Chapter 1. YOUTH & EDUCATION

Educational developments, patterns, trends, options and objectives as they relate to young people are the focus of this chapter. An evidence-based overview presents the challenges and inequalities faced in different contexts, with attention given to the invisibility of youth as a statistical category, comparisons between developed and developing countries, the gender gap, and deficiencies and requirements with respect to "old" and "new" literacy. Educational achievements and goals are addressed within the Education for All framework. The chapter repeatedly emphasizes the importance of relying on multiple pedagogies and approaches—including formal, non-formal and distance education—in achieving worldwide educational objectives.

INTRODUCTION

Patterns and trends in educational opportunities and outcomes outcomes are notoriously difficult to describe with any precision and to interpret meaningfully. First, the data are highly context-dependent. Second, in global terms, the diversity in educational access and attainment—between world regions, countries within these regions, and areas and social groups within each country—is overwhelming in its complexity. Third, the information available for comparative analysis is limited in terms of both quantity and quality and is unbalanced in its coverage of individual countries and across world regions. Such issues pose significant problems even for comparisons within Europe, a region in which educational research and statistics are long established and well developed.[1] A worldwide perspective magnifies the difficulties. Reports and statistics at the international level are, in effect, the only practicable comparative sources.[2] There is also a wealth of useful and important material available on the ground—which would be enormously valuable if it were accessible in practice, and if the sources could be brought into reliable, valid and meaningful relationships with one another.

In the light of such limitations, the present chapter restricts itself to an evidence-based overview, drawing on international statistical data to highlight key comparisons, in particular between the developed and developing countries. The thematic focus takes its cue from the Millennium Development Goals, together with the targets set by the Education for All initiative adopted at the World Conference on Education for All, held at Jomtien, Thailand, in 1990. This involves taking a closer look at the progress achieved and the problems encountered in extending the provision of and access to basic education, which in the context of developing countries refers to both primary and secondary schooling. Social inequalities—particularly the gender gap but also urban-rural disparities in access and participation—are addressed largely within this framework.

Outside the OECD countries, international comparative data are scarce for technical and vocational education and training (TVET) and for patterns of transition from school to work. Nevertheless, it is possible to indicate how the differences and inequalities that emerge in basic education continue into the post-compulsory stage of schooling, including higher education. Distance education and non-formal education essentially represent complementary and supporting measures to help achieve basic education access and participation goals, providing a "second chance" to those who do not complete basic education and who lack basic skills, especially basic literacy.

It is important to note that this approach is effectively dictated by the nature of the available data, which are a product of specific policy perspectives on educational priorities in the developing world.

In North America, Western Europe and the developed countries of East Asia and the Pacific, distance education and non-formal education take on broader roles. Both are seen increasingly as independently valuable pathways to knowledge and skills acquisition, and in some instances constitute a more effective avenue than conventional formal education and training. ICT-based instruction and e-learning are rapidly redefining established perceptions of distance education in the developed world.[3] The potential of new information and communication technologies for improving access and participation in the developing world is also on the active educational policy agenda, but appropriate implementation faces enormous obstacles for the foreseeable future.[4]

Renewed policy emphasis on lifelong learning has brought non-formal education into the limelight in terms of raising participation levels at all ages, using more effective pedagogies, and valuing the full range of learning outcomes.[5] These trends go hand in hand with the challenges developed countries are facing in making the transition to knowledge-based economies and societies. The education and training systems now in place in these countries were originally set up to respond to the demands of industrial development; adjustments are required to address the enormous variety of new and different demands that have evolved in recent years.[6]

The developed countries of the world, to widely varying degrees, have well-established social and community services for young people generally backed up by a dedicated youth policy sector and associated measures across a wide range of fields. In many countries non-formal youth education is provided within this context, with an agenda largely oriented towards intercultural learning, human rights and anti-racist education, and building up the social and personal competencies young people need to live in a multicultural and mobile world. The focus is often especially, but certainly not exclusively, on disadvantaged and marginalized youth.[7]

It has to be said that these activities and concerns, along with the recruitment and training of professional youth workers and non-formal youth educators who implement youth policy measures in practice, can hardly be identified as priorities for much of the developing world. Understandably, the resources and energies of these countries are directed towards trying to get all children into basic schooling and to keep them in an effective learning environment long enough to give them a reasonable chance of making their way through life—as parents, workers and active citizens in their communities. It is therefore not only very difficult, but arguably even inappropriate, to attempt to draw any comparisons on a global scale with respect to these aspects of education for young people. It might be more relevant to consider the different means by which developing countries ensure support and accompaniment for young people as they grow towards personal maturity, social adulthood and independent citizenship. The family, neighbourhood and local community—and in many cases religious and spiritual traditions and groupings—generally still play far more prominent roles for young people in these respects.[8]

In today's Western world, public services and professionals at least complement the traditional forms of socialization and learning associated with families, communities and religions. Some would argue that newer forms of socialization and learning have become more important and influential in young people's lives. Non-kin peer groups represent one type of social network that has come to exercise more of an influence on Western youth than on young people in the developing world. This process of self-socialization is generally more significant for young people in developed countries because they spend much more time exclusively with their peers, both at school and in their social and leisure lives. Contemporary youth culture—as a social and an economic phenomenon—is a distinctly modern Western product, one that furthermore provides a focus for parents and State authorities anxious about young people's values and behaviours in rapidly developing societies. These kinds of issues are no less important for the field of youth and education than are rates of participation in basic schooling, but they cannot be addressed through international statistics, and they demand focused attention in their own right.

RELATING "YOUTH" WITH "EDUCATION": A PROBLEMATIC CONNECTION

Education is but one part of young people's lives—an important part in some regions of the world, but a non-existent element for large groups of youth in other regions. Under these circumstances, how can one even begin to compare the situation of a 15-year-old in Mauritania with her schoolgirl peers in Finland? Furthermore, there is often an unspoken assumption that education is automatically linked to young people, as it is generally thought to exist for their sake. Certainly, modern formal education and training systems were developed with young people in mind—people seen to be going through an initial learning phase in their lives, to be doing a whole range of things for the first time, and to be doing these things all together at more or less the same ages. It is understood that this is a purely social construction that has established itself in very specific times and places, but in practice the arbitrary nature of these institutionalized arrangements escapes conscious notice. Educational statistics are by and large a highly condensed and narrowly focused empirical representation of a set of taken-for-granted arrangements for intentional learning and its outcomes. Youth as a social phenomenon and young people as the primary target population of formal education and training fade from view behind an avalanche of indicators that describe participation in institutional processes for learning but reveal little about those who take part. In many ways, educationalists and analysts are condemned to reporting on education and saying nothing about youth.

Few sources that address education within a global and comparative framework adopt a critical perspective on schooling. In other words, few overtly acknowledge the problems that arise in applying Western industrial societies' established educational concepts and practices. For example, all international reports are careful to emphasize that distance and non-formal education are supplementary forms of provision that serve to extend access to mainstream formal schooling—not alternative forms of provision altogether that may better respond to the exigencies of non-Western societies and the developing world. Distance and non-formal education are valued for their structural and organizational benefits, including cost-effective-

ness, scheduling flexibility and enhanced opportunities for community participation. Curriculum and pedagogy are rarely addressed in the context of considering the most appropriate kinds of educational provision—except when reference is made to poor teacher qualification and skill levels or, on occasion, to the need to provide "life-relevant learning" for rural young people and child workers.

Even life-relevant learning is seldom approached from the perspective of whether curricula and teacher-student relations are appropriate for the cultural context in which learners live, though practising educationalists, not to mention parents, are well aware that schooling in many parts of the world remains imbued with ideas and content originating from widely diverse circumstances, systems and traditions. The dominant concern is rather that curricula and certificates or diplomas awarded for distance and non-formal learning should conform as closely as possible to those offered in formal schooling, and that the effectiveness of such supplementary provision should be demonstrated by enrolment and pass rates at least as high as those in formal education and training institutions. None of this is surprising, and it is difficult to imagine how a case might ever be successfully made for relinquishing the ideal of universal formal education for all. It is, after all, impossible and unacceptable to suggest that young people in the developing world do not need and deserve a quantity and quality of education comparable to that enjoyed by their peers in the developed world.

This situation has a consequence for international comparisons, in that a "deficit approach" in comparing performance against standard indicators of access and outcome becomes virtually unavoidable. For a whole set of economic, political and cultural reasons, formal schooling is not yet accessible to everyone, and many have not been able to acquire adequate basic skills even when they have attended school for a given period. Targets are set with an eye to what happens in the developed world, a background against which the developing world will inevitably be assessed as performing more or less poorly. In many ways, the developing world is condemned to participation in a never-ending marathon in which the front-runners are unassailable.

If education is approached largely uncritically, then youth as such are virtually invisible. International reports on education use the word "children" almost universally; the terms "youth" and "young people" are rarely employed, except in reports that specifically focus on initial transitions between education, training and employment in the developed world. Occasionally, the term "young adult" is used, but almost always in reference to school drop-out and illiteracy problems. Furthermore, discussions of literacy rates generally emphasize that illiteracy is a significant problem only for older age groups, and not for the young. Illiteracy is seen as a problem that will die out naturally as education participation rates rise cohort by cohort—even though the results of literacy surveys in the developed world do not necessarily support such optimism. The fact is that levels of functional illiteracy remain disturbingly high in a number of countries at a time when the demand for higher basic skill levels is rising rapidly.[9]

Otherwise, international reports on education make reference to "students" and, less often, "pupils". In other words, young people are seen solely in a functional role or position within institutionalized teaching and learning relations—which is logical, given the prevalence of thinking about and documenting education in terms

of systems and structures of provision, participation and outcome. The other elements of young people's lives and identities are understood largely in terms of the constraints they may place on educational opportunities, access and "survival" rates, with particular attention given to family factors (especially as these affect gender-specific patterns) and economic factors (especially as expressed through the extent of child labour).

Overall, this kind of literature classifies educational subjects as either children or adults, with little indication that there may be a distinct, socially significant life phase called youth between the two. The statistical data included in international reports reflect this perspective in the ways in which the material is ordered and presented, and it is important to add that international comparative statistics are made up of what is already available or possible to extract from national sources. This means the material reflects real, if partial, dimensions of social, cultural and economic realities in the countries that contribute the basic data. As an explicitly recognized social phenomenon, "youth" is absent in much of the developing world or, alternatively, is an invention of modern Western societies.

As far as the developed world is concerned, the fields of education and youth—whether in research, policy or practice—live in rather separate boxes. Youth does exist in social, cultural and economic terms, but the realm of formal education is very much a world apart; it exists for young people, but it is certainly not of young people. On the international reporting front, youth transitions are defined and analyzed solely in terms of pathways between education, training and the labour market. This does not necessarily sit well with the more holistic approaches towards understanding young people's lives on their own terms.

To clarify the point, an analogy can be drawn with understanding gender relations as a social reality in their own right. Appreciating the social significance of gender cannot be limited to visualizing and analyzing people's roles and positions as, for instance, wives, husbands, daughters and sons. It is important to place such analyses in an overall framework of comparing women's lives with men's lives—or girls' educational opportunities with those of boys. As it happens, a good deal of comparative data about basic gender-specific patterns of educational participation and outcomes are now available. This body of information has gradually been generated over the years by the growing policy emphasis at the international level on equal opportunities in education, ultimately reflected in the provision of gender-specific statistics—which were not always collected and presented as a matter of routine. This means that gender has now become a visible dimension of world education indicators and their analysis. Such is not yet the case for youth as a distinct life phase, with its own educational concerns, patterns and trends.

It is nonetheless recognized that youth is no less a significant issue than gender for modernizing societies. Young people are the visible vanguard of cultural change in these parts of the world. They adopt values and behaviours that frequently provoke anxieties and overt disapproval on the part of their parents, social institutions and Governments. They are among the most prominent victims of the risks and pressures of economic and cultural modernization as expressed through marginalized labour, drug abuse, homelessness, sexual exploitation and violence.

They are equally the most enthusiastic creators and interpreters of innovative and hybrid cultures and lifestyles, and the most avid consumers and users of the global market and its communication networks. It can be said with absolute certainty that youth are rapidly becoming a highly visible social group throughout the developing world. This reality, however, has not yet reached the domain of formal education as presented in international reports, where young people remain eclipsed between children in basic education and adult illiteracy rates. Even the narrow meaning of youth transitions as expressed in international educational reporting for the developed world has little real relevance for much of the developing world, given the extremely poor provision of and participation in TVET in most countries—not to mention the lack of jobs to follow on from vocational qualification. Reports do note, however, that the absence of systematic links between education systems and labour markets in most developing countries—manifested in inappropriate course content, mismatched skills/qualifications and labour market demands, and high unemployment rates among the best educated—have highly negative effects on motivation and outcomes in upper secondary and higher education sectors.[10]

It might be concluded that in the developed world, youth and education are explicitly linked together above all in describing and understanding initial transitions from school to work, which for the majority take place between the ages of approximately 15 and 24 (and increasingly between 15 and 29). This is the age range typically used in international statistics for the developed world to define young people in the purely empirical sense. This kind of connection may be restricted in scope, but it is a well-established feature of education and training comparisons between countries.[11]

For much of the developing world there are few, if any, explicit connections between youth (as opposed to childhood or adulthood) and education. As mentioned previously, in many developing countries youth is not traditionally viewed as a distinct and autonomous life phase that exists above and beyond family, kinship and intergenerational relations. Youth policies and measures are not necessarily developed independently, but may be incorporated in other frameworks. Educational policies understandably place priority on ensuring universal basic education, and in many cases this means first of all reaching the target of universal primary education (UPE) and significantly reducing illiteracy rates as soon as possible (in line with the declarations of the World Conference on Education for All (Jomtien, Thailand, 1990) and the World Education Forum (Dakar, Senegal, 2000)).

Concerns about how young people manage to move from school to work and about the quality of the employment they obtain are sometimes assigned lower priority under these circumstances. In any case, in developing countries, it makes little practical sense to speak of employment or youth labour markets as they are understood in the developed economies. Consequently, the empirical information available typically presents the population as falling into two groups: children who (are supposed to) go to school and adults who do not (but may have done in the past). In this context, it is significant, for example, that the operational definition of adult literacy rates for international reporting purposes covers all those aged 15 years and over. Some reports compare these literacy rates with those for 15- to 24-year-olds, but mainly in order to show the success of rising rates of access to basic education as reflected in lower illiteracy rates for younger cohorts.

The invisibility of youth as a distinct category of attention and concern for educational policy and practice in many parts of the world—and as reflected in international policy-making and reporting—is thus explicable. Nevertheless, it is difficult to argue that there is no need for a distinct perspective on youth in relation to education. First, basic education does cover lower secondary schooling, even if developing countries must continue to direct their resources and programmes towards primary schooling in the coming decade. Young people in their early to middle teenage years face different sets of problems in continuing their education at least to lower secondary completion than do primary age children in getting into school to begin with. Second, although gender gaps in primary enrolment and drop-out rates remain disturbingly high in many parts of the developing world, it is at the secondary level that they open up even more dramatically and across a very wide range of countries. Young women in most developing countries still face strong barriers to participation above basic education levels, and the reasons lie at least as much in their lives outside schools as in their experiences within them. Third, education is a crucial space for encouraging and supporting the development of self-identity, the capacity to think for oneself, and the confidence to take one's life into one's own hands. To argue for the value of conceptualizing youth in its own right is to argue for supporting the development of open and democratic societies that confer dignity on all their members, regardless of their age, as citizens in their own right.[12]

EDUCATION FOR ALL: THE OVERALL PICTURE

In follow-up to the 1990 Jomtien Declaration,[13] the 2000 Dakar Framework for Action specifies a series of targets to be met by 2015 including universal primary education, equal enrolment by sex at all levels, and raising adult literacy levels by half, especially for women. Three additional goals that are included in the Framework but are not tied to specific target dates are expanding early childhood care and education, promoting the acquisition of life skills for young people, and enhancing educational quality leading to recognized and measurable learning outcomes for all. The United Nations Millennium Development Goals support the Dakar Framework in resolving to ensure that by 2015 boys and girls everywhere will be able to complete pre-schooling and will have equal access to all levels of education.

The UNESCO monitoring report published in 2001 points out that to meet the goal of UPE alone, most developing countries would need to raise primary enrolment rates by 5 per cent—and some by as much as 10 per cent—each year.[14] In sub-Saharan Africa, primary enrolment would have to increase to fully three times the 1990s rate to achieve this objective. At least 32 countries will certainly not reach the target by 2015.

Primary enrolment rates are relevant within the youth and education context for two reasons. First, access to and completion of primary education is the route to basic literacy and secondary education. Today's primary-age children who do not go to school are tomorrow's young adult illiterates, whose life prospects—in employment and in general—are the bleakest of all. There are currently 113 million children of primary age in the world who are not enrolled in school, 97 per cent of whom live in developing countries, and three-fifths of whom are girls.[15]

Second, in many parts of the developing world, the age range for which primary schooling is formally intended does not correspond to the age range of those actually enrolled.[16] Some begin school later; others are older by the time they complete the primary cycle. Children may start later because the nearest school is far away, or because parents cannot afford to send them.[17] Young people in their early to mid-teens (and sometimes even young adults) may still be in primary school because they began later in the first place, or because they have had to miss or repeat years. In the developed countries, the proportion of primary school students who are older than expected is under 10 per cent; outside this group, only the countries of Western Asia match this figure. In East Asia and the Pacific, the proportion is about 20 per cent.[18] These differences reflect not only the impact social and economic inequalities have on access and completion rates, but also the effects of national educational policies, long-standing professional practices, and the weight of public opinion about what constitutes "good schooling". In Brazil, for example, at any given time, 25 per cent of primary school pupils and 15 per cent of secondary school pupils are repeating a year, mainly because they have not met the attainment targets.[19] Whatever the reasons, young people who do not complete primary schooling until they are older than expected are probably far less likely to be able to continue their education much further, if at all, as pressures to fulfil family obligations and earn a living become more acute.

Meeting the goal of equal enrolment by sex will only be possible at all for the primary education sector. The gender gaps in participation are narrowing almost everywhere in the world, except in most of sub-Saharan Africa, but at different rates and from different starting points. Gender gaps remain particularly wide in South Asia and (with some exceptions) in the Arab world, and they are narrowing only very slowly.[20] Gender inequalities are considered in greater detail below, but all the evidence to date confirms that it will be impossible to achieve equal access to all levels of education for girls and women by 2015—unless the meaning of the word "access" is reduced to the purely formalistic question of whether in principle (in national legal statutes, policy papers and other official documentation) schools, colleges and universities are open to female pupils and students. In practice, it can be expected that in many parts of the world, young women will continue to be severely underrepresented in secondary and higher education for many decades to come. The reality in most countries is that young people's education is young men's education.

As far as adult literacy is concerned, it is currently estimated that some 21 per cent of the world's population aged 15 years and over are illiterate. Only the countries of East Asia and the Pacific and those of Latin America and the Caribbean can realistically hope to halve this figure by 2015.[21] At the other end of the scale, the World Bank's World Development Indicators for the year 2000 reveal that fully 40 per cent of South Asian women between the ages of 15 and 24 are illiterate (compared with 23 per cent for their male counterparts—itself a disturbingly high figure). In Central Asia and Europe, illiteracy rates fall to 2 per cent for young women and 1 per cent for young men in this age group. The scale and intransigency of the illiteracy problem in the developing world are such that the only promising option for achieving progress will be to invest much more heavily in non-formal education in the coming years.

Countries such as Brazil, India and Mexico have already begun to develop a range of programmes, some of which specifically target young people, and many of which are built around the needs of workers and those with family responsibilities regardless of their age.[22]

Promoting the acquisition of life skills by young people is of particular interest. According to the UNESCO monitoring report, the educational levels of most of those aged 15 years and over in developing countries are too low—regardless of their real levels of literacy[23]—to enable them to participate effectively in the global economy. Included in this group are young adults. In this type of context, resources and energies might be better spent on the development of life skills, a mixture of cognitive, social, personal and practical knowledge and competencies that help people plan and manage their lives across the full range of decision-making options—that is, in a "life-wide" sense.

It is pointless to debate whether young people anywhere in the world can best acquire these resources through formal schooling or through non-formal and informal learning channels. In some respects young people's life-skills needs and demands are similar all over the world—for example, as far as health and sex education is concerned. In other respects they are very different; a young Dane confidently making his way through the palette of vocational guidance services and training opportunities available has little in common with a young Bangladeshi trying to find a good quality technical apprenticeship in a small, underfunded and poorly organized TVET system. Whatever the case, the life-skills agenda is a relatively weak and unfocused theme within the follow-up to the Dakar Framework, and it does not explicitly appear among the Millennium Development Goals. Some Education for All initiatives are beginning in the areas of girls' education, health education and HIV/AIDS prevention, but otherwise this is a field in which both information and concerted action are still scarce at the international level.

PARTICIPATION AND COMPLETION: PATTERNS AND TRENDS

The World Education Indicators (WEI) Program[24] provides a range of comparative data for 18 countries, bringing together demographic, economic and education indicators.[25] Most of the participating countries are somewhere near the middle of the economic development scale, and the majority have achieved, or are about to achieve, universal primary education. However, participation rates at the secondary level range between 48 per cent in Indonesia and 87 per cent in Chile. Most of these countries will experience a "demographic bonus" in the coming decades as primary-age cohorts decrease in size while the proportion of those of active working age rises. The hope is that this will free more resources to improve the quality of education and training provision, and not simply the quantity. The fact remains, however, that the secondary school population will continue to grow for several decades. Young people, then, may not be the main beneficiaries of quality improvements in schooling systems, and current circumstances leave much to be desired.

While levels of economic prosperity in the WEI countries vary considerably, even those with the strongest economies (such as Chile) have per capita GDP figures that equal only half of the average for the OECD countries, and only four countries achieved significant growth during the 1990s (Chile, India, Tunisia and, most of all, China). In addition, the WEI group includes some countries with the most unequal internal distributions of wealth in the world. The absolute and relative amounts WEI countries spend on education also vary widely, and do not necessarily correspond to general prosperity levels. Education expenditure nevertheless takes a heavier toll on the public purse in WEI countries than in OECD countries; in Thailand, for example, over a quarter of public spending goes to education, compared with an average of one-eighth for OECD countries. What is striking, however, are the high levels of private expenditure on education in WEI countries, which, for example, accounts for more than two-fifths of total spending on education in Chile, Peru, the Philippines and Thailand—over twice the average proportion for OECD countries.

Taken together, these patterns mean that for this largely middle-income group, opportunities to raise public education spending remain relatively limited, and social inequalities in educational opportunities inevitably remain strong. Despite significant improvements in the past decade, secondary school completion rates are still below those for OECD countries.[26]

In global comparative terms, however, most of the WEI countries are doing well. Many developing countries struggle with low primary school completion rates. Five years of basic schooling is regarded as a minimum benchmark, but in eight countries, more than two-fifths of the pupils do not educationally survive to this level.[27] The situation of the largest developing countries is well illustrated by the E-9 group,[28] which includes Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan.[29] Several of these countries are also WEI countries, and they are not necessarily the poorest in economic development terms. However, they represent 3.2 billion people—over half of the world's population and almost three-fifths of the world's school-age population. Together, China and India account for over half of the world's illiterate people.

In effect, most of these countries must expand their primary and secondary sectors at the same time, but they must also cater to large numbers of adults—including young adults—who have not completed even basic education; they must find ways to raise girls' participation levels right from the primary level; and they must also develop strategies for improving the quality of public education, giving serious attention to addressing the poor levels of teacher qualification and pay and the poor condition of the teaching forces in many areas. Some of the E-9 countries can look forward to an easing of demographic pressures by the close of the coming decade, but others, including Bangladesh, Egypt, Nigeria and Pakistan, are still growing fast. This means that however much such countries invest in expanding provision, they can make no real inroads into further improving participation rates, reducing illiteracy rates and generally raising the quality of education. Under these circumstances, and given the poor employment prospects as well, the opportunity costs of educational participation, even at the primary level, are relatively high. Actually getting to school (which may be quite some distance from home), paying for school materials,

enduring poor-quality teaching and learning conditions, and not knowing whether having a completion certificate will improve job chances are all factors that conspire to reduce motivation and achievement. The increasing attention given to distance and non-formal education in the developing world is to be seen in this context.

Sub-Saharan Africa is the region facing the greatest difficulty in all respects with regard to education for young people.[30] Recent decades have seen declining per capita income and rising foreign debt, combined with the effects of high population growth, natural catastrophes and armed conflict. A quarter of the world's refugees—5.1 million people—live in the region. Adult illiteracy rates are as high as 78 per cent for men and 93 per cent for women; only in Mauritius, Namibia, South Africa and Zimbabwe are these rates below 20 per cent.[31] Even in this latter group, the situation is relatively grim. David Everatt describes the 1990s as having been a lost decade for South African youth; surveys estimate that 3.5 million 14- to 35-year-olds are not involved in education or training and are unemployed, and a quarter of young adults say that they have not been able to continue their education to the level had hoped for.[32]

Differences in participation rates between the primary and secondary education sectors are marked. The median gross secondary enrolment ratio for the region is only 25 per cent, ranging from 9 per cent in Mozambique to 77 per cent in Botswana. In two-thirds of the 21 countries for which gender-specific net enrolment data are available, girls are underrepresented in the secondary sector. In many countries of the region, girls are less than half as likely as boys to be in school. Eleven of the eighteen countries in the region that provide data on these issues report that the majority of those of secondary age who are enrolled in school are actually in primary sector establishments.[33] The post-secondary non-tertiary sector (including TVET provision) is either underdeveloped or non-existent in most parts of the region, and higher education enrolment levels are extremely low everywhere—although many young adults go abroad to study, which is generally only an option for the more affluent and well-connected.[34]

For the OECD countries, the picture is completely different. The past two decades have seen steadily rising education and participation rates. At the close of the 1990s, three-quarters of 18-year-olds and more than one-third of 22-year-olds were still in education and training (though not necessarily full-time).[35] In 25 out of 27 OECD countries, a five-year-old in 1999 could expect to participate in formal education for between 15 and 20 years during his or her lifetime, with most of the variation between countries accounted for by differences in upper secondary level enrolment. Practically everywhere in the OECD grouping, almost all young people will be in initial education and training for at least 11 years, which means that most countries can report virtually universal participation rates right through to the end of their compulsory schooling systems. More than a quarter of 29-year-olds in Australia and the Nordic countries are still full-time or part-time students.[36]

Completion of upper secondary education—which in many countries also includes school-based vocational education and training or dual-system-type apprenticeships—is rapidly becoming the norm in OECD countries, and routes leading to this

qualification level are diversifying. Furthermore, a typical 17-year-old in these parts of the world can now expect to go on to tertiary education of some kind for two and a half years, although the range between countries is wide.[37] One problem in many OECD countries, however, is that upper secondary education curricula and qualifications were originally designed for small proportions of age cohorts destined to continue on to university studies, and not for the large majority of young people who will pursue a variety of qualification routes towards training and employment. Another problem is that most higher education sectors and institutions, in particular universities set up according to the classic model, were designed neither to serve a mass audience nor to provide other than academic-type courses. This is one of the factors leading to high non-completion rates for university-type studies in several countries, including Austria, Germany and Italy.

As an OECD 14-country review concludes, the amount of time it takes for young people to make the transition between education, training and employment lengthened on average by about two years during the 1990s, but by the age of 24, the majority of young adults in most OECD countries are no longer in the education and training system.[38] Transition patterns are also assuming increasingly diverse forms, becoming more highly individualized and thus less normatively predictable. There are many interrelated reasons for these changes, but as far as education and training are concerned, it is clear that young people are adopting more conscious strategies to maximize their future options. For example, they are decreasingly likely to decide to follow an upper secondary vocational qualification pathway if this does not lead to eligibility to enter tertiary education later (should they decide they wish to do so rather than entering the labour market). At the same time, increasing proportions of young people are mixing and matching education, training and employment in parallel, not only because they need to finance their studies but also because this is seen as giving them an advantage in the labour market when they eventually embark on permanent and career-type employment. In the final analysis, however, despite all these largely positive developments in educational terms, no country can claim to have genuinely eliminated social inequalities in access, participation and outcomes. On the contrary, all the evidence points towards the increasing polarization of educational-occupational origins and destinations in ever more differentiated ways. Eastern Europe and the Commonwealth of Independent States have experienced this in especially acute ways over the past decade.[39]

GENDER INEQUALITIES

In the majority of OECD countries, taking the lifetime view, girls can now expect to stay in education for about half a year longer than can boys. This average figure masks a wide range of variations that do not necessarily follow obvious patterns, so that in countries as different as the Republic of Korea, Switzerland, Turkey and the United States, boys are still noticeably ahead of girls in this respect.[40] In 17 of the 21 OECD countries for which data are available, young women outnumber young men as upper secondary graduates. This trend is especially marked in the case of general upper secondary qualifications that open the door to long-cycle tertiary courses—that is, to conventional academic university studies.[41] In consequence, women graduate from

tertiary education at a higher rate than do men, but in the postgraduate sector, especially at the doctoral level, men still dominate. Interestingly, the postgraduate gender gap is greatest in the humanities and social sciences, in which women are best represented at the undergraduate level.[42]

The fall-off in women's participation at the very top end of the education system can be attributed to several factors. One is institutionalized discrimination, which results both from young women's lesser access to and success in academic "protegé networks" that are still dominated by older men, and from the structuring of academic qualification ladders and research careers.[43] Another factor is directly related to gender-specific life-course patterns; the time and investment required to reach the doctoral level collides with family building, even given the now widespread strategy of postponing childbearing. While these issues concern only a very small minority of young adult women everywhere, they throw light on some of the continuing ways in which gender inequalities are relayed through education.

It is now frequently argued that in most of the developed world women are no longer educationally disadvantaged and that, in fact, quite the reverse is true: by and large, they outpace and outperform their male peers as far as participation and achievement are concerned; it is young men who are more likely to drop out or fail to complete their courses; and it is young, poorly qualified men who are at the greatest risk of unemployment and social marginalization. These observations are accurate in a broad sense, but they must be placed alongside other equally accurate features of educational opportunity and outcome. It remains the case that young women and young men are very differently distributed throughout the education and training system as far as subject or vocational specialization and qualification pathways are concerned. At all levels, women are underrepresented in science and technology and in TVET. They are certainly underrepresented in many of the specialisms and pathways that offer promising labour market and career prospects. A more appropriate generalization would be that as far as educational outcomes and the quality of employment prospects are concerned, young men are overrepresented at the bottom and top ends of the distribution, whereas young women cluster in the middle range. This overall pattern is modified in multiple and complex ways by the equally important factors of social background, ethnicity and formal citizenship status in one's country of residence.

The OECD 14-country review[44] reports considerable variation in gender-specific equality ratios between countries as far as education and labour market initial transition outcomes are concerned, whereby the gender gap is not always in favour of young men. In terms of educational outcomes, for example, young Swiss women are behind their male compatriots, but in Australia and Hungary the situation is reversed. In most countries, labour market outcomes favour young men, but the reverse is true in Hungary, the United Kingdom and the United States. The Nordic countries come nearest to gender equality for both education and labour market outcomes. The precise patterns are extremely complex across the 14 countries reviewed, but evidence suggests that where education and training systems are highly stratified both vertically (by status level) and horizontally (by tracks), transition outcomes are more strongly influenced by both social background and gender—to young women's disadvantage (as, for example, in Austria).

The countries of Latin America feature overall participation rates that on the whole reflect gender equality in most places, and that favour girls and women on occasion. This exists side by side with significant disadvantage at the basic education level for rural and indigenous peoples in the region, especially for women, and with poor participation rates throughout the education system in particular countries, such as Guatemala. Latin American countries do relatively well on the human development index scale as a whole, but this is not reflected as strongly as it might be in education and training. One important reason is the highly unequal distribution of income and wealth in the region, which has a strong impact on access to education, much of which is privately financed.

Primary enrolment rates are high in most Latin American countries, but in all other sectors, from pre-school to tertiary, participation is skewed towards the more affluent groups. Two-fifths of all children in rural areas either do not complete primary school or do so much later than formally expected.[45] The differences between gross and net enrolment rates at the secondary level are wide in this region. Gross secondary enrolment rates are at least 50 per cent in almost all countries, and in all but three countries, young women are either equally or better represented. Where public-sector secondary education is most widespread relative to private-sector provision, enrolment ratios are generally higher, as in Uruguay, but also in Argentina, Bolivia, Cuba and Mexico.[46] Higher education, however, is an expensive business; it is mainly private, so students must pay fees. Still, women seldom fall below half of those enrolled, and never under 40 per cent. Their participation rates are equal to or higher than those for men not only in long-cycle general higher education courses, but also in shorter-cycle vocational higher education; in Argentina, Paraguay and Uruguay they outpace men here as well.[47] There can be little doubt, however, that it is urban and socially advantaged girls and young women who populate the secondary and tertiary sectors so numerously and successfully.

Western Asia offers a contrast, because in this region, gender gaps reflect not only social inequalities but also significant exclusion of girls and women solely because of their sex. A recent UNDP regional report notes that despite the progress made in the past two decades, illiteracy rates in this area are still above average in comparison with other parts of the developing world, and population growth ensures that the numbers of illiterates will continue to rise.[48] At least half of the women aged 15 years and over are illiterate, and girls are underrepresented even at the pre-school level; the situation is worst for the poor and those in rural areas. In contrast, levels of secondary and tertiary enrolment are above average in comparison with other parts of the developing world, but (with few exceptions) the gender gap worsens level by level, so that in most Arab countries, female participation rates at the tertiary level are lower than those for males and much lower than those for women in other parts of the developing world.[49] In many countries, very expensive private education for a minority (including highly affluent young women in some of the Gulf States) exists alongside poor quality public schooling for the majority.

Globally speaking, higher levels of overall enrolment correlate with greater gender equality, but Western Asia shows that this is not always the case. In Yemen, for example, the gross primary enrolment rate is 79 per cent—but only 45 per cent for

girls. In comparison with sub-Saharan Africa, Western Asia as a whole reports higher levels of primary school participation (84 per cent versus 74 per cent), but the gender gap measures 16 per cent in the Arab world and 14 per cent in sub-Saharan Africa. At the secondary and tertiary levels, the patterns repeat themselves. Bahrain, Lebanon, Qatar and the United Arab Emirates have the highest rates of secondary enrolment and, in contrast with other countries in Western Asia, the gender balance tips in favour of girls. This suggests that at the secondary level in these countries, social background overrides sex in predicting the likelihood of educational participation. At the tertiary level, only 8 of the region's 22 countries return relevant data, but among these, Kuwait, Qatar and the United Arab Emirates report female participation rates that exceed those for males.[50] These departures from general trends can only be accounted for in terms of very specific features of the countries concerned, among which are high levels of affluence combined with tight restrictions on women's active economic participation and free movement, making education the main arena beyond the family in which they can pursue personal development and social expression.

"OLD" AND "NEW" LITERACY

Literacy rates have been touched on several times in this chapter as a bottom-line barometer of human and educational development. It is abundantly clear that illiteracy remains an enormous problem in many parts of the world, and that it is at its worst among women, older age groups, the poor and those living in rural areas. Research, surveys and statistics do not necessarily use the same definitions of literacy, which is now no longer regarded as simply the ability to read and write in one given language. Literacy is really a multifaceted continuum of knowledge and skills related to reading, understanding, writing and using language and numbers. Whether a person is literate or not has to do with the kind of society and culture in which he or she lives, and what it is necessary to be able to do in order to participate economically, socially and politically at a minimum threshold level. Therefore, definitions of literacy differ across space and time. The "old" language-based literacy and numeracy skills have now been joined by the "new" visual, spatial and analytical skills of the digital age. The need for these new skills does not yet exist everywhere or for everyone in the world. The opportunity to acquire them is also very unequally distributed within and between societies, including by age. Young people undoubtedly have a greater opportunity to obtain such skills, whether in or out of school, and some argue that they also have a greater capacity to acquire them since they are more flexible and open in response to new experiences and circumstances. This is potentially an area, then, in which young people have an advantage over their elders. It is also the kind of innovation that is likely to gradually change the ways in which schools, teachers and students operate in order to effect learning.

The reality for most young people in the world is rather more prosaic: far too many lack basic literacy altogether, and relatively few have the opportunity to acquire digital literacy. Basic (but not higher-level) literacy is virtually universal for all ages in the developed world, but otherwise literacy rates are significantly higher—between 6 and 17 percentage points higher for the different regions of the world—for the age group 15-24 than for all those aged 15 years and over. Literacy rates among

young adults are highest and close to universal in East Asia and the Pacific and in Latin America and the Caribbean; they fall to 66 per cent or below for the least-developed countries.[51]

Education for All sources indicate that gender gaps in literacy have improved little in the past decade or so. They remain wide for all ages in South and Western Asia and in sub-Saharan Africa. In some countries—India is one example—there are marked regional differences in enrolment in primary education by sex, which means that the risks of remaining illiterate also correlate with the region of residence.[52]

According to a report prepared by Mahbub ul-Haq and Khadija Haq, South Asia is the most illiterate region in the world, having fallen behind sub-Saharan Africa in the past three decades. Some countries have made greater progress in raising literacy and basic education enrolment rates than have others.[53] The widest gender gaps in participation in the world are found in this region. Regional and ethnic disparities in literacy and enrolment are also very marked. The report argues that while inadequate resources and demographic pressures are key factors in this situation, the lack of sufficient political commitment to education and the overemphasis on supporting an outdated higher education system irrelevant to current needs are just as significant.

Beyond basic literacy levels,[54] the Programme for International Student Assessment (PISA) study results for reading, mathematical and scientific literacy levels among 15-year-olds show a wide range of variation between countries and between dimensions of literacy.[55] For each of the three dimensions, between 5 and 30 per cent of young people (depending on the country) function at the lowest proficiency level, which means that they will not be able to deal comfortably with the information and tasks they are likely to be presented with in their daily lives, whether at work or otherwise. The PISA study participants are predominantly the developed OECD countries and the countries of Eastern Europe, so this study clarifies the fact that when literacy is seen as a continuum of skills and as a multidimensional concept, many young people in even the most favoured parts of the world remain poorly equipped for leading productive and satisfying lives. Mainstream and formal education systems, then, are failing to fulfil their promise, despite universal enrolment and high completion rates through to the end of the upper secondary level.[56]

The Human Development Report includes a communications profile in tabular form that indicates the number of Internet hosts per thousand population, which serves as a rough guide to IT access and use. The high-income OECD countries have a combined average of 120 hosts, and the OECD countries as a group have 92. The developing countries have 0.7 and the least developed countries virtually none at all. Only Latin America and the Caribbean, with 4 hosts, and Central and Eastern Europe and the Commonwealth of Independent States, with 3 hosts, rise to visibility on the IT scale.[57] Interestingly, though, the distribution of Internet hosts in the developed countries is not systematically related to their purely economic affluence, nor to their overall rankings in the human development index.[58]

According to the latest Youth Eurobarometer data,[59] fully 94 per cent of 15- to 24-year-olds surveyed in 2001 in the EU reported using at least one available ICT access channel a minimum of once a week, ranging from palm computers (used by

only 2 per cent) through the Internet (37 per cent) to mobile phones (used by 80 per cent—by far the most popular apparatus). Only four years earlier, in 1997, over half of the same age group did not use any of the ICT tools or equipment then available, and only 7 per cent used the Internet at least once a week. Between 1997 and 2001, regular personal computer use rose from 43 to 56 per cent. Comparable information for Central and Eastern Europe and the Commonwealth of Independent States is not available, but one can safely assume that access remains at a lower level overall and that the quality of hardware and connections is poorer. In some countries, however, access and usage rates fall well within the range for EU members.

In spite of the progress achieved in ICT development and adoption, the digital divide remains very real. Half of the regular Internet users in the Russian Federation are young people, but only 5 per cent of eighth-graders have access to the Web.[60] Within the EU, access and use levels are on the rise everywhere, but absolute rates vary a great deal between Northern and Southern Europe and between the sexes. Furthermore, these gaps have not narrowed in the past five years. Over half of young men but still only a third of young women are users. It is likely that the digital divide will exist for some time. A recent study by Keri Facer and Ruth Furlong of 9- to 14-year-old "low PC users" in the United Kingdom shows that even when children have facilities at home, access, use and attitudes at school and at home reproduce gender differences and social inequalities.[61] Girls and pupils from working-class backgrounds are more likely to be low users. Teachers, parents and "more competent" peers contribute in a variety of ways to these outcomes.

The digital divide in the developing world begins at a very basic level, with difficulties linked to hardware purchase and maintenance costs, access to up-to-date software, and the speed of Internet connectivity. These problems are as relevant for schools and public access points as they are for individual citizens in their homes. Luis Osin argues that the effectiveness of computer-assisted learning has been demonstrated beyond all doubt—largely owing to its potential for individualized content and pacing—and that the real cost of equipping schools and colleges is low if the high rate of potential total return is taken properly into account.[62] The key problem is not paying for the equipment, but rather the long-term maintenance and upgrading costs together with ensuring that teachers know how to make good pedagogic use of ICT tools.

Researchers conducting a recent exploratory study of 15 Pacific Islands countries came up against fundamental communication problems in attempting to send out a survey as an e-mail attachment; even fax connections were highly unreliable.[63] Respondents—only one in five of the projected sample—identified cost and bandwidth as the major barriers to more widespread use of the Internet in their areas. Using the lowest acceptable definition of Internet access, all countries reported that fewer than 25 per cent of schools were connected—more or less the same level as private homes.

India is currently at the forefront of the global imagination with respect to overcoming the digital divide between the developed and developing worlds. The country's efforts in this regard are to a certain extent focused on the contribution of the IT industry to economic growth and hence the promise of far greater resources to tackle poverty, illiteracy and poor-quality public education. C.P. Chandrasekhar argues, however, that India remains a lower-end software and services supplier whose ICT export

revenues are far below the value of remittances sent back to India by migrants living elsewhere.[64] He identifies the major brake on development in the IT sector beyond this stage to be India's limited base for training and skills development. Fewer than 1 in 20 Indian citizens has ICT access, but even were access much more widespread, they would be unable to benefit significantly because the quality of education and training is so poor. The digital revolution and its impact on work practices and lifestyles will spread rapidly among the elites, both urban and rural, but will not reach the majority of the population in the foreseeable future. At the end of the 1990s, three Indians per thousand had access to personal computers, and fixed ISP-modem connections were accessible to 22 per thousand, with much of this access confined to urban areas. In comparison, average global access levels stood at 125 per thousand for modems and 60 per thousand for PCs. Finally, the information economy operates mostly in English; active citizenship in the digital age will increasingly lead to the use of the English language as well as the learning of information and communication technologies.[65]

DISTANCE AND NON-FORMAL EDUCATION

Distance education and non-formal education are by no means the same thing, but in the less developed and developing world they are both viewed as increasingly important ways to facilitate access to, participation in and completion of basic education. The gradual introduction of ICT will reinforce these trends, with the hope of improving access for disadvantaged groups and regions and with the promise of developing tailor-made, perhaps borderless education services for active learners of all ages.

Michael Potashnik and Joanne Capper point out that 11 mega-universities providing solely distance learning are now fully operative and serve approximately 3 million registered students.[66] Only three of these are in the developed countries (France, Spain and the United Kingdom); the remaining eight are located in China, India, Indonesia, the Islamic Republic of Iran, the Republic of Korea, South Africa, Thailand and Turkey. China alone can claim 1.4 million registered students and 100,000 higher distance education graduates each year; half of Chinese engineering and technology students are registered in distance education courses.

ICT-supported distance education is mainly relevant for the tertiary sector. At the primary and secondary levels, radio- and television-based distance education has existed for 30 years or more in parts of Latin America—particularly in Brazil and Mexico, where Telesecundaria is a part of the formal education service, above all for rural areas. Still, print-based technologies are easily the least expensive and most widespread medium, though distance education is not necessarily a cheaper option than conventional provision, since initial investment costs are high. High enrolments are needed to bring down unit costs. This brings the risk of limited and over-standardized course provision and inadequate tutorial support. Overall, investment-return calculations and poor infrastructures still favour conventional print-based correspondence courses, supplemented by pre-recorded audio-visual media.[67]

Although there is no research evidence showing that conventional distance learning is educationally less effective than mainstream formal systems, it is still accorded less credibility and recognition. Transfer and progression between the two channels of learning and qualification remain awkward, and systematic evaluations of

success and failure are scarce.[68] In addition, certain risks associated with technology-driven contributions to the delivery of learning are rising as ICT tools overtake conventional channels. In particular, the idea of borderless education is not universally welcomed; it embodies competition for national education and training systems and promotes cultural homogenization to the detriment of cultural and linguistic diversity.[69]

Potential risks and drawbacks notwithstanding, William Saint argues that ICT-supported distance education is the only solution to the tertiary sector crisis in sub-Saharan Africa, which faces the urgent need to expand access with no foreseeable increase in funding resources.[70] Current enrolments in the region are too low to sustain economic and social development. Demographic trends are such that the majority of countries would have to double the number of enrolments for 18- to 23-year-olds in the next 10 years merely to sustain the same participation rates. Public expenditure on tertiary education is falling rather than rising, and in many countries is approaching the minimum level at which conventional higher education can be provided. Many young people who are formally qualified for tertiary education cannot continue their studies because there are insufficient places. In Swaziland, for example, 13 per cent of university students are registered in distance degree courses; the programme was introduced in response to the fact that campus space and facilities are inadequate to accommodate the numbers of qualified applicants.

Facilitating university studies is certainly strategically important for developing countries, but opening access to basic education is arguably their most urgent problem. Indonesia,[71] for example, is a vast archipelago with high levels of regional, cultural and linguistic diversity; 300 ethnic groups, 583 languages and 200 dialects are spread over thousands of islands. A major drive to improve educational access and quality was halted in the late 1990s as the country experienced a monetary crisis. These considerations make conventional educational solutions impracticable, so extensive distance education programmes have been developed to offer alternative learning pathways to those who simply cannot attend school, either because there are insufficient places or because they live in remote areas. For example, the Indonesian Open Junior Secondary School (STLP Terbuka) is designed to reach poor rural families in which children must work, so there is no fixed timetable and the teaching materials do not presuppose high technology infrastructure. The organization of distance education also has to fit in with local conditions and traditions. In Indonesia, Terbuka is integrated into the regular school system, with the same curricula and examinations. In Bangladesh and India, and also in Brazil, NGOs and private initiatives play an important role.

The reasons for and characteristics of distance education and non-formal education overlap to some extent, but the latter is more distinctly defined as an alternative route to learning rather than simply a different channel of delivery for learning. Philip Coombs defines non-formal education as "any organized educational activity outside the established formal system ... that is intended to serve identifiable learning clienteles and learning objectives"[72] but that is not necessarily thought of as "educational" in the classic sense of the word.[73] A holistic approach to education will always consider formal, non-formal and informal learning as complementary and mutually reinforcing elements. There is always the risk, however,

that non-formal and informal learning might be used as an argument for investing less in formal education and depriving those who live in the developing world of the right to education as such. This is the reason for the caution with which international educational reports approach the question of non-formal education, which is seen not "as an alternative education system nor a short-cut (but as) providing second-chance or catch-up learning opportunities to those who missed formal schooling or failed to be attracted by the formal system".[74] In other words, non-formal education is complementary and supplementary; it facilitates the learning of life-relevant knowledge and skills—especially for rural and disadvantaged groups—but it cannot and does not replace formal education.

In the developing countries, it is unlikely that UPE can be achieved without expanding non-formal education provision. Formal access does not always lead to enrolment, and enrolment does not guarantee sustained participation or successful completion. UPE may be seen as the guarantee of literacy for young adults, but only non-formal education can reach those for whom mainstream formal education is practically inaccessible. A number of E-9 countries are investing particular efforts in this direction, among them Bangladesh, Brazil, China, India and Indonesia. Nevertheless, the non-formal sector receives too little recognition and funding, and it is still largely regarded as a second-class option by parents and local communities. What is also lacking in the developing world, it seems, is a broader understanding of non-formal education. It is not simply a more flexible, more typically community- or NGO-organized manner of providing education, but can embrace and offer a genuinely distinctive curriculum and more symmetrical pedagogies.

CONCLUSIONS

At the risk of oversimplification, international comparative data on education suggest that the world can be divided into the following three broad groups:

- Regions and countries in which overall participation in primary-level basic education remains low and in which gender gaps in enrolment are wide, compounded by minority group membership, rural location and, as always, poverty. This is the most common situation in countries in sub-Saharan Africa and South Asia; it also prevails in some East Asian countries and in some parts of Western Asia, and can be found in some Latin American and Caribbean countries as well.
- Regions and countries in which secondary education completion rates are poor and in which gender gaps in enrolment, whether wide or narrow, are compounded by social inequalities (for example, young women from affluent backgrounds have far better access to education than do other young women). This situation exists in parts of the Middle East and North Africa but is even more evident throughout much of Latin America, where gender gaps are small or non-existent but where social inequalities in educational opportunity are very marked. The Central Asian republics are also best placed in this group, although participation rates are typically better here than in the other regions included in this category.

- Regions and countries in which participation rates are relatively high throughout the entire education and training system but in which (at least) social background and ethnicity are still linked to noticeable differences in educational opportunities and in which gender gaps are still expressed in the distribution of young women and young men across sectors, tracks and subjects and at the highest levels of the system. This is the case in most of the developed world, though precise patterns vary considerably from country to country.

These basic divisions are frequently modified by economic and political changes that introduce turbulence and reform into previously stable education and training systems. Such transformations also overturn and restructure the life chances of specific cohorts who happen to be at a particularly vulnerable stage of their lives when these changes take place. Under such circumstances, participation rates suffer—at least temporarily, and established relations between education, qualification and employment opportunities lose their former predictability and effectiveness. The changes that have taken place in Central and Eastern Europe and the Commonwealth of Independent States since 1990 are a classic contemporary example.[75]

The most obvious cultural source of differences between regions and countries with respect to their educational profiles would appear to be long-established or "traditional" values, as these influence the shape of socialization and learning processes together with the kinds of self-identities and skills or competencies that are seen as necessary and desirable for young people to acquire. Formal school systems and their pedagogies sit less comfortably with cultures in which the family and local community are seen as primary agents and contexts for socialization and learning, and in which particular importance is assigned to people's respect for human relations and group solidarity. This may lead to noticeable dissonance between the worlds of family and school, as is the case in parts of South-East Asia.[76] In some societies, however, including Japan, schooling has been able to establish itself as an extension of the socialization and learning outcomes that parents and families want to achieve on the basis of traditional values; in other words, schools are more consonant with what families themselves want.[77] Looking back at the former Soviet Union, State authorities shaped both schools and families towards pre-specified goals, so that the collapse of State socialism produced turbulence and disorientation in both spheres of social life. Dissonance between formal schooling and the family/community appears to be most marked in parts of sub-Saharan Africa, to the extent that some might argue that introducing modern formal schooling is a misplaced endeavour insofar as it is not adapted to the physical, economic and cultural parameters of much of the region.[78]

Implementing lifelong learning is one important dimension of efforts to provide culturally, socially and economically appropriate education. In the developed countries, this is currently seen most typically as a means to update and to raise the overall level of workforce knowledge and skills in response to rapidly changing labour market and occupational demands. In this context implementing lifelong learning is largely a matter of increasing participation in continuing education and vocational training, in particular for older workers and those with low skill levels. In Europe,

the social benefits of lifelong learning for personal development and active citizenship are also emphasized, together with the importance of nurturing the joy of learning from the very start.[79]

It is both essential and desirable to restructure education and training systems and practices so that they continually open inviting doors to learning rather than closing down alternatives and horizons. It is important to stop and consider why so many young people in the developed countries dislike school and school-like environments, and why combining different activities (in particular, studying/training and working at the same time) is once again becoming more widespread.[80] It might be more effective to design positive ways of drawing greater educational benefit from linking activity spheres rather than regarding them as mutually exclusive alternatives or a result of pure economic necessity (to finance one's studies). The increasing importance of education and qualification in pre-structuring transition chances and risks has indisputably led to increasing internal differentiation within age cohorts (and not simply between them owing to economic cycles of boom and recession).

Unless attitudes and practices are restructured to reduce the relative significance of initial transitions between education, training and employment for subsequent life chances and instead work towards increasing the significance of recurrent or continuous transitions for life management on a long-term basis, the creation of intransigent patterns of social marginalization and exclusion for a significant minority of the population of the most affluent countries in the world remains a real risk. Poor levels of education and qualification are closely correlated with the risk of social exclusion, but good education and qualifications are no guarantee of social inclusion. From young people's perspective, initial education and training no longer deliver the desired result (a reasonable chance of decent, secure employment), while highly individualized and increasingly privatized strategies for achieving and sustaining educational advantage are gaining ground.

For the developing countries and regions, where the vast majority of young people in the world live, implementing lifelong learning could bring differently accented benefits. First, it could enable those who live in countries that cannot afford to provide quality education and training for everyone in conventional ways to participate in more appropriate and life-relevant forms of active learning alongside earning a living and looking after a family. Second, giving greater recognition to non-formal and informal learning and their outcomes is a potentially powerful tool in addressing the problem that conventional formal schooling is too divorced from local cultural and social environments. Third, more systematic and widespread acceptance of a diversity of contexts and channels for learning at all levels and for all ages facilitates access and participation for those living in rural and isolated communities. All these benefits apply to people of all ages, but the particular benefit for young people is that they help to give them more than just one chance, at this one point in their lives, to participate and succeed educationally. Young people in the developing world are especially likely to experience strong pressures to earn money to help support their families and—particularly if they are girls—to take on significant domestic and childcare responsibilities at home. Educational policy and provision must respond to the realities of young people's lives.

TVET provision and participation is typically weak in developing regions and countries.[81] Lacking more promising alternatives, young people usually struggle to get as far as possible in the general education system, but for the vast majority it has to be said that completion of primary education is the only realistic goal. A sizeable number manage this "on time" as foreseen in the national education system, but a significant minority complete their studies a few years later than they "should". By this time, some must find the means to support themselves independently because their families cannot do so, or, more often, they will have long since begun to work on a casual, part-time basis to supplement the family income. Those who manage to gain access to TVET are, in effect, a small and relatively privileged group, but their employment prospects are not necessarily better than those with lower-level and solely general qualifications. It is certainly significant that the modernizing economies and societies of East and South-East Asia have higher rates of participation in TVET and can deliver qualifications that bring returns in their labour markets.

SUMMARY AND RECOMMENDATIONS

Education is the single most important factor contributing to young people's chances of leading productive and responsible lives. Overall, the commitments made under the Millennium Development Goals are clear with regard to the emphasis placed on both primary and secondary education, aspects of particular relevance for young people between the ages of 15 and 24.

Illiteracy continues to be an enormous problem for many young people in the world. In 2000, approximately 82 million young women and 51 million young men were illiterate. Another 130 million children are presently not in school, and they will become the illiterate youth and adults of tomorrow. Despite improvements, illiteracy rates for young women in sub-Saharan Africa and South Asia currently average between 25 and 30 per cent. As further evidence of the gender gap, rates are typically at least 10 percentage points lower for young males in these regions.

Formal school systems and curricula may be considered less important in cultures that emphasize the role of family and local community as primary agents and contexts for socialization and learning. Nevertheless, there is widespread agreement that education, literacy and numeracy are essential for young people, and that educational policy and provision must respond to the realities of young people's lives, which can be achieved only through formal systems. The participation of students as partners in reviewing and renewing educational systems is crucial. Linkages between schools and the private sector and the importance of informal and vocational education to young people should also be considered.

In view of the foregoing, renewed emphasis should be placed on implementing lifelong learning schemes to provide culturally, socially and economically appropriate education. Lifelong learning arrangements, particularly those in informal and non-formal settings, can confer a number of benefits: they can provide people who live in countries that do not have universal education with access to learning opportunities on a continuous basis; they can address the problem of conventional formal

schooling being too far removed from local cultural and social environments; and they can alleviate economic hardship, particularly for young people in developing countries who may experience strong pressures to earn income to help support their families or, particularly if they are girls, to take on significant responsibilities at home.

[1] L. Chisholm and S. Kovatcheva, "Youth in search of a sip of happiness: the social situation of young people in Europe", a report prepared for the 6th Conference of European Ministers responsible for Youth, Thessaloniki, Greece, 7-9 November 2002 (Strasbourg, Council of Europe, 2002), chapter 1.2.

[2] As compiled by, in particular, UNESCO and its Institute for Statistics, UNDP, UNICEF, OECD, ILO, the World Bank, and EU agencies such as EUROSTAT, CEDEFOP and EURYDICE.

[3] See, for example, European Commission, "E-learning action plan—designing tomorrow's education" (Brussels, 24 May 2000) (COM(2000)318 final).

[4] R. Mansell and U. When, eds., *Knowledge Societies: Information Technology for Sustainable Development; Report for the United Nations Commission on Science and Technology for Development* (New York, Oxford University Press, 1998).

[5] P. Sahlberg, "Building bridges for learning: the recognition and value of non-formal education in youth activity", a report prepared for the European Youth Forum and the National Board of Education of Finland (Brussels, European Community/European Youth Forum, December 1999); L. Chisholm, "Towards a revitalization of non-formal learning for a changing Europe", Report of the Council of Europe Youth Directorate Symposium on Non-Formal Education, Strasbourg, 13-15 October 2000 (Sympo/Edu (2000) rap); European Commission, "Making a European area of lifelong learning a reality" (Brussels, 21 November 2001) (COM(2001)678 final); and European Youth Forum, "European Youth Forum response to the European Commission Communication: 'Making a European area of lifelong learning a reality'" (Brussels, 6 April 2002) (Education 0312-02).

[6] L. Chisholm, "The educational and social implications of the transition to knowledge societies", in *Europe 2020: Adapting to a Changing World*, O. von der Gablentz and others, eds. (Baden-Baden, Nomos Verlag, 2000), pp. 75-90; L. Chisholm, "Youth in knowledge societies: challenges for research and policy", *YOUNG*, vol. 9, No. 1 (2001), pp. 61-72; and J.P. Gavigan, M. Ottitsch and S. Mahroum, "Knowledge and learning—towards a learning Europe", *Futures Report Series*, No. 14 (Sevilla, Institute for Prospective and Technological Studies, 1999) (EUR 19034 EN).

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[8] B. Bradford Brown, R. Larsen and T.S. Saraswathi, eds., *The World's Youth: Adolescence in Eight Regions of the Globe* (New York, Cambridge University Press, 2002).

[9] OECD and Statistics Canada, "Literacy in the information age: final report of the International Adult Literacy Survey" (Paris, OECD, 2000).

[10] M. ul-Haq and K. Haq, *Human Development in South Asia 1998: The Education Challenge* (Oxford and Karachi, Oxford University Press, 1998).

[11] See OECD, "From initial education to working life: making transitions work" (Paris, 2000); and European Centre for the Development of Vocational Training (CEDEFOP), "The transition from education to working life: key data on vocational training in the European Union", CEDEFOP Reference Series (Luxembourg, Office for Official Publications of the European Communities, 2001).

[12] In the UNDP *Human Development Report 2002: Deepening Democracy in a Fragmented World*, youth coverage is notably absent, and education is mentioned mainly in the context of its importance for the human development index. Building and consolidating democracy is not solely dependent upon education, and certainly not on formal education, but educating and involving young people as active citizens is an indispensable element. This goes beyond access to basic education and the knowledge and skills children and young people acquire thereby (see European Youth Forum, "Lifewide learning for active citizenship", position paper (Brussels, April 2002) (COMEM 0238-02 final).

[13] The Declaration affirms that all children, young people and adults have a fundamental human right to a basic education that will develop their talents, improve their lives and transform their societies.

[14] UNESCO, *Monitoring Report on Education for All, 2001* (Paris, October 2001) (ED-2001/WS/33).

[15] UNESCO Institute for Statistics, *Education for All, Year 2000 Assessment: Statistical Document*, Report for the International Consultative Forum on Education for All, World Education Forum, Dakar, 26-28 April 2000 (Paris, 2000), p. 10.

[16] This is why it is important to distinguish between gross enrolment ratios, which include all registered students regardless of age, and net enrolment ratios, which include only those who fall within the standard age range for primary schooling in the country concerned.

[17] The Dakar goals specify the target of free and compulsory good-quality primary education for all. In many countries, it is certainly not free of charge in practice, as parents must pay for school books, supplies and so on. Systematic data on this question still has to be collected at the international level, as pointed out in UNESCO, *World Education Report 2000—The Right to Education: Towards Education for All throughout Life* (Paris, 2000), p. 48.

[18] UNESCO, *Monitoring Report on Education for All, 2001...*, p. 14, figure 1.

[19] OECD and UNESCO Institute for Statistics, *Teachers for Tomorrow's Schools: Analysis of the World Education Indicators, 2001 Edition* (Paris, OECD, 2001), p. 42, figure 1.14.

[20] UNESCO, *Monitoring Report on Education for All, 2001...*, p. 18, table 2.

[21] Ibid., p. 19, table 3.

[22] Ibid., p. 21, table 4.

[23] Basic literacy levels may not correspond with functional literacy levels (which themselves vary according to the society and economy in which a person lives and works). Digital literacy levels may have little or no relationship with language literacy levels in the developed world, and are wholly absent for the overwhelming majority of the population in developing countries.

[24] The World Education Indicators (WEI) Program is a joint initiative of OECD and UNESCO with support from the World Bank. The 18 participating countries include Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Jordan, Malaysia, Paraguay, Peru, the Philippines, the Russian Federation, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe. The data included in the WEI covers the whole of a country's education system, both public and private, and includes distance provision. Workplace-based TVET and "non-formal/adult" education are not included unless explicitly recognized as part of and as being in parity with the mainstream formal education system.

[25] OECD and UNESCO Institute for Statistics, *Teachers for Tomorrow's Schools: Analysis of the World Education Indicators, 2001 Edition*...

[26] Ibid., p. 41, figure 1.15.

[27] UNESCO, *World Education Report 2000...*, p. 38, figure 3.13.

[28] "The E-9 Initiative was launched in New Delhi, India, in 1993 on the occasion of the EFA Summit of the Nine High-Population Countries (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan). The heads of State and Government of nine countries signed the Delhi Declaration, committing their countries to reach the Education for All goals in the nearest possible future. The E-9 ministers of education met repeatedly during the past years, reconfirming their commitment to EFA, exchanging experiences and reporting increasingly on significant progress. In this respect and in view of the fact that those countries represent more than half of the world's population, the E-9 countries established themselves as a visible political lobby in favour of EFA", available at www.unesco.org/education/e9/index.shtml.

[29] UNESCO Institute for Statistics, *Literacy and Non-Formal Education in the E-9 Countries* (Paris, 2001); and UNESCO Institute for Statistics, *Distance Education in the E-9 Countries* (Paris, 2001).

[30] UNESCO Institute for Statistics, *Sub-Saharan Africa: Regional Report* (Paris, 2001).

[31] Ibid., p. 10, table A.

[32] D. Everatt, "From urban warrior to market segment? Youth in South Africa 1990-2000: youth in post-apartheid South Africa", *Development Update Quarterly Journal of the South African National NGO Coalition and INTERFUND*, vol. 3, No. 2.

[33] UNESCO Institute for Statistics, *Sub-Saharan Africa: Regional Report...*, p. 81, figures 2.13 and 2.14.

[34] Ibid., section 2.5; the median gross tertiary enrolment ratio is 2 per cent for the 30 countries providing data; rates are around 7 per cent for Côte d'Ivoire, Liberia, Mauritius, Namibia and Sudan.

[35] OECD, "From initial education to working life: making transitions work"..., p. 49, figures 2.9 and 2.10; data based on results returned by 17 countries.

[36] OECD, Centre for Educational Research and Innovation (CERI), *Education at a Glance: OECD Indicators 2001* (Paris, 2001), p. 119, chart C1.1; p. 131, table C1.1; and p. 132, table C1.2.

[37] That is, ISCED 5A courses; see OECD, Centre for Educational Research and Innovation (CERI), *Education at a Glance: OECD Indicators 2001...*, p. 146, chart C3.1. These figures require careful interpretation, as in some countries much higher proportions go on to vocational higher education (sometimes called "professional courses"), which may or may not enjoy the same status and prospects as general, non-vocational higher-education courses.

[38] OECD, "From initial education to working life: making transitions work"...; participating countries include Australia, Austria, Canada, the Czech Republic, Denmark, Finland, Hungary, Japan, Norway, Portugal, Sweden, Switzerland, the United Kingdom and the United States.

[39] UNICEF, *Young People in Changing Societies*, Regional Report No. 7 (Florence, UNICEF Innocenti Research Centre, 2000).

[40] OECD, Centre for Educational Research and Innovation (CERI), *Education at a Glance: OECD Indicators 2001...*, p. 119, chart C1.1.

[41] Ibid., p. 140, chart C2.2.

[42] Ibid., section C4.

[43] European Technology Assessment Network, Expert Working Group on Women and Science, *Science Policies in the European Union: Promoting Excellence through Mainstreaming Gender Equality,* ETAN report on women and science (Luxembourg, Office for Official Publications of the European Communities, 2000).

[44] OECD, "From initial education to working life: making transitions work"..., p. 45, figures 2.6 and 2.7.

[45] UNESCO Institute for Statistics, *Latin America and the Caribbean: Regional Report* (Paris, 2001), section 2.2.

[46] Ibid., section 2.3.

[47] Ibid., section 2.4.

[48] UNDP, *Arab Human Development Report 2002: Creating Opportunities for Future Generations* (United Nations publication, Sales No. E.02.III.B.9), chapter 4.

[49] Ibid., pp. 152-153, table 15; and p. 154, table 16.

[50] Ibid., pp. 152-153, table 15; tertiary enrolment rates in the United Arab Emirates are 4.7 per cent for males and 14.1 per cent for females; in Qatar, the corresponding figures are 14.7 per cent for males and 42.1 per cent for females.

[51] UNDP, *Human Development Report 2002: Deepening Democracy in a Fragmented World* (Oxford and New York, Oxford University Press, 2002), p. 185, table 10.

[52] UNESCO Institute for Statistics, *Education for All, Year 2000 Assessment: Statistical Document...*, p. 54, tables 6.3a and 6.3b; and p. 34, table 3.2; also see UNESCO Institute for Statistics, *Literacy and Non-Formal Education in the E-9 Countries...*, p. 12, figures 6 and 7.

[53] M. ul-Haq and K. Haq, op. cit.

[54] Defined within the Education for All framework as the ability to read and write, with understanding, a simple statement related to one's daily life.

[55] OECD, Programme for International Student Assessment, *Knowledge and Skills for Life—First Results from PISA 2000* (Paris, OECD, 2001); the PISA study covers 32 countries (28 OECD countries and Brazil, Latvia, Liechtenstein and the Russian Federation).

[56] See, for example, European Commission, Directorate-General for Education and Culture, "European report on quality of school education: sixteen quality indicators", a report based on the activities of the Working Committee on Quality Indicators (Brussels, May 2000).

[57] UNDP, *Human Development Report 2002: Deepening Democracy in a Fragmented World...*, p. 189, table 11.

[58] Information accessed at http://www.undp.org/hdr2002/indicator/indic_380_1_1. html.

[59] See L. Chisholm and S. Kovatcheva, "Youth in search of a sip of happiness: the social situation of young people in Europe"...; and http://europa.eu.int/comm/ education/youth/studies/eurobarometer/eurobarometer.html.

[60] According to the findings of the 1999 Trends in International Mathematics and Science Study (TIMSS), as reported in OECD and UNESCO Institute for Statistics, *Teachers for Tomorrow's Schools: Analysis of the World Education Indicators, 2001 Edition...*, p. 47.

[61] K. Facer and R. Furlong, "Beyond the myth of the 'cyberkid': young people at the margins of the information revolution", *Journal of Youth Studies*, vol. 4, No. 4 (2001), pp. 451-470.

[62] L. Osin, "Computers in education in developing countries: why and how?" *Education and Technology Technical Notes Series*, vol. 3, No. 1 (Washington, D.C., World Bank Human Development Department—Education Group, March 1998).

[63] Zwimpfer Communications Ltd., *Internet Infrastructure and e-Governance in Pacific Islands Countries: A Survey on the Development and Use of the Internet* (Apia, Samoa, UNESCO Office for the Pacific States, March 2002).

[64] C.P. Chandrasekhar, "ICT in a developing country context: an Indian case study" (New Delhi, Jawaharlal Nehru University/Centre for Economic Studies and Planning, 2001).

[65] For further information on the consequences of the dominance of English in computer software technologies, see UNDP, *Arab Human Development Report 2002: Creating Opportunities for Future Generations...*, chapter 5, which describes the situation in Western Asia.

[66] M. Potashnik and J. Capper, "Distance education: growth and diversity", Finance and Development (March 1998), pp. 42-45.

[67] Ibid., table 2.

[68] UNESCO Institute for Statistics, *Distance Education in the E-9 Countries...*, p. 61, table 14.

[69] See, for example, J. Tooley and J. Taylor, "Transnational education: lifelong learning knows no borders", a report to the Academic Cooperation Association for the European Commission, Directorate-General of Education and Culture (Brussels, 2002).

[70] W. Saint, "Tertiary distance education and technology in sub-Saharan Africa", *Education and Technology Technical Notes Series*, vol. 5, No. 1 (World Bank Human Development Department—Education Group and the Association for the Development of Education in Africa Working Group on Higher Education, November 2000).

[71] UNESCO Institute for Statistics, *Distance Education in the E-9 Countries...*, pp. 33-39.

[72] P.H. Coombs, "Should one develop non-formal education?", *Prospects*, vol. 3, No. 3 (Autumn 1973), p. 288.

[73] Current definitions are virtually identical. The main issue is the distinction between non-formal and informal education. P.H. Coombs (ibid.) correctly defines the latter as "the truly lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the ... environment"; in other words, informal education is effectively socialization. Non-formal education, by contrast, is intentional; it offers a structured process of learning, but one that is not institutionally embedded in mainstream schooling systems.

[74] UNESCO Institute for Statistics, *Literacy and Non-Formal Education in the E-9 Countries...*, p. 6.

[75] UNICEF, *Young People in Changing Societies...*

[76] M. Sta. Maria, "Youth in Southeast Asia: living within the continuity of tradition and the turbulence of change", *in The World's Youth: Adolescence in Eight Regions of the Globe*, B. Bradford Brown, R. Larsen and T.S. Saraswathi, eds. (New York, Cambridge University Press, 2002).

[77] H.W. Stevenson and A. Zusho, "Adolescence in China and Japan: adapting to a changing environment", in *The World's Youth: Adolescence in Eight Regions of the Globe*, B. Bradford Brown, R. Larsen and T.S. Saraswathi, eds. (New York, Cambridge University Press, 2002).

[78] A. Bame Nsamenang, "Adolescence in sub-Saharan Africa: an image constructed from Africa's triple inheritance", in *The World's Youth: Adolescence in Eight Regions of the Globe*, B. Bradford Brown, R. Larsen and T.S. Saraswathi, eds. (New York, Cambridge University Press, 2002).

[79] International Commission on Education for the Twenty-first Century, *Learning: The Treasure Within*, Report to UNESCO of the International Commission on Education for the Twenty-first Century (Paris, UNESCO, 1996); and European Youth Forum, "Lifewide learning for active citizenship"...

[80] L. Chisholm, "From systems to networks: the reconstruction of youth transitions in Europe", in *From Education to Work, Cross-National Perspectives*, W.R. Heinz, ed. (Cambridge, Cambridge University Press, 1999), chapter 13.

[81] See M. ul-Haq and K. Haq, *Human Development in South Asia 1998: The Education Challenge...*; and UNDP, *Arab Human Development Report 2002: Creating Opportunities for Future Generations...*

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