

**SCHOOLING, LIFELONG LEARNING, AND THE
FUTURE**
Selected Insights from OECD Analyses

This paper draws on a selection of recent OECD work to explore the relationships between schooling and lifelong learning and relate these to the Schooling for Tomorrow scenarios. It is an initial version of one of the transversal analyses contributing to the analytical component of this project, and provides background to the Forum session on Scenario Analysis and Indicators.

Schooling for Tomorrow Poitiers Forum

SCHOOLING, LIFELONG LEARNING, AND THE FUTURE - Selected Insights from OECD Analyses

1. Introduction

This paper explores the relationships between schooling and lifelong learning (LL), drawing on a selection of recent OECD work, and then relates this to the OECD schooling scenarios.¹ It thus provides the initial version of one of the transversal analyses contributing to the work on Schooling for Tomorrow.

From early in the CERI project on Schooling for Tomorrow, it was decided to concentrate the focus broadly on learning arrangements for young people up to the age when they might leave school in most OECD countries. This decision to focus on young people was not in any way to deny the importance of LL but to recognise that contemporary societies make very specific arrangements for the education of the young compared with adults, including requirements of compulsion. This focus was also decided to avoid an excessively broad canvas. However, rather than place schooling and LL in opposition, the challenge is to understand how they relate to each other. These relationships can be understood along a number of dimensions, addressing different questions, as outlined in the next section.

2. Dimensions of Schooling/Lifelong Learning Relationships

One of the most robust cross-national educational research findings is that the start people experience during their school and college days across all countries tends to exercise a powerful and enduring impact on their subsequent educational careers. But noting the existence of the correlation says little about how well schooling in any country lays the basis for most or all to return to learning later on: the quality of the learning experiences involved or what it is that explains the correlation. Observing that any system of LL will be powerfully influenced by what takes place in schools does not by itself indicate what that influence might be and whether it is benign or malevolent to the broader LL enterprise. Substantial clarification is still needed, therefore, of the role schools do and might play in LL. This paper examines domains where OECD work sheds light on school/LL relationships, through addressing the following broad questions:

- ◆ Has the "front-end" loading of education - that lifelong learning was originally conceived thirty or so years ago to counteract - become stronger or weaker? Drawing on OECD statistics, the relationships in this case are examined in terms of *the structured distribution of educational opportunities in life cycle terms and their contribution to the "extension of adolescence"*.
- ◆ How widely do OECD school systems engender the competences and skills conducive to continued active learning? To address this question, the discussion draws on findings from the recent PISA international survey of 15-year-olds. The relationships between schooling and LL are examined in terms of *certain cognitive qualities that schools develop in the young and the inclusiveness of systems*.
- ◆ How motivated are young people by their schooling, and what can be done to improve motivation? PISA results and a study in the "What Works in Innovation in Education" series are drawn on to

examine the relationships between schooling and LL in this case in terms of *non-cognitive qualities possessed by young people, and approaches to enhance motivation for learning especially among the most disaffected.*

- ◆ How far have schools adopted models consistent with flexibility of learning and diversity of curricula and assessment? Conclusions of two OECD/CERI projects - on knowledge management and ICT in schools - are reported in broad-brush terms. Schooling and LL are looked at here through *the organisation of teaching, knowledge and assessment.*

The paper concludes by looking to the future, and the OECD schooling scenarios in particular. It discusses the implications of the analysis for the development of LL in the different scenarios.

3. Education More or Less "Front-Loaded"?

The longer the time that the young stay in initial education is widely interpreted positively, particularly as more and more attain qualifications. Countries compare each other not only in terms of assessments of competences such as measured by PISA but by staying-on and graduation rates among young people as synonymous with progress towards knowledge-based and learning societies. Yet, such comparisons are beset with shortcomings. They do not question whether education could be organised differently, more intensively or efficiently, whether that be during the preceding school period up to age 16/17 or later throughout adulthood.

There are other reasons for concern about ever-lengthening careers in initial education. There are the social and cultural arguments about delaying the attainment of adulthood, echoed most recently in the "Schooling for Tomorrow" report (OECD 2001a) in terms of the "continued extension of adolescence." Should there be a protracted period of cloistering the young away from labour market, family and other adult experiences, creating growing tensions between earlier physical maturity and delayed social responsibility? How to maintain the interest of many young people in learning if the expected duration of initial education is continually pushed outwards? The very goals of educational inclusion and the promotion of motivation for lifelong learning may be undermined by the "front-end" expansion aimed to promote them.

Economic reasons for questioning this model could prove even more instrumental in changing dominant assumptions. Public expenditures are coming under acute pressures from the ageing society, as health and pension bills grow. The increasing dependency ratio implied by continually squeezing of the "active" generation into an ever-tighter age range in the middle of people's lives is not sustainable. Re-thinking the beginning of the "active" economic period makes as much sense as re-thinking the end around retirement age.

Are there signs that this re-thinking is taking place? What has happened to the "front-loaded" model of education? Participation and enrolment data suggest that instead it has been strengthened. Earlier analysis on transitions from school to working life suggested that between 1990 and 1996 the international average duration of young people's initial transition to working life grew by an average of nearly two years (see OECD 2000c). In many countries, over 90 per cent of the age group are enrolled in education for 12 or more years, and in some it is higher than this. In Denmark, Iceland, New Zealand Spain and Sweden, the figure is 13 (Sweden from ages 6 to 18, Denmark, Iceland and Spain from 4-16); in Japan and the Netherlands (between ages 4 and 17) it is 14 years, rising to 15 in Belgium and France (between ages 3 and 17). Over three-quarters of the 15-19 population across the OECD are now students, and in seven countries (Belgium, France, Germany, Greece, Netherlands, Norway, Sweden) more than 85 per cent are enrolled. Even the proportion of 20-29 year-olds who are students stands at over 1 in 5 for OECD as a whole (21.4

per cent), and is a third or more in Finland (37.9 per cent) and Sweden (33.4 per cent) (OECD, 2002). What such figures do not reveal is the extent to which new patterns for young people combining education, work and other activities are emerging in the transition phase from school to adult life, and to the degree that this is taking place "front-loading" is being modified. A more radical redistribution of learning opportunities, however, would be to reverse the historical trend towards an ever-lengthening initial phase.

4. The Skills and Competences of 15-year-olds - some PISA insights on LL

OECD has co-ordinated the major on-going PISA study that has measured the knowledge, skills and competence of 15 year-olds in three domains: reading, mathematical and scientific literacy. A small number of main results for the first major published report (OECD 2001b) are drawn on below. They are revealing about the contribution of schooling to LL because the design of the measures deliberately sought to assess competence relevant to advanced and on-going learning. They place an emphasis on the mastery of processes, the understanding of concepts, and the ability to function in various situations within each domain (reading, mathematical and scientific literacies). Thus, the PISA work offers a valuable view of how well 15-year-olds are equipped with the knowledge, skills and competences to be lifelong learners, recognising that there are aspects relevant to LL that it does not measure.

The most detailed data and analysis in the 2000 survey relate to reading literacy, and this is the domain discussed below. Reading literacy was assessed in terms of retrieving information, interpreting texts, and reflection and evaluation. The teenagers are scored at six levels. Level 3 is a critical baseline, albeit a high minimum given the demands that LL and the knowledge-based society impose. The proportion of 15-year-olds achieving at least this level of competence gives one basic indicator of the extent to which - through schooling and out-of-school influences learning by this age - teenagers have been equipped with requisite reading literacy. The results show very wide differences across countries (see, OECD 2001b, Figure 2.3). They also show very large numbers in many countries where this high basic minimum level is not achieved. Even taking Level 2 as the cut-off, there are some countries where significant numbers of 15-year-olds fall below the line.

In only 9 of the surveyed countries do two-thirds of 15-year-olds reach the high minimum Level 3 - Finland, Korea, Canada, Japan, Ireland, New Zealand, Australia, United Kingdom and Sweden. If 6 in 10 achieving at least Level 3 is taken as a cut-off, several more countries come into the frame with others just below at 58-59%. Those lying below the 60% cut-off are Denmark, Switzerland, Spain, Czech Republic, Italy, Germany, Poland, Hungary, Greece, Portugal, Luxembourg, and Mexico. This is only one finding from the richness of PISA data and the choice of cut-offs - two-thirds, 60% etc. - has a degree of arbitrariness. Nevertheless, that fewer than 6 in 10 teenagers approaching school-leaving age meet this high minimum in as many as 12 of the 27 OECD countries surveyed in 2000 provides qualification to confident assertions about how well schools are now equipping young people for a lifetime career of learning.

Concerning the magnitudes of those who attain no higher than Level 2, very clear variation occurs between countries in the size of the very lowest attainment groups. 15% or more scored only at Levels 1 or 0 in as many as 17 of the 27 countries surveyed; in 4 of them (Greece, Portugal, Luxembourg, and Mexico), a quarter or more fell into this group. In the countries with significant numbers at this level, there are clear problems relating to young people leaving school ill equipped with the knowledge and skills to be lifelong learners. ["...performance below Level 1 does signal serious deficiencies in students' ability to use reading literacy as a tool for the acquisition of knowledge and skills in other areas. "(op.cit. p.35)]. Clearly, there is much more that can be taken from PISA of relevance to this question; this section has simply begun this analysis.

5. Engaging Secondary School Students

PISA also sheds light on the engagement of 15-year-olds with school across OECD countries. The climate generated by schools is one component of their ability to foster and maintain the interest of students. Were 15 year-olds to report in large numbers that they do not belong and feel bored, it would challenge the claim that schools are laying firm foundations for LL, even if such reports alone would not be decisive indicators of long-term disenchantment. But in contrast to such a gloomy picture, the results are generally positive: across the OECD area approximately three-quarters of 15 year-olds report that they agree or strongly agree with the statement "I feel like I belong" to school. Of the 28 countries providing this evidence, the proportion rises to 85% in 6 countries: Australia (85), Austria (85), Finland (86), Hungary (89), Iceland (85), Mexico (88).

The opposite question about feeling 'awkward and out of place' produces consistent results. The proportion claiming a sense of being out of place stood at around 13-14% for OECD countries as a whole in 2000. It was under 10% in some: Czech Republic (9), Hungary (9), Ireland, (9), Italy (9), Sweden (7), and the UK (9). Similarly low proportions state that they agree or strongly agree with "I feel like an outsider (or left out of things)". Fewer than 1 in 10 described themselves in this bleak situation across OECD countries, and only 5-6% did so in Denmark, Finland, Germany, Japan, Netherlands, Norway, Spain and Sweden. This evidence, contrary to some of the other results reviewed, gives a more positive picture of the school as providing a solid foundation on which later learning might draw.

15-year-old Student Sentiments towards School in OECD Countries, 2000

Country	Percentage of Students who Agree/Strongly Agree about School:		
	"I feel like I belong"	"I feel awkward and out of place"	"I feel like an outsider (or left out of things)"
Australia	85	11	9
Austria	85	18	7
Belgium	53	19	10
Canada	81	12	9
Czech Republic	73	9	11
Denmark	84	10	6
Finland	86	11	6
France	44	16	8
Germany	82	15	6
Greece	83	13	10
Hungary	89	9	10
Iceland	85	11	10
Ireland	83	9	7
Italy	73	9	7
Japan	76	22	6
Korea	68	15	15
Luxembourg	72	19	9
Mexico	88	11	10
Netherlands*	76	10	5
New Zealand	83	12	9
Norway	79	10	6
Poland	63	14	10
Portugal	83	19	8
Spain	52	12	5

Sweden	78	7	6
Switzerland	76	14	7
United Kingdom	83	9	7
United States	78	14	11
OECD Total	75	14	9
Country Mean	77	13	8

* Low response rate rules out direct comparability with the other countries.

Source: OECD 2002, Table D5.4, p.330.

The above-reported figures are not entirely positive: the corollary of the three-quarters of 15 year-olds feeling a sense of belonging to school is the quarter who do not; 1 in 8 to 1 in 5 reporting that they feel "awkward and out of place" represents very large numbers in absolute terms across the OECD. For some teenagers, the sense of disenchantment is acute. Approaches and initiatives aimed at addressing lack of motivation among secondary-cycle students were the subject of one of the recent OECD/CERI studies in its "What Works in Innovation in Education" series (OECD, 2000a). The study itself was entitled "Motivating students for Lifelong Learning", recognising that influencing attitudes to learning is critical to later participation in education.

The report includes a synthesis of key policy approaches, and described the two most important concepts in this regard to be individuality and diversity. More specifically it discusses approaches under the following headings: balancing theoretical studies with authentic, first-hand experience; adapting teaching methods; introducing student-centred assessment; bridging the vocational and general divide; enhancing guidance and counselling services; improving the infrastructure; establishing environments for lifelong learning; out-of-school approaches, and involving local and regional government. The range of initiatives and innovations featured in the 2000 study is impressive. The diversity notwithstanding, the aim of engaging the students to participate and build confidence runs through these and all the other cases featured in the study. All seek flexibility in activities, curricula and scheduling, a reaction against the traditional rigidities of schools as organisations.

6. School Knowledge and Organisation

The OECD has conducted a number of studies over the past decade analysing successful educational innovation and arguing for more flexible, open forms of school learning and organisation. These have included reports of innovations in general (Stern and Huber, 1997) and more specifically of innovations in science, mathematics, and technology education (Black and Atkin, 1996). More widely, attention has increasingly focused on the nature of organisations wherein people learn and work, including schools, as the critical bridge between the individual and broader society. OECD/CERI has contributed to this *inter alia* through its work on social capital (2001e). The arguments linking change in the traditional structures of school organisation and knowledge to laying foundations for LL are at least two-fold: it is through schools as flexible learning organisations that students will stand greatest chance to acquire the advanced knowledge and competences needed for 21st century life; such organisations are characteristic of many sectors and enterprises beyond education in which contemporary students will spend their working lives.

Yet while international studies across Europe and the other regions of the OECD can identify numerous examples of interesting educational innovation, more sustained widespread change is altogether more problematic. The difficulty of achieving widespread reform to traditional practices has been analysed in OECD/CERI work on knowledge management (OECD 2000b), the value of which has been enhanced through a comparative perspective embracing other sectors as well as education. The general conclusion is

that schools, individually and collectively, tend still to have only poorly developed knowledge management practices, despite knowledge being education's explicit business. This is revealed in a variety of ways including low spending on and application of educational R&D, the predominance of tacit professional knowledge, weak networking and knowledge sharing among teachers etc., organisational units (classrooms) characterised by isolation.

Parallel with the CERI work on knowledge management is that on ICT, one outcome of which is the published report, "Learning to Change - ICT in Schools" (OECD, 2001d). It was not based on a comprehensive international survey, but drew on a series of country papers, expert contributions and seminar discussions. Among its main messages, it also underscored the need for an extended professional role for teachers, their development and networking. It argued for the importance of school leadership and management fully committed to adopting ICT. It drew attention to the potential partnerships and links that ICT can open up between schools, homes and communities.

Particularly relevant for this paper is the assessment given in the study of how well school curricula and assessment have moved to accommodate the "Internet Age". The conclusion drawn is that dominant organisational structures, curricula and student evaluations still act as a brake on the adoption of ICT in ways that would most fruitfully release its learning potential. In summary, the relevant messages were:

- ◆ *Radical curriculum change is needed in the Internet age:* Powerful tensions exist between traditional curricula and the open, skills-based, student-centred approaches supported by ICT. Dominant curricular and organisational patterns in school were not designed for the Internet age, and often inhibit its effective use. ICT offers some gains for traditional curriculum delivery, but its full educational potential cannot be realised without radical changes in school structures and methodologies. As ICT gains acceptance in schools, it may become both the driver and the facilitator of the necessary curriculum change.
- ◆ *Student assessment should be compatible with ICT-enriched learning:* The promotion of advanced skills and competences will fall short in assessment regimes that are overwhelmingly based on achievement in single subjects, by means of conventional written examinations. What is assessed schools and how the assessment is performed exercises a tenacious influence on the delivered curriculum. To continue with existing patterns of student assessment will act as a brake on the imaginative use of ICT. The pervasive adoption of ICT not only *requires* different assessment procedures but *provides* a variety of means.

The theme running through each of these studies is that innovation and flexibility are not only desirable but possible. There are indications that policy and practice are moving in the directions advocated, in some countries perhaps more than others. Yet, the powerful weight of traditional school organisation - bureaucratic and atomised - proves highly resilient to change. Until it does, claims that schools collectively are actively contributing to overall LL "systems" are not convincing.

7. Lifelong Learning and the Schooling Scenarios

This paper has reviewed a selection of analysis conducted in recent years in OECD to shed light on the relationships between schooling and LL. The aim of the discussion has been as much to clarify the dimensions of these relationships as to provide evidence, and that evidence is no more than suggestive. Further conceptual clarification and the marshalling of analysis would both usefully help illuminate a critical yet neglected set of questions. The evidence reviewed above is far from conclusive, and countries vary substantially on certain indicators. In some areas, such as engagement with school, the evidence

reviewed portrays a relatively positive picture; other aspects are less so. Altogether, it suggests that there is still much to be achieved before schooling in most countries can claim to be leading contributors to "learning systems" characterised by LL. In the language of the scenarios, the "status quo" remains powerfully embedded in many systems. The value of developing indicators to gauge progress towards "re-schooling" or "de-schooling" is in part to assess how far the traditional school models really are being modified.

Can one or other scenarios be regarded as more or less indicative of LL systems? 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 LL on a universal basis will be limited. For in this case, schooling is too closed and inflexible and its organisations insufficiently imbued by LL characteristics. The nature of LL systems with these schooling scenarios will likely be characterised by marked disjunctures - with sharp divides between initial and continuing education, for instance, and between educational "haves" and "have-nots". The "meltdown" scenario through its very nature would scarcely provide a secure basis for LL, though passage through this scenario might offer the spur to activate more radical versions of "re-schooling" or "de-schooling". Nevertheless, the incremental increases towards learning opportunities for adults already visible should be taken as a caution not to exaggerate the incompatibility between current arrangements and the quiet spread of LL.

Moving towards one of the other scenarios is, however, more likely to speed LL developments, though in which direction clearly depends on whether "de-schooling" or "re-schooling" prevails. The more radical option for thorough-going LL might well prove to be "de-schooling", for this would remove any clear demarcation between the initial phase of education and the broader panoply of learning opportunities available over the whole life cycle. Many worry that the lack of management implied by "learner networks" and lack of equity that might result from the "extension of the market model" would outweigh any possible benefits. Yet this might be unduly pessimistic, in that such scenarios for schools might only come about were "de-schooled" LL already in place, in which these governance and equity concerns had already been addressed. In any case, it is not clear how far such worries are removed by "re-schooling". The "school as core social centre" risks reproducing the very social inequalities it is intended to address, while the "school as focused learning organisation" may prove an unrealistic and expensive option without major changes in the overall structure and size of school systems.

In light of this, therefore, it might be that LL would be best served by a judicious combination of scenarios, possibly corresponding to the different phases of initial learning. It might best call for "re-schooling" in the earlier cycles, with both strong knowledge and social remits. But, it may also need more "de-schooling" in adolescence, permitting powerful roles for markets, distance education, community networks and informal learning, as well as the public authorities.

Such a combination in essence questions the continued trend towards a heavily "front-loaded" school system, as discussed above in section 3. As the trend itself is so dependent on the collective outcomes of individual choices this would be very difficult to reverse it without a clear shift in education systems towards LL, where the incentives and rewards would not be stacked in favour of long-term survival in school and college at the outset. To achieve this would need a determined and simultaneous shift in quality educational resources to both earlier and later in the educational cycle than the critical 18-24 year-old juncture. This may well mean a shorter, better resourced and very high quality school system from infancy to around age 13/14, on the one hand, and, on the other, highly visible inclusive LL opportunities.

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ⁱ The analysis takes some of the arguments contained in a forthcoming article (Istance, 2003) and relates them to the work on Schooling for Tomorrow. It also draws on the reflections contained in a recent collection of "international perspectives on lifelong learning" (Istance, Schuetze and Schuller, 2002), which was prepared in celebration of the work of Jarl Bengtsson, recently retired as Head of OECD/CERI.