

# **The Wider Environment of Schooling: Deep Trends and Driving Forces**

## **Introduction**

This report begins with a broad survey of the major trends that set the environment in which schools will be shaped into the future. The trends reviewed are drawn from a number of the fields – economic, social, political, cultural, environmental – that are closest to the world of schools and schooling. Such a presentation is not meant to imply that these wider trends define agendas to which the educational world must simply react. Yet impact they undoubtedly do on the world of education, shaping its nature, outcomes, and the agenda of aims for tomorrow.

The features and trends presented are necessarily selective from the manifest complexity of the world of today and tomorrow. The complexity is compounded as not all trends point in the same direction, and sometimes conflict in terms of their impact on, and the agenda they set for, schooling. On some aspects, countries share similar basic developments, on others there are clear differences, even growing divergences. The aim in this chapter is to identify the “deep” factors and driving forces, rather than the more short-term aspects that tend to grab media attention.

The discussion of the wider environment of schools, together with the educational issues and trends of Chapter 2 are essentially historical as they are based on visible developments. Certain questions they raise for the future are identified. The trends in turn inform the scenarios for schooling presented in Chapter 3, where the perspective shifts from past and present to possible futures. The Secretariat report concludes in Chapter 4 with a recapitulation

and discussion of the key emerging points, the policy questions and dilemmas these give rise to, and conclusions about avenues for further exploration in clarifying the school of the future.

### **Childhood, generational issues and the ageing society**

#### ***Childhood in the 20th and into the 21st centuries***

Too often, discussion about schooling for the future is divorced from consideration of the nature of childhood and youth in today's societies. Social historians at least since Aries (1973) have shown how the very nature of "childhood", far from being a given across time and cultures, is shaped by the particular circumstances of each era. This is easy to overlook, because our ways of organising childhood seem so natural.<sup>1</sup> Another reason for overlooking the nature of childhood may be the perception that it changes so slowly as to be, in effect, a given for the foreseeable future. This would be an unwise assumption as the status of childhood is currently subject to powerful pressures on a number of fronts.

#### ***Schools at the core of structures for childhood***

Schools lie at the heart of these arrangements and of modern notions of "childhood", even if other sources of influence – TV and computer games perhaps, or the peer group – seem to exercise a more attractive pull for large numbers of young people. Organised schooling is in essence the compulsory cloistering of young people from a very early age into specialist educative institutions, characterised by their distinctiveness from adult life. The benefits of compelling this experience on all young people – benefits that are seen to accrue to society and to the young person and their families, now and in the future – are widely agreed to justify any costs incurred by the loss of freedom that compulsory attendance entails. Norms for staying on in education have continually been pushed back to older and older ages, delaying the onset of recognised "adult life" and extending the cloistering process.

The distinctiveness of "childhood" as a phase has been reinforced by other long-term trends, regulating, for instance, the ages when paid work, sexual activity, and family

formation can begin, each strongly justified in terms of personal protection and the avoidance of exclusion. Early pregnancy/childbirth, far from being regarded as a norm, has come to be seen as a major social problem to be rectified. The long-term employment shifts, particularly the shift away from agriculture and other primary industries with its concomitant impact on communities, have served to distance work from the lives of the young, though some return to home-based work may in part reverse this trend.

The delayed process of entering fully into adult life can be described as “extended adolescence”. The analysis prepared for the 1998 meeting of OECD social policy ministers described young people “deferring both marriage and childbirth until they can achieve economic autonomy – and this is taking longer” (OECD, 1999a, p. 16). The OECD work on transitions from school to working life has analysed the rapidity of this set of changes to suggest that between 1990 and 1996 the duration of young people’s initial transition to working life grew by an average of nearly two years (OECD, 2000d). This is indeed very rapid and substantial change, raising the question of the limits of its continuation. How far are more flexible mixes of learning and work already emerging, especially as broader developments in the economic, society and lifelong learning argue for greater flexibility instead of an increasingly rigid age segmentation into different life phases? However desirable, the facts underpinning “extended adolescence” warn that such flexibility cannot at present be assumed.

***“Extended adolescence”***

With the extension of childhood and adolescence, tensions are introduced that may prove substantial enough to force new departures. For instance, the delay in acquisition of adult status, reinforced by the deteriorating labour market position of young people, stands in contrast to the earlier onset of puberty and sexual activity [around a third of 15-year-olds in a number of countries participating in a recent WHO survey report to having had sexual intercourse (WHO, 2000)]. Another example is that children and young people have become extremely powerful forces in the “adult world” as consumers, and are being carefully targeted

***Tensions and pressures for change***

in corporate marketing strategies. This is occurring at the time that their acquisition of full autonomy over their own resources is being delayed. A related set of concerns arises in relation to disaffection, even violence, within schools that have been designed for children yet must cater for young people with greater maturity and a wider range of out-of-school experiences. Prout (2000) advances the hypothesis that a growing gap is emerging in which public institutions are increasingly concerned with the control of children, while the private sphere is where children are more allowed to “express choice, exercise autonomy, and work at their individual self-realisation”. To the extent that this gap is growing and that the school belongs firmly in the public domain, it may prove increasingly difficult to maintain legitimacy and student motivation.

### *Ageing societies*

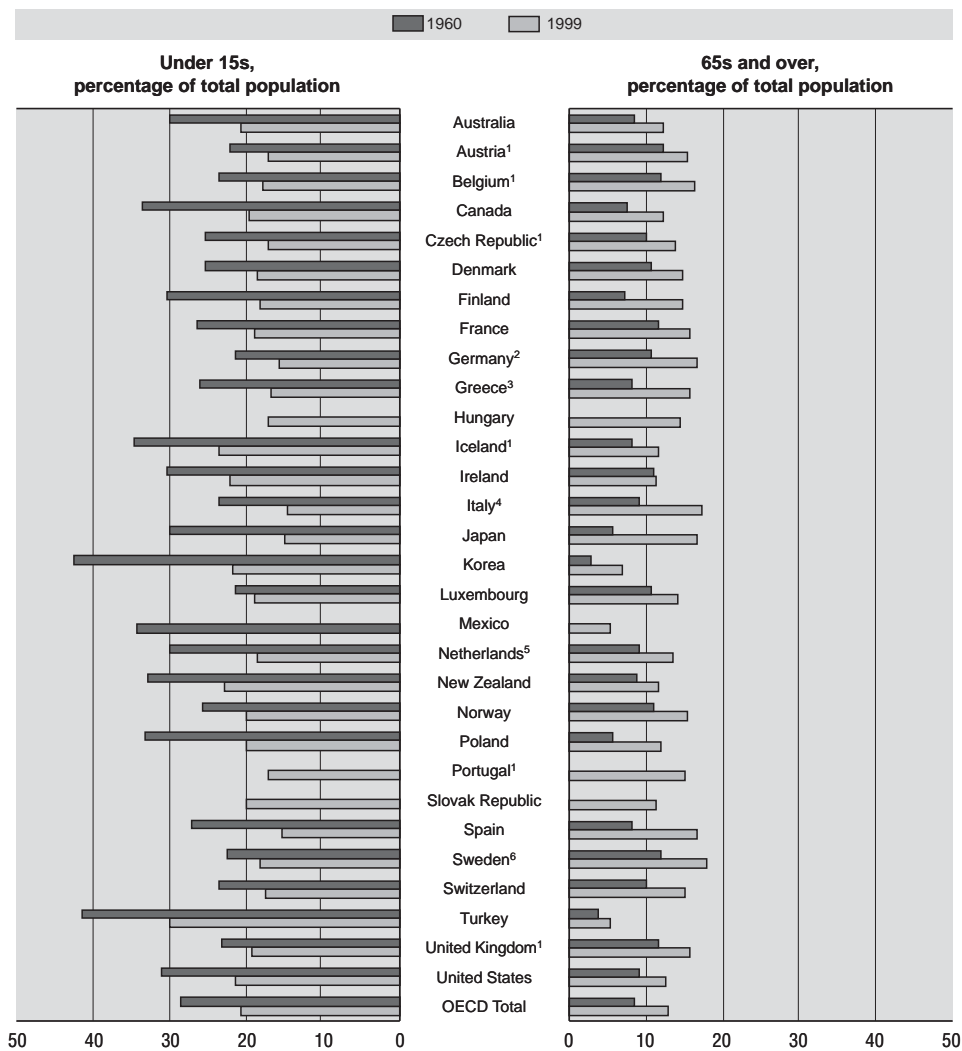
#### ***The “greying” of OECD societies***

However, some of the most important pressures are being exerted from changes taking place at the other end of the age spectrum; questions relating to intergenerational relationships and segmentation cannot be understood apart from the ageing of societies. By 1999, the proportion of under-15s has fallen to less than 1 in 5 of total national populations in as many as 22 of the OECD countries, with only Mexico and Turkey significantly above this level. In 1960, in no OECD country was it as low as this. For the first time, the proportions of over 65s are beginning to approach those of the under-15s, and had reached 15% or more in 13 OECD countries (Figure 1.1). In short, our societies are “greying”.

The “dependency ratios” – the numbers in the economically “non-active” to “active” populations – continue to go up linked both to ageing populations and to “extended adolescence”. One proxy for this is in the comparison of the 15-64 age group with the combined numbers of under 15s and over 65s.<sup>2</sup> Over the longer term, the ageing of populations and rising “dependency” are set to continue:

“Population ageing means that OECD countries are at the end of a period which saw a steady increase in the share of 15-64 year-olds in the total population. Dependency

Figure 1.1. Age structure of OECD countries under 15 and 65 and over, 1960 and 1999



1. 1998.  
 2. Former West Germany only.  
 3. 1996.  
 4. Under 14.  
 5. 1997.  
 6. Under 16.  
 Source: OECD (2001b).

ratios in most countries are set to rise over the next 30 years, with some countries showing particularly sharp increases after 2010. In countries which are relatively young (*e.g.* Mexico), dependency ratios are still high but are projected to fall (OECD, 1999a, pp. 13-14)."

***Growing  
"dependency ratios"  
and pressures for  
change***

The growing dependency ratio could well be influential in leading to re-thinking the squeeze of the "active" generation into an ever-tighter age range in the middle of people's lives. The impact on public finances – increased calls on the expenditure purse unmatched by growth in the tax-paying base – could add to the social and/or educational arguments for re-examining the wisdom of the continued extension of adolescence. The evidence suggests that these are long-term changes, as it is only by 2020 and especially 2030 that very significant differences will be apparent from today. When those years are reached, however, the changes promise to be on such a scale as to have been anticipated by policy strategies well before then (see Visco, 2001).

***New inter-generational relations?***

***The generation gap,  
a perennial – but  
new inter-  
generational forces  
at play***

It is a perennial of educational and social debate that each "older" generation regards the habits of youth as a worrying break with the past. Kennedy in this volume (Chapter 10) describes this as a tradition to be traced back at least to Plato, and appearing with regularity over the past century. Habits of speech, dress, and social activities by the young contain an element of "shock value" that often do just this, and help to establish independence from parents and schools while reinforcing peer-group inclusion. Yet, the aims of many of the young tend to be very conventional, with similar aspirations to their parents – so much indeed that a common complaint from the ageing baby-boom generation is that younger adults are altogether too conventional.

If these tensions are perennials, is there any evidence that the current generation of young people has entered into qualitatively different relationships with their elders than in the past? There are certainly some grounds for reflection

about generational relationships to inform thinking about schooling in the future.

One reason for this lies in the nature of learning and knowledge experienced by the “Nintendo Generation”. A new argument is that this sets them increasingly apart from the world of schools and adults in terms not only of culture but of cognitive development. On this view, many young people have developed competences and approaches through their facility with ICT that find such poor reflection in their schooling as to reinforce distance and disenchantment. Michel in this volume (Chapter 11) also expresses concern about “zapping and surfing rather than the search for knowledge”. As yet, however, firm evidence is lacking on the extent to which new cognitive processes are being developed through computer games etc., and, to the extent they are, whether this is a matter of urgency either for the young or for schools. There is thus a host of unanswered questions relating to the “Nintendo Generation” calling for more profound reflection.

### ***The “Nintendo Generation”***

Further grounds for reflecting whether inter-generational relations are entering new waters lie in the “contracts” that bind schools, parents and students. Over the latter decades of the 20th century, compulsion and regulation for the young have given way on many fronts to negotiation and consensus-seeking. The abolition of corporal punishment in many countries – in schools and, to an increasing extent, in homes as well – is one tangible indicator of this change. The establishment in some countries of rights for children to sue their own parents can equally be seen as a step of significance in recasting relations between the generations. Changes in discipline and rule-enforcement would be among the most noticeable shifts in school life and socialisation to strike someone revisiting today’s world from the past. A question arising for the future is how far traditional organisational models and school ethos will prove untenable because of these broader cultural shifts.

### ***Negotiation with young replacing compulsion***

A third possible “generational” shift concerns the lack of engagement by many young in the civic fabric of society.

### ***Lack of civic interest***

Kennedy describes one international study and the pessimism expressed by the researchers in the results:

Hahn (1998) investigated students' political values and understandings in Denmark, Germany, the Netherlands, the United Kingdom, and the United States.<sup>3</sup> Students were asked to report on their levels of political trust, experiences and interest, their confidence and views on political efficacy and their future civic participation. The researcher's own words are unambiguous: "the questionnaire responses are quite dismal... the depth of students' political cynicism (...) is troubling" (p. 31).

***Individualism and sustainability – the role of schools in fostering sustainable experiences and values***

Robert Putnam's most recent analysis of social capital (2000) – the "Bowling Alone" thesis about individualism, fragmentation and isolation in modern society – contends that there has been a clear generational shift. In his view, recent cohorts are less inclined to join, volunteer, engage politically or socially, or trust others than did earlier generations. This is not specific to the the young in school as it refers equally to their parents. This is a recent and controversial analysis, and the OECD/CERI work on human and social capital has concluded that, outside the US and Australia, the evidence is not compelling that engagement has declined in quantitative terms. It may well be, however, that the terms of that engagement are shifting to more individualistic and transient activities (OECD, 2001d). A question that then needs addressing is whether the spread and depth of individualism means that at some time the very sustainability of society will come into question. If it might, an obvious question for schools as key social institutions is what role they might play to foster more sustainable experiences and values.

***The power of the retired as a political force – supportive of schools?***

A final generational issue for this section concerns the growing numbers and relative prosperity of the retired in OECD societies. Söderberg in this volume (Chapter 9) summarises Swedish data on attitudes held by different age groups towards schools, and finds that a qualitative break in attitude occurs between the over- and under-65 year-olds (as this is the case in Sweden, with its strong tradition of support for public services, even greater age differences might be found elsewhere). In judgements of how well



schools succeed in reaching their objectives, the youngest age group with the most recent experience of schools was the most, and the oldest age group the least, positive. Not only is distance from schools' activities greater for the elderly, and their perceptions of relevance lower, but the importance of other public services, particularly health, understandably receive a higher priority.

Clearly, such a summary is far from conclusive for OECD societies in general, and in itself holds no surprises. What is noteworthy, however, is the numerical – and hence political – importance of the older sections of the population and their new-found general affluence. Taxpayer and voter attitudes on decisions relating to school investments are likely to be increasingly shaped by an older constituency who may question the case, to greatest effect in systems which allow the most room for voter/taxpayer influence on educational decisions. It suggests for Söderberg the “need in ageing populations for stress to be placed on intergenerational solidarity and support for investments in services essential for children”. He does not maintain that ageing necessarily brings a decline in intergenerational solidarity, but that this becomes a new issue in the light of the changing numerical strength of the different generations and the political clout now exercised by older citizens.

## **Gender and family**

### ***Radical changes in the position of women in society***

Of all the manifest changes to have occurred over the past century, one of the greatest has been the transformation in the position of women in many OECD societies. Some of the most substantial aspects of this have taken place in education itself; others include the public “visibility” of women and their importance, for instance, as consumers in today's affluent societies. Of particular note are two fundamental trends relating to women's lives that serve to define the wider environment for schools and the lives of their students.

***Major transformation in the position of women***

The first is the major shifts in fertility and birth rates. The facts themselves are dramatic across the OECD. Of the

***Plummeting fertility rates***

Table 1.1. Total fertility rate<sup>1</sup> in OECD countries, 1998

Australia	1.8 <sup>2</sup>
Austria	1.3
Belgium	1.5
Canada	1.6 <sup>3</sup>
Czech Republic	1.2
Denmark	1.7
Finland	1.7
France	1.8
Germany	1.3
Greece	1.3
Hungary	1.3
Iceland	2.1
Ireland	1.9
Italy	1.2
Japan	1.4 <sup>3</sup>
Korea	1.6 <sup>2</sup>
Luxembourg	1.7
Mexico	2.7 <sup>2</sup>
Netherlands	1.6
New Zealand	2.0 <sup>2</sup>
Norway	1.8
Poland	1.4
Portugal	1.5
Spain	1.2
Sweden	1.5
Switzerland	1.4
Turkey	2.7 <sup>4</sup>
United Kingdom	1.7
United States	2.1 <sup>4</sup>

1. Average number of children per woman aged 15-49.

2. 1996.

3. 1997.

4. 1994.

Source: OECD (2001b).

29 Member countries for which there were data, fertility rates<sup>4</sup> had fallen by 1998 to below 2.0 in 24 of them, and of these to 1.5 or less in Austria, Belgium, the Czech Republic, Germany, Greece, Hungary, Italy, Japan, Poland, Portugal, Spain, Sweden, Switzerland (Table 1.1). The age at the birth of the first child has risen steadily, associated closely with the increased employment trends discussed shortly. Between 1970 and 1995, the average across the OECD had risen from 24.2 to 26.6. It stood at over 28 years of age in Australia, Germany, the Netherlands, New Zealand, and Switzerland (OECD, 2001a). (There has also been a sharp increase in single parenthood, discussed further below.)

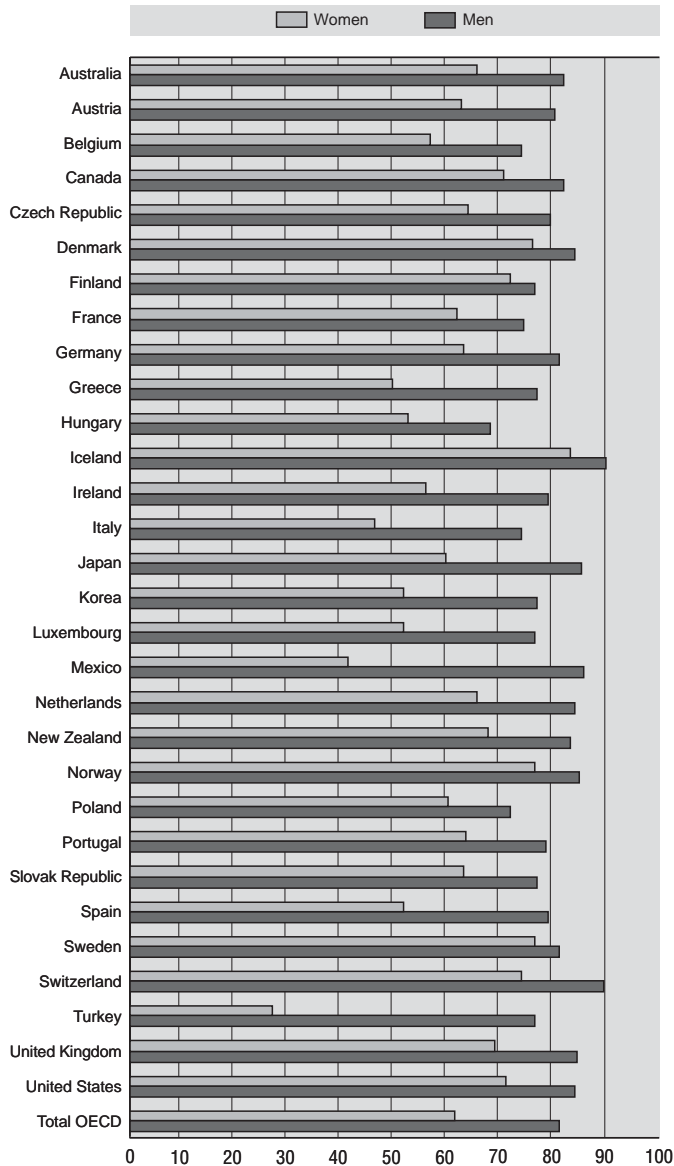
The implications of such substantial changes in fertility are far-reaching. They impact on women in ways affecting schools and raise questions such how many women are now having children at all? What are childcare needs? In what period of their adult lives are women having young (pre-primary and primary age) children and how is this affecting their experience of work, education and family? Fertility trends impact on the numbers coming into employment and the future labour supply in OECD countries, and in turn on the issues of dependency and “who pays?”, as well as on international population movements and the ethnic diversity of societies. All these are key matters for schools. Fertility rates impact very directly, of course, on the numbers of children and young people coming through school doors each year. It cannot now be assumed that, after dramatic change, fertility rates will remain fixed into the future at the levels of the late 1990s. It is expected that numbers of 5-14 year-olds will drop by 9% of 2000 levels by the end of the decade across OECD as a whole. These numbers are foreseen to fall by the very large measures of 15 to 25% of 2000 numbers in the Czech Republic, Germany, Hungary, Poland, the Slovak Republic, and Sweden (OECD, 2001c, p. 36).

### ***Rising female employment***

The very marked shifts in women's employment are the second major set of changes to be highlighted. Across the OECD as a whole, the labour market participation rate of women aged 15-64 stood at over 6 in 10 (61.3) in 2000, still well below the same figure for men (81.1) but nevertheless a very clear majority of working age women (Figure 1.2. Taking the prime age group 25-54 years, these labour market figures are higher still: over two-thirds for women (68.2%) albeit compared with over 9 in 10 for men. In the Nordic countries and the Czech and the Slovak Republics, they stand at over 80% and largely approaching those of men, and at three-quarters or more in another nine countries (Austria, Canada, France, Germany, Poland, Portugal, Switzerland, the United Kingdom, the United States) (OECD, 2001e, Table C).

Again, such trends are linked to a range of on-going developments of significance both for students still in school and for the future world that today's girls and boys will live in

Figure 1.2. Labour force activity rates for persons aged 15-64 by gender, 2000



Note: The figure refers to persons aged 15-64 in the labour force divided by the working age population.  
 Source: OECD (2001 e), Table B.

as adults. In addition to the fertility and child-rearing impacts of working life changes already been referred to, further important aspects include the numbers combining work and family responsibilities, the rise of dual-earning families, and the growing gulfs between “work-rich” and “work-poor” households. Much job growth over the past couple of decades has typically been in fields of high female employment, while the areas suffering most dramatic decline have tended to be in the “heavy” male-dominated primary<sup>5</sup> and manufacturing sectors. Some of the most important impacts of women’s working lives have been on female educational ambitions and attainments. These have risen dramatically over the past 20-30 years, and are described in the next chapter as representing perhaps the “most remarkable educational trend of the recent period”.

Focusing on the extent of change should not be to ignore continuing problems and stubborn inequalities. Women’s earnings on average remain consistently well below those of men,<sup>6</sup> employment discrimination is still rife, as is the male domination of the higher reaches of management, the professions, and decision-making in most countries. While female employment has been more buoyant than men’s, many of the jobs are in low-pay jobs and sectors, with limited rewards and prospects for further learning. Women who are combining paid work and family responsibilities find themselves under the intense time and energy pressures of “dual careers” at work and at home, as the patterns of household duties change much more slowly than do patterns of employment. Issues of childcare continue to be major preoccupations, despite the long time period during which working mothers with young children have become the norm in OECD countries, with continuing lack of coherence between many enterprise and school practices, on one side, and the demands of working parents, on the other (OECD, 2001 *h*). And, the growing precariousness of marriage and rise of single parenthood bring risks of exclusion that are felt most acutely by women.

Yet, whether the focus is on the problems or on the positive transformations of women’s life-styles, these changes have been fundamental and are likely to continue.

***Stubborn  
inequalities  
alongside positive  
change***

Carnoy, in his contribution to this report (Chapter 5), is clear as to their profundity. Alongside globalisation, he describes the “second major force behind world-wide social change” as the “rapid transformation of family life, driven in turn by a profound revolution in the social role of women”.

### *Changing family lives and structures*

#### **Many affluent families in OECD countries**

Changes in family structures – the immediate environments in which young people are raised – have been dramatic in their scale and swiftness, closely linked to the rapid developments in fertility and female employment discussed above. Some are generally positive. Falling numbers of children, combined with continuing growth in overall standards of living and consumption, mean that many young people have access to goods and services as a norm that would have been unimaginable even 2-3 decades ago. As with other trends reviewed in this section, however, the changes are complex and characterised by tensions.

#### **But also “time-poor” and more family breakdowns**

Improved material lifestyles often depend on double incomes, leading to the phenomenon of families being “work-rich” but “time-poor”. Even such a basic family experience as the shared meal is being eroded for many – with longer adult working hours and the preferences of the young to “graze” – raising new questions about the nature of socialisation.<sup>7</sup> More obvious tensions still are raised by marital dissolution and fragmentation. The culture of modern family life, of providing an environment of affection and self-expression for children, stands in marked contrast with the conflicts of marital disintegration. Very large numbers of the marriages now being entered into will end in divorce. By the mid-1990s, the overall OECD divorce figure stood at 4 out of every 10 marriages. In Belgium, Sweden, Finland, the Czech Republic, the United Kingdom and the United States, the rates were significantly higher at between half and 70% (OECD, 2001*o*). More in schools are growing up as single children, or with the different types of sibling relationships formed through delayed family completion, re-marriages, or new partnerships.

#### **More single-parent households**

Whether because of marital dissolution or through rising numbers of children born outside marriage, the numbers of

single-parent families are growing – another key trend in schools' wider environment. Even by the early 1990s, single-parent families were around a fifth in many OECD countries, and well over a quarter in the US (OECD, 1999a, Table 1.3). While not everyone will experience marital breakdown as a disaster, it leaves few unscathed and the risks of social exclusion can be acute among single-parent families, particularly those of vulnerable labour market status. Even when entrapment in poverty is avoided, the subjective impact on the young through a heightened sense of insecurity and risk may be no less real.

It is a truism in education that supportive family environments are critical for students, learning, and schools. Yet, it is also clear that such beneficial conditions cannot just be assumed. Van Aalst's review in this volume (Chapter 8) of studies and enquiries into the future world for schooling in a number of countries shows that there is a widespread perception of the weakening role for the home and family. The partnerships offered by schools to families in socialisation and investment through learning thus take on heightened importance. For such partnerships to be really effective to provide a balance to the individualism and fragmentation of contemporary societies, they will need to be accorded a high priority among the aims of schools rather than be regarded as incidental spin-offs. This issue helps to define the "reschooling" scenarios outlined in Chapter 3.

***Strengthened  
family/school  
partnerships***

## **Knowledge, technology and work**

### ***The knowledge and learning economy***

OECD economies can now accurately be described as "knowledge-based", a matter of obvious importance to schools, given their unique set of educational responsibilities. The implications of these changes for education, and the extent to which schools are characterised by the organisational features typically found in knowledge-intensive sectors (these aspects are discussed in Chapter 2), have recently been addressed in a major OECD/CERI report (OECD, 2000a).

***Knowledge-based  
economies, learning  
societies***

This report summarised some of the key indicators of the developing “knowledge-based economy”:

“Many indicators show that there has been a shift in economic development in the direction of a more important role for knowledge production and learning (...). Moses Abramowitz and Paul David (1996) have demonstrated that this century has been characterised by increasing knowledge intensity in the production system. The OECD’s structural analysis of industrial development supports their conclusion. It has been shown that the sectors that use knowledge inputs such as R&D and skilled labour most intensively grew most rapidly. At the same time, the skill profile is on an upward trend in almost all sectors. In most OECD countries, in terms of employment and value added, the most rapidly growing sector is knowledge-intensive business services (OECD, 1998a, pp. 48-55).

***Coping with rapid change***

These observations have led more and more analysts to characterise the new economy as “knowledge-based”, and there is little doubt about relative shift in the demand for labour towards more skilled workers (OECD, 1994). However if the knowledge intensity of the economy were to increase permanently, the destructive aspects of innovation and change might take on greater importance. In an alternative interpretation of the change in the composition of the labour force, Carter (1994) pointed out that the main function of most non-production workers is to introduce or cope with change. The rising proportion of non-production workers may thus be taken as the expression both of the growing cost of change and of an acceleration in the rate of change.

An acceleration in the rate of change implies that knowledge and skills are exposed more rapidly to depreciation. Therefore the increase in the stock of knowledge may be less dramatic than it appears. An alternative hypothesis is that we are moving into a ‘learning economy’, where the success of individuals, firms, regions and countries will reflect, more than anything else, their ability to learn. The speeding up of change reflects the rapid diffusion of information tech-



nology, the widening of the global marketplace, with the inclusion of new strong competitors, and deregulation of and less stability in markets (Drucker, 1993; Lundvall and Johnson, 1994; Lundvall, 2000)." (*op. cit.*, pp. 28-29)

This analysis identifies the importance of speed of change, which brings costs as well as benefits, and the premium this places on abilities to learn. It also raises profound questions for the kinds of knowledge students are being equipped with, and ought to be equipped with, by schools. This is especially because the actual deployment of knowledge by professionals, workers, scientists and so forth takes place well after they have left school, perhaps many years later, by which time most of what they were taught within the school curriculum is forgotten. This is the case for the highly skilled and still more for those in low-skill work environments who are up against the "use it or lose it" principle (OECD, 1997*b*, Chapter 3). The questions of the knowledge and skills that schools should focus on in preparing students for future lives within tomorrow's learning society are rendered still more complex as the pathways and destinations that students will later follow are far from identical. Not all will pursue professional careers in the dynamic sectors of the "new economy" – indeed most will not – so that curriculum cannot be designed as if all are on an identical high-flying track. The knowledge that many will use in work, society or leisure may be far from advanced.<sup>8</sup>

Despite – or because of – very diverse needs, attention comes to focus on generic skills and competences in addressing these questions. The four-way typology of knowledge presented in the knowledge management analysis is useful in distinguishing between "know-what", "know-why", "know-how", and "know-who" (Lundvall and Johnson, 1994; OECD, 2000*a*, p. 14). While "know what" is important, in its own right and to anchor concretely the latter three, the implication of rapid change and "knowledge decay" is that schools must lay a very sound foundation on which the other three forms of knowledge can be developed and maintained. How well they succeed in this in all countries is still an open question, especially where the traditions of factual knowledge transmission and recall remain dominant.

***Implications of rapid change for school knowledge?***

***"Know-what",  
"know-why",  
"know-how", and  
"know-who"***

### The “technological paradigm”

“A common feature of new general-purpose technologies is that it takes a long time before they are implemented and use to their full potential across economies (...). It took several decades before manufacturing enterprises, having already invested in steam engines, introduced electricity. Thereafter, it took a long while before they implemented the organisational changes, in particular the assembly line, and developed the skills required to use the electro-motor to its full potential (...).

ICT is an example of a general-purpose technology that has pervasive effects on practically all sectors of economic activity. In line with other general-purpose technologies, reaping its full benefits calls for comprehensive structural and organisational change. However, the importance and all-purpose characteristics of ICT should not lead to lose sight of the more general dynamics of innovation in OECD economies. These are driven, *inter alia*, by the evolving relationships between science and industry and the impetus for better exploitation of knowledge.”

*Extracts from OECD (2000e)*

### ***Technological change as a driving force – opportunities and risks***

The message from this analysis [and the recent final report from the OECD Growth Project (OECD, 2001*k*)] is thus both that technological change is a pervasive driving force in OECD countries and that its impact depends critically on its general context, including the opportunities for innovation and for the production, mediation and use of knowledge. Technology does not deterministically drive wider change, a point reinforced by Miller in his contribution to this report (Chapter 7). The high-level OECD forums on 21st century transitions analysed this inherent openness by distinguishing between opportunities and risks. There is agreement that technological advances in train now could be as significant as the earlier radical shifts associated with the steam engine, electricity, and the car, whether referring to ICT, bio-technology, or new materials technologies. But, there are also risks, including that possible schisms and divides will grow – between haves and have-nots, risk-takers and risk-avoiders. Addressing such divides defines important challenges for education, including schools.

So marked have been the shifts towards the integration of ICT into work, and the key economic role of knowledge and learning, that the term “new economy” has entered the policy and media lexicon. It is a term given to loose and exaggerated application, as implied by the title of the recent report from the OECD Growth Project *The New Economy: Beyond the Hype* but it points to possible new forces and relationships. For instance, productivity growth through technology might continue apace without running up against standard “old economy” constraints like rising inflation, facilitated by widespread organisational changes, the decline of hierarchical structures, and the powerful use of the networking possibilities of ICT. An important feature as identified by Miller is the blurring of the supply and demand sides of the economy, so that consumers enter more directly into the production process before output is actually created. How far such “new economy” characteristics are typical of the OECD as a whole is still debatable, especially in the light of recent economic downturns and the loss of confidence in the technology sector in particular. By the time current school students are active in the job market, however, such cautions and caveats may well be long forgotten.

### ***The “New Economy”?***

### ***Changing nature of work and careers***

There have been massive changes taking place in the structure of work and the economy over the long term. Since the beginning of the 20th century, the countryside has been transformed in many countries, with urbanisation and the widespread exit from agriculture. Even the factories that lay at the heart of jobs and economic strength within living memories are now declining as the place of employment. There has been a massive shift to services – the “tertiarisation” of work. With the possible dawning of the “new” economic age, these major movements are far from over.

### ***The shift to service sector employment***

Service employment has continued to grow in OECD countries, and now accounts for three-quarters of employment in several countries. The overall OECD average stood at 65% in 1999 (OECD, 2000*b* and 2001*e*). As recently as the mid-1980s, there were marked national divergences in the

service share across countries but by now patterns have converged. Services are associated with a different profile of jobs from manufacturing. Of people working in the goods-producing sector, 65% occupy blue-collar jobs; this stands at less than 13% in services. While the ratio of women to men is only a third in the “goods-producing” sector, they are a slight majority (ratio of 1.04 OECD-wide) in the “service sector”. In the latter, employment growth has been most rapid in producer and social services.<sup>9</sup> More generally, there has been a process of “up-skilling”, revealed most convincingly in “within-industry” and “within-occupational” shifts, rather than the larger sectoral movements referred to above (OECD, 2001a, Chapter 4).

***Up-skilling but  
many jobs not  
highly skilled***

While it might be tempting to interpret these figures as sign that all now participate in the “new economy”, they should be put in perspective. While among services, distributive jobs have grown least they still account for very large numbers, and typically double those in business services. Many work in the personal sector of hotel, catering, entertainment, domestic service and the like, very often in low-skill jobs. The social services sector is more dynamic with clear divergences across countries but even here, the ratio of unskilled to skilled jobs could well increase as social service jobs expand (Esping-Andersen, in Chapter 6 of this volume). At the same time, part-time working has increased in most OECD countries, sometimes very rapidly, associated on average with lower hourly earnings and less training (though such generalisation admits many exceptions) (OECD, 1999b, Chapter 1; approximately a quarter of female employment is part-time and 1 in 13 male jobs across OECD as a whole). And, while unemployment levels have been falling in recent years, it still represents a critical problem. Across the OECD as a whole, unemployment as a proportion of the labour force (men and women) stood at 6.4% in 2000, rising to nearly 9% (8.8) for the OECD European area.<sup>10</sup> The overall picture is therefore complex, with many problematic, as well as positive, developments.

Recognition of the importance of the knowledge economy should therefore be tempered by acknowledgement

that a great many jobs remain outside very high-skill, dynamic sectors of the job market, and many people are outside the job market altogether. There is a general trend towards “up-skilling” but only as a central tendency. Demand for the most unskilled jobs has fallen – and hit hard the prospects facing the unqualified – but large numbers still occupy them. It is most plausible to assume that very wide differences in skill demands will remain a feature of tomorrow’s employment world.

Consideration of skills trends can usefully be complemented by those relating to insecurity. The main trend is towards greater insecurity at all levels, but especially among blue-collar workers and the unqualified for whom job stability has clearly dropped. In part, security is a subjective matter: “a widespread and, in some countries, very sharp increase in numbers perceiving employment insecurity took place between the 1980s and 90s” (OECD, 1997a, Chapter 5). Even where job instability does not appear to have increased, the expected loss from job separation has as it becomes more difficult to find a satisfactory new income or security match in the event of job loss. This ties in with the “consumer society” trends discussed later in this chapter, bringing greater pressures to maintain income and lifestyles for individuals and families.

The more general conclusion to draw from these manifold changes is that linear hierarchical concepts of “skill”, closely correlated with qualification levels, do not well apply to the jobs of today and tomorrow. More dynamic relationships are in play, with possibly far-reaching implications for how educational credentials will function in the labour markets of the future. This theme is developed in the scenarios presented in Chapter 3, where the consequences are discussed of futures in which schools are “liberated” from the very powerful grip they exercise over the credentialing and certification process. Already, the degree of change and flux has undermined the model of the lifetime career engaged in until retirement after an initial training period, which is one powerful argument in favour of universalising lifelong learning. It is difficult to be precise on how many major job shifts

### ***Insecurity***

### ***Changing concepts of skill and career***

people already in employment will make throughout their working lives; still more is precision impossible about futures for students still in school. The safest assumption is that all can expect unpredictable and changeable careers. This alone presents considerable challenges to schools, especially those which hold on to traditional assumptions about educational and work careers.

***Rising adult educational attainments – towards the “expert society”?***

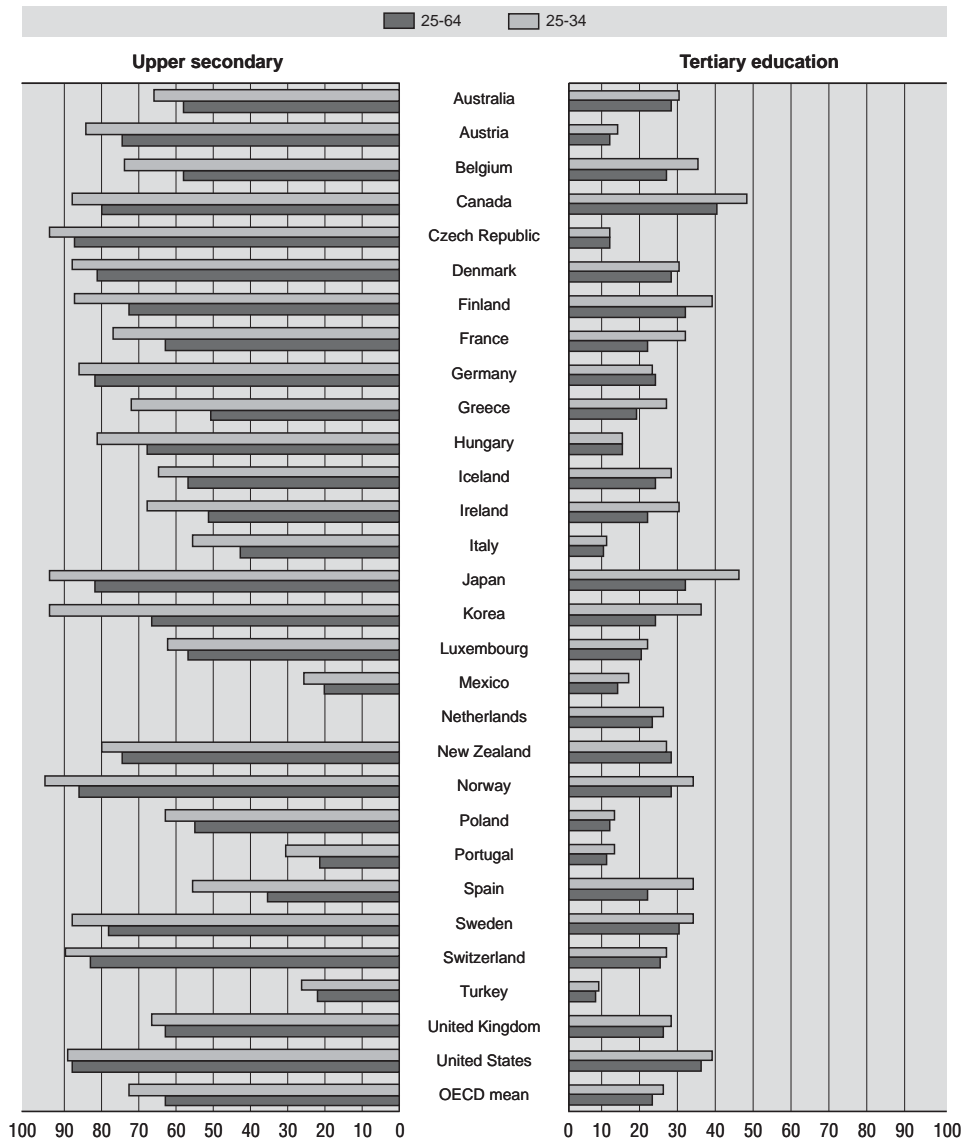
***Adults becoming better qualified***

With the major post-World War II expansion of educational provision, attainments of adult populations have naturally risen, too. These trends are set to continue into the foreseeable future. For the whole 25 to 64 year-old age group – which includes those in their fifties and sixties who were in school too soon to profit from the more recent periods of educational expansion – as many as 62% have attained at least upper secondary education across the OECD as a whole rising to 8 in 10 or more in a number of countries<sup>11</sup> (Figure 1.3). Even for tertiary education attainment, many adults now have reached this level. Just over a fifth (22%) of all aged 25-64 across the OECD as a whole have attained tertiary level education, which is hardly a small elite group as in earlier times, and in many the figure stands at around a quarter of working-age adults. In Canada (39%), Finland (31%), Japan (31%) and the United States (35%), it is around a third or more.

***Especially younger adults, today's parents***

For younger adults who have not long left initial education the figures are naturally higher again and the overall OECD average now approaches the three-quarters mark (72%) of 25-34 year-olds who have attained at least the upper secondary level of education. In 13 countries, this figure is 80% or more, and even over 90% in the Czech Republic, Japan, Korea, and Norway. Among the next youngest 35-44 age group, as many as two-thirds across the OECD have attained this level of education, and is much higher than this in a number of countries. At the same time, around a quarter of younger adults have had a tertiary education – 25% in the 25-34 age group and 35-44 (23%) age groups. A third or more of the

Figure 1.3. **Population having attained at least upper secondary and tertiary education, 1999**  
25-64 and 25-34 age groups



Source: OECD (2001 c), Tables A2.2a and b.

youngest adults up to their mid-thirties have had a tertiary-level education in a number of countries, and in some cases it is approaching one half (Canada and Japan). These higher attainments of younger adults up to their mid-forties, together with those of students now coming through the system, will mean that attainments will continue to rise at least over the medium term. These younger adults in the 25-44 age groups also correspond broadly to the cohort of parents of school students in school; their rising “expertise” could well be exerting a diffuse but significant impact on schools, as discussed below. On the strength of this form of evidence, then, OECD countries seem well embarked to become “expert societies”.

### ***Problems and paradoxes: adult literacy***

#### ***But still poor adult literacy levels***

Such a conclusion might, however, be premature. The aggregate attainment figures are not very revealing about the spread of lifelong patterns of learning as they largely reflect the expansion of “front-end” provision in schools and colleges for the young. Hence, they tell us little by themselves about continued learning thereafter. More specifically, OECD analyses carried out with Statistics Canada have exposed an apparent paradox to qualify images of the “expert, high-skill society”. Despite the rapidly increasing levels of educational attainment, there are serious literacy problems among the adult population of many countries. Indeed, certain of the countries enjoying among the highest levels of measured educational attainment are also those having outstanding adult literacy problems.

“In 14 out of 20 countries, at least 15% of all adults have literacy skills at only the most rudimentary level, making it difficult for them to cope with the rising demands of the information age (...) low skills are found not just among marginalised groups but among significant proportions of the adult populations in all countries surveyed. Hence even the most economically advanced societies have a literacy skills deficit. Between one-quarter and three-quarters of adults fail to attain literacy Level 3, considered by experts as a suitable minimum skill level for coping with the demands of modern life and work.” (OECD and Statistics Canada, 2000, p. xiii)



In part, of course, the “paradox” is explained because the high educational attainment and low literacy data refer to different populations. The analysis does indeed show that educational attainment is the strongest single predictor of literacy: an extra year of education is associated, on average, with an extra ten points on the IALS literacy test. Yet, the “fit” between the two is far from tight and many other factors are involved. In some countries, significant proportions of those who had apparently attained well in the education system got only the low literacy scores. There are very large differences between countries in the measured literacy scores of those who had less than upper secondary education.<sup>12</sup> In some, there is a clear gap between the literacy scores of those with upper secondary and tertiary level attainment, in others little discernible difference.<sup>13</sup> These variations warn that substantial skills problems in many societies have not been resolved with rising educational attainment levels.

***Some with poor literacy are the unqualified – but by no means all***

### ***The world of the school***

The rising general attainments of the population have other more diffuse impacts on the world of the school, particularly of reducing the distance between schools and teachers, on the one hand, and the general public, on the other. Many are now very familiar with the world of education, and are themselves qualified to levels at or greater than teachers. In the process, schools inevitably lose some of the “mystique” they enjoyed in earlier times. Parents and others are articulate and demanding. Pressures for greater accountability to render schooling more transparent can be linked *inter alia* to this factor, as can the problematic standing of teachers as a professional group, discussed in Chapters 2 and 3.

***Declining school “mystique”***

Söderberg in this volume (Chapter 9) suggests on the basis of Swedish data that higher levels of parental education foster critical attitudes that might actually weaken the standing of schools: “The general conclusion might thus be that a rise in educational level leads to more critical thinking about, and higher demands on, the educational system. It is possible that a well-functioning school system in a paradoxical sense contributes to weakening its own position.” Much depends on what “weakening” and

***Educated parents mean more critical attitudes***

lower measured satisfaction levels mean. On the one hand, critical attitudes could be a sign of robustness as rising expectations and a desire for improvement find expression in educational action and investment.<sup>14</sup> On the other, they might express genuine dissatisfaction leading increasing numbers to retreat towards alternatives such as home or specialist schooling (as outlined by Hargreaves, 1999). More in-depth international evidence could usefully illuminate the issue of public attitudes and expectations. It is an important area and defines one dimension of the scenarios presented in Chapter 3.

***Declining authority  
of expertise and  
ethical signposts?***

An element of the declining “mystique” and distance between schools and societies also stems from the more diversified sources of knowledge in today’s society. As populations become more highly educated and as the means of accessing knowledge become more diversified, the standing of school knowledge and the curriculum is increasingly problematic. Some refer to a general “decline in the authority of expert knowledge” (Prout, 2000), accompanying the erosion of cultural absolutes. Michel, in Chapter 11, also describes the problems, as well as the appeal, of the new “managerial paradigm” characterised by flexibility rather than more clear-cut cultural and ethical signposts. Schools can respond in different ways. They might try to “keep up” by seeking to reflect all the rapidly changing sources of knowledge in their curriculum. Alternatively, greater flux and diversity of knowledge, far from confusing their mission, may force greater clarification of what it is that schools are best placed to focus upon.

**Lifestyles, consumption and inequality**

***The consumer society and sustainability***

***Massive rise in  
consumption in  
OECD countries***

Consumption levels define a major aspect of life in OECD countries, in particular the trends and scale to which they have grown. To anyone arriving from a century ago, they would be a source of incredulity. There have been enormous changes experienced in average lifestyles and what many children today expect to be their standard of living in the future. The sheer scale of the change was one of

the basic facts that introduced a joint Environment/CERI Workshop on education, learning and sustainable consumption held in OECD in 1998:

“The scale of human consumption has risen dramatically and unequally over this century. The 1998 *Human Development Report* documents this: from \$1.5 trillion in 1900 to \$4 trillion in 1950, and then a trebling to \$12 trillion in the 25 years to 1975, followed by another doubling to \$24 trillion in 1998.” (OECD, 1999d and UNDP, 1998)

There are undoubtedly massive benefits lying behind these stark figures, representing liberation from privation and drudgery. Unless there is a cataclysmic change brought on by, say, global conflict, it is perhaps safest to assume that the world of tomorrow for most OECD school students today will continue to have very high levels of consumption.

Yet, contained in these high and growing consumption levels are challenging aspects of the school's environment. A growing concern is that such high consumption has strengthened materialism as a defining value in itself, to the detriment of a range of other civic and cultural values that are needed for the future health of societies. This, and individualism more generally, may be eroding the “social glue” that is essential not only for individual and social development but even for economic development. (The relationships between social capital, human capital and sustainability are explored in a recent OECD analysis, see OECD, 2001d.) Nor, contrary to what might be expected, have individuals' subjective feelings of well-being kept pace with growing personal resources and their ability to consume (Inglehart, 1997). The opposite may even be the case: “(...) the proportion of people in the US describing themselves as ‘happy’ peaked in 1957 even though consumption rates have increased considerably since then. The US Index of Social Health has decreased by 52% in the last two decades despite a rise in consumption of nearly 50%.” (OECD, 1999d, p. 12)

**But problems too**

Given the role of schools in socialisation, it is not surprising that their potential for educating for a more complete range of human endeavours and outcomes should be

appearing increasingly on educational agendas. An ambitious approach has been developed as part of a Pacific region project on “multi-dimensional” citizenship, which suggests the need for all to be sensitive to a variety of dimensions – the personal, social, spatial, and temporal – that defines their lives (Cogan, 1997). Such agendas are inherently controversial, whether through fear that devoting greater attention to values and civic attitudes risks indoctrination or that further extensions of schools’ tasks, particularly beyond cognitive learning, will only exacerbate existing school overload. There are powerful economic and political interests with a stake in high consumption so that schools confront an ambivalence in the societal messages they receive in relation to consumption.

***Not all share  
affluent lifestyles...***

Concerns relating to the “consumer society” derive also from the disadvantage then suffered by those who do not enjoy access to high levels of consumption and material well-being. The more affluent become larger sections of OECD societies, the more sharply is the disadvantage experienced by those who still miss out. Still more glaring than these within-country inequalities, are the divides between the rich countries and the poor. The 2000 *World Development Report* shows that, despite major indications of progress over the past half century: “Of the world’s 6 billion people, 2.8 billion live on less than \$2 a day, and 1.2 billion on less than \$1 a day” (World Bank, 2000). For these enormous numbers, the notion of a “consumer society” is largely meaningless.

***... especially  
in the developing  
world***

Such stark differences between the rich and poor in the world become a growing part of society’s consciousness, particularly through the immediacy of media attention. Many of the young are acutely aware of such glaring inequalities and the environmental issues with which they are intertwined. In his contribution to this report (Chapter 8), van Aalst describes how the importance of these issues to young people is perceived as a driving force in schooling in the 21st century in a number of countries. It is less clear how consistent are these environmental concerns with the consumption habits of many in society, including young people who are among those with the highest material expectations.

Sustainability lies at the heart of these questions. At least since the Earth Summit in Rio in 1992, there has been recognition of just how unsustainable many contemporary production and consumption practices are. Though ambitious objectives for change are in place, actual progress is still painfully slow. While the issues of sustainable production and consumption are intertwined, those relating to consumption are much nearer to the lives of school students and provided the focus of the 1998 Environment/CERI Workshop. (For a recent summary of the environmental situation in OECD countries see OECD, 2001*i*.)

It is natural to suggest that sustainability concerns should be reflected in new programmes that “teach” children about the environment. Yet, new programmes jostling for room into already-crowded school curricula are unlikely to make a significant impact, and moreover environmental information campaigns have been shown to be singularly ineffective in changing consumption habits or deeper-held values. Instead:

“Among the most important learning that schooling provides of relevance to sustainability are the attributes of critical thinking, self-reflection, media analysis, personal and group decision-making and problem-solving. These capacities and skills abound in countries’ official definitions of educational aims, but are often far less in evidence in the actual teaching and learning that take place. The successful acquisition of precisely these capacities, however, might represent a much more significant step towards an education for sustainability than relatively small-scale examples of curriculum innovation, no matter how valuable these are.” (OECD, 1999*d*, p. 20)

A key question then is how well school systems in OECD countries really do develop the more general, critical higher-order competences that are horizontal across subjects and disciplines, building capacity in the young to become informed and responsible in the world of the 21st century. How well they do provides a valuable yardstick of the quality of education provided by schools, but as yet firm evidence is elusive. Such competences closely match those required in the labour market and organisations, including the capacity of each person to design their

***Slow progress  
towards sustainable  
consumption***

***Calling for critical,  
informed,  
responsible young  
people***

own lifelong learning agendas and negotiate their way through complex, individualised pathways of professional development. They are less matters to be taught as part of the manifest curriculum, more embedded in the culture and everyday practice of working schools. They are inimical to the most traditional approaches and ethos of schooling, already out-moded by the second half of the 20th century.

### ***Incomes, poverty and life-chances***

***Earlier long-term trends towards narrowing gaps...***

In OECD countries, the long-term trend had been for income inequalities to diminish, even while the disparities between the top and bottom remain large, this alongside the massive rises in consumption already described (*e.g.* OECD, 1993, Chapter 5). More recently, however, changes have been occurring. On wealth, Wolff (1987, p. 1), taking a very long-term view, observed: "Perhaps the most important finding is the gradual but persistent decline in the degree of wealth inequality among households during the 20th century". The World Development Report (World Bank, 2000, p. v) also observed positive changes over the past century: "The 20th century saw great progress in reducing poverty and improving well-being. In the past four decades life expectancy in the developing world increased 20 years on average". At the same time, the inequality between the rich and poor countries of the world has been widening at an alarming rate as summarised by Jolly (2000). He refers to modestly growing inequalities over the first half of the 20th century, that quickened and then soared after 1960: "from 30 to 1 in 1960 to 60 to 1 in 1990 and 74 to 1 at present".

***... but not between rich and poor countries***

***More recent signs of growing inequalities***

Within the OECD countries since the 1970s inequality trends have been disturbed. They have widened in some countries in the 1980s, continuing into the 1990s. The more recent trends on incomes and poverty are presented in the box below in the form of "stylised facts" (OECD, 1999*e*). Such trends help to define the broader environment in which students live and, more specifically, highlight that schools are particularly affected in terms of groups hardest hit.

***Widening gaps in some countries***

Important messages for schooling emerge from these "stylised facts". The first is that the very long-term trends

towards a narrowing of resource differentials among individuals and households have not continued as before. In many countries, the gaps are now widening, though this should be understood in the context of the overall rise in affluence, health and consumption levels. When all the caveats have been entered, however, and in the light of the well-established links between home background factors and educational attainment, schooling is confronting the situation where critical social inequalities remain. Enthusiasm for the “new economy”, “knowledge society”, etc., should not disguise this. Indeed, such developments may well be exacerbating the problems of those who are unable to participate fully in them.

**Extracts from the “stylised facts” on income inequality and poverty in OECD countries**

There was no generalised long-term trend in the distribution of disposable household incomes since the mid-1970s. However, during the more recent period (mid-1980s to mid-1990s), income inequality has increased in a greater number of OECD countries, *i.e.* in over half of the observed countries.

In those countries where inequalities increased, this happened mostly among the working-age population, whilst there were less changes among the retirement-age population. However, average incomes of the elderly increased towards the average of the population in most countries.

Changes in income distribution in the past ten years generally favoured the prime-age and elderly age groups, in particular those around retirement age. Persons living in multi-adult households have seen their income shares rise somewhat, especially in households without children, or when there are two or more earners present. On the other hand, young age groups lost ground, in particular those aged 18-25. Relative income levels of single parents and persons in workless households tended to weaken further.

The increased dispersion from gross earnings and other market income was the main contributor to widening inequality at the household level: increased inequality in earnings themselves; increased income differentials between households with different degrees of employment attachment; and a trend towards “employment polarisation” in many countries, leading to a simultaneous increase in “work-rich” and “work-poor” shares of households.

This increase in market income inequality was not, or not entirely, translated into higher inequality of disposable incomes for the working age population, as both transfers and taxes off-set the effects of earnings and capital/self-employment income on the distribution. In most countries, this effectiveness increased.

**Extracts from the “stylised facts” on income inequality and poverty in OECD countries (cont.)**

Apart from income taxes, public transfers also played an important role in the redistribution of incomes to lower-income segments, in particular among the working-age population (...). Moreover, public transfers are a more important source of income for lower income groups. The part of non-pension transfers in the incomes of poorer working-age adults increased in a majority of countries.

Relative poverty rates remained broadly stable over the last ten years, with some countries experiencing declines (in particular Belgium and Denmark) and some others increases (in particular Italy and the United Kingdom) (...). The share of both elderly and children in the poor population decreased over the last ten years in most countries. However, poverty rates of children increased somewhat in a number of countries, while poverty rates of the elderly decreased.

Joblessness is a key factor in explaining why poverty often increased for those aged 18-25 and single parent families (...). For the working age population, poverty rates on a pre-tax and transfer basis rose in all countries, on average by 4 percentage points. Post-tax and transfer poverty rates fell or increased by less in all but two countries. This indicates an increased effectiveness of tax/transfer systems in alleviating poverty in a majority of Member countries.

***The young and single-parent households slipping back***

A second main message is that different population groups and countries have fared differently. Lack of a universal trend is nevertheless consistent with growing inequalities in some countries, and, for market incomes, in the majority of countries. Some trends are even more clear-cut, especially concerning the socio-demographic groups whose fortunes have improved and others whose fortunes have slipped. Of particular relevance for schools is that the most gains have been experienced by older members of populations, and those well-established in employment while younger people (including children) and those with precarious labour market positions have done relatively badly. Households with children headed by young parents have lost out. Especially vulnerable are single-parent households, which have grown throughout the OECD, and those described as “work-poor”. In short,



problems have been aggravated precisely among those for whom schools are most responsible and have diminished among those furthest from the school gates.

There are wide variations between countries regarding the concentration of exclusion and poverty among children (UNICEF, 2000). In some countries, these rates are very low at only 5% or even less (Nordic countries, Belgium and Luxembourg). In others, as many as a fifth to a quarter of children live in poverty (Turkey, the United Kingdom, Italy, the United States, Mexico).<sup>15</sup> Compound disadvantages set up compound barriers as described by Esping-Andersen in Chapter 6 when he refers to the “bundling” of low pay or unemployment in couples, families or communities, causing people to become stuck in these situations, nurturing concentrated deprivation, and hardening the sense of social failure. He also draws attention to marked variations in the prevalence of terms such as “underclass”, “social exclusion”, “two-speed”/“two-thirds” society, etc., in everyday debate and discourse. Such terms, he suggests, are found rarely in Mediterranean Europe, where family institutions and protection remain strong, or in the Nordic countries with highly developed equity attitudes and anti-poverty policies.

An extreme result of exclusion and insecurity is suicide. Kennedy in Chapter 10 compiles youth suicide figures to show that several countries have recently recorded steep rises. He links this to a broad range of factors, including the lack of inclusion, opportunity and social capital, and the experience of hardship. Many more young males commit suicide than young females – by a factor of 3, 4 or 5. However these gender differences should be accounted for – whether linked forward to the employment insecurities brought by the disintegration of staple male manual job opportunities, or connected back to the consistently higher numbers of boys than girls in special education, or to some other cause – these represent a stark indicator of contemporary malaise.

***Child poverty  
very marked  
in some countries***

***Growing youth suicide,  
especially among young  
men***

***Key role of the state***

A third main message from the “stylised facts” is also relevant to the world of education. The role of the state through taxation and social transfers has been a critical one in modifying the inequalities that exist from the operation of the market in the absence of government action. This impact has, if anything, become greater and more effective in latter years. Thus, while it is commonly observed that “welfare state” structures and assumptions have been eroded since their immediate post-World War II heyday, there remains a critical state role in redistributing access to resources. The school is often an active partner in public policies to combat exclusion (the issue of co-ordination of services has been extensively studied by OECD/CERI; see OECD, 1998e).

**The geo-political dimension – International, national, local**

***Globalisation***

***Polarised views on globalisation***

Globalisation refers to a diverse set of important changes, often highly controversial. Viewpoints differ sharply on whether they are positive and to be encouraged, or grudgingly accepted, or else to be fiercely resisted. For some, globalisation represents the opening of national barriers, allowing the passage of knowledge, trade and culture for prosperity to flourish for the benefit of humankind. It embraces the Internet, travel, exchange and similar cross-border developments. For others, it encompasses a raft of mainly reprehensible developments – from international corporate power to growing international inequalities between rich and poor, to cultural and political hegemony. Viewpoints tend thus to be polarised between extremes, divided less over the facts of globalisation than over its benefits and costs.

***The economic dimensions...***

Globalisation has a strong economic base in growing interdependency across countries and between enterprises, involving increased and more liberalised trade, flows of finance, persons and services, the “borderless world” of rapid electronic communication and exchange, and a range of other

on-going developments. It refers politically to the internationalising changes introduced by governments and NGOs as well as the prominence of international bodies/associations of varying statuses, powers, and memberships. In the world of today and tomorrow, such international bodies are inevitable in some form – even curbing the “excesses” of globalisation would ultimately depend on co-ordinated international action – but they attract growing controversy and are criticised variously for the approaches/philosophies they espouse, the volume of resources they control, or their apparent distance from the democratic process.

*... the political...*

The cultural dimension is equally controversial. There are very positive developments that have quickened over the past half-century: the major growth in travel and awareness of other cultures, the explicit pursuit of multiculturalism in education and societies, including awareness of the critical role of languages. Again, however, there are countervailing trends. Many worry about the impact of globalisation on language and cultural diversity. There has been a very clear shift towards English as the international lingua franca, as well as the questionable benefits from ubiquitous anglophone TV series. Even the apparently benign expansion of travel, broadening minds and economic development, is not without cost – analysed with precision by Hirsch (1977) a quarter of a century ago – as high-volume tourism eventually threatens the very magnet sites that so attract. More problematic still are the effects described by Michel in Chapter 11 in Part II:

*... and the cultural ones*

“Globalisation, because of the risk it brings of soulless standardisation, can lead to fragmentation and a reduced sense of belonging to a wider community. The excesses of unbridled markets, in which prices and the market are more important than social and cultural relationships, are being met with an excess of nationalism, regionalism and parochialism. These threaten peace and raise the spectre of resurgent racism and intolerance.”

In all, therefore, the globalisation issues are far-reaching indeed.

Knowledge, learning and education are intertwined through all these dimensions. As expressed by Carnoy:

“Even our cultures are globalising. One effect is that activities, including how we relate to our family and friends, are rapidly becoming organised around a much more compressed view of space and time. This extends to children in school or watching television who are re-conceptualising their ‘world’, in terms of the meanings that they attach to music, the environment, sports, or race and ethnicity.”

***Learning to deal  
with “hyper-  
complexity”***

Education bears a heavy responsibility in equipping young people with the means to deal with the complexity – the “hyper-complexity” – these trends represent. The profound ethical and values questions call for discerning competences and a broad understanding of contemporary culture and life. These are formed through education in all its settings, formal and informal, but schools clearly have a potentially key role. In some specific instances, such as second- and third-language teaching, schools have the lead responsibility.

***Opening  
educational  
boundaries, for good  
or ill...***

There are charged decision-making and knowledge issues that also increasingly arise for education through the impact of globalisation. A world in which schools very actively use ICT and the Internet is a very different one from the situation at the other end of the spectrum where school knowledge is very tightly controlled through nationally- or locally-agreed syllabuses, textbooks, and materials. While at present schools mostly operate somewhere in the spectrum between the extremes, the trend is clearly moving towards the ICT scenario. This is on-going, not just about possible futures. In tertiary education in particular, there are already many examples of cross-frontier distance education programmes and diplomas, some public, some private. Increasing school use of Internet and educational software raises questions about who produces materials and where, in the process recasting traditional relationships and notions of sovereignty (see OECD, 2001j).

Forms of educational globalisation impact on schooling in other ways. National political debates are increasingly shaped by international comparisons, particularly of matters such as class sizes or student scores. Some systems have already been shaken by the so-called “TIMSS effect” after publication of comparative scores (and there may soon be similar “PISA effects” when the first results of the OECD/PISA surveys are published).<sup>16</sup> Certain countries have had to dip well into the international teacher labour market in the face of shortages, as such advanced-skill markets are becoming increasingly global. In short, education is an integral element of globalisation, as well as being profoundly affected by it. It features prominently as one dimension of the scenarios presented in Chapter 3.

*... and creating challenges for national decision-making*

### ***The international movements of populations***

An important aspect of globalisation is the greater movement of populations from one country to another. It is plausible that these flows will increase substantially in the years ahead though current trends are mixed. If increases materialise, they would enhance still further ethnic and cultural diversity and, in some cases, the socio-economic and educational problems experienced by minority populations. These present major challenges to the place called school. They sharpen issues concerning how well schools are able to deal with, even promote, diversity. They increase the range of family expectations and aspirations regarding what schools should achieve. They raise acute equity questions – when are educational differences the laudable expression of cultural diversity or instead the unacceptable face of social inequality?

***Sharpening diversity and equity issues***

OECD countries had already become places of net immigration by the beginning of the 1990s, including in the Southern European area that before had been an important sending region (OECD, 1991). Regarding the scale of population movements, migration flows have tended to increase since then but it is difficult to generalise, particularly on the basis of relatively short-term trends. Even over the course of 1990s, there were up- and down-turns in numbers, significant differences across

***Net immigration into the OECD countries***

***Illegal migration***

countries, while the nature and source of migration vary substantially. The phenomenon of illegal and irregular migration, by its nature, is impossible to chart with any precision but it is clear that it continues in large numbers. Those concerned are among the most excluded in OECD countries, lying outside even the most basic welfare provisions open to others.

***Much within-OECD movement***

Very different patterns of population flows emerge depending on whether they are expressed in absolute or relative terms: the former indicate the scale of world-wide movements whereas the size of flows relative to national population is what matters particularly to each country, including their schools. In absolute terms, by far the largest inflows of foreigners are recorded in the United States and Germany, followed by Japan, Canada and the United Kingdom. A striking feature of inflows for each country is that they tend to be dominated by a very small number of sending countries. These reflect a pattern of “regionalisation” and sometimes continuing ex-colonial links. They belie the notion that population flows are predominantly from poor to rich countries for a very large amount of the movement goes on between the OECD countries themselves. Some of this takes the form of the highly-skilled personnel who now participate in international labour markets.

***Population growth outside the OECD area leading to intense worldwide pressures***

Demographic projections suggest that pressures are set to intensify. Of the expected population increase of 2 billion over the first quarter century, only 145 million are foreseen for the OECD area, and much of this dominated by a small number of countries (Mexico, Turkey, Canada, the United States and Australia). The relative share of the OECD countries among the world population is expected to decline by 2025 to around 16% from current levels just under 20%. With 93% of the additional 2 billion humankind to be born outside the OECD area, the pressures “pushing” people to the richer countries could well intensify. At the same time, the very low birth rates in the OECD area might themselves be “pulling” in inflows, especially in the context of continuing labour shortages. These could be

especially marked in Europe and Japan where the impact of ageing will be greater (OECD, 1999c). Whatever their source, an important trend already visible is for the numbers of foreign and foreign-born members of OECD societies to rise.

The “push” and “pull” factors will likely involve different profiles of foreign populations – those looking to escape poverty by moving to one of the world’s rich nations contrast with the highly-skilled being targeted by OECD enterprises seeking workers internationally. Such differences and the demographic pressures combined, in the context of the markedly growing inequalities between the affluent and poor countries of the world, create conditions that may turn out to be far from stable.

### ***Communities and regions***

If the importance of a supportive family and home background to attainment is an educational truism, the role of close links between schools and their communities can be counted as another. Increasingly, however, questions arise about what those “communities” are. The extent of geographical mobility reduces lifelong connections to particular neighbourhoods and the density of social interactions that this brings. The radical decline of industries such as agriculture, mining, fishing, and steel production brought devastating decline to the residential communities that depended on them. There are other equally problematic development challenging established notions of “community”: new patterns of urbanisation and sub-urbanisation; the individualisation of lifestyles (including the central place occupied by TV and other ICT media); the decline of established religions in many societies, as well as of other community-based institutions (local retailers, cafés, etc.).

Evidence relating to the “social capital” of social and civic engagement (OECD, 2001d) suggests complex patterns. In some countries, there are signs of a decline in social engagement, membership of different bodies and other associational activity (Australia, the United States), in others, the picture is less conclusive. There does appear to be a shift towards individualised leisure and community activities, with more informal and transient forms of engagement, as well as a

***The importance of the community – but what are communities today?***

***Mixed evidence on levels of social engagement, with new forms of leisure and informal “connectedness”***

growth of single issue politics. Our levels of trust in each other may not have declined significantly, but they have in relation to a range of public institutions. These are complex developments and the temptation should be resisted to romanticise about mythical “golden times” – new forms of communal activity, including virtual communities, develop as others decline. Yet, there do seem to be new trends in train relating to the nature of our connections to society and each other that are fundamental to grasp for schools and the young.

Without romanticising about a lost “golden age” of community, there are problems to be addressed. One affecting children very directly is lack of public spaces devoted to play. Such is the profound sense of unease about the security of young people, itself linked to the loss of the sense of protection offered by stable residential communities, that play space may be under-utilised even when it is available. Less established residential communities can lead to the deterioration of the social capital in the form of norms and values supportive of education, as analysed by Coleman a decade or more ago (Coleman, 1988). Schools can less readily turn to the “community” as an educational partner where it has become elusive, transient or virtual. These problems contrast with a widespread agreement on the need to devote particular attention to the socialisation of the young. In situations of problematic community support and social capital, individual schools, parents, and immediate families are placed under more intense pressures and responsibilities.

***Community and  
socialisation role  
for schools***

One way forward is to reinforce the socialisation functions of schools, and to recognise more explicitly their nature as communities in their own right, where, for instance, contacts, friendships, and play are valued as essential not incidental. Such an emphasis does not necessarily conflict with a strong focus on cognitive development but it suggests acknowledgement of a comprehensive set of educational outcomes going beyond measurable standards. This broader understanding of the school is developed particularly in Scenario 3 of Chapter 3, which itself draws on the arguments developed by Carnoy:

“The functional separation between residence, work, and urban services, the increasingly lower density of



new urban forms, and increased geographic mobility have made it increasingly difficult to build social communities on a neighbourhood basis (...). The central organising point in our society at the neighbourhood level is the school – elementary and secondary, as well as child development centres. Because schools' location patterns are pervasive and residence-based, and because sociability is made easier through children's connections, schools could become the platforms for a variety of neighbourhood issues."

Of particular interest in this analysis is not only the concept of the school "with" or "for" or "instead of" the community but the school as community. In this analysis, the school becomes perhaps the leading community institution.

There is further reason why the locality and region are important. An over-individualised view of education, aptitude and society can neglect the importance of the geographical configurations in which we live. These configurations help to shape cultures and infrastructures for learning. From this derives the interest in the concept of "learning cities and regions" (OECD, 2001f). Building on the critical lesson that "geography does matter", the aim of this family of strategies is to create dynamic synergies and partnerships, to which schools contribute. Conversely, without recognition of the local dimension, opportunities for such synergies and partnerships may not be grasped, to the detriment of school learning.

***Learning cities  
and regions –  
"geography  
matters"***

A strong focus on the local level is justified not only by the need to create effective partnerships but from the very nature of knowledge and learning:

***Learning by  
interacting***

"Most significantly, however, both the production and the dissemination of 'know-how' is facilitated by what has been termed 'learning-by-interaction'. Quite simply, individuals are able to build significantly on what they learn through 'learning-by-doing' by communication and exchange with others – colleagues both in the workplace and outside (for example, Rubenson and Schuetze, 1995). Recent evidence from the UK suggests, moreover, that individual 'learning-by-interacting' is especially important where people perceive them-

selves to have exhausted the learning potential of 'learning-by-doing' on their own account (Eraut *et al.*, 1998)." (OECD, 2001f, pp. 16-17)

Again, there is need for new balances to be struck from an over-individualised view of the nature of education and schooling.

### *The changing nature of governance*

#### **Governance changing...**

The environment of schooling embraces the broad nature of governance, which impacts on education either indirectly or directly through different forms of educational decision-making. Common challenges are now confronting governments across the different realms of public policy, as they explore new approaches to decision-making, accountability, social responsiveness, and citizenship. In some, this is taking place against a history of powerful "welfare state" arrangements that have been modified over the recent period into increasingly complex, mixed policy models. Globalisation is one major factor spurring the search for new models.

#### **... but governments not withering away**

As a result of these changes, some suggest that governments are in a state of terminal decline, overtaken by new players exercising private corporate, consumer and NGO power, or by configurations of policy-making undermining traditional sources of sovereignty and influence. Challenging questions about government effectiveness are implicit in the analysis of declining of social capital, insofar as it suggests serious public disengagement from political institutions and tears in the social and community fabric. Mulgan's analysis for the OECD's International Futures Programme, while acknowledging the extent of change and the difficulties some governments have found to adapt to greater complexity, networked forms of organisation, and huge increases in information flows, questions the "terminal decline" thesis:

"The share of tax in GDP actually rose across the OECD from 34% in 1980 to 38% in 1996. Contrary to many predictions the demand for government and the capacity to supply this demand both remain strong. On the demand side, electorates have signalled clearly that they want public services, the security afforded by

governments in health care and pensions, as well as common goods like clean air and safe streets. Business too has rediscovered its dependence on government to maintain social order, education and infrastructures.” (Mulgan, 2000, p. 146)

As regards education and schooling, with the enhanced role for the exercise of citizen choice, rather than regulation, a growing premium is placed on the individual's capacity to exercise choice in the face of complexity. This in itself defines a demanding agenda for learning and an important criterion for judging the outcomes of schooling. As with the earlier discussion of sustainability, the conclusion may be less that students need more civics programmes – that might anyway be learned through a variety of channels – but more the critical faculties that will allow them to be active citizens. This is one pillar of preparation for lifelong learning.

Indeed, the major societal project of “lifelong learning for all” (OECD, 1996a), by its sheer ambition and diversity, is characterised by a complexity of forms, stakeholders, partnerships, and funding that epitomises the new context of governance in the 21st century. As an integral element of the overall strategy, schooling is thereby brought into quite new forms of organisation and decision-making.

***Active choices  
in a complex world***

***Lifelong learning  
implies complex  
governance  
and partnerships***

## Notes

1. For discussion of how some of the most important aspects relating to schooling can remain “invisible” through their very familiarity, see Hutmacher (1999).
2. This understates the extent of “dependency” to the extent that economic activity is being delayed well beyond 15 years of age, which has been a powerful trend. It would also understate it if more are taking early departure from the labour market pre-65 years but on this there has been no clear trend over the 1990s. Partly, growing female participation rates offset falls for older men, but even for the latter there has been no consistent downward trend across countries (OECD, 2001e, Table C).
3. A study using the same instruments in Australia confirmed Hahn's results (Mellor, 1998).
4. Average number of children per woman aged 15 to 49 years.
5. Agriculture, mining, fishing, forestry, etc.
6. While the percentage gender gap for full-time earnings has narrowed to 10-15%, as a proportion of men's earnings, in Belgium, Denmark, France and Australia, it remained between 25 and 30% in Austria, Ireland, Canada, Spain and Portugal, and was around 40% in Japan and Korea (OECD, 2001o).
7. Not all countries could be so described, and those in the South European area in particular appear to be characterised by strong family institutions. These are singled out by Esping-Andersen in this volume (Chapter 6) as countries that have avoided the extreme marginalisation of social exclusion, as strong families offer protection and inclusion even in the absence of resources, though Carnoy reflects whether even in these cases traditions will be strong enough to resist the pressure leading to fragmentation.
8. This point has also emerged from work in the OECD International Futures Programme: “The key to a thriving learning society is the capacity of most people to produce relatively simple living knowledge, even if such knowledge is not new or a ‘first’— either historically or worldwide” (Stevens *et al.*, 2000, p. 14).
9. The “service sector” comprises producer, distributive, personal, and social services.
10. Of these, nearly a third (31.4%) had been jobless for a year or more across OECD, with the corresponding European figure at 43.2%.
11. The Czech Republic (86%), Denmark (80%), Germany (81%), Japan (81%), Norway (85%), Switzerland (82%), the United States (87%).
12. For example, in Sweden and Germany more than half the adults who had not completed upper secondary education scored at 3 or more on the document literacy scale. Less than 20% did so in the United States, Poland, Portugal, Hungary, Slovenia, and Chile.

13. "(...) the benefit of a completed tertiary education compared with secondary education differs dramatically across countries. In the Netherlands, for example, the difference in scores between those with only secondary education and those with tertiary education is very small, particularly when compared with the difference between these same educational groups in the United States. In Germany, the link between educational attainment and average literacy skills is weak at all levels of education. This contrasts with the pattern observed for a country such as Slovenia." (OECD and Statistics Canada, 2000, p. 24)
14. Söderberg also suggests on the basis of Swedish data that parents may operate as an articulate but in general "conservative" force – wanting results in terms of the tried and tested and avoiding any radical change that might be seen as risky.
15. Children defined as less than 18 years of age, poverty as less than 50% of median disposable household income, and the child poverty rate as the proportion of children living in households with incomes falling below this threshold.
16. TIMSS: Third International Mathematics and Science Study; PISA: Programme for International Student Assessment.