 81   | 362  | 1,430 | 4,664 | 11,032 | 22,966 | 41,965 | 68,555 | 78,908  | 78,908  |
| Asia      | 0        | 0    | 1    | 1    | 2     | 10    | 14     | 42     | 89     | 217    | 264     | 264     |
| Europe    | 8        | 0    | 3    | 19   | 86    | 301   | 865    | 2,196  | 4,766  | 10,843 | 13,206  | 13,214  |
| Oceania   | 0        | 0    | 0    | 0    | 1     | 7     | 52     | 176    | 419    | 794    | 1,004   | 1,004   |
| TOTAL     | 9        | 14   | 85   | 382  | 1,522 | 4,999 | 12,062 | 26,090 | 50,997 | 92,227 | 108,167 | 108,176 |



*Dense conurbations, often with underdeveloped infrastructures, especially medical care, and easy access by transport, facilitate the spread of AIDS.*

natal transmission is a substantial problem, since some 5–15% pregnant women are HIV-infected.

Pattern III includes Asia, most of the Pacific, the Middle East and Eastern Europe. HIV is a rather recent phenomenon; there are relatively few AIDS cases and they are usually related to homo- or heterosexual contacts, or cases involving imported blood. Although the virus is present in those areas, prospects for successful containment look reasonably promising.

Statistics are still unreliable, particularly for many parts of the Third World. But there is little doubt that some, mostly urban, areas of Sub-Saharan Africa will be particularly badly hit. The WHO estimates that at least 2 million Africans are probably already infected. On the other hand there are vast areas where, so far, little or no infection has been diagnosed. Each country, indeed, is showing a distinct epidemiology, and it would clearly be a mistake to treat Africa as one homogeneous entity.

### **Identifying the Enemy**

What is HIV? It seems that the more is known about this retro-virus, the more it emerges as a highly unusual challenge to the scientific community. In describing their present chief enemy, leading scientists, almost with awe, use words such as 'highly sophisticated'. The HIV virus behaves differently from other viruses and scientists are far from understanding why, or why not, it causes AIDS.

One particularly disturbing problem which is only now emerging is the strong indication that the virus may stay 'dormant' in the body for extended periods. It is impossible to detect with available tests and people thus have no indication that they are infected and may one day fall ill. How often this behaviour occurs in the virus



is not known. This new information is considered most alarming by many commentators, even if its full strategic implications are still difficult to judge. It underlines the importance of understanding the virus and its functions much better before any meaningful attacks can be launched.

## **AIDS, Drugs and Risk**

There is a strong correlation between intra-venous drug use and transmission of HIV. HIV is spreading rapidly among many groups of intra-venous drug users world-wide. And the increasing use of cocaine is aggravating existing problems since its effects do not last as long and thus increase the frequency of injection.

Education programmes directed towards drug users have so far had relatively little effect since people using narcotics have little fear of taking risks; risk and desperation are a constant feature of their lives. Their transmission of HIV to their children, partners and clients (through prostitution) is a major concern and one which is particularly difficult to tackle. There may never be a lasting solution to the AIDS pandemic unless governments take a far more serious stand against drugs.

## **New Findings on Transmission Risks**

Recent research suggests varying risks for transmission according to sex, age, culture, type of sexual behaviour, and frequency of change of partner. But findings are inconclusive and sometimes contradictory and underline the urgency of improving knowledge. If continued analysis confirms that higher risks of transmission are gender-related, for instance, it could, over time, have implications for population composition and development.

Chlamydia, herpes and other sexually transmitted diseases seem to increase the susceptibility to infection by HIV (the virus enters through genital sores or inflamed mucus). The use of contraceptive pills may carry similar risks. Since chlamydia is increasingly common in young women in many societies, and pills are a popular contraceptive method for women without children, this recent finding is causing considerable concern. Yet it should be emphasised that the correlation between sexually transmitted diseases and HIV seems better scientifically documented than the potential link with pills. If the links between pill use and susceptibility to HIV infection were firmly established, it could have serious consequences for family planning.

Above all, these recent findings serve to emphasise the importance of comprehensivity in AIDS control programmes: AIDS is basically a sexually transmitted disease, but to control AIDS effectively other sexually transmitted diseases and drug use must be controlled as well. Unfortunately, risk behaviour holds a certain attraction with many young people in big cities who are fascinated by drugs, smoking, fast cars and unsafe sex. Full awareness does not automatically lead to behavioural change. And it is through education and information that risk behaviour must be changed.

How much under-reporting is there of HIV-transmission through occupational accidents in the health sector? There have been several claims that HIV has been spread in hospitals as a result of work-related accidents, without any reporting, for various reasons: staff were afraid of getting fired (where unions were weak); they were afraid of social reactions. Although there may be more such accidents than is publicly admitted, they are, in perspective, probably still relatively few. Nonetheless, medical staff have ex-

pressed unease at the hush-hush atmosphere surrounding this particular mode of transmission. There seems little doubt that better information would facilitate effective preventive measures and reduce unfounded fears.

## **No Vaccine, No Cure**

There is no vaccine or effective cure for HIV/AIDS on the horizon. The massive research going on around the world seems mainly to produce more information about the many obstacles to drug and vaccine development. But important experience is gained daily on how to minimise side-effects and increase the relative effectiveness of available methods of treatment.

Many researchers find it difficult to carry out effective clinical research since, quite understandably, few, if any, infected people are prepared to take placebos if there were new drugs or combinations of existing drugs available for testing. This reluctance poses ethical problems for the clinicians/researchers and is bound to obstruct the acquisition of solid scientific information.

## **Equity and Human Rights**

AIDS is the most recent of many epidemics which strike disproportionately at the most vulnerable groups in society. AIDS thus raises important issues of equity, not least in the availability of treatment. It has been suggested, for instance, that blacks and hispanics in the USA who develop AIDS have a considerably shorter average survival time than do whites. And what care will be available in Sub-Saharan Africa, or in Latin American favelas?

The ability to protect human rights and dignity is essential for the effective functioning of national AIDS pro-

grammes. As with any other social problem, openness and compassion is the only effective approach. This view was strongly reflected in the recent WHO World Health Assembly resolution against discrimination in relation to HIV-infected people and those with AIDS.

## National AIDS Control Programmes

As of today, 106 national AIDS control programmes have been designed and are in the process of being implemented. It would seem that this global mobilisation has made an excel-

"We know, far too well, where intolerance, bigotry and projection can lead. Fear is a potent force, capable of throwing individuals as well as entire societies off course. The struggle against AIDS is therefore a struggle for humanity, against the darker sides in ourselves."

Ingvar Carlsson,  
Prime Minister of Sweden,  
Stockholm,  
June 1988.

lent start in comparison with any other international health or social activity ever undertaken.

The WHO and the United Nations Development Programme (UNDP) have formed a close alliance in order to make best use of all available multilateral resources. Many governments have initiated impressive AIDS control programmes, supported by bilateral aid agencies, and non-governmental organisations (NGOs) have joined in. Some initial conflicts of competence and responsibility have now been sorted out and co-ordination generally seems to be functioning well. Special local co-ordination arrangements have

"This disease is becoming the particular scourge of people who are young, black and hispanic. How tragic that is for them, but also, how tragic it is for America [...]. This country is only now emerging from two decades of turmoil during which we have tried to correct the injustices of the past. Now, will the disease AIDS, by itself, reverse this trend of history?"

C. Everett Koop,  
US Surgeon-General,  
Washington DC,  
September 1987.

been made under the leadership of governments or so-called 'lead agencies'. Technical assistance is provided to build national competence.

The WHO has launched the necessary missions and organised training in order to speed up the implementation of the national programmes they have developed together with governments and other interested parties. The concepts, principles and structures of national AIDS prevention and control programmes which little more than a year ago were only ideas have become reality—a unique achievement.

At present there is a considerable amount of money available for AIDS work in developing countries. But simply to move money away from other equally deserving programmes is not the solution; transferring money from primary health care, or the control of sexual diseases (syphilis and gonorrhoea, for example), and into AIDS may even be counterproductive.

There is little doubt that very important resources will have to go into treatment, now that the number of developed AIDS cases is going to increase rapidly. This new burden will be extremely heavy, particularly in debt-distressed countries with structural adjustment programmes. It seems clear massive donor support will be required for a considerable length of time in addition to the considerable expenditures already involved in prevention.

There is a real danger that public interest and political support may gradually weaken because AIDS will be around for such a long time. People may just learn to accept it as they seem to accept daily slaughter on the roads.

"Like every other disease, AIDS is an idea as much as it is a biomedical phenomenon.

For various reasons, AIDS is of course an unusually powerful idea. There is as yet no cure or vaccine for it. We are forced to recognise that increasingly people "like us" are dying from AIDS prematurely. It is furthermore associated with the perversion of the vital fluids, semen and blood, normally the source of life, now transformed into agents of death.

AIDS is also a powerful idea because the breakdown of the immune system according to popular mythology seems to mirror the breakdown of social and sexual inhibition, widely believed to have caused AIDS in the first place.

Finally, the idea of AIDS is associated with Sex and Death simultaneously in mind-boggling tandem. AIDS is spread by the ideas and behaviour of ordinary people and will therefore not be stopped by advances in the biomedical sciences alone. [...]

Every society has its own ways of dealing with sexuality and the family, risk and responsibility, ritual and medical practice, deviance and crisis, any and all of which may effect the meaning, the spread and ultimately the control of HIV and AIDS.

[...] three groups [homosexuals in San Francisco, prostitutes in Nairobi and drug-users in Edinburgh] make a point for public education: networks of contact which spread the virus are ready conduits for information directed at controlling it."

Professor Sandra Wallman,  
Department of Anthropology,  
University College of London,  
Stockholm,  
June 1988.

*In the absence of vaccine or efficient treatment, there is only one hope against AIDS: education—early.*

"HIV does not need to spread rapidly in a population to have a tremendous and gradually expanding cumulative effect. The two major factors influencing the risk of individual infection are the prevalence of HIV in the community and the individual's personal behaviour. We do not have precise numbers, but it is likely that several hundred million people around the world may have behaviours which make them potentially vulnerable to infection with HIV."

Dr Jonathan Mann,  
Director,  
WHO Global Programme on AIDS,  
London,  
January 1988.

## What Scope for Optimism?

The global AIDS control programme has rapidly come of age. The world is entering a new phase where both panic and over-optimism have been laid to rest. Even if scientists are bewildered by that strange retro-virus, they, and their governments, are better poised to react.

With neither vaccine nor cure on the horizon, education assumes increasing importance. Yet, in spite of encouraging experience from some programmes, there are immense difficulties involved in changing human behaviour. Information about and effective cures against sexually transmitted diseases have existed for many years; yet they still are on the increase in many parts of the world. Most people are fully aware of the dangers connected with smoking, drinking and fast driving....

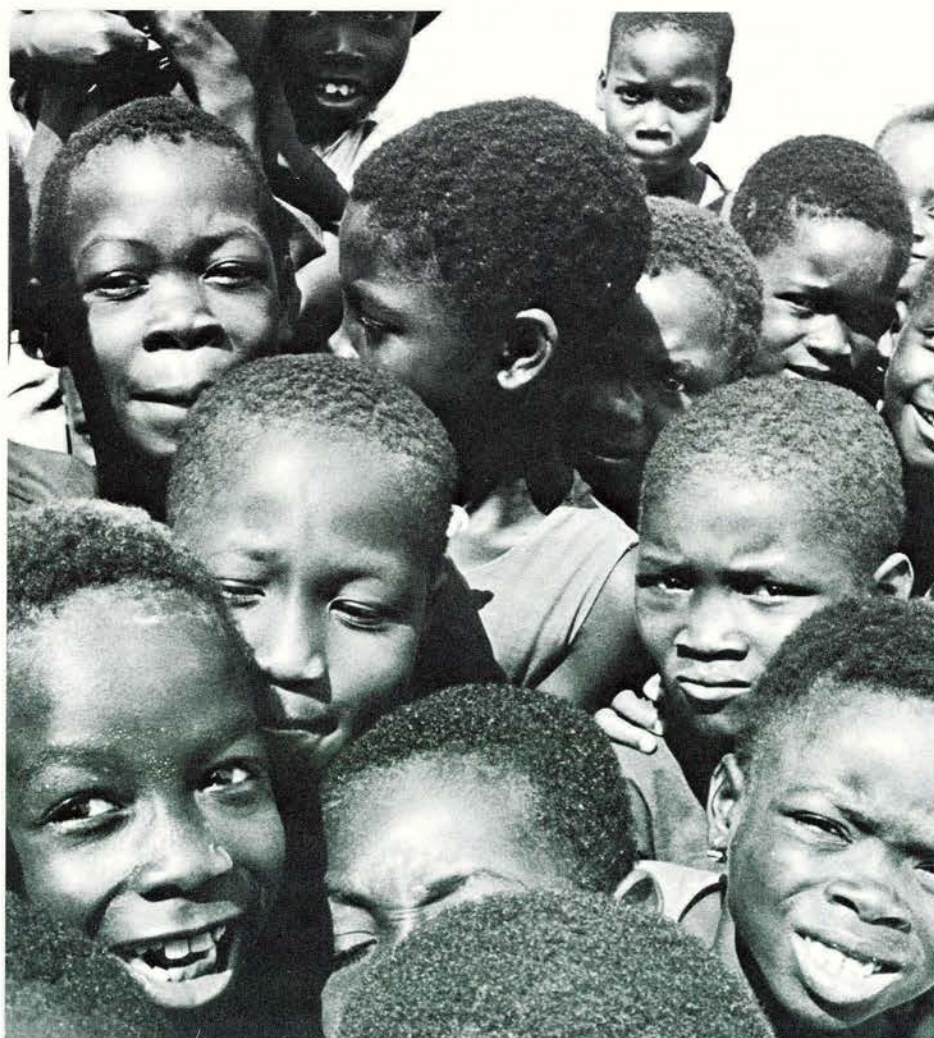
There are important lessons to be learned for the design and implementation of public education programmes. The common denominators seem to be:

- establish full political and community support
- don't lecture—communicate
- target your messages to specific groups
- be compassionate, respect human rights, and avoid discrimination.

□ □

AIDS will have a massive impact on many people and several countries, not least in the developing world. But humankind is still only in the earliest stages of understanding its full implications. More research is required, as is a decentralised approach. Generalisations must give way to careful national analysis involving a broad range of disciplines. AIDS considerations must be integrated into national development planning, where the traditional concerns of the Development Assistance Committee (DAC)—technical assistance, co-ordination and funding—will be, literally, vital issues.

But the basic question remains: given all the information that governments and scientists can supply, will people change their behaviour? ■





# The Fishy Business of Aquaculture

Carl-Christian Schmidt

*This fish farm in south-west Norway uses nets slung from steel pens to protect, and contain, its produce in a natural environment.*

*Aquaculture—the commercial breeding of fish, shellfish and sea-weed—is expanding in the OECD as a whole, and has found an important niche in the economy of many member countries. Current OECD production amounts to some 2.4 million tons, of an OECD fisheries production of around 30 million tons. And perhaps more important, aquaculture could provide additional protein to bridge the gap between rising demand and stable supply from traditional fisheries.<sup>1</sup>*

**T**he farming of fish and shellfish is an ancient occupation. But only in the last decade has the technique of aquaculture fish production become commercially viable, and it could now play an important role in providing food, export earnings and employment and in stimulating rural development. The production technology has been mastered for salmon, mussels and oysters, and rapid advances for other fish and shellfish are being made. Nevertheless, if further production is to increase, aquaculture must remain profitable on its own.

Total world production from aquaculture is now between 10 and 11 million tons annually, a figure which,

Carl-Christian Schmidt has worked in the Fisheries Division of the OECD Directorate for Food, Agriculture and Fisheries since joining the Organisation in 1982.

1. **Aquaculture: Present Experience and Potential for Development**, OECD Publications, forthcoming winter 1988.

2. 'Aquaculture' is used here in its broadest sense, to include activities ranging from high-intensity farming (of eels, for example) to sea-ranching and seaweed collection.

compared with total fisheries production of some 92 million tons, may not seem particularly high. Nonetheless, while farmed fish provide only 4.5 million tons, or 7% of 'capture fisheries' production, almost 80% of the overall production of molluscs—oysters and mussels, for example—stems from aquaculture.<sup>2</sup> There are wide disparities in regional aquaculture production: Table 1 shows how it is concentrated in the Asia/Pacific region, where fish farming has long been a traditional activity.

Another reason for high production in the Asia/Pacific region is that, developed economies apart, it has traditionally been concentrated on high-volume, low-priced species, often as a complement to an agricultural activity. In China, for example, extensive carp production takes place in rice paddies. And it is almost exclusively in the Asia/Pacific region that seaweed is commercially farmed; most of it is subsequently consumed there, too.

## Aquaculture in the OECD

The largest producers by volume of farmed fish and shellfish in the OECD are Japan, the United States, Spain and France (Table 2). But this picture changes considerably when the value

of farming is compared with that of capture fisheries, when Finland, Germany, France and Norway take the lead. And measured by export earnings, Norway becomes the most prominent producer among OECD countries.

Of the total 1986 OECD production of 2,400,300 tons, 1,105,100 tons were crustaceans and molluscs, fish accounted for 757,200 tons, and the remaining 538,000 tons were seaweeds. Among the crustaceans and molluscs, mussels and oysters take up the largest share, although the fast-growing production of shrimp will probably move to the front in a number of years. Catfish, trout and salmon are predominant among fish and will continue to be so in the foreseeable future.

In most member countries aquaculture has been left alone to develop on a strictly commercial basis, which explains the concentration in the OECD on high-value species.

## Investing in Luxury Products

Salmon, reared in highly intensive sea-based cage systems, have recently attracted public attention and, for a decade now, investors' money. Production now amounts to some

Table 1  
**WORLD AQUACULTURE PRODUCTION – 1983**  
(tons)

| Region <sup>1</sup>     | Fish      | Molluscs  | Crustaceans | Seaweeds  | Total      |
|-------------------------|-----------|-----------|-------------|-----------|------------|
| Africa                  | 43,553    | 286       | 26          |           | 43,865     |
| Asia/<br>Pacific        | 3,357,978 | 2,586,464 | 75,644      | 2,392,045 | 8,412,131  |
| Europe/<br>Near<br>East | 726,530   | 494,719   | 162         | 100       | 1,221,511  |
| South<br>America        | 167,797   | 30,883    | 20,188      | 1,637     | 220,505    |
| North<br>America        | 152,088   | 133,178   | 27,425      |           | 312,691    |
| Total                   | 4,447,946 | 3,245,530 | 123,445     | 2,393,782 | 10,210,703 |

1. Definitions by the Food and Agriculture Organisation (FAO).

Source: Data supplied by governments to the Aquaculture Development and Coordination Programme of the FAO.

80,000 tons in the OECD and estimates suggest that it will more than double by 1990. Although salmon has shown the swiftest growth, there is no doubt that other luxury products will follow: crayfish, shrimp and eels in the near future and, later, turbot, bass and halibut, pending the development of commercial rearing techniques.

In forecasting aquaculture production, a number of factors (besides rearing techniques) that could limit or sustain developments should be taken into account. Constraints include availability of suitable sites, feed and feeding costs. On the other hand, the

marketing aspects of farmed fish products may offer scope for further expansion.

### Where to Farm Fish?

What makes a site suitable for aquaculture? First, fish farming requires high-quality water in large quantities. It has to be both clean and, at least for molluscs, have a high nutritional value, in plankton, for instance.

Some areas of the sea already show signs of having reached the limits of

their carrying capacity, ruling out any increase in production. And though aquaculture must have clear water, its installations, not least through unconsumed feed and fish excretion, can affect the environment adversely. Excess nitrogen, for example, may reduce oxygen levels, diseases may spread, or chemicals intended to cure them cause unintended side-effects elsewhere. Appropriate site selection and improved farm management are thus essential.

Moreover, aquaculture installations often compete with other uses of areas of water. Farms licences have been

Table 2  
OECD AQUACULTURE PRODUCTION – 1986

|                | Fish (tons) | Shellfish (tons)     | Main types                    | Value of aquaculture production (US\$ million) | Value of fisheries incl. fish for reduction <sup>1</sup> but excluding aquaculture unless indicated (US\$ million) | Aquaculture as % of Total Fisheries Earnings |
|----------------|-------------|----------------------|-------------------------------|--|--|--|
| Australia      | 1,193       | 8,393                | Trout, oysters                | ..   | 396  | ..   |
| Belgium        | 1,750       | –                    | Trout, carp                   | ..   | 74.6   | ..   |
| Canada         | 3,088       | 8,550                | Trout, oysters, mussels       | 23.0   | 932.7  | 2.5  |
| Denmark        | 27,400      | ..                   | Trout, eel                    | 74.7   | 439.2  | 17.0   |
| Germany        | 20,200      | 21,024               | Trout, carp, mussels          | 55.3   | 122.2  | 45.2   |
| Finland        | 10,074      | –                    | Trout                         | 44.8   | 38.6   | 116.1  |
| France         | 38,540      | 173,336              | Trout, carp, oysters, mussels | 404.3  | 979.5 <sup>b</sup>   | 41.3   |
| Greece         | 4,590       | 2,300                | Trout                         | 0.02   | 0.4  | 5.2  |
| Iceland        | 338         | –                    | Salmon                        | ..   | 1.2 <sup>b</sup>   | ..   |
| Ireland        | 1,778       | 11,042               | Salmon, mussels               | 10.6   | 84.2   | 12.5   |
| Italy          | 33,000      | 87,881 <sup>a</sup>  | Trout, eel, mussels, oysters  | 0.1  | 1.3  | 9.9  |
| Japan          | 291,601     | 892,620 <sup>a</sup> | Yellowtail, eel, oysters      | 3.6  | 17.2 <sup>b</sup>  | 21.0   |
| Netherlands    | 700         | 102,200              | Mussels, oysters              | 51.3   | 355.4  | 14.4   |
| New Zealand    | 500         | 15,000               | Salmon, mussels               | 12.8   | ..   | ..   |
| Norway         | 49,985      | 170                  | Salmon                        | 233.3  | 675.1  | 34.6   |
| Portugal       | 2,755       | 8,220                | Trout, clams                  | ..   | 317.3  | ..   |
| Spain          | 16,931      | 250,353              | Trout, mussels                | 60.0   | 1,551.0  | 3.0  |
| Sweden         | 4,028       | 327                  | Trout                         | 13.3   | 98.2   | 13.6   |
| Turkey         | 3,340       | ..                   | Carp                          | 6.3  | ..   | ..   |
| United Kingdom | 21,240      | 4,074                | Salmon, trout, mussels        | 91.6   | 530  | 17.2   |
| United States  | 224,147     | 57,651               | Catfish, crawfish             | 496.3  | 2,763  | 18.0   |

.. not available.

– not applicable.

1. Into feed compounds, etc.

a Includes seaweeds.

b Includes aquaculture production.

Source: OECD.

rejected, because, for example, they spoil the view or because they conflict with other fishery interests in the area.

## Competition for Inputs

The fish species commercially produced in the OECD area are carnivorous. They therefore require feed compounds based on fishmeal, which in turn is produced chiefly from anchovy, blue whiting, capelin and the like. It takes three kilos or more to produce one kilo of farmed fish. The annual world harvest of capture fish for fishmeal production is currently around 30 million tons and is unlikely to increase.

Fish farmers are not the only people with an interest in fishmeal. They compete with producers of livestock, such as poultry, for feed compounds based on fish. Improvements in processing technology have also made it feasible to use for human consumption species which until now have been used only for animal feed. Surimi-based products,<sup>3</sup> such as crab sticks, are only one product which may potentially take up an important share of the harvest of fish used for fishmeal.

Fishmeal prices will probably increase, to form an even larger part of the costs of producing farmed fish: the basic resource of fish is finite while demand is likely to grow. As a result, if increases in production—and hence more competition—make higher prices for the final farmed product unlikely, the profitability of fish farms may be considerably reduced. But if, on the other hand, the market can bear higher prices for the end product, fish farms ought to be able to sustain their profitability.

The availability of fishmeal and its price may therefore have a marked impact on the expansion of aquaculture. Further research into alternative feeds is urgently required; it should also improve feed technology and management with a view to reducing



*The controlled environment of intensive aquaculture ensures a survival rate of over 90% of juvenile fish. In the wild, less than 10% make it.*

waste. Another, though more distant, possibility is to improve fish through genetic engineering.

## Consumers, Markets and New Products

Throughout the developed economies there has, over the last three or four years, been a tendency to consume more fish and fish products. And the consumer awareness of the nutritional value of fish has been accompanied by improvements in product availability and form: surimi-based products, ready-to-eat dishes and boneless fish fillets are only a few examples. It seems that aquaculture products will easily find their niche in the market place.

Fears have been expressed—by capture-fishery interests, *inter al.*—that farmed fish could eventually lead to the displacement from the market of cap-

ture fish. Available evidence suggests there is no substitution effect; indeed, the opposite is probably true: that consumer awareness is sustained, and in all likelihood the kind of market niches found so far (such as smoked salmon in the *hors-d'œuvre* market) add to total fish consumption.

Aquaculture products have definite marketing advantages over caught fish. They are available throughout the year, although still subject to seasonal fluctuations, and since the production is managed in all its phases, a high-quality product can be assured. Nevertheless, because many of these farms are relatively small, concerted action through appropriate marketing bodies can prove helpful. In Norway, for example, the sale of all farmed fish

3. Surimi is a fish mince which is formed into imitation products after rinsing and processing.

and shellfish is the responsibility of the Norwegian Fish Farmers' Sales Organisation. Product image and the easier flow of products may be only the first concerns to be improved by concerted effort.

### What Should Governments Do?

The role of the public sector has developed gradually with the expansion of the industry. Most governments see in aquaculture the likely benefits in employment, in stimulating regional economies and, of course, in providing an additional supply of protein. Yet they must ensure that it is not developed at the expense of other environmental policies—the provision of open spaces, reduction of pollution, adequate sanitation, and so on. One of the most important prerequisites for the healthy and long-term growth of an aquaculture industry is a national development plan, which should encompass the necessary rules and regulations so that it can offer guidance while laying down the rules of the game to the private investors. Most OECD member countries have adopted such plans and regularly adjust them to changes in the natural, commercial and political environment.

□□

Aquaculture has come to stay, and further increases in production will almost certainly be achieved in the short term. But will it offer the bonanza often forecast and fill the world's projected protein gap? More likely, the best prospect for its development lies with new kinds of high-value luxury products to be consumed in the developed world, although this growth will require an increasing use of scarce world fishery resources in the form of fishmeal and feed compounds.



*The consumption of farmed fish and other aquaculture products does not seem to have grown at the expense of traditional catch fisheries, although there does seem to be some substitution in the market for luxury products.*

Aquaculture could nonetheless ease the protein deficit by expanding towards the high seas with more extensive methods of production. 'Sea ranching'—for example, the release of young salmon (smolts) into rivers, to be recaptured after some years at sea—is one likely development. But progress will most probably be limited: only a few kinds of fish, such as salmon, instinctively return to home waters, where they can easily be captured. Yet fish can learn—recent research on cod has shown that, by using sound, they can be taught to return for feeding. Genetic engineering may also provide a solution.

The legal and institutional framework for such eventualities has still to be developed and refined. Fish do not pay much attention to national frontiers, at sea or inland, and competing claims, fishing or other, can lead to friction between interest groups within a country, and even between countries themselves.

Countries which have invested in aquaculture technology have a primary interest in the further international collaboration necessary if aquaculture is to fulfil its early expectations of substantial amounts of food, employment opportunities and a healthy and viable industry. ■



# International Piracy and Intellectual Property

*Ebba Dohlman*

*Patents, trademarks, copyright, and so on, are all legally obtained 'intellectual property rights', designed to provide the incentive for innovation by protecting intangible property and allowing for exclusive use for a limited time of the invention involved. They are thus fundamental to the international competitiveness of any country. If adequately protected, intellectual property rights promote investment, transfers of technology and international trade. But if not, they may impede or distort trade and, indeed, can result in a proliferation of counterfeit and pirated goods in the international market.*



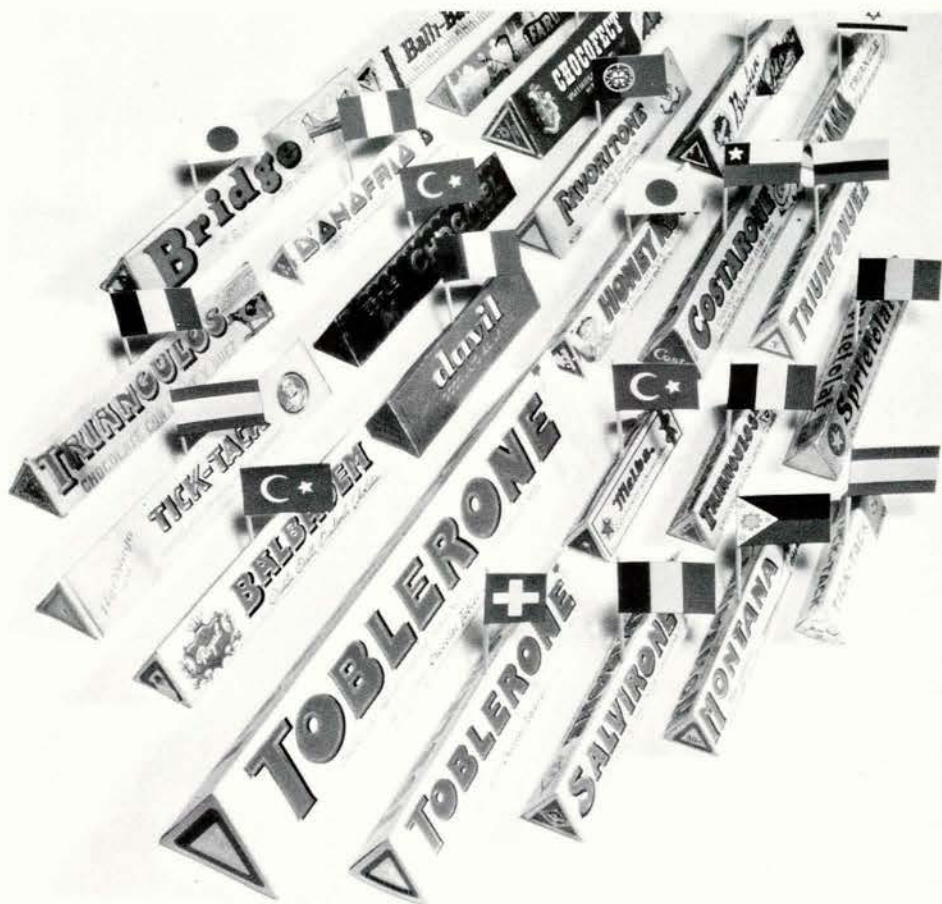
*Ebba Dohlman works in the Division of General Trade Policies and Related Issues in the OECD Trade Directorate.*

*Well-known 'brand-name' products with healthy profit margins have long been the main target of counterfeiters.*

Intellectual property rights (IPRs) are granted through national legal systems. They are therefore territorial. There was early political agreement that inventors should be able to protect their rights in a wider geographical context, which led to a set of agreements and treaties between countries with similar objectives. More than two dozen now exist for the various aspects of protecting IPRs, most of which are administered by the World Intellectual Property Organisation (WIPO), an agency of the United Nations established in 1967.

The two major international agreements under WIPO jurisdiction are the Berne Convention for the Protection of Literary and Artistic Works, adopted in 1886 to handle copyrights, and the Convention of Paris for the Protection of Industrial Property, which came into being in 1883 to handle patents, trademarks, trade names, utility models, industrial designs, indications of source or appellations of origin and 'repression of unfair competition'.

In view of the wide differences in national legal traditions, the approach adopted by these conventions is to lay down a series of guidelines or standards for protection. These include, for instance, recommendations on application procedures for securing rights, and certain standards for defining the scope and duration of the rights as well as their enforcement. It is ultimately up to each member state to take the steps necessary to ensure their national laws conform with the recommendations and obligations assumed by signing the conventions. Yet the consistency in applying rights is to some extent assured by imposing on adherents a fundamental principle common to all IP conventions, that of 'national treatment', which ensures that nationals of any one member country are accorded the same treatment of their industrial property in any other member country as that granted to its own nationals.



## « Vraiment faux »

*An exhibition organised by the Cartier Foundation in Paris to draw attention to trade in counterfeit goods.*

### Protection or Protectionism?

The production and circulation of counterfeit and pirated goods is increasing rapidly. These activities include the identical or near-identical copying of the appearance of someone else's commercial product and are usually calculated to deceive the public into believing the product is genuine.

The traditional victims used to be concentrated in the consumer-goods industries making products with well-known brand names and large price margins (Louis Vuitton, Christian Dior, Lacoste, etc.). Such products attract infringers because they are usually highly profitable and require little capital investment. But counterfeiting and piracy are now spreading to more sophisticated products: pharmaceuticals, chemicals, industrial spare parts, computer software, audiovisual goods, and so on.

Attempts to combat piracy have proved to be difficult, and they have exposed substantial variations between countries in the scope, duration and enforcement of the IPR protection they accord, as well as the shortcomings of the conventions in bridging these differences.

Counterfeit and piracy provide, of course, the tangible evidence that trade distortions exist. In addition, there is a broad range of IPR-related elements which impinge on international trade, and which have given rise to a new acronym: TRIPs—trade-related intellectual property rights.

First, there is increasing internationalisation of production and trade, licensing and joint ventures in which intellectual property, know-how and trade secrets are a critical element in determining competitiveness. The proportion of foreign applicants for IPRs in any given country is also growing steadily.



## 11 juin - 18 septembre 1988

*Cartier watches are among many French luxury products copied by pirates.*

Second, rising R&D costs require larger-scale production and an open international market to recoup them. This is particularly important for patent holders in the high technology industries where there is substantial expenditure on development and testing. Unlike the producers of trademarked and copyrighted goods, patent applicants can claim protection only when they create something which embodies a new idea. Producing the first model of an innovative product is costly while subsequent copies can be made relatively cheaply. Maintaining an edge over competitors is thus vital, and the perceived reward of novelty is the ability to exclude other producers from the market long enough to recover the sizable investment that went into the product.

Third, the new technologies have opened new means of transmitting, distributing and embodying traditional products and forms of expression

which have rendered protection and enforcement much more difficult, if not impossible, within the present set of rules. And simultaneously the new technologies have enormously facilitated the task of infringers as the means of reproducing protected works have become cheaper and more efficient. The infringer can make a profitable business from selling products far below the original price since he has not had to bear the cost of investing in research and marketing, or in elaborate equipment; in broadcasting, for example, to appropriate a copyrighted cassette or TV programme he simply ignores the obligation to pay royalties or licensing fees.

Finally, there has been a gradual shift in the focus of trade policy away from traditional barriers to other forms of protection. It has therefore become apparent that certain IPR practices or policies, although they may not have a direct bearing on trade, may have

effects comparable to production or export subsidies, or to other forms of direct or indirect discrimination against imports.

### **Unwitting Barriers to Trade**

Counterfeiting and piracy are widely considered as criminally dishonest procedures that should not be tolerated. Yet trade distortions may result from IPR-related practices which are not illegal. They may, for instance, result from much lower degrees of protection in some countries than in OECD countries for certain types of inventions; or from the exploitation of variations in national laws or gaps in the conventions; or from the use of IPR legal procedures for anti-competitive and protective purposes.

Trade distortions can also result from activities which are legal within national systems that offer significantly different degrees of IPR protection. Some countries, for instance, do not extend protection to pharmaceutical products: or they may protect the process but not the product, although there may be several ways of making the same product. Some countries do not protect films or some of the newer technologies—software and semiconductor chips. When regimes of IPR protection vary between markets, industries face circumstances which can create potential or effective obstacles to producing, investing or trading their goods for reasons other than those based on sound economic criteria.

### **'National Treatment' No Longer Enough**

Against this background, a number of OECD countries with significant interests in foreign trade, beginning with the United States, began to question the ability of the current multilateral



*More and more, pirates are aiming their sights at pharmaceutical products, hoping to avoid the enormous R&D costs of the genuine article (above). Companies producing computer software, audiovisual equipment and the like are also the subject of such unwelcome attention.*

teral framework of IPR conventions to reform the deficiencies they perceived.

First, they noted that the membership of these conventions was far from universal and varied from one instrument to the other.

Second, their content required revision in the light of changed circumstances. More comprehensive and more clearly defined basic standards were called for, to serve as a yardstick against which national IPR systems should be set and adapted if need be.

Third, even if the conventions attempt to define the nature of the rights, they refrain from a substantial involvement in the procedural aspects of verification and enforcement, with the result that these countries usually attempt to tackle them individually within their own legal systems. Other countries may, indeed, ignore the issue altogether.

Finally, OECD countries felt that the lack, in the existing conventions, of a procedure for settling disputes such as those available in the General Agreement on Tariffs and Trade (GATT) prevented states from bringing up their complaints against IPR procedures of others and from mustering, when required, peer pressure to convince

them to change their policies. The experience of several years of difficult negotiations in WIPO, often bogged down on technical issues, raised doubts on the prospects for reaching the solutions that were urgently required.

The principle of 'national treatment', which is included in all IPR conventions, aims to prevent the wide-ranging discrimination which could arise as a result of national variations. But it is no longer enough: it does not attack the problem of unequal degrees of protection between countries. For instance, enforcement procedures through courts or administrative channels can be worthless if a national legal basis for securing IPRs is so weak to grant no more than token rights.

### **Bilateral or Multilateral Solutions?**

For all these reasons, many countries argue for immediate action to redress those aspects of IPR protection which adversely affect international trade. Such action has so far implied either a bilateral or a multilateral approach.

Some countries (the United States in particular) have already negotiated a series of bilateral agreements with

some newly industrialising Asian countries, amongst others, on the grounds that this approach caters more precisely to national requirements and can do so with almost immediate effect. Singapore, Malaysia, Indonesia, South Korea and some other countries have made recent changes in their legislation to improve aspects of their IPR protection.

But bilateral actions have been criticised in many circles because they raise the danger that concessions obtained will be limited to areas of national interest and contain elements which discriminate against outsiders. The purpose, after all, is to avoid 'solutions' which may themselves distort trade.

### **GATT or WIPO?**

There are two continuing and competing philosophies on multilateral approaches. Some countries, primarily developing, but also industrialised, maintain that WIPO has had many years of experience in issues of intellectual property and, since it has done its job well, should continue to encourage reforms and revisions of its conventions as circumstances evolve. Other countries suggest as a parallel approach the application of remedies and conceptual approaches to IPRs that have traditionally been used in trade policy and the devising of solutions within the GATT. They believe that GATT is the best forum in which to handle the trade-related aspects of IPRs mainly because of its procedures based on negotiation and conciliation.

An attempt was made in the late 1970s to address one specific trade related issue in the GATT by drawing up an international code to protect owners of trademarks from operators trading in counterfeit goods. This initiative was taken during the previous round of multilateral trade negotiations (1973-79), the Tokyo Round, when

## THE LOSSES FROM PIRACY

Leading US, European and Japanese business groups have joined together in calling on their governments to negotiate a comprehensive multilateral agreement in the GATT to stop the theft and illegal copying of intellectual property.<sup>1</sup> In their 100-page report, published on 14 June 1988, they cite large-scale losses worldwide as a result of inadequate and ineffective protection of intellectual property.

US businesses are reported to have lost \$23.8bn in 1986 because of poor protection against all kinds of intellectual property infringements, including home-taping, illegal copying of microchip designs and software, and counterfeiting of chips and consumer products. According to the European Parliament, several billion dollars' worth of counterfeit goods are sold annually within the European Community. While it takes an average of ten years and \$125-180 million to bring a pharmaceutical product based on a new chemical entity to market, a chemist could easily duplicate the product and, if not legally restrained, could produce the drug in sufficient quantities to make it effectively unprofitable for legitimate producers. A new family of semiconductor integrated circuits also costs \$100 million or more to design. Yet, the same chips can be copied for less than \$1 million. A copy of a popular \$500 US software package can be bought for \$7.50. Of the two billion records and tapes sold in the world 25% are counterfeit, with prices in some countries as low as 25% of the price of the genuine product.

1. **Basic Framework of GATT Provisions on Intellectual Property: Statement of Views of the European, Japanese and United States Business Communities**, joint report by The Intellectual Property Committee, Washington DC/Keidanren, Tokyo/Union of Industrial and Employers' Confederations of Europe, Brussels, June 1988.



*Thieving magpie? In 1955 Stravinsky incorporated 'Happy Birthday to You' in the short Greetings Prelude he composed for the 80th birthday of the French conductor Pierre Monteux. In doing so he unwittingly stole the intellectual property of Clayton F. Summy of Chicago, who duly sent Stravinsky a bill for the use of his tune.*

□ □

the focus of trade policy turned increasingly to non-tariff barriers and when solutions were sought in the form of special codes (such as the anti-dumping code and code on technical barriers to trade). But the attempt to pattern a counterfeit code on such other codes met the opposition of a number of countries, mainly developing, and the issue was temporarily dropped.

More recently, efforts were renewed by a number of OECD members who aimed not only to revive the debate on establishing a counterfeit code but also to enlarge international disciplines to include other IPRs than trademarks. The Uruguay Round, in their view, offered the perfect opportunity for improvements, but they managed to include it on the agenda only after overcoming the indifference, even opposition of a number of other GATT countries.

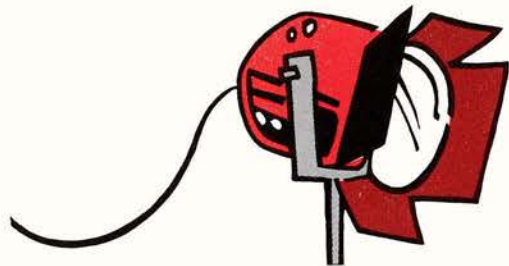
In the event, the agenda of the Uruguay Round agreed upon in September 1986 recognised the importance of promoting effective and adequate protection of intellectual property to help reduce distortions and impediments to international trade, under the provision that 'measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade'. The negotiations are to 'clarify GATT provisions and elaborate as appropriate new rules and disciplines'; these negotiations should also aim to 'develop a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods'.

The Uruguay Round negotiations are expected to conclude in 1990. Although several proposals have been presented, there is rising pressure to reconcile the differences of views among participants and provide evidence of progress for the mid-term review in Toronto in December.

Views range from those which propose the establishment of a comprehensive GATT agreement covering all forms of intellectual property and incorporating a set of minimum standards and basic enforcement procedures, to those who are sceptical of an approach involving GATT and who emphasise their support of national policies and continuing relationship with specialised institutions that have been in place for some time. In the middle is another group of countries which would be willing, as a first step, to consider the problems of counterfeiting separately.

The challenge of reconciling these opposing views is a formidable one, but heightened awareness of the trade problems involved might provide the motivation to seek a common solution and avoid the traps of bilateralism. ■

# Spotlight on



# Canada

**T**he Canadian economy has performed well in recent years. Six years of expansion have returned the economy to high employment and capacity utilisation. Real output in Canada expanded faster from 1982 to 1987 than in any other major OECD country. By mid-1988 almost 2 million new jobs had been created, pushing the unemployment rate down to 7 $\frac{3}{4}$ %. Yet wide regional disparities in unemployment remain: indeed, labour shortages are now being felt in some areas with the unemployment rate in Toronto falling to close to 3%.

These impressive economic gains have been achieved in sometimes difficult external conditions—high real interest rates in the early 1980s and sharp declines in the prices of major export commodities in 1986. Inflation at about 4% has remained slightly above the OECD average. Strong growth from an unusually severe recession in 1981/82 has led to a sizable swing in the current external balance. From an annual surplus of about US\$2 $\frac{1}{2}$  billion over the period 1982/84, the current account reached US\$8 billion (almost 2% of GDP) in 1987.

Growth of around 4% is likely in 1988, and, in the absence of a recession abroad, is projected to be around 3 $\frac{1}{4}$ % in 1989. Domestic demand could expand by about 5% in 1988, and a little less than 4% in 1989. Growth may be still stronger in 1988, with a more marked slowdown in 1989: this will depend on business investment and international demand conditions. Recent surveys suggest that a boom in business investment will be a major source of stimulus this year, although Canadian equipment investment is import-intensive. The current external deficit is thus expected to widen to over US\$12 billion by the end

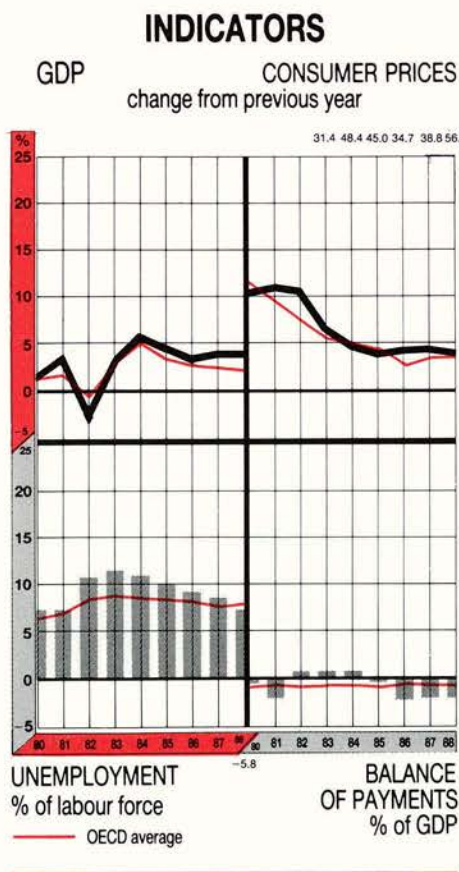
of 1989 (2 $\frac{1}{4}$ % of GDP). With the aggregate unemployment rate projected to drop below 7%, some modest upward pressure on wages is incorporated in the OECD projections. But as a large number of labour contracts are due for renegotiation in 1988, there is some uncertainty about the eventual size of the rise in wages. The high degree of capacity utilisation may increase inflationary pressures. Inflation is therefore projected to edge up despite a significant appreciation of the Canadian dollar and relatively depressed oil prices. In these circum-

stances, macro-economic policy must remain vigilant.

The large and widening external deficit is also a matter of some concern. Rising deficits have increased external debt/GDP ratios, and have left Canada more exposed to developments abroad. By the end of 1987, net external debt amounted to around 40% of GDP and net investment income paid abroad annually was US\$12 $\frac{1}{2}$  billion, some 11% of total export receipts. Because Canada is an international debtor, the balance of payments is also vulnerable to international movements in interest rates. These considerations underline the importance for considerable prudence in setting macro-economic policy and for the vigorous pursuit of trade liberalisation—both multilateral and bilateral as exemplified by the Free Trade Agreement with the United States.

The federal budget deficit has been reduced from 7.4% of GDP from 1984/85 to 3.9% of GDP by 1987/88—a drop of C\$11.5 billion, not less because of decisive measures introduced in 1985/86 and 1986/87: the dismantling of the National Energy Program, tight controls on federal spending on goods and services, a reduction in the growth on Established Program Financing transfers to provinces, and the completion of earlier public investment projects.

Spending rose more strongly in 1987/88—largely because of a big rise in agricultural subsidies to farmers hard-hit by depressed grain prices in world markets. Nonetheless, growth in revenue that was much stronger than expected (up by almost 13%) allowed a reduction of some C\$3.8 billion (about 1% of GDP) in the deficit. The February 1988 Budget forecasts a fall



Source: OECD Economic Surveys: Canada, OECD Publications, Paris, 1988.

in the budget deficit in 1988/89 of C\$1.3 billion (about 1/2% of GDP).

The non-federal government deficit (including local governments, hospitals and public-sector pension funds as well as provinces) increased from 0.5% of GDP in 1984 to 1.3% in 1986, falling to 0.8% in 1987. The deterioration up to 1986 largely resulted from a decline in revenues in the Western Provinces, following the drop in oil and grain prices. While these Provinces have restrained expenditure, governments in provinces where growth was larger were able to spend much more. Spending in Ontario—which has benefited most from the recent expansion—has risen by over 40% in the last four years, twice as fast as in the other provinces.

The general government deficit in 1987 was 4 1/2% of GDP, rather high by international standards; with the economy close to full employment, most of this deficit can be thought of as structural.

Further reductions in budget deficits are indispensable, for three main reasons:

- to control the build-up of debt
- to make funds available for productive investment
- to contain inflationary pressures.

But the unexpectedly strong pace of growth since mid-1987 has made it all the more important that monetary restraint be further supported by other policies.

Micro-economic reforms will also be required to sustain non-inflationary growth. In many ways, the Canadian economy is already highly responsive and adaptable. Labour markets and real wages have proved flexible by international standards. Capital markets are efficient. The large number of new firms created each year attests to the underlying dynamism of the economy. But Canada has had, for many years, lower productivity growth than most other OECD countries. Particularly low in the 1970s, it rebounded in the 1980s.

The Government's Agenda for Economic Renewal set out in 1984 a major re-orientation of structural policies aimed at fostering growth. The energy market has been deregulated, and important steps towards liberalisation have been taken in the transport,

communication and financial markets. A number of government-owned commercial enterprises have been privatised. Import quotas on footwear and automobiles have been removed. Other important initiatives have been taken. But more remains to be done. The regional diversity of the unemployment insurance programme—which discourages labour mobility—requires reform. Inter-provincial trade barriers and distorting subsidies have to be eliminated. Maintaining momentum towards multilateral trade liberalisation is also essential.

Canada has embarked on an extensive tax reform. Stage I (which broadens the tax base and lowers tax rates) took effect on 1 January 1988. Corporate tax reform reduces tax variability across industries and among capital assets, so that the new tax system should distort investment decisions much less than the earlier system. Tax incentives to substitute capital for labour are diminished. By reducing such distortions, economic efficiency should be enhanced.

Stage II is expected to have larger efficiency gains than Stage I. It will eliminate the taxation of business inputs and the knock-on features of the

present system. Capital costs are officially expected to fall by about 4%. Finally, the bias of the present system in favour of imports and against Canadian manufactured goods should be eliminated, enhancing Canadian competitiveness.

The Free Trade Agreement with the United States, which was praised at the Toronto Summit, should provide Canadian companies with both an opportunity and a challenge. Canada is expected to derive large economic benefits from such liberalisation: it is expected to produce lower consumer prices, expanded market opportunities and increased efficiency for the realisation of economies of scale. But a risk of any bilateral trade agreement is that demand may be diverted from lower-cost foreign suppliers, hurting domestic consumers as well as foreign enterprises. A general, multilateral lowering of trade barriers would considerably reduce this risk. It is therefore welcome that the Canadian authorities attach such importance to fostering multilateral trade liberalisation particularly in the context of the current Uruguay Round, and have taken some other steps towards freer international trade. ■



## Denmark

**D**enmark's medium-term stabilisation programme has achieved many of its objectives over the last five years. Perhaps the most important achievement has been the turn-around in public budgets from ever increasing deficits to a substantial surplus, which has no match in the OECD area. Unemployment also fell and inflation was brought down. Lower interest rates stimulated investment and, through wealth effects, consumption; but the increase in domestic demand, which was further helped by changes in income distribution, adversely affected net exports. Imports rose rapidly, and exports fell short of

expectations as competitiveness, which had improved markedly in the period 1979–83, deteriorated, and capacity constraints and labour shortages were more severely felt. Faced with a widening current account deficit (5.2% of GDP in 1986) and rising external debt, the authorities had little choice but to tighten policy.

The 1986 'potato diet' and the 1987 tax reform have gone some way towards correcting the situation. In spite of the stagnation of output, these measures have to stay in place to prevent the re-emergence of imbalances in domestic demand.

Unfortunately, those restrictive

measures were taken too late to prevent labour-market pressures from affecting wage negotiations in early 1987. As a consequence, that year's wage round led to wage and salary increases out of step with the developments in competitor countries. Moreover, Denmark's international competitiveness deteriorated as a result of weak productivity growth, higher social security contributions and the appreciation of the effective exchange rate. To counter the deterioration of international competitiveness, the social security system was changed at the beginning of 1988. In effect, social security contributions, instead of being tied to labour input, are now calculated on the basis of imports and value added in production for domestic consumption, relieving exports and making imports more expensive. As a result, competitiveness may remain approximately unchanged in 1987-1989, assuming a continuation of present exchange rates.

The necessity of continuing tight policies and the state of the international economy do not point to an imminent resumption of domestic demand growth. Moreover, weak competitiveness may lead to further loss of market shares in domestic and foreign markets, even though the fall in domestic demand in 1987 has eased capacity constraints. As a consequence, private-sector production may not display much buoyancy in the near term. With stagnation continuing in the private sector, unemployment may soon start to rise, though, so far, it has not increased, mainly because employment has been bolstered by a reduction in working hours and higher public-sector employment.

The remarkable improvement in the general government budget balance in previous years was largely due to the introduction of a system of central government expenditure control; as a result, public expenditure has been virtually constant in real terms. The main features of this system are increased decentralisation of responsibilities, specific expenditure targets, wider application of user fees and specific requirements for productivity growth. But despite impressive results, there may still be some room for checking further the growth of public spending, not least through charging

for services, introducing market principles in the management of the public sector, flexibility in the government wage structure, and controlling local government spending.

The budget surplus was achieved also because of some increase in tax pressure. High tax pressure and a general focus on income distribution have resulted in high marginal tax rates, even for average income earners. Indirect taxation is also relatively high,

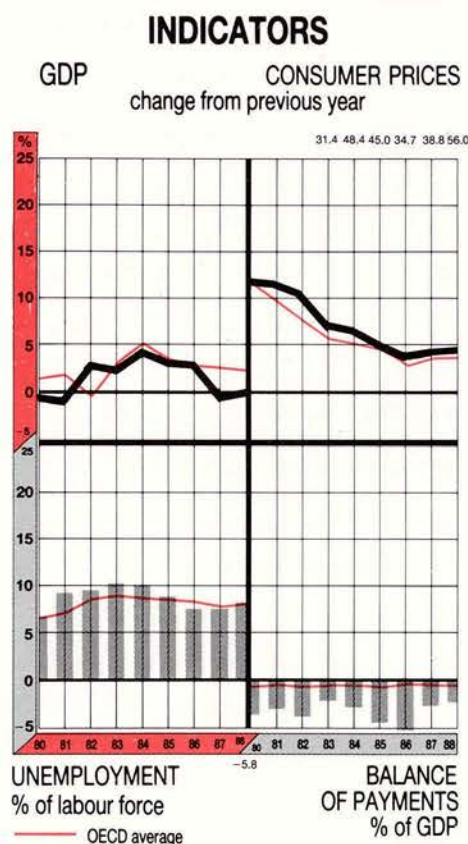
achieved mainly through an increase in household savings. If more reliance on private pensions were part of a design to reduce public-sector responsibility for income redistribution over the lifetime of taxpayers, the impact on private savings might be significant.

Although higher domestic savings would reduce the external deficit, they would not necessarily lead to a reduction in unemployment. A sustainable increase in employment will come about only through improved competitiveness. The desirability of maintaining a firm policy on exchange rates, to encourage price stability, suggests that labour costs should increase relatively less than abroad. This is a very ambitious goal, since these costs stand to be boosted by the extension of the private pension scheme as well as by the agreed shortening of working hours. The scope for increases in yearly wages in the 1989 wage round is therefore very limited. The occurrence of bottlenecks in the labour market in 1986, while general unemployment was still high, showed that flexibility has to be increased—especially by education and retraining—if unemployment is to be brought down permanently.

The foreign debt, at 40% of GDP, makes the reduction of the deficit the foremost concern for policy. This seems to require the adoption of measures which foster institutional changes to help restrict consumption and increase domestic (notably private) savings, as well as leading to improved competitiveness and to a transfer of resources from the sheltered to the open sector of the economy.

Evidently, a turn-around cannot be achieved overnight. Monetary and fiscal policy must continue to be tight. On the supply side, the main emphasis must be put on measures that affect relative labour costs. Saving should be encouraged, and consumption discouraged. Conditions to achieve the aim of a sustainable current account position now seem considerably more favourable than they were at the beginning of the 1980s because the government budget is in surplus and a high volume of investment in the recent past has created the productive capacity to sustain the desired export growth. ■

Source: OECD Economic Surveys: Denmark, OECD Publications, Paris, 1988.



which may pose a problem in connection with the EC Commission's proposals of fiscal harmonisation. The aim of redistributing income over individuals' lifetimes also has brought about high tax pressure. Current plans for wider application of supplementary private pension schemes could provide some relief of tax pressure in the longer run.

With the government sector already in surplus, the increase in domestic savings necessary to achieve external equilibrium without reducing investment and growth prospects is to be





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### Erratum

The photo-credits of *The OECD Observer*, no. 153, August/September 1988 should read as follows:

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# STEPS TOWARDS AN ACTIVE SOCIETY

The Editorial of the 1987 *Employment Outlook* advanced the general objective of 'activity for all in tomorrow's society'. Against the background of a high latent demand for work, which in many countries is not fully reflected in conventional measures of unemployment, it concluded that major developments and policies are required to promote an acceptable future balance between labour demand and labour supply.

The intervening year has brought forward some important developments which permit a sharper, and perhaps more optimistic, statement of the problem and possible responses. Employment has continued to grow not only in the United States and Japan, but also in parts of Europe and in Australia. But unemployment has come down only marginally: in remaining high, it represents a

serious misuse of available human resources. More seriously still, it is rather heavily concentrated on specific groups in society, who may prove unable to participate in the benefits of renewed growth and prosperity unless new policies are developed to get them back into active roles. As the June 1988 *OECD Economic Outlook* observed,<sup>1</sup> the removal of constraints on labour markets and improvement of their responsiveness would help to strengthen growth and employment. So what practical steps in labour-market policy, in the light of the current and prospective employment situation, can be or are being taken to increase employment? These policies include measures to improve employability, both generally and for particular groups, and policies which facilitate the processes of net job creation.

### Recent and Prospective Developments

Continued wage moderation has damped inflation pressures and thereby contributed to the continuation of the present recovery, which began in 1983 and is now the longest-lived since the Second World War. Although consumer price inflation increased slightly last year, and the possibility of a resurgence remains a risk in some countries, no general increase is projected. Profitability has

continued to improve, notably in Europe. Against this background, OECD employment growth since 1983 has been in line with its best historical experience. But it has been uneven, with the strongest growth occurring in North America and Australia.

Unemployment is somewhat lower than seemed likely a year ago: in several European countries it is a full percentage point or more below projections in the 1987 *Employment Outlook*. Among developments contributing to this position have been strong business investment; buoyant consumer spending; and in some coun-

tries special measures to tackle unemployment. In 1989, a further fall in unemployment is expected in North America, but a reversion to 1986 rates seems likely in Japan and Europe, resulting in little or no projected change in the unemployment rate for the OECD area as a whole. Thus while North American unemployment will remain low in comparison with the preceding

1. OECD Publications, Paris; see also *The OECD Observer*, No. 153, August/September 1988.

decade, the average rate for the other OECD zones will scarcely have changed since 1983.

A somewhat disquieting feature for many European countries is that this relative stability of unemployment since 1983 has continued despite increases, often substantial, in vacancies registered with employment services. In some cases an increase in registered vacancies may reflect efforts by employment services to attract employer clients. But a less comforting explanation is that the unemployed seem not to be filling vacancies effectively. Actual shortages of labour, as reported by employers, have re-emerged in some member countries since 1984 although, except in Sweden and Norway, they remain less severe than at the 1979-80 cyclical peak. These developments suggest that the problem of 'mismatch' between the skills of the unemployed and the requirements of the available jobs has worsened.

### Lines for Policy to Reduce Unemployment

The main public expenditure consequences of high unemployment have often been increased expenditure on income support. But income support payments, while often vital, are not in themselves a sufficient response: for people of working age in OECD societies the only route to a stable and adequate income is through paid work. If the aim of policy is to assist individuals to obtain an adequate income and also, as far as possible, to perform a useful role in society, new combinations of work and welfare would seem to be required to achieve that goal for many of the people at risk. The impli-

cations for policy of achieving such new combinations of work and welfare were discussed by OECD Ministers of Social Policy in July. Ministers agreed that 'Such a shift in emphasis—which is already beginning—will require closer and more active co-ordination of social, labour market, and education and training policies. It will also need to take account of the importance of appropriate work incentives'.<sup>2</sup> Income support systems in OECD countries were generally designed to do little more than tide people over during periods of unemployment which were expected to be short. Their current form naturally reflects—in part—overlays of a variety of past labour-market circumstances and past social climates. Even judged in their own terms, some policies on income support for the inactive and for the unemployed are confused. Such confusion is also in some cases reflected in the structure of labour-force programmes. The longer that unemployment, and particularly long-term unemployment, has persisted, the more it has become clear that a new framework of thinking is required. Such a framework, while continuing to pay due attention to income security, will also have to concentrate on improving employability.

Education and training provision for the unemployed—and indeed for many of the people who do now have jobs—is one important general component of a policy to increase employability. A 'rediscovery' of human resources as a major determinant of economic performance has emerged in policy thinking in many countries, entailing an increased emphasis on education and training. In some countries, action is

being taken through gradual modernisation of education systems and, in labour-market policy, through switching resources from temporary job schemes into the retraining of the unemployed. Several have moved to adjust support measures to avoid disincentives for employment or for participation in education and training.

The central role of an educated and well-trained workforce in economic and technical change was the main theme of the OECD Intergovernmental Conference on Education and the Economy in a Changing Society, held in Paris in March 1988, at which ministers and government representatives considered, with employers and trade unionists, how education and training might contribute more to economic progress, and especially to relieving shortages of skills. It was recognised that, given the high cost of educational failure in the labour market, schools have to make special efforts to combat educational under-achievement. The conference also recognised that skill formation was more and more a necessary part of work, and that consequently employers must assume more responsibility for it, although in the training of those currently unemployed, the role of government will remain paramount. In both cases, concerted action is required, involving governments (national and local), employers and trade unions.

But it is not only the skills and talents that workers possess (employability) that affect employment prospects; equally important is the enterprise that employers bring to regenerating existing activities and, even more importantly, to starting up new ones. A comprehensive policy for employment, therefore, has to act on both these fronts.

The mechanism whereby such es-

2. *The Future of Social Protection*, OECD Publications, Paris, forthcoming autumn 1988.

essentially micro-economic improvements can act to increase total employment is an important one. Too simplistic a macro-economic perspective can lead to the pessimistic conclusion that labour-market policy cannot affect total employment. Total employment, the thought goes, is determined by output; output is determined by aggregate demand; and aggregate demand is determined only by macro-economic factors such as tax rates and interest rates, savings propensities and export sales.

A broader perspective leads to a recognition that aggregate demand can be raised by efficient micro-economic functioning. If the labour force becomes more skilled, if companies become more effective in creating new lines of profitable business, if competition policy becomes more effective, and if potential employers and employees are motivated in the confidence that their employment-oriented activities will be worthwhile, then output quality and productivity improve and inflation falls, leading to higher real incomes and so to higher real domestic demand. Through these mechanisms, the immediate micro-economic impact of employment measures can be validated macro-economically. For any individual country, higher export and lower import demand will reinforce these general effects.

Such micro-economic influences on demand are particularly important in the longer term. Macro-economic policy instruments—fiscal and monetary policy—are now fairly generally recognised to be effective only within strict limits. Expansionary policies carry with them the risk of inflationary pressures, sometimes acting through a balance-of-payments deficit and a fall in the exchange rate, which all too

frequently provoke recession, reversing the intention of the policy. Thus an optimal macro-economic policy can at most steer a course between the dangers of excessive expansion and excessive contraction; it is the micro-economy which determines the point where the limits to expansion lie. Historical experience is that such micro-economic constraints have often been fairly tight and, in effect, determined actual employment in the medium term.

### The Case for Targeting

One of the main conclusions of a forthcoming OECD synthesis report on labour-market programme evaluation is that, no two individuals, occupations or regions being identical, meeting the requirements of individuals should be the basic goal of any set of measures to improve employability. While education and training policies cannot practically be designed to meet every particular requirement, there are large potential gains to be achieved from paying attention to at least broad classes of demand. Effective targeting is best achieved through procedures—such as, for example, those implemented in the Canadian Jobs Strategy—which are based upon an understanding of the main different segments of labour markets, and which seek local solutions to local problems by tailoring options and measures to local and individual requirements.

#### Youth

Previous *Employment Outlooks* have stressed the importance of developing

education and training policies to give young people 'a solid and broadly-based education, [...] equipping them with essential basic skills and competences on which to build vocationally-specific skills'.<sup>3</sup> In recent years many OECD governments have indeed been concentrating scarce resources on young people. The effects can be seen in the recent fall in youth unemployment relative to total unemployment, in all the larger countries except Japan, where youth unemployment has been low throughout. Other factors contributing to this fall have been the lower numbers of young people entering the labour market and probably, in some countries, lower relative wages for young people.

The patterns of activity of young people appear to be changing, with education and work more often carried out simultaneously. This probably facilitates their transition into the world of work. Further integration of labour market activity and education will require more flexible education systems. These will have to allow more scope for forms of part-time attendance, and closer links between educational institutions and those of the labour market. The 'dual systems' of vocational education in Germany, Austria and Switzerland provide, in many ways, a model for such developments. A continued restructuring of employment opportunities, especially towards more flexible patterns of working time, including part-time employment, will be a complementary part of this process.

But such developments will not directly benefit young people leaving school with essentially no educational qualifications or skills, belonging to

3. *Employment Outlook*, OECD Publications, Paris, 1987, p. 13.

minority groups, or living in economically depressed regions, who are either outside the core labour force or have only tenuous connections with it. These young people include some of the more disadvantaged, who are particularly vulnerable to unemployment, not only while they are young, but also as they age. Thus special measures have to be targeted on this group, not only in the form of labour-market programmes, but also efforts to allow them to gain marketable, basic educational qualifications.

### Older Workers

The participation rates of older workers, especially men, have almost everywhere long been declining. This trend seems to have been accompanied by an increase in the availability of public and private pension income: as the relative costs of leaving the labour force have declined, retirement may have become more attractive. But falling participation must be considered also in the light of the relatively high incidence of long-term unemployment among older persons, and the evidence that many older, long-term unemployed may leave the labour force because of discouragement after months of unsuccessful job search.

The lowering of average retirement ages must be evaluated against the background of an aging population throughout the OECD area, which tends to reduce the number of active contributors to social security schemes while increasing the number of beneficiaries of pensions. An increase in retirement age would help to ease some of the potential financial pressures inherent in this demographic shift, and would probably be welcomed by some older workers. Any increase in the average age of retire-

ment will almost certainly have to take place in the context of increased flexibility in the individual retirement process. Successfully meeting this objective will require complementary social and economic changes, notably expanded training opportunities, improved flexibility in working-time arrangements, and changes in the valuation of the actual and potential contribution that the elderly—particularly the 'young elderly'—make to society.

The new technologies continue to change methods and organisation of work. Few can expect to remain in a fixed employment structure throughout their working life. For some, sudden change will force a change of career in mid-life. OECD countries furnish many examples—especially in Japan—of companies that offer stable employment and yet engage in rapid structural change, all the while retraining and redeploying their employees. Such strategies offer a promising model, yet they too are not without problems for older workers. Rising salary scales are required to retain and motivate employees, yet these imply a policy of compulsory retirement to contain the cost of employing older workers whose salaries may exceed their productivity. Company personnel practices and government welfare policies interact, and each party can formulate policy better when it considers both sides of the picture.

### Displaced Workers

During restructuring, some employers try to offer alternative jobs to affected workers, in order to avoid lay-offs. But in other instances displaced workers receive little help other than such financial compensation as severance

payments, unemployment benefits or pensions; in consequence, many end up as long-term unemployed or leave the labour force, even though they are willing and able to work. Almost every OECD country has labour-market programmes to help the displaced get new jobs; these include placement services, counselling, and training, but there is considerable variation in the scale and nature of these efforts. Considerable administrative flexibility is required, the permanent facilities available at any particular locality seldom being sufficient when a major redundancy occurs. Competent local managers are required, ready to establish contacts with local authorities, employers and other organisations, and able to take initiatives in arranging training and orientation courses and *ad hoc* measures such as referral facilities and relocation assistance.

Middle-aged and older workers who are made redundant from long-held jobs are particularly susceptible to losing their place in the labour market. Older workers will constitute an increasingly large proportion of the labour force. It is particularly important, therefore, to prevent large numbers of older workers from being pushed into long-term unemployment or into discouraged withdrawal from the labour force. Once out of contact with the regular labour market, it becomes difficult for them to re-enter. Any such development on a large scale would exacerbate the increased fiscal pressure on social protection structures to be expected early in the next century.

### Women

Women have always been strongly represented in the so-called 'second-



ary labour market'. And over the last twenty years the female share of total employment has increased rapidly and women have entered virtually every occupation, sometimes at the highest positions. The gap between male and female hourly earnings has fallen substantially and, indeed, there are indications that it has been halved in some countries. For those countries where female participation rates are highest, a substantial proportion of the current generation of young women seems likely to experience only short absences from employment over their working lifetime, giving them better chances of accumulating skills. While the entry of married women may have displaced some younger workers from employment,<sup>4</sup> overall this is likely to have been outweighed by multiplier effects which derive from female participation—in particular, the generation of demand for services to families, including child care and household support. And the contribution of female entrepreneurs, though a small part of overall job creation, should not be overlooked.

It is clear that, despite progress, the potential contribution of women to the economy is far from fully developed. Women are more likely than are men to be either unemployed or discouraged workers. Women—even younger women—are still concentrated in a small number of occupations, and are found in relatively low-level positions within each occupation. Although the situation is improving in many countries, they remain disproportionately represented in precarious forms of employment and at the bottom of the earnings distribution. A fundamental reason is that, despite the progress

made, women's career patterns often do not display the continuous, full-time employment experience necessary for entry into the more highly-skilled occupations and to the higher-status positions within them. This arises partly from the fact that the peak ages of child-rearing demands coincide with the key ages for building a career.

Policy can help solve this structural difficulty in women's employment; one important element is the appropriate provision of child-care services to families. Flexibility may also be facilitated—in some cases relatively costlessly—through modifications in school timetables, changes in the organisation of work, flexible working hours, and appropriate forms of social protection. Those countries with the most systematic child-care strategies often have above-average female participation rates (such as Sweden) or relatively high rates of full-time employment among women (such as France), although the way taxes are levied may also be a significant element in women's employment choices.

From a larger perspective, the issue is one of life-cycle choices. A range of options must be available to women if they are to be an integral part of an active society. These include working or remaining at home to care for children, or a combination of these with other constructive activities. Providing women with more flexibility provides similar flexibility for men, and for men the gains may emerge in the form of a reorganisation of time spent in parenting, working in paid employment, and in other chosen activities.

Apart from tackling structural constraints to full participation, policy may also have to combat explicit discrimination against women in employment. Evidence suggests that policies of equal pay have been successful in

raising the relative earnings of women. In addition, affirmative action programmes seem to have had some, limited, success in reducing systematic discrimination against women in employment.

### **Lone-parent Families**

More and more children in OECD countries are being raised by only one parent—usually the mother. Families headed by women often have low incomes, in part because of the absence of the father (and his resources), the limited earnings of many women, and the considerable difficulties of reconciling paid work and family obligations.

Without adequate earnings or support from the absent parent, the lone mother may have no choice but to rely on income from social assistance programmes. Yet government income maintenance programmes frequently provide only relatively low benefits, and discourage any real moves towards self-sufficiency. In some public schemes, benefits are reduced when a woman has earnings or income from the absent parent. As a result, there may be little advantage in working (or receiving child support) unless earnings far exceed benefits and are adequate by themselves to bring up the family and pay for the costs related to working. State support can thus trap many lone mothers in dependency.

Thus it may not only be sound social policy, but also over the long term economically cost-beneficial to direct policy at preventing economic vulnerability. For those who come to lone parenthood with existing disadvantages—poor educational backgrounds, few if any marketable skills, little or no

4. *Employment Outlook*, OECD Publications, Paris, 1986, Chapter 5.

previous work experience, and therefore little hope of sustaining a family—more intensive investment in raising earnings capacity may be necessary. Integration of public income support (perhaps as a transitional mechanism) with direct employment-related assistance may be required. Such assistance could include counselling, education and training (including training in techniques of job search themselves)—and could extend to public job guarantees when other efforts fail to generate employment.

### Long-term Unemployed

Although recent data show significant falls in the United Kingdom and Belgium, in general long-term unemployment persists as a serious labour market problem, especially in a number of European countries. Analysis of labour-force flow data confirms that movements out of unemployment become increasingly infrequent the longer a group has been unemployed. The trap in which the long-term unemployed find themselves—lack of work experience, declining human capital and lost contact with the job market—is worrying, in respect both of the affected individuals and the wasted productive potential of society as a whole. A number of countries, including Belgium, France, the Netherlands and the United Kingdom, have recently undertaken major initiatives in this area. Such initiatives fall into three major categories: counselling to improve job-search; training and direct employment; and wage subsidies. But, reacting to unemployment only when it has become long-term is wasteful: measures should also be taken to help the shorter-term unemployed into

employment before they, too, become long-term. This requires preventive measures which intervene at critical stages in the cycle of unemployment. But it is not always easy to identify those most at risk, especially when the overall rate of unemployment is high.

Moreover, the problem extends even beyond the long-term unemployed as conventionally defined. Of those long-term unemployed who do escape unemployment, a significant proportion, especially among older workers, do so by leaving the labour force. Hence among this group in particular a significant proportion of the exits may be involuntary, so that programmes which focus only on the openly long-term unemployed pass some part of the problem by.

Even in countries where long-term unemployment does not appear to be particularly prevalent, the limited evidence available suggests that unemployment is generally concentrated among a relatively small group of the labour force: in this group many individuals experience multiple shorter spells, interspersed by periods spent out of the labour force or in employment. Depending on their causes, rather different policies have to be developed to address such different patterns.

When an unemployed person succeeds in finding a job, the characteristics of that job can be important. A disproportionate number of those who enter employment from long-term unemployment apparently take temporary or part-time jobs. Although such jobs can be a useful stepping stone to longer-term employment, those in them are also more likely to experience future bouts of unemployment. Hence it can be as important to provide help for people in precarious work situations as it is to help the unemployed.

## Policies to Encourage Job Creation

This analysis has emphasised the importance of increasing the employability of many workers if unemployment is to be brought down, and have stressed the range of targeted policies required to achieve this end. But such policies may well not be sufficient; unemployment arises not only because individuals have inappropriate talents, but also because appropriate structures for the profitable employment of existing talents are not in place. In some countries, there may be scope for state employment services to make a larger contribution. Initially overwhelmed by sharp rises in unemployment, many of these services reacted by concentrating work on the administration of income maintenance payments. They may now have to pay renewed attention to the problem of matching the talents and enthusiasms of each job-seeker with the content of the jobs offered and the requirements of each employer client.

Any enterprise is more than the simple sum of the skill and talents of its employees; it consists also of the links between individuals, collective experience, and organisation and planning that enable its workforce to be more productive collectively than they could be separately. Productivity growth has been the most important of all the factors allowing modern societies to maintain and improve the general standard of economic welfare, and is essential in order to provide the resources to meet higher real wages and higher job-creating investment. New technologies offer, perhaps above all, the potential for the requisite pro-

ductivity growth. Yet an innovation can become widely diffused only when the potential productivity gain it offers is realised in practice, and the successful introduction of an innovation often involves substantial changes in organisation and methods of work.

By allowing faster pooling of information and implementation of decisions, new technologies are bringing together previously separate enterprise functions. Such integration, requiring increased worker participation and responsibility and less hierarchical control, is best introduced through early discussions between managers and workers and their representatives in the enterprise. Job definitions have to be upgraded and broadened, while a multi-skilled workforce must be developed to take on the responsibilities offered by the changes in work organisation. By co-operating to ensure that their activities complement each other, firms and public training organisations can contribute importantly to the successful diffusion and integration of the new technologies.

These issues of the interrelationship between labour market flexibility and the abilities of economies to deal with technical change and adaptation to new technologies are emphasised in two recent OECD reports: the report by a high-level group of experts chaired by Professor Ralf Dahrendorf, *Labour Market Flexibility*, released in 1986,<sup>5</sup> and the report by the Group of Experts chaired by Ulf Sundqvist on *New Technologies in the 1990s: A Socio-economic Strategy*.<sup>6</sup> The Dahrendorf Report, which discussed the processes by which increased labour market flexibility might be achieved across the OECD as a whole, was inspired in part by the belief that a more flexible labour market is one in which more people will

have the opportunity to participate. The Sundqvist Report, which characterises technological change as a 'social process', observes that a variety of social innovations are required to translate technology-induced productivity gains into higher employment, and draws particular attention to the crucial role of a responsive education system—including under this heading the contribution of enterprise-based training.

Economies which are undergoing successful continuing change are dependent on a local enterprise culture. And because net employment growth seems to be concentrated in the service sector,<sup>7</sup> it is particularly in this sector that the process has to take root. The creation and expansion of small firms is a principal source of new jobs, while enterprise dynamism is in large part determined by the local entrepreneurial and business climate. Hence, effective enterprise and employment development efforts are a local phenomenon generated by local people: businessmen, banks, universities, local governments, and trade unions.

The harmony of interest between the local and macro-economic spheres of policy deserves recognition. While local participants must accept that macro-economic expansion is often constrained by the proneness of modern economies to inflation, central policy-makers must appreciate the talent, imagination and entrepreneurship

that exists locally. This means that they should seek to create a climate in which local initiatives will neither be stillborn for lack of demand, nor impeded by excessive regulation, and with some policy-making authority sufficiently decentralised as to give full vent to local initiative and imagination. The achievements of local employment and economic development policy should be seen not only in terms of numbers of immediate jobs or enterprises created, but also in terms of the dynamics which they set up. This is a long-term strategy which, when successful, results in a culture of adaptability, entrepreneurship, resilience and creativity, and which will enable the people of any one local community, however large or small, to make the most of whatever economic resources they can muster to cope with the changes that confront them.

Where factors that promote individual and local employability and job creation have been an intrinsic part of a national economy for some time, they can be seen to work: in the extensive efforts made to retrain unemployed workers in Sweden as much as in the birth of new enterprises in the United States and Japan. It is tempting to read, in the recent combination of declining government budget deficits with unexpectedly vigorous employment and output growth, evidence of structural improvements in OECD economies, particularly marked of late in some countries such as the United Kingdom, Australia and Spain. Although the impact is difficult to measure in an exact way, it seems likely that structural reforms begun earlier in the 1980s can claim credit for at least some of the improvements occurring now.

5. See also 'Labour Market Flexibility: A Controversial Issue', *The OECD Observer*, No. 141, July 1986, pp. 13–16.

6. Its 'Conclusions and Recommendations' have now been published: *New Technologies in the 1990s*, OECD Publications, Paris, 1988.

7. *Employment Outlook*, OECD Publications, Paris, 1987, Chapter 1.

