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SCHOOLING FOR THE FUTURE – TRENDS, SCENARIOS AND LIFELONG LEARNING

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The OECD Centre for Educational Research and Innovation (CERI) has recently completed a forward-looking analysis entitled "What Schools for the Future?" (OECD, 2001a). This paper discusses some of the main trends highlighted by that analysis, and specifically outlines its six schooling scenarios for the future. The paper concludes with a discussion of how all this relates to lifelong learning.

Some Key Trends and Issues in Education's Wider Environment

i) The Nature of Childhood and "Extended Adolescence"

Policy discussion about schooling needs to be informed by a serious appreciation of the nature of the lives of the young in today's society, which too often is missing. It will mean a searching examination of the place of schools in the lives of the young, which "structurally" lie at the core of their activities but with other sources of interest and influence – TV, computer games, the peer group – seeming far more attractive and relevant for many. How can these two sides – what matters to society and what matters to young people themselves – be brought closer together? Will schools wither away because they are perceived by too many as irrelevant to 21st century life? These questions permeate the scenarios presented below.

The notion of "extended adolescence" recognises this importance of organised education and how it delays full entry into adult life. The longer time the young stay in initial education is widely seen as a good thing, particularly as more and more attain qualifications. But, on the other hand, how far can this lengthening be taken, as compared with lifelong learning alternatives that argue for less emphasis on the "front-end model" of education? Should the young be cloistered away from labour market and family responsibilities for increasingly protracted periods? These and similar questions

relating to the experience of childhood and adolescence today are fundamental in considering the future of schooling.

ii) The Knowledge Economy

There are many signs that we live in a knowledge economy – more and more of us are "knowledge workers", the qualifications asked for continue to rise, the speed of knowledge-change (and obsolescence) quickens, as does the integration of ICT within work. But, by no means all are "knowledge workers", many continue to occupy low-skill positions, and greater job insecurity comes with the quickening change, especially among the less qualified. So, there are troubling aspects to these developments as well as positive news. It is also necessary to ask about what "knowledge" is – it is certainly more than mere information. A recent OECD/CERI analysis of knowledge management applies the four-way distinction: "Know-what", "Know-why", "Know-how" and "Know-who" (OECD, 2000a). It suggests that there is growing demand for the latter three compared with the more straightforward factual knowledge embodied in "Know-what".

What does this mean for education, especially schools? The OECD knowledge management report wonders about the capacity of many school systems to address such a broad and challenging knowledge agenda that goes well beyond traditional conceptions of educational quality and the "know-what" focus of factual knowledge/recall. Much of what was taught to the young within the school curriculum is in any case forgotten by adulthood. This, combined with the quickening change in job-related knowledge requirements and the greater complexity and diversity of the pathways through adult life, means that searching questions must be asked about what it is that education equips students with. Paradoxically, perhaps, the very importance of knowledge in the 21st century may increase, not diminish, the need for the school to place a strong emphasis on establishing a healthy personal and social foundation in the young. It should give them the tools with which to cope with the complex, rapidly changing world in which they live, with many such tools being about personal development and citizenship rather than cognitive knowledge itself.

iii) Inequality and Exclusion

The past century has seen enormous progress relating to standards of living, health and other indicators of welfare. The very long-term trends had been towards the reduction of wealth and income inequalities, though with the gaps between the top and bottom remaining stark. Over the past 25 years, however, the patterns have been disrupted and in many countries, the disparities in resources available to individuals and households have again been widening. Not all socio-demographic groups have experienced the changes equally: across the OECD countries as a whole, older members of populations, and those established in work, have done relatively well. But, younger members of the population (including children) and those with precarious labour market positions have done badly. Households with children headed by young adults, especially single parents, have been particularly affected. Child poverty rates may be low in certain countries, (5% or lower in the Nordic countries, Belgium and Luxembourg), but in others as many as a fifth to a quarter of children live in poverty (Italy, Mexico, Turkey, United Kingdom, the

United States). (UNICEF, 2000) In short, problems have been aggravated precisely among those for whom schools are most responsible.

In the light of the powerful association between home backgrounds and educational attainment, the stubborn, sometimes worsening, social inequalities are a critical set of trends for schools. Far from the "knowledge society" evaporating problems, it may well be exacerbating them for the most excluded.

iv) Changing Family and Community Life

The above reference to single parents raises the more general consideration of family and community life. Declining birth rates, combined with growth in standards of living, mean that many young people have access to unprecedented levels of goods and services compared with their parents or grandparents. Again, however, the benefits are mixed, and growing individualism and social fragmentation bring their own problems for the young and for schools. An obvious issue that they must cope with is marital dissolution, and the decline of the conventional nuclear family. Change in community life is also important: sub-urbanisation and increased mobility can undermine the neighbourhood structures that foster the "social capital" of norms, values, and networks supportive of education (see also OECD, 2001b; Putnam, 2000). The school can less readily turn to the "community" as an educational partner where communities are dispersed, transient or virtual, and in some societies there is a related sense of profound unease about children's security.

Some identify in these trends a new set of missions for schools. Carnoy (2001) envisages the school as "the central organising point in our society at the neighbourhood level". Should the socialisation functions of schools be made more explicit and accorded much greater priority? This would be to recognise the potential of the school as the communal setting critical for the upbringing of the young, where contacts, friendships, play and informal learning are essential rather than incidental. While this should not necessarily conflict with a strong focus on student cognitive development, it requires investment in a very broad set of educational outcomes going well beyond the measurable aspects of student achievement if this mission is to be brought about. These different emphases underpin the two "re-schooling" scenarios in the next section.

v) Some Broader Developments

The trends discussed so far have referred primarily to the situation in OECD countries, but what of the rest of the world? The pertinent global developments for the future environment of schooling are legion; here I focus on two. First, the inequalities between the rich and poor countries of the world have been widening at an alarming rate: "Inequalities continued to grow over the 20th century, though also comparatively slowly until well into the post Second World War period. From 1960 onwards they soared: from 30 to 1 in 1960, to 60 to 1 in 1990 and 74 to 1 at present. Inequality is still increasing, in countries and between countries." (Jolly in OECD, 2000b: 79) This is indeed very rapid change, and should inform thinking about the worlds in which students live as citizens now and in the future.

The second major area to highlight relates to patterns of population growth. The relative share of the OECD countries in the global population is set to decline by 2025 to around 16% compared with 19% in 1999. Of the expected population growth of 2 billion over the next quarter century, only 145 million (7%) are foreseen for the OECD area, and much of this dominated by a small number of non-European countries, (Australia, Canada, Mexico, the United States, as well as Turkey). The pressures "pushing" people into the richer countries could well be intense as could the "pull" as the very low birth rates in the OECD area continue (OECD, 1999). All this is likely to further increase ethnic and cultural diversity, and, in many cases, it will exacerbate the socio-economic and educational problems experienced by minority populations. These present major challenges to the place called school, sharpening issues concerning how well schools are able to deal with, even promote, diversity while providing a "social anchor" and equality of opportunity.

The OECD/CERI Scenarios for the Future of Schooling

The OECD through its Centre for Educational Research and Innovation has developed a set of scenarios for schooling in 10-15 years time, which will be shaped by these different forces and issues (OECD, 2001). There are six which have been clustered into three main categories: 1) "Attempting to Maintain the Status Quo"; 2) "Re-schooling"; 3) "De-schooling".¹ They describe in "pure form" how schooling might look overall in a society, not individual schools or local pockets of development. In reality, one would expect complex mixes to emerge between these different possible futures, rather than one or the other. By sharpening the alternatives, their value is to help us think about what we want and do not want, and how probable the more or less desired choices are in terms of on-going trends and policies, not whether they offer accurate predictions about education up to 2020.

1. ATTEMPTING TO MAINTAIN THE STATUS QUO: *With the "status quo" scenarios, the basic features of existing systems are maintained well into the future, whether from public choice or from the inability to implement fundamental change. In Scenario 1.a, the future unfolds as gradual evolution of the present with school systems continuing to be strong; in Scenario 1.b, there is a major crisis of the system triggered by acute teacher shortages.*

Scenario 1.a "Bureaucratic School Systems Continue"

This scenario is built on the continuation of powerfully bureaucratic systems, strong pressures towards uniformity, and resistance to radical change. Schools are highly distinct institutions, knitted together within complex administrative arrangements. Political and media commentaries are frequently critical in tone; despite the criticisms, radical change is resisted. Many fear that alternatives would not address fundamental tasks

¹ In their full versions, they have each been constructed around five dimensions: i) Attitudes, expectations, political support; ii) Goals and functions for schooling; iii) Organisation and structures; iv) The geo-political dimension; v) The teaching force.

such as guardianship and socialisation, alongside the goals relating to cognitive knowledge and diplomas, nor deliver equality of opportunity.

- ◆ *Learning and organisation:* Curriculum and qualifications are central areas of policy, and student assessments are key elements of accountability, though questions persist over how far these develop capacities to learn. Individual classroom and teacher models remain dominant.
- ◆ *Management and governance:* Priority is given to administration and capacity to handle accountability pressures, with strong emphasis on efficiency. The nation (state/province in federal systems) remains central, but facing tensions due, for example, to decentralisation, corporate interests in learning markets, and globalisation.
- ◆ *Resources and infrastructure:* No major increase in overall funding, while continual extension of schools' remits with new social responsibilities further stretches resources. The use of ICT continues to grow without changing schools' main organisational structures.
- ◆ *Teachers:* A distinct teacher corps, sometimes with civil service status; strong unions/associations but problematic professional status and rewards.

Scenario 1.b "Teacher Exodus – The 'Meltdown Scenario'"

There would be a major crisis of teacher shortages, highly resistant to conventional policy responses. It is triggered by a rapidly ageing profession, exacerbated by low teacher morale and buoyant opportunities in more attractive graduate jobs. The large size of the teaching force makes improvements in relative attractiveness costly, with long lead times for measures to show tangible results on overall numbers. Wide disparities in the depth of the crisis by socio-geographic, as well as subject, area. Very different outcomes could follow: at one extreme, a vicious circle of retrenchment and conflict; at the other, emergency strategies spur radical innovation and collective change.

- ◆ *Learning and organisation:* Where teacher shortages are acute they have detrimental effects on student learning. Widely different organisational responses to shortages – some traditional, some highly innovative – and possibly greater use of ICT.
- ◆ *Management and governance:* Crisis management predominates. Even in areas saved the worst difficulties, a fortress mentality prevails. National authorities are initially strengthened, acquiring extended powers in the face of crisis, but weakened the longer crises remain unresolved. A competitive international teaching market develops apace.
- ◆ *Resources and infrastructure:* As the crisis takes hold, funds flow increasingly into salaries to attract more teachers, with possible detrimental consequences for investments in areas such as ICT and physical infrastructure. Whether these imbalances would be rectified depends on strategies adopted to escape "meltdown".
- ◆ *Teachers:* The crisis, in part caused by teaching's unattractiveness, would worsen with growing shortages, especially in the most affected areas. General teacher rewards could well increase as might the distinctiveness of the teacher corps in reflection of their relative scarcity, though established arrangements may eventually erode with "meltdown".

2. RE-SCHOOLING: The "re-schooling" scenarios would see major investments and widespread recognition for schools and their achievements, including towards the professionals, with a high priority accorded to both quality and equity. In Scenario 2.a, the focus is on socialisation goals and schools in communities, in certain contrast with the stronger knowledge orientation of Scenario 2.b.

Scenario 2.a "Schools as Core Social Centres"

The school here enjoys widespread recognition as the most effective bulwark against social, family and community fragmentation. It is now heavily defined by collective and community tasks. This leads to extensive shared responsibilities between schools and other community bodies, sources of expertise, and institutions of further and continuing education, shaping not conflicting with high teacher professionalism. Generous levels of financial support are needed to meet demanding requirements for quality learning environments in all communities and to ensure elevated esteem for teachers and schools.

- ◆ *Learning and organisation:* The focus of learning broadens with more explicit attention given to non-cognitive outcomes, values and citizenship. A wide range of organisational forms and settings emerge, with strong emphasis on non-formal learning.
- ◆ *Management and governance:* Management is complex as the school is in dynamic interplay with diverse community interests and of formal and non-formal programmes. Leadership is widely distributed and often collective. The local dimension of decision-making is strong, while drawing on well-developed national/international support frameworks, particularly where social infrastructure weakest.
- ◆ *Resources and infrastructure:* Significant investments would be made to update the quality of premises and equipment in general, to open school facilities to the community, and to ensure that the divides of affluence and social capital do not widen. ICT is used extensively, especially its communication capabilities.
- ◆ *Teachers:* There is a core of high-status teaching professionals, with varied contractual arrangements and conditions, though with good rewards for all. Around this core would be many other professionals, community players, parents, etc., and a blurring of roles.

Scenario 2.b "Schools as Focused Learning Organisations"

Schools are revitalised around a strong knowledge rather than social agenda, in a culture of high quality, experimentation, diversity and innovation. New forms of evaluation and competence assessment flourish. ICT is used extensively alongside other learning media, traditional and new. Knowledge management moves to the fore, and the very large majority of schools justify the label "learning organisations" (hence is equality of opportunity the norm), with extensive links to tertiary education and diverse other organisations.

- ◆ *Learning and organisation:* Demanding expectations for all for teaching and learning combines with widespread development of specialisms and diversity of organisational

forms. Flourishing research on pedagogy and the science of learning is systematically applied.

- ◆ *Management and governance:* "Learning organisation" schools are characterised by flat hierarchy structures, using teams, networks and diverse sources of expertise. Quality norms typically replace regulatory and punitive accountability approaches. Decision-making is rooted strongly within schools and the profession, with the close involvement of parents, organisations, and tertiary education and with well-developed guiding frameworks and support systems.
- ◆ *Resources and infrastructure:* Substantial investments are made in all aspects of schooling, especially in disadvantaged communities, to develop flexible, state-of-the-art facilities. Extensive use is made of ICT. The partnerships with organisations and tertiary education enhance the diversity of educational plant and facilities.
- ◆ *Teachers:* They are highly motivated enjoying favourable conditions, with strong emphasis on research and development, continuous professional development, group activities and networking (including internationally). Contractual arrangements might well be diverse, with mobility in and out of teaching.

3. DE-SCHOOLING: *Rather than high status and generous resourcing for schools, the dissatisfaction of a range of key players leads to the dismantling of school systems, to a greater or lesser degree. In Scenario 3.a, new forms of co-operative networks come to predominate, compared with the competitive mechanisms of Scenario 3.b.*

Scenario 3.a "Learning Networks and the Network Society"

Dissatisfaction with institutionalised provision and expression given to diversified demand leads to the abandonment of schools in favour of a multitude of learning networks, quickened by the extensive possibilities of powerful, inexpensive ICT. The de-institutionalisation, even dismantling, of school systems is part of the emerging "network society". Various cultural, religious and community voices come to the fore in the socialisation and learning arrangements for children, some very local in character, others using distance and cross-border networking.

- ◆ *Learning and organisation:* Greater expression is given to learning for different cultures and values through networks of community interests. Small group, home schooling and individualised arrangements become widespread.
- ◆ *Management and governance:* With schooling assured through inter-locking networks, authority becomes widely diffused. There is a substantial reduction of existing patterns of governance and accountability, though public policy responsibilities might still include addressing the "digital divide", some regulation and framework-setting, and overseeing remaining schools.
- ◆ *Resources and infrastructure:* There would be a substantial reduction in public facilities and institutionalised premises. Whether there would be an overall reduction in learning resources is hard to predict, though major investments in ICT could be expected. Diseconomies of small scale, with schooling organised by groups and individuals, might limit new investments.
- ◆ *Teachers:* There is no longer reliance on particular professionals called "teachers": the demarcations between teacher and student, parent and teacher, education and

community, blur and sometimes break down. New learning professionals emerge, whether employed locally to teach or as consultants.

Scenario 3.b "Extending the Market Model"

Existing market features in education are significantly extended as governments encourage diversification in a broader environment of market-led change. This is fuelled by dissatisfaction by "strategic consumers" in cultures where schooling is commonly viewed as a private as well as a public good. Many new providers are stimulated to come into the learning market, encouraged by thoroughgoing reforms of funding structures, incentives and regulation. Flourishing indicators, measures and accreditation arrangements start to displace direct public monitoring and curriculum regulation. Innovation abounds as do painful transitions and inequalities.

- ◆ *Learning and organisation:* The most valued learning is importantly determined by choices and demands – whether of those buying educational services or of those, such as employers, giving market value to different forms of learning routes. A strong focus on non-cognitive outcomes and values might be expected to emerge. There is wide organisational diversity.
- ◆ *Management and governance:* There is a substantially reduced role for public education authorities – overseeing market regulation but less involvement through organising provision or "steering" and "monitoring" – and entrepreneurial management modes are more prominent. Information and guidance services and indicators and competence assessments that provide market "currency" play important roles.
- ◆ *Resources and infrastructure:* Funding arrangements and incentives are critical in shaping learning markets and determining absolute levels of resources. A wide range of market-driven changes would be introduced into the ownership and running of the learning infrastructure, some highly innovative and with the extensive use of ICT. Problems might be the diseconomies of scale and the inequalities associated with market failure.
- ◆ *Teachers:* New learning professionals – public, private; full-time, part-time – are created in the learning markets, and new training and accreditation opportunities would emerge for them. Market forces might see these professionals in much readier supply in areas of residential desirability and/or learning market opportunity than elsewhere.

The Scenarios and Lifelong Learning

The situation of schools needs to be understood in the broader context of overall learning, where the ambitious goal has become "Lifelong Learning for All" (OECD, 1996). Despite agreement on the principle, it is not clear how far countries have actually moved towards generalised lifelong learning opportunities (OECD, 2001c). While there is a greater volume and range of participation in learning than there used to be, in most countries the ambitious goal of universal learning careers is still a long way from being implemented. And, despite much greater recognition that schools are fundamental to lifelong learning, rather than a separate set of provisions that precedes it, there is as yet

little evidence of a more fundamental rethink of what the distinct role of schools should be to meet this challenge.

Further important questions arise concerning the dominant place that educational credentials occupy in the life of many schools, especially at the secondary level. A decline in educational monopolies over diplomas would surely be a feature of more thoroughgoing lifelong learning systems and would make a substantial difference to school life in the future. Such a decline will probably be fiercely resisted by the educational world as a loss of influence, but a more long-sighted view might be to see it as a welcome liberation from the pressure of credentialism in favour of learning itself.

So long as schools continue to adhere to the model and assumptions of the scenarios described as "Attempting to Maintain the Status Quo", their capacity to lay the foundations for lifelong learning is bound to be limited. For in this model, schooling is too closed and inflexible and its professionals and organisations themselves are insufficiently defined by lifelong learning characteristics. Moving towards one of the other scenarios is thus necessary, though the nature of the foundation laid will clearly be shaped according to whether this is in the direction of "de-schooling" or "re-schooling", and whether the latter would take the broader social remit or one more focused on knowledge. Which scenario is chosen also influences whether lifelong learning would be "for all", as the scenarios differ widely in their emphasis on inclusiveness.

It may be that lifelong learning would be best served by a judicious combination of scenario features for different phases of learning. To realise lifelong learning for all may well call for "re-schooling" in the earlier cycles, with both strong knowledge and social remits. But, it may also need more "de-schooling" in the later years, permitting powerful roles for markets, distance education, community networks and informal learning, as well as the public authorities. Whichever path is chosen is likely to involve the willingness and imagination in the educational world to embrace far-reaching change.

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