

chapter 5

WHAT FUTURE FOR OUR SCHOOLS?

SUMMARY

What directions will schooling take over the medium to long term, and how might policies shape these futures? These far-reaching questions have inspired the OECD's Centre for Educational Research and Innovation to develop six scenarios for tomorrow's schools.

The first two scenarios project from existing features or trends. Scenario 1 posits the continuation of bureaucratic institutionalised systems, resisting radical change but fulfilling important hidden social functions. Scenario 2 delineates futures where existing market approaches to education are extended much further than today, with both positive and negative results.

Two "re-schooling" scenarios describe a strengthening of schools' public recognition, support and autonomy. In Scenario 3, this comes from schools developing much more powerful social links and community leadership functions. In Scenario 4, most schools have become flexible "learning organisations" with a strong knowledge focus and highly motivated teachers.

Two "de-schooling" futures involve the dismantling of much of school institutions and systems. In Scenario 5, this comes about through the widespread establishment of non-formal learning networks, facilitated both by ICTs and a "network society" environment. In Scenario 6, it comes about through an exodus of teachers that is unresponsive to concerted policy measures and leads to the more or less extensive "meltdown" of school systems.

The chapter concludes with a set of policy questions that arise in relation to all these different futures and options.

There is a need for policy reflection on the long-term future of schooling.

Forward-looking educational methodologies remain under-developed, and scenarios offer a valuable tool ...

1. INTRODUCTION

Schooling is a matter of fundamental importance for the well-being of OECD countries in the broadest terms. Its characteristics and effectiveness are at the heart of education policy. The foregoing chapters in this volume have highlighted the key role of education and learning in fostering skills and competencies and in promoting growth, knowledge, social development and inclusion; schooling plays a central part in furthering these objectives. Equally important, though not necessarily as obvious, schooling has a critical function to perform in the socialisation of the young so that they become healthy individuals and active citizens. This function is, if anything, still more important in a world of rapid change and fragmentation in many other areas of family and community life. It is also during the early years, from early childhood to adolescence, that the bedrock of competence and motivation is laid for a lifetime of learning. Given these critical functions of schooling, policy reflection is needed on future directions over the medium- to long-term as well as on present priorities. This chapter complements the above analyses of on-going developments by just such a long-term discussion.

The chapter presents six scenarios constructed through the OECD/CERI programme on “Schooling for Tomorrow” (OECD, 2001a). Their purpose is to sharpen understanding of how schooling might develop in the years to come and the potential role of policy to help shape these futures. While this does not exhaust approaches to forward-looking policy thinking, scenario development is a particularly effective way of bringing together the “big picture” of strategic aims, the long-term processes of change, and multiple sets of variables. Perhaps surprisingly, forward thinking of this kind has been relatively little developed in education compared with other policy sectors, despite education’s fundamental characteristic of yielding benefits over very long time spans.¹ A major challenge for policy-making in this field is both to make it more genuinely long-term in vision and to integrate more effectively knowledge about education and its wider environment into the process. As the methodologies for educational forward-thinking remain under-developed, there is much to be done in building up a “toolbox” of such approaches to inform the policy-making process. Scenario construction, as presented in this chapter, is one way to do this. It becomes especially effective, however, when undertaken as part of policy formulation in each country. This enables the scenarios to be developed against the concrete trends and realities in place. And, it enables them most effectively to achieve their purpose – to stimulate dialogue between the different stakeholders about change.

2. THE OECD SCHOOLING SCENARIOS

The OECD “Schooling for Tomorrow” scenarios combine different elements – trends, plausible inter-relationships between clusters of variables, and guiding policy ideas. They are thus neither purely empirical (predictions) nor purely

1. This point was also emphasised by Ms. Ylva Johansson, the former Swedish Education Minister, in her conclusions as Chair of the November 2000 Rotterdam “Schooling for Tomorrow” conference, in describing forward-thinking approaches as being “woefully under-developed in our field” (Johansson, 2000).

normative (visions). They have been constructed as alternatives for schooling *per se* rather than as educational extrapolations based on scenarios developed for other fields – the social, economic, technological, environmental, cultural, etc. – though, of course, education is strongly influenced by such factors.

Proposing several scenarios underlines that there is not one pathway into the future but many, and they should not be expected to emerge in a “pure” form. Distilling the infinite range of possible futures into a limited number of polar “types”, however, stimulates consideration of the strategic choices to be confronted and the principal dimensions of change. The scenarios invite the questions: *a)* how probable, and *b)* how desirable, each is. Having addressed these questions, the task for policy thinking is to consider what might be done to bring the probable and desirable as closely as possible into alignment, making the more desirable futures more likely, and *vice versa*.

The scenarios presented have been constructed in a time frame of approximately 15 to 20 years – long enough for significant change to occur beyond immediate political cycles, but not so far off as to be remote to any but futurists and visionaries. The interest is as much in the intervening processes of change as in the fully-fledged scenarios themselves. The latter may be considered either as stable “steady-states” or as more volatile, and hence likely to set further cycles of change in train.

Six scenarios have been developed through the “Schooling for Tomorrow” programme, refined through a series of events during 2000, ranging from small expert group meetings to larger seminars, and most recently an international conference held in Rotterdam in November. Two of the scenarios are posited on the continued unfolding of existing models (“The status quo extrapolated”), two describe the substantial strengthening of schools with new dynamism, recognition and purpose (described as “Re-schooling”), while the two final scenarios portray future worlds that witness a significant decline in the position of schools (“De-schooling”).²

... for clarifying what is desirable and what is possible.

Two OECD scenarios extrapolate the status quo, two describe “re-schooling” futures, two “de-schooling”.

The “status quo extrapolated”	The “re-schooling” scenarios	The “de-schooling” scenarios
Scenario 1: <i>Robust Bureaucratic School Systems</i>	Scenario 3: <i>Schools as Core Social Centres</i>	Scenario 5: <i>Learner Networks and the Network Society</i>
Scenario 2: <i>Extending the Market Model</i>	Scenario 4: <i>Schools as Focused Learning Organisations</i>	Scenario 6: <i>Teacher Exodus – the ‘Meltdown’ Scenario</i>

2. The sixth “teacher exodus” scenario has been added following workshop discussion during the Rotterdam Conference, in recognition of the fundamental problems that would confront schools in systems where teacher shortages become so seriously exacerbated as to constitute a crisis.

*They refer to whole systems,
not individual cases.*

The scenarios are bounded in age terms, covering organised learning from birth up to around completion of secondary education. It is for children and young people of this age range that public responsibility for education is most highly developed in OECD countries, raising a distinct set of policy issues compared with later learning for adults organised through highly diverse arrangements. The six scenarios are not specific to the primary or secondary phases, though it can be expected that certain aspects would apply more directly to one or other of these cycles.

To facilitate comparison, the scenarios have been constructed within a common framework of clusters of variables that were identified as critical dimensions in determining the shape of school systems: *a) Attitudes, expectations, political support; b) Goals and functions for schooling; c) Organisation and structures; d) The geo-political dimension; e) The teaching force.* Each scenario refers to the systemic “centres of gravity” of schooling arrangements rather than descriptions of particular schools or local cases. While, for instance, there will already be some examples of schools in OECD countries that fit the “re-schooling” features of Scenarios 3 and 4, these would only come about when the large majority of schools can be described as “key social centres” or as “focused learning organisations”.

2.1 The “status quo extrapolated”

Scenario 1: “Robust bureaucratic school systems”

- *Strong bureaucracies and robust institutions*
- *Vested interests resist fundamental change*
- *Continuing problems of school image and resourcing*

*In Scenario 1, bureaucratic
systems remain strong and
resist radical change ...*

This scenario is built on the continuation of dominant school systems, characterised by strong bureaucratic elements and pressures towards uniformity. Despite education being to the fore on political agendas, robust schools and systems prove to be extremely resistant to radical change, because of the strength of the vested interests of the powerful stakeholders. Resource levels do not pass the thresholds that would allow longstanding criticisms of schools to be laid to rest or quality to be generally assured. New tasks and responsibilities are continually added to the remit of schools, in the face of the problems arising within the other core socialisation settings of family and community, causing schools’ financial and human resources to be continually stretched. The norms of completed years spent by students in schools and initial education continues to go up, and the diplomas so gained are widely regarded as the main passports to the next stages of life (though in reality the links are more complex). Despite repeated policy initiatives, the educational inequalities that reflect unequal social and residential home backgrounds/environments prove extremely resilient (see Chapter 3 of this volume).

Scenario 1

Education, especially schooling, is politicised, and to the fore in party politics.

Despite continued grumbling about the state of schools from parents, employers and the media, most are basically opposed to radical change.

More positive attitudes held towards local than overall provision.

Possibilities for “playing the system” are important in ensuring the continued support of schools by educated parents resulting in pressure for the greater exercise of choice.

*Attitudes, expectations,
political support*

Much attention focuses on the curriculum, with many countries operating a common curriculum and assessment system – aimed at enforcing standards or creating greater formal equality or both.

Formal certificates are seen as main passports to economic/ social life – but while increasingly necessary they are increasingly insufficient.

Larger relative numbers and greater diversity of “older young” in initial education as the norm continues of staying on longer and longer.

Continuing inequalities alongside policy endeavours to combat failure.

Goals and functions

Strong bureaucratic character of schools and systems continues.

Dominance of the classroom/individual teacher model, but some room for innovation and for developing schools as learning organisations.

Increased ICT use in schools but not radical change to organisational structures of teaching and learning.

Growing but patchy connections between educational and “non-educational” community uses of school facilities.

*Organisations and
structures*

The nation (or state/province in federal systems) is still the main locus of political authority but squeezed by:

- decentralisation to schools and communities...
- new corporate and media interests in the learning market and ...
- globalising pressures, including growing use of international surveys of educational performance.

The geo-political dimension

Highly distinct teacher corps, sometimes with civil service status. Strong unions and associations in many countries and centralised industrial relations.

Professional status and rewards are problematic in most countries. “Craft” models of professionalism remain strong.

Growing attention to professional development (INSET), and efforts to retain teachers. This is partly in the face of major teacher supply problems, exacerbated by ageing.

The teaching force

... while performing
fundamental tasks that are
not always well recognised.

While schools are continually criticised for being out-dated and slow to change – accusations such as being excessively bureaucratic, with teachers wedded to traditional instruction methods – some inertia may simply be inherent in the nature of school systems. It may only be expected in societies that expect a great deal from schools, seeking to include all young people for ever-longer time periods with ever fuller curricula, while being unwilling to invest on the very large scale that might bring about fundamental, as opposed to incremental, change. Societies, including parents, may well prefer only gradual evolution in their schools. This scenario also recognises that schools perform many fundamental tasks (looking after children, providing protected space for interaction and play, socialisation, sorting and selection) that generally pass unnoticed compared with the obvious ones of imparting literacy, numeracy, disciplinary knowledge, and diplomas (Hutmacher, 1999). The question then is: “If schools systems were not in place for these purposes, what alternatives would serve them better?” Fragmentation in families and communities, the other settings in which children are socialised, reinforces the pertinence of this question (see Scenario 3).

The OECD’s Rotterdam Conference acknowledged the many successes of school systems, despite their imperfections: “In sum”, said its chair, Ylva Johansson in her conclusions, “schools have been very important and, in many respects, successful institutions. They were integral to the transformation from agrarian to industrial societies. They represent a very important investment for our countries in making the further transformation from industrial to the knowledge-based societies of today and tomorrow, but for this they must be revitalised and dynamic” (Johansson, 2000). The final condition – the need for revitalisation – is, however, a critical caveat to her perception of schools’ continued effectiveness into the future.

New forces – such as ICTs or
teacher crisis – may still
break open the “status quo”.

Yet, even if school systems are excessively bureaucratic and slow to create such dynamism themselves, there may now be developments in train that will force disruption to the *status quo*. Among the most important of these factors are the growing power of learners and parents as “consumers”; the impact of ICTs in eroding established school and classroom boundaries; and a potential crisis of teacher supply. (These factors are reflected in the scenarios outlined below, including “extending the market model”, “learner networks and the network society”, and “teacher exodus – the ‘meltdown’ scenario”.) It remains to be seen whether schools can accommodate such pressures, as they have many times before, or whether there will be major ruptures with the past.

Scenario 2: “Extending the market model”

- Widespread dissatisfaction leads to re-shaping public funding and school systems
- Rapid growth of demand-driven “market currencies”, indicators and accreditation
- Greater diversity of providers and professionals, greater inequality

Trends towards more market-oriented schooling models – of organisation, delivery and management – are much closer to the experience and cultures of some countries than others. In this scenario, these trends are extended significantly in the face of widespread dissatisfaction with the performance of relatively uniform structures of public school systems and with existing funding arrangements to provide cost-effective solutions. In response to these pressures, governments encourage diversification and the emergence of new learning providers through funding structures, incentives and de-regulation, and discover considerable market potential, nationally and internationally. Significant injections of private household and corporate finance are stimulated.

New market “currencies” of indicators, measures, and accreditation of both learners and providers flourish, while direct public monitoring and curriculum regulation decline. Public education, schools and the government role do not disappear, despite greater privatisation and more mixed public/private partnerships, though outcomes depend greatly on the funding and regulation regimes being introduced and may differ significantly between the primary and secondary levels. In an atmosphere of shake-up, innovation and imaginative solutions abound as do painful experiences of the transitions. Alongside the positive features of fresh thinking are the seriously enhanced risks of inequality and exclusion and of the public school system being relegated to “residual” status.

The development of a much more market-oriented model for schooling is likely to depend on a number of factors. It would be fuelled by a substantial sense of dissatisfaction with established provision among “strategic consumers”, especially articulate middle-class parents and political parties, combined with a culture where schooling is already viewed as much as a private as a public good. Wide differences of educational performance would add weight to the criticisms, while the significant development of the “market model” in schooling would itself be supported by a degree of social tolerance of inequality. The nature of the teaching force could be a determining factor. A crisis of teacher supply (see Scenario 6) might well quicken the search for market-based models as it would for other alternatives. And, while a fragmented teaching force might be conducive to such changes through its impotence to prevent them, a monolithic profession resisting innovation could conceivably produce the same result.

The business environment is likely to be highly influential, but in which direction is not necessarily clear-cut. On the one hand, more aggressive entrepreneurial cultures might be best for identifying new markets and approaches that break with convention. On the other, highly developed traditions of human resource development, with a deep understanding of “soft skills” and learning, might be needed to generate successful demand-oriented approaches of competence development, measurement and accreditation. Political tradition and government action would clearly be critical – in setting market terms, encouraging alternative forms of supply, permitting the exercise of demand. Its role would also be important in managing what could be a painful set of transition processes. Such responsibilities notwithstanding, this scenario assumes a diminished direct government role in provision.

In Scenario 2, market approaches to schooling expand significantly...

... stimulating widespread innovation, but creating difficult transitions and widening inequalities.

Dissatisfaction by “strategic consumers” provides impetus for market solutions...

... but while entrepreneurial and political cultures influence schooling, in which direction is not clear-cut.

Scenario 2*Attitudes, expectations,
political support*

Significantly reduced belief in the value of public education overall. Possible funding “revolts” by taxpayers.

Divergent and conflicting positions expressed. Teachers associations unable to resist moves to greater privatisation.

A political culture develops that supports extended competition across many areas of social, employment, and cultural policy.

The stability of new market solutions highly dependent on how well they meet perceived shortcomings.

Goals and functions

Different indicators and accreditation arrangements become basic to market operations; “efficiency” and “quality” are prominent criteria. Decline of established curriculum structures defined in terms of programmes and delivery, re-defined as outcomes.

Alongside the strong focus on knowledge and skills, values and attitudes – such as attitudes to risk, co-operation and hard work – may be prominent and hence recognised as outcomes. Market-oriented schooling may also, in response to demand, allow greater reflection of cultural/religious beliefs.

Stronger emphasis on information, guidance and marketing – some publicly organised, much private.

Substantial tolerance of inequalities and exclusion. Possible tendency for greater homogeneity of learner groups.

Lifelong learning becomes the norm for many. Clear boundaries for “staying on” in school lose meaning in the face of diversified educational careers.

*Organisations and
structures*

Privatisation, public/private partnerships, voucher systems, and diverse management are the norm. Individualisation and home schooling flourish. Greater experimentation with organisational forms. Many existing programmes disappear.

Possible big differences emerge between the primary and secondary sectors, with market models more strongly developed at secondary level.

Markets develop in childcare and culture, not just in employment-related learning.

ICTs are much more extensively and imaginatively exploited for learning. Networking flourishes where tangible gains perceived by all parties; otherwise competition inhibits co-operation. Copyright issues acute.

The geo-political dimension

Substantially reduced role for central providers and public education authorities. They still oversee market regulation, but much less traditional “steering” and “monitoring”.

International providers and accreditation agencies become more powerful, but strong players, many private, operate at each level – local, national, international.

Much more diverse set of stake-holders involved in educational governance.

Funding arrangements, including absolute levels of resources, are critical in shaping new learning markets.

Less distinct teaching force and a wide range of new professionals with diverse profiles – public, private; full-time, part-time. Potential quality issues.

The new “teaching professionals” in ready supply in areas of residential desirability and/or learning market opportunity. Otherwise, problems of shortages and speed of market adjustment.

Flourishing training and accreditation for professionals to operate in the learning market.

Transition problems until new markets become embedded.

The teaching force

There is substantial interest in market approaches in some countries and quarters and many pertinent developments (hence this scenario is included in “The status quo extrapolated”). But, they cover a bewildering variety: the enhanced exercise of parental choice, including in some cases through vouchers; the involvement of the private sector in the running of schools or parts of systems; substantial household contributions for supplementary private tuition as in Japan or Korea, or for attendance at private schools (such as the oddly-named English “Public schools”); the public funding of “private” institutions organised by particular cultural, religious or citizen groups; the corporate promotion of the e-learning market, and others. The recent UNESCO *Courier* (“Education: the Last Frontier for Profit”, November 2000) magazine is but one expression of interest in new market approaches. The title conveys well an underlying ambiguity: is education a frontier on the point of being breached by the profit motive or is it so distinct that it will continue to resist? Much might turn on the *level* of education in question. Flourishing corporate initiatives in the ICT learning market at tertiary level, for example, stand in contrast with modest growth in schools. The further question then is about where the main boundaries will be drawn in the applicability of this scenario – between secondary and tertiary (in which case it would not be a schooling scenario as such)? Between lower and upper secondary? Between primary and lower secondary?

Many market examples exist, but how far should they be extended in schooling?

2.2 The “re-schooling” scenarios

Scenario 3: “Schools as core social centres”

- *High levels of public trust and funding*
- *Schools as centres of community and social capital formation*
- *Greater organisational/professional diversity, greater social equity*

In this scenario, the school comes to enjoy widespread recognition as the most effective bulwark against social fragmentation and a crisis of values. There is a strong sense of schooling as a “public good” and a marked upward shift in the general status and level of support for schools. The individualisation of learning

In Scenario 3, schools as high status, community institutions provide a bulwark against fragmentation.

*Greater resource equality,
experimentation, school
autonomy and
shared roles....*

is tempered by a clear collective emphasis. Greater priority is accorded to the social/community role of schools, with more explicit sharing of programmes and responsibilities with the other settings of further and continuing education/training. Poor areas in particular enjoy high levels of support (financial, teaching, expertise and other community-based resources).

Overall, schools concentrate more on laying the cognitive and non-cognitive foundations of knowledge, skills, attitudes and values for students to be built on thereafter as part of lifelong learning. Norms of lengthening duration in initial schooling may well be reversed, and there is greater experimentation with age/grading structures and the involvement of learners of all ages. Schools come to enjoy a large measure of autonomy without countervailing central constraints, as levels of public/political support and funding have been attained through a widespread perception of high standards, evenly distributed, thereby reducing the felt need closely to monitor conformity to established standards. Strong pressures for corrective action nevertheless come into play in the face of evidence that any particular school is under-performing. There is more active sharing of professional roles between the core of teachers and other sources of experience and expertise, including different interest, religious, and community groups.

Scenario 3

*Attitudes, expectations,
political support*

Wide measure of party political and public agreement on goals and the value of public education; funding increases.

High-trust politics with extensive co-operation between authorities, teachers, employers, and other community groups in relation to schools.

The role of schools as centres of community activity/identity is accorded widespread recognition.

Educated classes and media supportive of schools, giving them greater freedom to develop their own pathways as centres of social solidarity/capital in different partnerships.

Goals and functions

The role of schools continues in transmitting, legitimising and accrediting knowledge, but with greater recognition and focus on a range of other social and cultural outcomes, including citizenship.

More diverse forms of competence recognition developed in enterprises and the labour market liberate schools from excessive pressures of credentialism.

The lifelong learning function more explicit. Possible reversal of trend to longer school careers, but less clear-cut boundaries between school participation and non-participation.

Inequalities reduced but diversity widens and social cohesion strengthened.

Strong distinct schools reinvigorated by new organisational forms, less bureaucratic, more diverse.

General erosion of “high school walls”. Wide diversity of student body, greater inter-generational mixing and joint youth-adult activities.

Sharp divisions between primary and secondary levels are softened; possible re-emergence of all-age schools.

ICTs are strongly developed, with particular emphasis on communication (by students, teachers, parents, community, other stakeholders). Networking flourishes.

Organisations and structures

The local dimension of schooling substantially boosted, supported by strong national frameworks, particularly in support of communities with weak social infrastructure.

New forms of governance are developed giving various groups, enterprises, etc, a bigger role.

International awareness and exchange is strong, but supra-national control is not, encouraging local diversity.

The geo-political dimension

A core of high-status teaching professionals, but not necessarily in lifetime careers.

More varied contractual arrangements and conditions, but significant increases of rewards for all.

A prominent role for other professionals, community actors, parents, etc. More complex combinations of teaching with other community responsibilities.

The teaching force

This scenario describes a strengthened, creative school institution available to all communities, meeting critical social responsibilities while silencing critics. This scenario fits a longstanding tradition advocating that closer links be forged between schools and local communities. More recently, such arguments have acquired an added urgency and relevance with the fragmentation occurring in many family and community settings, raising new concerns about the socialisation of children. In response to these concerns, the school could thus become a much-needed “social anchor” (Kennedy, 2001) and constitute the fulcrum of residential communities (Carnoy, 2001). Some analyses suggest that “social capital” may be in a process of erosion in a number of OECD countries to the detriment of individual well-being, society and the economy (OECD, 2001b).³ In this scenario, the school is instrumental in arresting this trend, benefiting in the process from the positive impact on educational achievement of strengthened infrastructure and belief in the values upheld by schools.

... help schools contribute to the development of social capital.

This future for the place called school would call for very major changes in most countries – more than would normally be feasible even over a 15-to-20-year time period. The scenario is predicated not only on important re-definitions of

The scenario's demanding prerequisites may be unrealistic.

3. Though the empirical evidence on declining social capital remains mixed and as yet inconclusive; see also Putnam (2000).

*Closer ties to communities
may widen not narrow
inequalities.*

purpose, practice and professionalism, but also on the new definitions being widely endorsed by the main stakeholders throughout society. Generous resourcing would probably be called for, given the need for very even patterns of quality learning environments across all communities and for establishing high esteem for teachers and schools, though some of this might be attained through more cost-effective resource use. Greater flexibility of action would also be needed. If schools could rely on the existence of universal opportunities for continuing education and the certification of competencies outside education, this would be a major step in liberating them from the excessive burdens of credentialism; in these circumstances such flexibility might well be more attainable. However desirable any of these prerequisites to this scenario may be, they are not necessarily very likely in the foreseeable future.

Furthermore, the problems relating to communities and social capital that make this scenario attractive could equally be the very factors that prevent it being fully realised. Far from equalising the effect of different socio-economic environments, the strategy of linking schools very closely with their communities might only serve to exacerbate the gaps between the vibrant and the depressed. Hence, without powerful mechanisms equalising resources and status, and without a strong sense of common purpose, the risk is that scenario would reflect, even exacerbate, existing inequalities between different communities [discussed in relation to “educational priority zones” (ZEPs) by Michel, 2001]. These problems would need to be overcome if the future is to lie with this radical form of “re-schooling”.

Scenario 4: “Schools as focused learning organisations”

- *High levels of public trust and funding*
- *Schools and teachers network widely in learning organisations*
- *Strong quality and equity features*

*In Scenario 4, most schools
are “learning organisations”
with strong knowledge
focus...*

In this scenario, schools are revitalised around a strong “knowledge” agenda, with far-reaching implications for the organisation of individual institutions and for the system as a whole. The academic/artistic/competence development goals are paramount; experimentation and innovation are the norm. Curriculum specialisms flourish as do innovative forms of assessment and skills recognition. As with the previous scenario, all this takes place in a high-trust environment where quality norms rather than accountability measures are the primary means of control. Similarly, generous resourcing would probably be required, though there would be very close attention to how those resources are used in pursuit of quality. Professionals (teachers and other specialists) would in general be highly motivated, learning groups are small, and they work in environments characterised by the continuing professional development of personnel, group activities, and networking. In these environments, a strong emphasis is placed on educational R&D. ICTs are used extensively alongside other learning media, traditional and new.

In this scenario, the very large majority of schools merit the label “learning organisations”. They are among the lead organisations driving the “lifelong learning for all” agenda, informed by a strong equity ethos (thereby distinguishing Scenario 4 from the two “status quo” scenarios in which quality learning is distributed much more unevenly). Close links develop between schools, places of tertiary education, media companies and other enterprises, individually and collectively.

... and they are afforded high levels of support, trust and flexibility, and advance equity aims.

Scenario 4

Wide measure of party political agreement on goals and on the value of education as a “public good”.

Attitudes, expectations, political support

Very high levels of public support for schools, including through funding where this is judged necessary. Care taken to ensure the gaps between more and less endowed schools do not widen learning opportunities.

Educated classes and the media are supportive of schools, permitting an environment of freedom to individualise their programmes. High-trust politics.

Schools work hard to maintain their supportive constituency and generally succeed in lowering “school walls”.

Highly demanding curricula are the norm for all students. More specialisms catered for (arts, technology, languages, etc.) but a demanding mix of learning expected of all students, including specialists.

Goals and functions

School diplomas continue to enjoy major currency, albeit alongside other forms of competence recognition. Innovative developments of assessment, certification and skills recognition for broad sets of talents.

The lifelong learning function is made more explicit through clarification and implementation of the foundation role for lifelong learning. Extensive guidance and counselling arrangements.

A major investment made in equality of high quality opportunities – overt failure considerably reduced by high expectations, the targeting of poor communities, and eradication of low quality programmes.

Strong schools as learning organisations with distinct profiles. Flatter, team-oriented organisations with greater attention to management skills for all personnel.

Organisations and structures

Team approaches are the norm. Intense attention to new knowledge about the processes of teaching and learning, and the production, mediation and use of knowledge in general. Major new investments in R&D.

Wide variety in age, grading and ability mixes, with more all-age and school/tertiary combinations.

ICTs are strongly developed, both as a tool for learning and analysis and for communication.

Links between schools, tertiary education, and “knowledge industries” are commonplace – for INSET, research and consultancy.

The geo-political dimension

Strong national framework and support, with particular focus on communities with weakest social resources.

International networking of students and teachers.

Countries moving furthest towards this scenario attract considerable international attention as “world leaders”.

Substantial involvement of multi-national as well as national companies in schools (but close attention given to widening gaps).

The teaching force

A high status teaching corps, enjoying good rewards and conditions.

Somewhat fewer in lifetime careers, with greater mobility in and out of teaching and other professions.

More varied contractual arrangements but good rewards for all.

Major increase in staffing levels, allowing greater innovation in teaching and learning, professional development, and research.

Networking is the norm among teachers, and between them and other sources of expertise.

This differs from the previous scenario by its stronger “knowledge” focus that is well understood by the public and avoids the risk of ever-widening social remits making impossible demands on schools. It assumes strong schools, enjoying very high levels of public support and generous funding from diverse sources, as well as a large degree of latitude to develop programmes and methods. The teacher corps remains a more distinct profession, albeit with mobility and using various sources of expertise, than in the “school as social centre” scenario.

But Scenario 4 is not typical of today's practice, and its conditions are hard to create.

Many in education would regard this “learning organisation” scenario as highly desirable but at least two related sets of problems stand in the way of transforming the desirable into the probable. First, OECD analysis has shown that this model is very far from typical of practice in schools across different countries (OECD, 2000b). The scenario would thus call for radical breaks with established practice especially by and among teachers that, as discussed in relation to Scenario 1, could be extremely difficult to realise on a broad scale. Second, as with the previous scenario, the formulation begs questions of how to create a very supportive media and political educational environment, ensure such generous funding levels, and capture high status for schools and teachers where these do not already exist. Such conditions are far from being met in most countries at present, implying concerted strategies and investments to turn this situation around. Similarly, this scenario's equality assumptions are highly demanding, yet the analysis in Chapter 3 of this volume shows just how entrenched learning inequalities remain. In short, this scenario remains a good way off, whatever the progress in particular schools and pockets of excellence.

2.3 The “de-schooling” scenarios

Scenario 5: “Learner networks and the network society”

- *Widespread dissatisfaction with/rejection of organised school systems*
- *Non-formal learning using ICT potential reflects the “network society”*
- *Communities of interest, potentially serious equity problems*

Whether schools are criticised for being too reflective of unequal social and economic structures, or insufficiently reflective of diverse cultures, or out of tune with economic life, in this scenario these very different sources of criticisms take firm root. Dissatisfaction with available provision leads to a quickening abandonment of school institutions through diverse alternatives in a political environment supportive of the need for change. This is further stimulated by the extensive possibilities opened up by the Internet and continually developing forms of powerful and inexpensive ICTs (see OECD, 1999). The result is the radical de-institutionalisation, even dismantling, of school systems.

What takes their place is part of the emerging “network society”. Learning for the young is not primarily conferred in particular places called “schools” nor through professionals called “teachers” nor necessarily located in distinct residential community bases. Much more diverse cultural, religious and community voices come to be reflected in the day-to-day socialisation and learning arrangements for children in the “network society”. Some are very local in character, but there are also extensive opportunities for distance and cross-border learning and networking. The demarcations between the initial and continuing phases of lifelong learning come to be substantially blurred. While these arrangements are supported as promoting diversity and democracy, they may also bring substantial risks of exclusion especially for those students who have traditionally relied on the school as the mechanism for social mobility and inclusion.

Scenario 5

Widespread dissatisfaction with the institution called “school” – its bureaucratic nature and perceived inability to deliver learning tailored to complex, diverse societies.

Flight out of schools by the educated classes as well as other community, interest and religious groups, supported by political parties, media, multi-media companies in the learning market.

New forms of private, voluntaristic and community funding arrangements emerge in tune with general developments towards the “network society”.

In Scenario 5, institutions and systems are dismantled...

... and are replaced by diverse learning networks as part of the “Network Society”.

Attitudes, expectations, political support

Goals and functions

The decline of established curriculum structures with the dismantling of the school system. Key role for different values and attitudes.

New attention comes to be given to “childcare” arrangements with the demise of schools. Some of these are based on sports and other cultural community activities.

Hard to predict how far various measures of competence become the driving “currency”. To the extent that they do, strong emphasis on information, guidance and marketing through ICTs, and on new forms of accreditation of competence.

Possibly wide inequalities open up between those participating in the network society and those who do not.

Organisations and structures

Much learning would take place on an individualised basis, or through networks of learners, parents and professionals.

ICTs much more extensively exploited for learning and networking, with flourishing software market.

If some schools do survive, hard to predict whether these would be mainly at the primary level (focused on basic knowledge and socialisation) or at secondary level (focused on advanced knowledge and labour market entry).

Some public schools remain for those otherwise excluded by the “digital divide” or community-based networks – either very well-resourced institutions or else “sink” schools.

The geo-political dimension

Community players and aggressive media companies are among those helping to “disestablish” schools in national systems. Local and international dimensions strengthened at expense of the national.

While international measurements and accountability less relevant as systems and schools break up, new forms of international accreditation might emerge for elites.

Bridging the “digital divide” and market regulation become major roles for the public authorities, as well as overseeing the remaining publicly-provided school sector.

Groups of employers may become very active if these arrangements do not deliver an adequate skills base and if government is unwilling to re-establish schools.

The teaching force

Demarcations between teacher and student, parent and teacher, education and community, blur and break down. Networks bring different clusters together according to perceived needs.

New learning professionals emerge, employed especially by the major players in the network market. These operate via surgeries, various forms of “helpline” and home visits.

Scenarios based around these ideas are among the most commonly proposed as “visions” for the future of schooling. They have the appeal of offering, for those in search of change, a clear alternative to the more school-based models outlined above. The scenario can be understood as a feature of already-visible developments towards the “network society” (Castells, 1996), building on the potential of ICTs to provide the means for learning and networking beyond time and place constraints. It is in tune with those messages of the broader lifelong learning agenda stressing flexibility, individualisation, and the role of non-formal learning. In relation to school-age learning, home schooling is growing and some predict this will quicken into the future, even if it is still relatively small-scale in most countries (Hargreaves, 1999). While sharing some common features with the “market model” of Scenario 2, the driving force in this scenario is co-operation rather than competition, again appealing to those in search of alternative “post-industrial” paradigms.

Yet, it also raises serious questions of feasibility and sustainability. How well would such arrangements meet the range of critical “hidden” functions, including of socialisation, that has made the school such a universal model and so resilient (as discussed under Scenario 1)? What would happen to those individuals and communities who are not active participants in the “network society” and who have low social capital? It is possible that this scenario would actually deepen the “digital divide” (OECD, 2000a). This scenario, therefore, also runs into potentially severe inequality problems, raising the prospect of government intervention in ways that would undermine the very distinctiveness of this scenario. Does it really provide a feasible scenario for the 21st century or is it instead proposing a return to 18th/19th century educational arrangements (plus the Internet)? Along with such questions about feasibility are those to do with stability/volatility – does it describe a “steady-state” future or a transition point calling for further transformation?

Scenario 6: “Teacher exodus – The ‘meltdown scenario’”

- Severe teacher shortages do not respond to policy action
- Retrenchment, conflict, and falling standards leading to areas of “meltdown”, or
- Crisis provides spur to widespread innovation but future still uncertain

This scenario can be regarded as an elaboration of a “worst case” in response to the question posed in conclusion of Scenario 1 – would the “status quo” survive were teacher shortages to turn into a real staffing crisis? This “meltdown scenario” comes about through the conjuncture of four main factors: *a*) a highly skewed teacher age profile resulting in outflows through retirement far out-stripping inflows of new recruits; *b*) a long period with very tight labour market conditions and general skill shortages resulting in severe difficulties both to recruit new teachers and to retain them in the profession; *c*) the upward shift in teacher rewards and/or staffing levels needed to make a tangible impact on relative attractiveness being viewed as prohibitively expensive, given the sheer numbers involved; and *d*) even when measures

These ideas are common among futurists as a clear alternative to school-based approaches.

But, is this scenario feasible or sustainable?

Teacher supply problems reach crisis proportions threatening “meltdown” ...

*... despite concerted policy
measures.*

*The reactions to “meltdown”
differ, from conflict and
retrenchment to innovation
and cohesion.*

are proving effective, they require long delays before a noticeable effect results in greater numbers of practising teachers, making it still harder to break into the vicious circles.

The scenario posits a staffing crisis in a context that differs in at least two important respects from that of the “baby boom” of the 1960s. First, the quality demands and expectations of students for extended educational careers have moved on substantially in forty years. Second, the attractiveness of school-level teaching as a career has declined against a continuing upward trend in the share of advanced-skill posts throughout the economy as a whole, posts that often enjoy greater rewards. This combination of factors comes together in this scenario in the form of a very serious crisis for schools, rather than assuming that the problems will always be “muddled through”.

As the teacher exodus takes hold and the scale of the “meltdown” crisis is recognised, potentially very different outcomes could be part of Scenario 6. At one extreme, a vicious circle of retrenchment, conflict, and decline sets in, exacerbating the inequalities and problems further. At the other, the teacher crisis provides the spur to radical innovation and change, with different stakeholders joining forces behind far-reaching emergency strategies. Even in that more optimistic case, “meltdown” would not necessarily be avoided. In between, a more evolutionary response to the crisis might be that rewards and attractiveness of the profession increase leading eventually to reconstruction. Whether actions taken would allow another scenario to take the place of “meltdown” would depend critically on the room for manoeuvre permitted by social and political cultures.

Scenario 6

*Attitudes, expectations,
political support*

Widespread public and media dissatisfaction with the state of education in the face of the teacher recruitment crisis and growing sense of declining standards, especially in worst-affected areas.

Relative political impotence to address the loss from the teaching force given the scale and long-term nature of the problem and/or deep-seated cultural barriers to changes needed to set in train another of the scenarios.

The education political climate becomes either increasingly conflictual or leads to consensual emergency strategies.

Goals and functions

Established curriculum structures are under intense pressure, especially in shortage subjects. Where main response is one of retrenchment, examinations and accountability mechanisms are strengthened in a bid to halt sliding standards.

Where the teacher shortage instead stimulates widespread change, major revisions of curricula are undertaken – much more outcome- and demand-oriented and less supply- and programme-centred. New forms of parallel evaluation and assessment methods are developed.

Inequalities widen sharply between residential areas, social and cultural groups, etc. Affluent parents in worst-affected areas desert public education in favour of private alternatives.

Very diverse organisational responses to lack of teachers. In some situations, there is a return to highly traditional methods, partly through public pressure in response to declining standards, partly because of large classes.

In other situations, innovative organisational responses using different forms of expertise (including from tertiary education, enterprises, communities), and diverse mixes of lectures, student groupings, home learning, ICTs, etc.

Intensive use of ICTs as an alternative to teachers; ICT companies are very actively involved. Wide disparities are again possible between highly innovative and traditional uses.

Organisations and structures

The position of the national authorities is strengthened in the face of crisis, as they acquire extended powers. It weakens, however, the longer the crises are unresolved.

Communities with no serious teacher shortages seek to protect themselves and extend their autonomy from national authorities.

Corporate and media interests in the learning market intensify.

International solidarity improves between some countries where initiatives develop to “lend” and “borrow” trained teachers, including between North and South.

Solidarity declines and protectionist responses increase the more generalised the shortages and where several countries are competing for limited pools of qualified staff.

The geo-political dimension

Teacher rewards increase as part of measures to tackle shortages.

Conditions of teaching worsen as numbers fall, with problems acute in worst-affected areas, exacerbating the sense of crisis.

Strenuous efforts made to bring trained – especially retired – teachers back into schools. Often only disappointing results, particularly where school politics very conflictual and in areas of severe shortage.

In some countries, the distinctiveness of the teacher corps and role of unions/associations increase in proportion to their relative scarcity. In others, established conventions, contractual arrangements, and career structures are rapidly eroded.

As schools shorten teaching time, many posts are created for semi-professional “child-minding.” The market in home tuition flourishes, possibly with government subsidies to lower-income households.

The teaching force

Is this scenario likely? As yet the requisite studies are unavailable, but there are some indications that this scenario might be plausible. OECD countries have moved rapidly from being “industrial” to “post-industrial” societies: two-thirds are in service employment across the OECD, approaching three quarters

Signs of problems in teacher supply are apparent ...

*... but unevenly
distributed, between and
within countries.*

of all jobs in a number of countries, compared with between a half and a quarter or even less at mid-20th century (OECD, 1994, Table 1.2 and OECD, 2000d). The job market in which teachers are being recruited and employed is shifting markedly, including the continuing growth of demand for advanced skills as charted in the previous chapter. Teacher salaries, standing, and conditions, in the different combinations that shape a profession's "attractiveness", struggle to compete with the wide range of professional alternatives now available.

Most importantly, perhaps, the profession is ageing in many countries, in some cases rapidly. European statistics (European Commission, Eurydice, Eurostat, 2000) suggest that more than a fifth of practising teachers are within a decade of retirement in the majority of EU countries, rising to above a third in Italy which has the highest EU level. There are even higher percentages in the Central European "pre-accession" countries, where as many as 40% are counted in this 10-year pre-retirement phase in the Czech Republic. A third of primary teachers were aged 50 years and over in 1996/97 in Germany and Sweden, as are a quarter in Finland and Italy. Among secondary teachers, over 30% fall in this 50+ age band in these four countries, up to as high as 50% in Sweden (published OECD teacher data are incomplete, but the 2001 edition of *Education at a Glance* will carry a special focus on teachers). While conditions do and will vary widely from one country to another, this area deserves closer international study, including approaches that promise to enhance teacher supply.

3. CONCLUSIONS

As stated at the outset of this chapter, these scenarios have been developed in order to clarify the main directions and strategic options for schooling over the long-term, as well as the policy issues that arise in shaping different futures. They are tools for reflection, not analytical predictions. In the first scenario, large, bureaucratic systems continue as the norm, through the strength of the interests with a major stake in them and through the sheer difficulty of organising equally effective alternatives. In the second, market approaches are extended much more radically, bringing innovation and dynamism but also augmented risks of exclusion. In the third, schools are strengthened significantly by investing in them as focal centres for communities, giving them a range of important new tasks, responsibilities and partners. The fourth sees "learning organisations" for the young become typical of the very large majority of schools, based on demanding, flexible programmes for all. The fifth scenario presents schooling consistent with a highly developed "network society", heavily exploiting ICT's potential and leading to the widespread dismantling of school institutions. The final scenario addresses a future in which teacher shortages reach crisis levels and yet prove largely resistant to the policy initiatives taken to rectify them.

*Policy options can be developed
in terms of strategic challenges
and deliverable goals.*

Policy issues have been raised in the discussion of each scenario. Professor Michael Barber, in the Keynote Address to the Rotterdam Conference (2000), suggested a framework through which policy options can be developed in

each country in terms of “strategic challenges” and “deliverable goals”.⁴ This concluding section poses a number of the questions that arise from the alternative scenarios that can usefully be addressed in delineating the policy challenges and the goals to be pursued.

The cultural and political environment. Public attitudes, the degree of consensus or conflict over goals, (dis)satisfaction with schools, and the level of recognition and esteem in which they and teachers are held, will all be critical in shaping the future of schooling. The broad environment becomes even more critical the more that schools are called upon to be autonomous, work in partnerships, and orient themselves to demand. Should this environment be viewed largely as a given and beyond the reach of educational policy? Or instead, should it be treated as an important target of policy strategies, with a view to setting in train virtuous circles on matters that are beyond the reach of regulation and administration?

Accountability. This is an integral feature of all the scenarios, though Scenario 5 – learner networks and the network society – assumes a much-reduced degree of control. The mechanisms through which accountability is realised, however, differ widely across the scenarios: from those based on the close monitoring of performance and attainments, to the accountability generated by the exercise of “client demand”, to that exerted by widely-shared norms of demanding quality standards. As demands on schools grow, and with it the costs of failure, how can the need for accountability be assured without its mechanisms undermining the very quality and flexibility they are intended to promote?

Diversity vs. uniformity. One of the strengths of the systemic “status quo” model is its pursuit of a formally equal opportunity structure, even if this may come with excessive bureaucracy, and, as shown in Chapter 3, continuing actual inequalities. In the other scenarios (except Scenario 6), major departures from standardisation are sought, though by different routes and approaches to inclusion/exclusion. Important equity questions are raised by all the scenarios. Can schools pursue much more diversified pathways without stumbling over powerful accountability pressures to standardise? Under what conditions does democratic diversity become unacceptable inequality? How far can schooling, which reflects communities and the broader society, be expected to attain much more equal and equitable outcomes, and up to what price are societies willing to pay to do so?

Resourcing. Schooling requires numerous resources – finance, professional expertise, technical infrastructure and facilities, community and parental support. Outcomes depend not only on their levels, but on their nature and how they are used, managed, and combined. Hence, there are not clear resource implications attached to the scenarios, though broad possibilities

Can the cultural and political environment be a variable of educational policy?

How can accountability be assured without undermining flexibility of action?

There is a need for greater diversity, but what are the risks of widening inequality?

Sufficient resources will need to be marshalled to meet high ambitions – how will they be found?

4. He proposed five “strategic challenges” – Reconceptualising Teaching; Creating High Autonomy/High Performance; Building Capacity and Managing Knowledge; Establishing New Partnerships; and Reinventing the Role of Government – and four “deliverable goals” to meet these challenges: Achieving Universally High Standards; Narrowing the Achievement Gap; Unlocking Individualisation; and Promoting Education with Character.

are suggested. Certain of them – Scenarios 2, 3, and 5 particularly – are consistent with diversification of the resource base, with or without a major change in educational spending in relation to GDP. Scenarios 3, 4 and 6 may well call for significant increases in the total spending effort. Scenarios 2 and 5 in particular could well see widening inequalities in resources per student. Whichever scenario unfolds in the future, fundamental resource questions will arise. Are societies willing to invest sufficiently in schools for the tasks being expected of them? If resources are stretched too far to sustain high-quality learning environments and if it is unrealistic to expect major new resource inputs, where might they be found through redistribution, especially in a lifelong learning framework? Is there room for major increases in resource effectiveness in schools and, if so, how?

New demanding models of professionalism – but how to recruit enough teachers?

Teachers. The human resources – the professionals working in schools – are clearly fundamental to the future. Teachers become still more critical to the success of schooling as expectations about quality increase – more demand-oriented approaches and less supply-determined; more active and less passive learning; knowledge creation not just transmission in schools. Responses to these pressures will often result in teachers having to operate in new organisational structures, in close collaboration with colleagues and through networks, facilitating learning and overseeing individual development. The profile, role, status, and rewards of teachers differ significantly between the scenarios, and some imply a degree of change both towards and by teachers that may well prove uncomfortable to them and to society. One matter on which most would agree, however, is the imperative of avoiding the “meltdown” Scenario 6. How to devise new models of teacher professionalism and organisational roles, in ways that enhance the attractiveness of the job, the commitment of teachers, and the effectiveness of schools as learning organisations? How to attract new blood into the profession?

What is the best way for schools to lay the foundation for lifelong learning?

Schools and lifelong learning. The principle of integrating school policy and practice into the larger lifelong learning framework is now widely agreed, for the benefit both of schooling and of lifelong learning strategies. It is less clear what this means in practice and the extent of change it implies. The scenarios suggest contrasting possibilities such as shorter, more intensive school careers compared with an extended initial education; diversified agencies, professionals, and programmes compared with highly focused knowledge-based approaches. Behind these choices lie further questions. Does the task of laying firm foundations for lifelong learning call for fundamentally different approaches by schools? Or instead, is it tantamount to a restatement of a demanding equality objective – ensuring that the quality resources and opportunities presently enjoyed only by the best-served are available to *all* students? ■

References

- BARBER, M.** (2000), "The Evidence of Things not Seen: Reconceptualising Public Education", Keynote Address at the OECD/Netherlands Rotterdam International Conference on Schooling for Tomorrow, 1-3 November (see CERI website at www.oecd.org/ceri).
- CARNOY, M.** (2001), "Work, Society, Family, and Learning for the Future", forthcoming in OECD, *Schooling for Tomorrow: Trends and Scenarios*, Paris.
- CASTELLS, M.** (1996), *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, Vol. 1, Cambridge, MA.
- EUROPEAN COMMISSION, EURYDICE, EUROSTAT** (2000), *Key Data on Education in Europe*, Office for Official Publications of the European Communities, Brussels/Luxembourg.
- HARGREAVES, D.H.** (1999), "Schools and the Future: the Key Role of Innovation", *Innovating Schools*, OECD, Paris, Chapter 3.
- HUTMACHER, W.** (1999), "Invariants and Change in Schools and Education Systems", *Innovating Schools*, OECD, Paris, Chapter 2.
- JOHANSSON, Y.** (2000), "Chair's Conclusions", from the OECD/Netherlands Rotterdam International Conference on Schooling for Tomorrow, 1-3 November (see CERI website at www.oecd.org/ceri).
- KENNEDY, K. J.** (2001), "A New Century and the Challenges it brings for Young People: How might Schools support Youth in the Future?", forthcoming in OECD, *Schooling for Tomorrow: Trends and Scenarios*, Paris.
- MICHEL, A.** (2001), "Schools for an Emerging New World", forthcoming in OECD, *Schooling for Tomorrow: Trends and Scenarios*, Paris.
- OECD** (1994), *The OECD Jobs Study, Evidence and Explanations, Part I: Labour Market Trends and Underlying Forces for Change*, Paris.
- OECD** (1999), "Technology in Education: Trends, investment, access and use", *Education Policy Analysis*, Chapter 3, Paris.
- OECD** (2000a), *Learning to Bridge the Digital Divide*, CERI, Paris.
- OECD** (2000b), *Knowledge Management in the Learning Society*, CERI, Paris.
- OECD** (2000c), *Education at a Glance – OECD Indicators*, CERI, Paris.
- OECD** (2000d), *Employment Outlook*, Paris.
- OECD** (2001a), *Schooling for Tomorrow: Trends and Scenarios*, forthcoming, CERI, Paris.
- OECD** (2001b), *The Well-being of Nations: the role of human and social capital*, CERI, Paris.
- PUTNAM, R.** (2000), *Bowling Alone: The Collapse and Revival of American Community*, Simon Schuster, New York.