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ABSTRACT

This book contains a collection of papers from the Organisation for Economic Co-Operation and Development's Schooling for Tomorrow project. The first part contains papers on networks and governance in schooling as follows: "Networking in Society, Organisations and Education" (Hans F. van Aalst); "Schooling for Tomorrow: Networks of Learning" (Judith Chapman); "Networking for Educational Innovation: A Comparative Analysis" (Anne Silwka); and "Governance, Management and Leadership" (Ron Glatter, Bill Mulford, and Dale Shuttleworth). The second part contains the following papers on specific cases: "Strategies to Promote Good Practices and Innovation in Schools: The Portuguese Case" (Maria de Ceu Roldao); "Public Management Reform and the Regulation of Education Systems: The Hungarian Case" (Gabor Halasz); "Deliverable Goals and Strategic Challenges: A View from England on Reconceptualizing Public Education" (Michael Barber); and "Schools and Governance in the Netherlands: Recent Change and Forward-Looking Policy Thinking" (The Netherlands Ministry of Education, Culture and Science). The third part of the book contains articles highlighting the main conclusions to emerge from a series of conferences held in 2000 and 2001; they are as follows: "Schooling for Tomorrow: Principles and Directions for Policy" (Ylva Johansson); "Understanding Networks for Innovation in Policy and Practice" (David Hopkins); and "The Management of Learning, Schools and Systems" (Donald Hirsch). (WFA)

Schooling for Tomorrow

Networks of Innovation

TOWARDS NEW MODELS FOR MANAGING SCHOOLS AND SYSTEMS

Schooling for Tomorrow

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Towards New Models for Managing Schools and Systems

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Réseaux d'innovation

Vers de nouveaux modèles de gestion des écoles et des systèmes

Foreword

This report is the most recent publication of the OECD/CERI project, "Schooling for Tomorrow". Earlier volumes have identified the challenges of innovating schools and systems, analysed key trends, developed scenarios, and have focused on ICT in schools and on the learning digital divide. The initial inspiration for this series came from a meeting of OECD Ministers of Education in the 1990s, when they invited the OECD to "assess alternative visions of the 'school of tomorrow'". They expressed their concern "about education systems' capacity to change quickly" and called for more "supple frameworks" in general.

Compared with the earlier "Schooling for Tomorrow" analysis providing the macro sweep of trends and scenarios (OECD, 2001a), in this volume the focus shifts to the means through which these broad futures might be realised – the "how?" as well as the "what?" and "why?" of changing schools for the future. Many lament the stubborn persistence of "industrial age" bureaucratic models of schools and systems as inappropriate for 21st century knowledge societies. To what extent can educational networks replace cumbersome bureaucracies as sources of innovation, decision-making and professionalism? And, what wider forms of management and governance are suited to systems in which schools are more autonomous, sources of learning increasingly diverse, and the world more complex? These questions run through the chapters of this report.

At the report's core are the analyses and conclusions of three conferences hosted in different OECD countries: the Portugal/OECD seminar, "Schooling for Tomorrow: Innovation and Networks" (Lisbon, September 2000); the Netherlands/OECD conference on "Schooling for Tomorrow" (Rotterdam, November 2000); and the Hungary/OECD conference, "Managing Education for Lifelong Learning" (Budapest, December 2001). Participation in Rotterdam and Budapest was open to representatives of all OECD countries, while the Lisbon seminar was organised around experts from a small number of identified educational networks.

This report is organised into three main parts. The first contains expert papers prepared for OECD/CERI on networks and governance in schooling (by Hans F. van Aalst, Judith Chapman, Ron Glatter, Bill Mulford, Dale Shuttleworth, Anne Sliwka). While the research reported and countries included are wide-ranging, these chapters make no pretence to exhaustive coverage. The second part contains chapters referring specifically to each of the countries that hosted the conferences. One

was prepared by Maria do Céu Roldão (Portugal), another by Gabor Halász (Hungary), while that on the Netherlands is based on extracts from recent policy reports. The chapter by Michael Barber, based on a keynote address at the Rotterdam conference and making extensive reference to policies in England, has particular relevance in this part and is also included. The final part brings together the main conclusions to emerge from this series of conferences, as summarised by their chairs/rapporteurs (Ylva Johansson, Rotterdam; David Hopkins, Lisbon; and Donald Hirsch, Budapest). There is an extensive Secretariat introduction to the main themes and issues, also relating these to the schooling scenarios.

In acknowledgement, thanks are due to the chapter authors, each of whom has made an important contribution to the work on "Schooling for Tomorrow". Thanks are also due to those in the countries other than chapter authors who played a central role in organising the three international conferences/seminars, in particular the following persons and their organisations at the time of the events: Maria Emilia Brederode Santos and Filomena Matos of the Institute of Educational Innovation (IIE), Portugal; Marceline Engelkes and Jan van Ravens of the Netherlands Ministry of Education, Culture and Science; and Istvan Kovacs and Rózsa Juhász of the Ministry of Education, Hungary. Many others have been involved in the seminars and conferences covered in this volume, in preparing the related analysis, and in working on this publication whose contributions cannot be acknowledged individually.

Within the CERI/OECD Secretariat, David Istance and Mariko Kobayashi were mainly responsible for the relevant work on Schooling for Tomorrow and for compiling this volume. (Ms Kobayashi has since returned to the Japanese Ministry of Education, Culture, Sports, Science, and Technology.)

The report is published on the responsibility of the Secretary-General of the OECD.

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Introduction

by
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Abstract. *The introduction presents a substantial discussion of the key themes and findings of the different chapters of the report, as a contribution that goes beyond just summary. It outlines the need to analyse the processes of change in school systems confronted by a new context of management and governance. Beginning with macro issues and moving through to the micro level, it discusses governance, including accountability; networks and partnerships; and organisations and leadership. The links are drawn with the earlier* Schooling for Tomorrow *analyses by relating these themes to the six schooling scenarios presented in the 2001 OECD report* What Schools for the Future?*; it develops the governance, management, leadership and network arrangements consistent with each of the six.*

1. Introduction

The issue of how educational change is managed is clearly central to any analysis of what schooling will be like in the future. The previous work in the Schooling for Tomorrow project (OECD, 2001a) focused on the "big picture" – trends and scenarios – but equally important are the means and mechanisms through which these broad futures will be realised. The concept of "network" has been central in this phase of the CERI analysis, and several of the chapters of this report seek precisely to understand more fully the nature and scope of networks. These chapters show that they cover a wide range of forms, with markedly varying ambitions and significance. The broader context of management and governance for schooling, in which networking activities are one part, needs also to be addressed. Such breadth is reflected in this report.

This introduction first discusses key themes found in the report, beginning with the more macro aspects of governance, including accountability, and before focusing in on organisations and leadership. Following this, the focus changes from the present to the future. It then returns to the schooling scenarios[2] and elaborates the governance, management, leadership and network arrangements that might be most prominent within each of them.

2. Importance of Analysis of Change Processes for Schooling for Tomorrow

Many commentators, including several below, emphasise the need for revitalisation of school organisations away from the bureaucratic, "industrial" models of education created for the earlier decades of the 20th century. These should be replaced, so it is argued, with professionalised, flexible models appropriate for the post-industrial age of the 21st century. The sense that fundamental change is needed in schools and school systems if they are to have a strong place in the future is a theme that recurs in this report, offering frameworks and examples of how it might be done. In these analyses, the role of organisational change, leadership, knowledge management, networking, and new forms of governance are all prominent.

Yet, the same analyses show that the task is much more complex than it was in earlier times – solutions cannot be implemented via fiat or old-fashioned planning. Instead, the policy challenge, as the boundaries between

"internal" systems and "external" environments blur and even disappear, is becoming one of creating fertile conditions in which desirable change can occur. The complexity of this situation calls for much more sustained analysis, to which this report makes its own contribution, but much still remains to be done.

The stakes are high. Among the contributors closest to the political world, Ylva Johansson, the former Swedish education minister (Chapter 9), foresees a future in which schools are as fundamental in the transformation from industrial to knowledge-based societies as they were from the agrarian to the industrial. But, she adds, this is *only on condition that* they are "revitalised and dynamic", not offering more of the same. Michael Barber, an educationist now with senior political responsibilities in the UK, argues a similar point in more dramatic terms (Chapter 7): public education systems risk being "swept away by powerful new forces", he maintains, which those in education can only ensure does not happen by embracing radical new conceptions of schooling. He singles out rising affluence and expectations as forces that might lead many parents towards private individualised solutions for their children's schooling if their high demands are frustrated. Both also place a very strong emphasis on the important role of networks and partnerships for this to be achieved. For instance, Johansson in concluding the 2000 Rotterdam International Conference, declared:

> Networks and partnerships are critical: School autonomy goes hand-in-hand with being connected to the community, other educators, and the broader society. Hence, the key role of networks and partnerships. Too much educational practice in OECD countries is characterised by isolation: schools from parents and the community and from each other; teachers and learners in isolated classrooms. Partnerships may address skills and employment, society and culture, or bring together different parts of the educational world.

The above arguments find expression in the schooling scenarios developed by the CERI/OECD Schooling for Tomorrow project. There is broad agreement that societies should seek to avoid futures founded on "attempting to maintain the status quo", in which bureaucratic school systems predominate (see Scenario 1.a in this introduction). Such inertia might anyway result in "meltdown" (see Scenario 1.b), or it might lead to the "de-schooling" futures in which school systems become dismantled and replaced by learner networks (Scenario 3.a) or markets (Scenario 3.b).[3] If schools are to be strong but revitalised, they will be on the path of the "re-schooling" scenarios, either with social and community goals uppermost (Scenario 2.a) or closely focused as learning organisations on school knowledge (Scenario 2.b). At the same time, elements of "de-schooling" might also feature in the shift away from the bureaucratic "industrial" models, especially at the upper

reaches of the school system, and several of the authors below emphasise the value of the informal learning taking place outside classrooms and schools.

2.1. *Networks and Partnerships in the Broader Context*

To grasp new forms of organisation, management and governance in education calls for attention to the broader environment that constantly impinges on the world of schools. Some of the main features of this environment are identified by the Netherlands government statement (Chapter 8): globalisation, immigration, the rise of individualism, Information and Communication Technology (ICT), the influence of market values, high levels of female employment. Van Aalst (Chapter 1) echoes certain of the above-listed factors when he refers to "fundamental changes in the world economy, including the increasing importance of knowledge and the global scale of capital, knowledge exchange, and so forth. Inexpensive, powerful electronic communication is becoming widely available and accelerating this process".

A key factor underpinning the development of partnerships in no matter what sector is the *sharing of knowledge or services* that either of the partners does not alone possess. They thereby provide added value, extended services, or create new market opportunities through increased scale and scope of activity; van Aalst analyses the knowledge management aspects of networking in particular. Partnerships can permit the sharing of *costs*, especially where large investments are needed to develop new services, and are sources of both financial and human resources. Not only may the cost of developing new products or services be shared but also, third, any *risks* accompanying the development as well. With lower risk, further innovation may occur.

The above analysis was not specifically drawn in terms of education but certainly applies to it. Education is being transformed, albeit unevenly and at varying pace, from a producer-led, planned system to one more guided by its multiple stakeholders, as are many other public services. It is called upon increasingly to be responsive to the needs of the knowledge society and partnerships offer one way in which the new demands can be met. Required competences change, more advanced, specialised skills are called for, learning programmes "tailor-made" to individuals or groups are in demand. New opportunities and competition are tending to open up in the conventionally public sector, a further driving factor for public-private partnerships, and cutbacks in expenditure are also pushing the public sector to search for new (including private) partners.

There are important social and political agendas at issue which are equally relevant for education as the technological and economic. For

Chapman (Chapter 3), strands of political philosophy and action are emerging in which traditional hierarchies are supplemented or replaced by new conceptions of community. For her, the declining pre-eminence of the nation-state also pushes networking to the fore. A similar emphasis on participation is given to partnership and network development in a recent OECD analysis:

> Previously, partnerships were established mainly as a response to an acute problem threatening a particular area, such as the decline of a vital industry that triggered the need to mobilise available resources. Today, however, local actors wish to participate more systematically in the design of strategies for their area. This wish for greater local participation has often come about as a reaction to the poor results attained by policies only poorly linked to local conditions. It has also been a reaction to the persistence of social exclusion and its associated problems, despite recent economic growth. Partnerships are seen as a means to an improved way of life (OECD, 2001b, p. 13).

The need to relate educational management issues to the broader agendas of public policy is argued by Halász (Chapter 6). He notes that, despite the obvious inter-connections between public management reform in general and the challenges being confronted in educational governance, few examples exist where those inter-connections have been made explicit. For instance, the general trend to decentralisation is nothing unique to education. Understanding the forces and constraints operating on education will be improved by relating them to this bigger picture; equally, imaginative solutions to problems of educational management may well be found in other sectors of public policy.[4]

2.2. *Governance, Management and Accountability*

In the context of increasing complexity and uncertainty, alongside very high pressures and demands on education, several of the report's contributions discuss what is the role of government within the broader canvas of decision-making that involves all stakeholders. For Barber (Chapter 7), uncertainty and complexity emphasise the importance of knowledge management at the system, and not only school, level:

> The challenge of reforming public education systems is therefore acute. Those responsible are in no position to deal in certainties. What they can do is manage and transfer knowledge about what works effectively, intervene in cases of under-performance, create the capacity for change in the system and ensure that it is flexible and adaptable enough to learn constantly and implement effectively.

The "Learning without Constraint" analysis in the Netherlands reported in Chapter 8 sees the government role primarily as setting the terms of three

inter-connected pillars or principles: direction, scope and accountability. The earlier 1999 vision of "Strong Institutions, Accountable Government" also recognises that networking may be an integral aspect of management and governance rather than as simply a desirable offshoot of it. "Strategic networking" is taken as a core objective: "ensuring that educational institutions are an integral part of the communities they serve, 'making education central to society and society central to education'." Yet, it recognises that the complex regulation involved in steering and operating through networks can end up feeling like over-regulation. Together with the fragmentation of funding, such forms of governance militate against the integrated management of the system and indeed question what now constitutes a "system" at all. Features such as greater school autonomy, choice, horizontal structures, and responsiveness to demand have rendered complex the satisfaction of collective interests.

Halász, (Chapter 6), offers a framework for the analysis of this complexity. He distinguishes between two dimensions – "asset specificity" and "opportunism"/"compliance with broad societal goals" – drawing on the political science model developed by Robinson (2000). As the costs of assuring compliance and the complexity of learning systems increase, the only realistic pathway is identified as the quadrant combining high "asset specificity" and low "opportunism" – which is described as "liberation management". A key variable in working towards this is identified as the professional and social commitment of teachers: rather than regulation being imposed from above, it should increasingly come from within. He too recognises that with such unpredictability, there will always be limits to managed coherence.

One important part of the government role at the macro level in the light of these analyses is support for innovation that is generated and developed at either the school (micro) level or the intermediate/network (meso) level. Johansson (Chapter 9) underlines this point: "there should be high levels of support for successful innovation and experimentation to ensure that the benefits are sustainable." She maintains that a "climate of experimentation should be fostered within the broad frameworks of national goals". Hirsch (Chapter 11) in similar vein suggests that a more constructive attitude to "failure" is needed, where it is seen as a normal part of experimentation in systems and schools as part of a continuous learning process. The Portuguese Good Hope Programme described by Roldãu (Chapter 5) offers a model of innovation support and transfer in practice. This was a nation-wide programme designed to support teachers and schools in various educational fields: inclusion initiatives, ICT/education strategies, school reorganisation endeavours, and school-community projects. Considerable attention was devoted to creating conditions through which innovation could be sustained and networks created.

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Yet, even when governments promote new approaches to educational management based on support for innovation, the scale of potential problems should not be under-estimated. Roldãu describes how difficult it is to bring about real systemic change, as opposed to the tolerance of initiatives that stay on the periphery of the system. Unless there is a shift in culture, the innovation can prove very difficult to sustain. Equally fundamental is the nature of accountability. The contributors to this volume do not question the importance of accountability; Johansson, for instance, in calling for bold experimentation and support for innovation is clear that this should go hand-in-hand with "well developed systems of assessment and accountability" (Chapter 9). The Dutch government position calls for sophisticated systems of accountability alongside and as part of giving much freer rein to demand. Halász's framework in Chapter 6 talks of "liberation management" yet within policies which seek a high degree of compliance/low opportunism (which is a form of accountability).

The creation of a culture of bold experimentation and tolerance of supposed "failures" stemming from experimentation, however, runs into the critical question: how far do the mechanisms chosen for improving accountability militate precisely against the openness and confidence needed for innovation? The release of local energy through giving schools greater autonomy and support for networking and innovation will be undone if at the same time they are under intense pressures to conform. Hence, while there is no necessary contradiction between the joint pursuit of innovation and accountability, in practice there may be powerful tensions between them. The distinction drawn in Glatter's (Chapter 4) contribution to this report between "contractual" and "responsive" accountability is relevant to these tensions. The former concept is essentially concerned with holding educators to account in terms of standards and results; the latter refers to "decision-making by educators, after taking account of the interests and wishes of the relevant stakeholders".

Establishing clear accountability mechanisms is closely linked to the enhancement of both choice and demand in education. An important inspiration behind the accountability movement is to provide the transparency to enable informed choices to be made. Similarly, making schools more accountable to parents and the public can be characterised in terms of the shift from supply-driven systems to demand-sensitive schooling. It is open to debate how far these are simply alternative ways of expressing the same goals. In Glatter's typology, the promotion of choice and demand suggest contrasting not consistent values, distinguished in terms of the consumerism of certain forms of "contractual accountability" and the empowerment inherent in "responsive accountability".

The contributions in this volume discuss aspects of market developments in education. England and the Netherlands, two of the countries featured in this report, are singled out in Glatter's chapter as among the most decentralised of systems, with a strong role for the market. They are distinguished from other systems where the locus of power resides either at the centre, the region/province, or the locality. Another featured country, Hungary (Chapter 6), is one of the most market-oriented as well as decentralised in the OECD. This does not mean that these systems are well advanced towards the fully-fledged market for learning as described in one of the "de-schooling" scenarios, for that is understood in terms of the substantial dismantling of the public school system altogether. Many of the market-oriented developments currently visible in education are instead compatible with the continued existence of public schools while increasing the play of choice and of "clients" and "consumers" (often parents) within schooling, or introducing limited privatisation within mixed models and "quasi-market" arrangements. Of course, not everyone embraces markets or privatisation enthusiastically: Johansson interprets the Rotterdam conference participants' responses to the scenarios, for instance, as "rejection of the market model".

2.3. Networks and Partnerships

Networks and partnerships are of particular interest to the governance, management and organisation of education. They may be understood as themselves forms of governance growing in importance. Chapman makes this connection explicit in Chapter 2 by stressing their participatory, horizontal nature and their potential to displace hierarchical and bureaucratic decision-making structures. Equally important, they are important constituents of the "meso" level, lying between the macro level of government policy-making, on the one hand, and the micro level of individual schools, on the other. This intermediate level of action and decision-making, through creating linkages and connections, becomes especially important as schools acquire considerable autonomy. They risk to be isolated and unconnected while the centralised authorities have fewer direct planning powers. Without close attention to the mediation between the macro and micro, educational provision could disintegrate into an assembly of disaggregated actions and units.

Hopkins (Chapter 10) draws out the significance of networks in this governance context:

> [They] offer the potential for "re-inventing" the meso level by promoting different forms of collaboration, linkage, and multi-functional partnership – sometimes referred to as "cross-over structures". In this respect, the network enables stakeholders to make connections and to synergise activities around common priorities. The system emphasis is

not to achieve control (which is impossible), but to harness the interactive capability of systemic forces.

Put another way, there is need to "tighten the loose coupling" in a period of rapid change in order to create more responsive and collaborative structures. Networks, maintains Hopkins, are an important means of doing just this.

Several of the report's contributors focus on this intermediate, meso aspect of networks. Barber calls for imaginative thinking in relation to the intermediate tier, including networks and partnerships, seen as critical elements in knowledge transfer systems. An example is given by Hirsch (Chapter 11) of the educational ombudsmen and the role they play as mediators in the highly decentralised system in Hungary, as described in the 2001 Budapest seminar. Glatter identifies the differences in the "intermediate authority and functions" under each of his four forms of governance. Yet, while networks and partnerships may all be conveniently classified as belonging to the intermediate level, not all structures at that level can be described as networks and partnerships. Hopkins cautions that certain support structures traditionally provided by local education authorities and school districts might be more accurately described as part of a slow-changing *status quo* than as a dynamic new topography of educational governance. Hence, to argue for "tighten loose coupling" through the promotion of network activity is not a blanket call just to fatten up the meso level.

Networks may be promoted through policy action and at the same time be themselves regarded as a form of governance. The relationships involved are complex, as Hopkins concludes in showing that there is no simple distinction between networks created and sustained by government action and those operating in apparent independence. As with governance and policy so for innovation: networks can support innovation and they can be a form of innovation in their own right. Van Aalst (Chapter 1) notes reasons for the attractiveness of networks in terms of their advantages for organisational and professional learning:

- networks open access to a variety of sources of information;
- they offer a broader range of learning opportunities than in hierarchical organisations;
- they promise a more flexible while more stable based for co-ordinated learning than does the anonymity of the market;
- they help to create and access tacit knowledge.

But, if these are advantages for innovation and learning, there are drawbacks, too. Sliwka (Chapter 3) describes a major "down-side" of dynamic, innovative groupings – their relative fragility. Participation in them can be

experienced as both stimulating and frustrating. They can vary widely in their effectiveness. She and Hopkins describe the conditions that help to make them more effective, which can serve to guide policies promoting educational innovation and reform. Hopkins groups the conditions he believes most important under the following headings – consistency of values and focus; clarity of structure; knowledge creation, utilisation and transfer; rewards related to learning; dispersed leadership and empowerment; and adequate resources.

Given the variety of meanings and forms that networks can take – there is little consensus on definitions – such a list can be no more than indicative: so much depends on who is involved in the networks, what purposes they serve, the context in which they operate and so forth. That said, Sliwka and Hopkins usefully distinguish different levels of ambition and influence in networks. To move through their typologies is to move from networks functioning as effective practice to innovation and learning, to new forms of educational governance. Hopkins formulates the typology thus:

- At its most basic level, networks may be simply groups of practitioners joining together for a common purpose and sharing good practice.
- More ambitiously, networks can join together groups of teachers and schools joining together with the explicit aim of enhancing teaching and learning, not just of sharing practice.
- Networks can also serve not just the purpose of knowledge transfer and school improvement, but also join together groups of stakeholders to implement specific policies locally and possibly nationally.
- An extension of this way of working is found when groups of networks, within and outside education, link together for system improvement in terms of social justice and inclusion.
- Finally, there is the possibility of groups of networks working together not just on a social justice agenda, but also as an explicit agency for system renewal and transformation.

Such a typology usefully distinguishes some of the main ways in which they contribute to practice, innovation and governance. It should be further elaborated and clarified as part of the on-going analysis of networks in schooling.

2.4. Organisational Management and Leadership

The chapters of this report repeatedly discuss the importance of schools as organisations. Partly, this derives from the strong trend towards greater school autonomy for as they are more autonomous, the onus is placed on the school to organise its own professional and community solutions. As Glatter

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points out, however, "autonomy" is not a simple or single concept: more autonomy associated with one of the main areas of input, structure, process and the school's environment may come at the price of less of one of the others. Greater influence exercised by school management may mean less for others such as classroom teachers. More positively, the need to focus on schools as organisations derives not just from their growing, and sometimes problematic, autonomy but as a key aim of policy in its own right. For Johansson in Chapter 9, her first "future policy orientation" is predicated on schools as "strong organisations". This goal is underpinned by the empirical evidence reported in another chapter – the Leadership, Organisational Learning and Student Outcomes (LOLSO) research programme described by Mulford (Chapter 4). This identifies the critical role played by "organisational learning" as the channel through which educational inputs and leadership become translated into higher levels of student achievement. The processes of change and organisational practice are an essential link between the two.

Beyond the management of schools as organisations is the management of the learning process. Too often, as Hirsch notes from the discussion at the Budapest conference, the old didactic models still prevail in classrooms right across OECD countries instead of being places where students are co-workers with teachers and are genuinely motivated to learn. The Netherlands government sees the future in similar terms (Chapter 8): teaching and the organisation of learning should be much more in line with the tenets of knowledge management and "re-schooling". Accordingly, it will demand more specialised skills and team-teaching, and should provide the organisational flexibility so that learning is geared to individual student demand and their needs.

A strong emphasis on organisational practice and learning is not specific to the Schooling for Tomorrow work in OECD/CERI. It is also a central aspect of the parallel analysis on the management of knowledge, comparing practices in education with other sectors (see OECD 2000a). The broad thesis of that analysis is that many aspects of current school practice have yet to adopt approaches imbued with awareness of knowledge management, characterised by such features as widespread teacher networking, development and use of a strong practice knowledge base, and continuous institutional and individual professional learning. The fostering of such approaches should be priorities for policy.

If a strong focus on schools as learning organisations, intermediary structures and networks might be thought to diminish the importance of leadership, this is not borne out in the contributions to this report. Sliwka argues that even in network structures defined by the absence of hierarchy and top-down lines of control, "they need to be understood as requiring both relatively stable structures as well as some form of organisational leadership

to function effectively". Johansson (Chapter 9) proposes that "strong autonomous schools meeting high ambitions... call for strong leaders, principals and managers". This is not leadership defined in traditional hierarchical terms. As Shuttleworth (Chapter 4) maintains, this would be to seek solutions from earlier "scientific management" paradigms that are inappropriate to the post-industrial era, a mismatch that arguably has characterised some educational policy thinking over recent decades. Mulford and Hirsch in their contributions (Chapters 4 and 11) reject the "great man/ woman theory of leadership"; Johansson similarly argues against placing faith in "idiosyncratic influence of the charismatic individual".

The arguments are two-fold: first, modern forms of organisation – whether schools or others – need leadership other than that defined in strongly hierarchical relationships; second, contemporary complex environments need teams not single individuals. Even as regards those individuals who are in key leadership positions, their role is not that of providing single-handed direction. Mulford in identifying the features of what he describes as the "transformational principal" emphasises the extent to which this person should bring all the staff into the decision-making and organisational change process rather than impose this "top-down":

- *Individual Support* – providing moral support, showing appreciation for the work of individual staff and taking account of their opinions.
- *Culture* – promoting an atmosphere of caring and trust among staff, setting the tone for respectful interaction with students, and demonstrating a willingness to change practices in the light of new understandings.
- *Structure* – establishing a school structure that promotes participative decision making, supporting delegation and distributive leadership, and encouraging teacher decision-making autonomy.
- *Vision and Goals* – working toward whole-staff consensus on school priorities and communicating these to students and staff to establish a strong sense of overall purpose.
- *Performance Expectation* – having high expectations for students and for teachers to be effective and innovative.
- *Intellectual Stimulation* – encouraging staff to reflect on what they are trying to achieve with students and how they are doing it; facilitates opportunities for staff to learn from each other and models continual learning in his or her own practice.

Strong pressures towards relatively narrow forms of accountability may, however, sit uneasily with exhortations for leaders to be more "transformational" in the directions outlined in this list of desirable characteristics. Nor is it a question of replacing one outdated form of

leadership with another that is more up-to-date, for various approaches will be needed. The *context* in which schools operate – Glatter singles out the varying structures of governance and Mulford identifies socio-economic environment as pertinent aspects of context – influences the room for manoeuvre available for the effective exercise of leadership. There is no one model of leadership that is best for all circumstances.

Some of the authors touch on the more specific relationships between leadership and networking. Hopkins includes as a condition of effective networks that they should be characterised by "dispersed leadership and empowerment" with a high degree of team working. From another angle, school leaders are themselves called on increasingly to be effective networkers. School managers, according to Shuttleworth, "are an integral part of a micro-political milieu of networks [that...] compete for scarce resources and even political power". More generally, he maintains, the professional development of educational managers and leaders has been a badly neglected aspect of the school reform agenda, especially in terms of preparing them to cope with the burgeoning demands with which they are faced.

3. From the Present to the Future – Governance, Management, Leaderships and Networks in the Schooling Scenarios

3.1. *Scenarios 1.a and b: "Attempting to Maintain the Status Quo"*

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

3.1.1. *Scenario 1.a: "Bureaucratic School Systems Continue"*

This scenario is built on the continuation of powerfully bureaucratic systems, strong pressures towards uniformity, and resistance to radical change. Schools would be highly distinct institutions, knitted together within complex administrative arrangements. Political and media commentaries tend to be frequently critical in tone, but despite the criticisms, radical change would be resisted. Many fear that alternatives would not address fundamental tasks such as guardianship and socialisation, alongside the goals relating to cognitive knowledge and diplomas, nor deliver equality of opportunity. This is the model that Barber suggests in Chapter 7 has had its day and will wither through its inappropriateness for 21st century circumstances. It may, however, prove to be considerably more robust than this.

Governance: As education is such an important feature of national sovereignty, the nation – or the state/province in federal systems – remains the main locus of political authority. Considerations of efficient administration and accountability lead to experimentation with varying patterns whereby authority is distributed across the different levels. National sovereignty is nevertheless being squeezed by a variety of factors: decentralisation to schools and communities (despite efforts of central authorities to maintain countervailing powers); growing corporate and media interests in the market opportunities that education represent; and globalising pressures, whether through international comparisons or trans-national decision-making/funding. The model of governance developed by Glatter in Chapter 4 that best corresponds to this scenario is "Quality Control", which he characterises as "bureaucratic", with a central role played by the education authorities, detailed forms of assessments and control, and contractual accountability within hierarchical structures.

Leadership and management: Leadership in this scenario calls for strong administrative capacities to handle the bureaucratic demands. It needs abilities to manage competing vested interests that come together in the place called school, especially in the light of limited resources. Not only are there no significant new resources – financial or human – for established tasks, but new tasks are continually added to the remit of schools. Accountability pressures are strong, and occupy a great deal of management time and energy. There would be a wide diversity in the quality of buildings and facilities, and the necessary investments would continue to struggle in the face of intense competition with the alternative calls on resources. This scenario is demanding, therefore, of educational management and leadership.

Networks: Networks will be a feature of this scenario, particularly established by motivated individuals and groups communicating to share solutions. Diverse pilot programmes will often be based on networking structures, and receive additional financial support. There would be tensions, however, between the hierarchical nature of the bureaucratic system and the functioning of networks. The levels of motivation needed to sustain networking would not be universal, and the networks dependent on additional funding would often disappear with the programme's end. Roldãu's chapter on innovation in Portugal describes just such tensions: experimental and innovative developments emerging alongside a system with many prescriptive hierarchical features, while making little tangible impact on it. Relating to Sliwka's observations in Chapter 3 about the fragility of networks, innovation may be highly dependent on support provided by essentially centralised and bureaucratic systems, with a tendency to evaporate when that support comes to an end.

3.1.2. *Scenario 1.b: "Teacher Exodus – The 'Meltdown Scenario'"*

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

Governance: The position of the national authorities is strengthened in the face of crisis, as they acquire extended powers. It weakens, however, the longer crises remain unresolved. Communities with no serious teacher shortages might seek to protect themselves and extend their autonomy from national authorities. Corporate and media interests in the learning market could intensify. Internationally, co-operation increases between some countries where initiatives develop to "lend" and "borrow" trained teachers, including between North and South; it declines the more generalised the shortages and where several countries are competing for limited pools of qualified staff. As a worst case scenario of attempting not to change, this scenario does not correspond to any of the ideal type models outlined by Glatter (Chapter 4).

Leadership and management: The leadership and management features of Scenario 1.a are found here too, but in this case summed up in the term "crisis management". This would extend from those running systems to individual local managers and school leaders. In socio-geographical areas where problems are most acute, the shortages among those willing to take on these jobs could well be greater even than among classroom teachers. A fortress mentality would be widespread in those areas saved most from the "meltdown". It would be likely that investments in school facilities would be very badly squeezed, as funds switch increasingly into salaries in an effort to attract more teachers. If the meltdown were to lead only to further retrenchment and conflict, so would the predominance of "crisis management". If instead national emergency strategies began to succeed through innovation and change, a whole new cadre of school managers, leaders and energy might be created.

Networks: Networking and partnerships will emerge in this scenario by force of necessity; there will be burgeoning pooling arrangements to cope with shortages. While highly innovative, the networks themselves may be less focused on the sharing of professional knowledge, given the sheer pressure of

crisis management, and more on survival. Which direction emerges for this scenario – retrenchment or dynamism – will define the place of networks: marginal in the former case, critical in the latter.

3.2. Scenarios 2.a and b: "Re-schooling"

The "re-schooling" scenarios would see major investments and widespread recognition for schools and their achievements, including towards the professionals, with a high priority accorded to both quality and equity. In Scenario 2.a, the focus would be on socialisation goals and schools in communities, in certain contrast with the stronger knowledge orientation of Scenario 2.b. Both Johansson in Chapter 9 and Barber in Chapter 7 – the Chair and Keynote Speaker respectively at the Rotterdam International Conference – assume that major investments will be required to create strong schools. Johansson talks of "well-resourced schools to meet demanding public responsibilities"; Barber maintains "successful public education systems in the 21st century will be expensive".

3.2.1. Scenario 2.a:"Schools as Core Social Centres"

The school would enjoy widespread recognition as the most effective bulwark against social, family and community fragmentation. It would now be heavily defined by collective and community tasks. This leads to extensive shared responsibilities between schools and other community bodies, sources of expertise, and institutions of further and continuing education, shaping not conflicting with high teacher professionalism. Generous levels of financial support would be needed to meet demanding requirements for quality learning environments in all communities and to ensure elevated esteem for teachers and schools. The Netherlands government has seen this type of future as a likely and desirable one: "An important issue is the position of the school in the community. The number of community school initiatives is increasing rapidly. Three-quarters of Dutch local authorities wish to set up between one and five such schools within the next few years" (Chapter 8).

Governance: The local dimension of action and decision-making would be substantially boosted in this scenario. But, this could only take place if supported by strong national frameworks, particularly in relation to communities with weak social capital and infrastructure. This would unlikely be simply moving powers up or down existing hierarchies of authority, but would create new forms of governance, giving various groups, enterprises, etc. a greater voice. A big question remains how "macro" steering would occur. While international awareness and exchange is a prominent feature of this scenario, supra-national control is exercised more through guiding frameworks than in detailed regulation. The clear correspondence with the governance models outlined by Glatter in Chapter 4 is with "Local

Empowerment", though perhaps some mix of this with "School Empowerment" more nearly expresses the thrust of this scenario.

Leadership and management: Management would be complex in this scenario. The school would be the centre for a dynamic interplay of community groups and players, with open doors and low walls. Integrating the formal learning programmes with a wide range of other activities would present considerable challenges. At the same time, leadership would also be more widely distributed and collective, and less would be expected of hard-pressed individuals. With well-developed frameworks of support, locally, nationally and internationally, there would be a rich vein of resources available to facilitate the undoubtedly challenging nature of management in such a scenario, including the management of infrastructure.[5] But, major investments in facilities would be expected, in part aimed at improving the quality of the premises and equipment in general and in part at extending the range and quality of social functions that the school would serve.

Networks: Community interests – linguistic, cultural, professional, geographical – find very strong expression in this scenario, using the school as the focal point. Schools would be allowed a great deal of room to respond to, and promote, these interests. Networking and co-operation would therefore flourish, both as an expression of different communities of interest (as in Scenario 3.a) and as a mode of governance (as in Scenario 2.b).

3.2.2. *Scenario 2.b: "Schools as Focused Learning Organisations"*

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

Governance: Decision-making would be rooted strongly within schools and the profession. This could not, however, be exclusive or protective, given the powerful involvement of parents, multi-national as well as national companies, and tertiary education in schooling. There would need to be strong guiding frameworks and support facilities, especially in relation to those communities with weakest social resources. The international networking of students and teachers would be the norm. Countries moving furthest towards this scenario might well attract considerable international attention as "world leaders". If there is a correspondence in one of the Glatter models from Chapter 4, it would be "School Empowerment", though an empowerment

qualified by extensive partnerships and perhaps based on groups of schools rather than the individual institution.

Leadership and management: Professional leadership would replace the administrative thrust of the bureaucratic scenarios. With schools being "learning organisations", hierarchy structures are typically flat, with teams and networks taking over much of what currently would be shouldered by particular individuals. Quality norms and conventions would also typically replace the more punitive forms of accountability, with arising problems of quality being resolved through various forms of professional mediation, at local or higher levels. As with the previous scenario, extensive structures of support would be available and widely accessible to all those engaged in schooling. For there to be a burgeoning of state-of-the-art facilities, major investments are to be expected, in part afforded through partnerships with the corporate sector. Blurring boundaries with tertiary education might well lead to more diversity in educational plant and in ownership and leasing arrangements.

Networks: Networks of expertise, including among teachers, would be an essential feature of this scenario. Bureaucratic and hierarchical models would give way to the flatter, collaborative arrangements of networks arrangements, and there would be numerous partnerships involving the different stakeholders. The very management and governance of schooling arrangements would come to rely heavily on networks, with all the positive features of professionalism and dynamism this implies, but also the potential problems of instability and patchiness.

3.3. Scenarios 3.a and b: "De-schooling"

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

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

Dissatisfaction with institutionalised provision and expression given to diversified demand would lead to the abandonment of schools in favour of a multitude of learning networks, quickened by the possibilities afforded by powerful, inexpensive ICT. The de-institutionalisation, even dismantling, of school systems would be an important feature of the emerging "network society". Various cultural, religious and community voices would be powerfully to the fore in the socialisation and learning arrangements for

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children, some very local in character, others using distance and cross-border networking.

Governance: This scenario assumes a substantial removal of existing patterns of governance and accountability, as community players and media companies are among those helping to "disestablish" schools in national systems. The local and international dimensions are strengthened at the expense of the national – for instance, new forms of international accreditation might emerge for elite groups. 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 networked arrangements do not deliver an adequate skills base and if governments would be unwilling to re-establish schools. This scenario is almost defined by lack of governance structures, and so does not correspond closely to any of the "ideal type" models outlined by Glatter (Chapter 4).

Leadership and management: As the system becomes transformed into inter-locking networks, so does authority and leadership become widely diffused. Much now organised by education authorities and schools would be taken over by particular individuals, groups and interests in society, developing their own educational projects and methods for bringing these to learners. Far from simplifying the management of education, it would be extremely complex. The removal of the established visible structures would place demanding expectations on all those involved in the education of the young to be able to operate "mini-systems" – capable of teaching, facilitating, organising community resources, engaging in professional development, managing infrastructure and finance, and so forth. The dismantling of the system would imply substantial reduction in public facilities and institutionalised premises, their place taken by diverse market arrangements as in Scenario 3.b, and community and private facilities would also play an important part. One issue would be how existing premises would be dealt with and used, and whether sold off altogether.

Networks: Networks define and characterise this scenario in all its features, but they are relevant to all the scenarios, albeit taking different forms and shaped by different forces. Hence, not all the arrangements discussed in this report would find a prominent place in this scenario, such as the linkages between schools, teachers and tertiary institutions that depend on the established educational system. This scenario is *par excellence* about non-formal/informal groupings and arrangements, not formal educational structures.

3.3.2. *Scenario 3.b: "Extending the Market Model"*

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

Governance: Consistent with the market model, there would be a substantially reduced role for central providers and public education authorities. They may well have a role in overseeing market regulation, but much less direct involvement through "steering" and "monitoring" that would otherwise distort market operations. Funding arrangements, including the absolute levels of available resources, are critical in shaping new learning markets and their outcomes. International providers and accreditation agencies might well be expected to emerge, though there would be strong players, many private, operating at all levels – local, national, and international. There would be greater diversity of stakeholders with a major voice in educational governance. This finds an obvious correspondence with the "competitive markets" model presented by Glatter (Chapter 4), although that analysis is based on the continued central unit of the school, albeit operating in highly competitive environments. This scenario, on the other hand, supposes an important degree of dismantling of schools themselves and the creation of a wide range of other learning providers for the young.

Leadership and management: Whereas the administrative mode of management and leadership would be to the fore in the first set of scenarios, and professional modes in the second, entrepreneurial modes would now be much more apparent. But, management would not reduce entirely to entrepreneurship, as all the features of previous scenarios could be expected to feature prominently in the market model – administrative acumen, crisis management, community involvement, flat hierarchy and team-working, professional leadership, and multi-skilling. The settings wherein management and leadership would be exercised would be extended, given the key role of information and guidance, indicators and assessments, and the need to develop the dynamic interplay between educational supply and demand. A wide range of market-driven changes would be introduced into the ownership, leasing, and running of the learning infrastructure. While very innovative solutions could be expected, widening inequalities might well

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mean flourishing educational resources in some places contrasting with decaying infrastructure in others.

Networks: The variety of arrangements under this "de-schooled" scenario would most likely bring a flourishing of networks and partnerships. Some would be international, some national or regional, some highly local. They would be found in areas suffering most from "market failure" just as in those enjoying healthy development. Particularly in the latter, however, participation in networks could be expected to be driven by the perceptions of competitive advantage to be gained, rather than for more altruistic or educational reasons.

This introduction has shown how issues of governance and management, including networking, are key to the analysis of schooling for the future. These issues are becoming increasingly complex, placing the established education authorities in a growing web of tensions. Many new ideas are also emerging on how these tensions will be addressed in years to come, as discussed more fully in the chapters to follow. There are, however, no fixed pathways. This point is underlined by the discussion relating to the scenarios and how very different management and governance futures are possible for schooling over the years ahead.

Notes

1. Responsible in the OECD/CERI Secretariat for the Schooling for Tomorrow work on innovation and networks until her return to the Japanese Ministry of Education, Culture, Sports, Science, and Technology.
2. There are three sets of scenarios, each with two thus giving six scenarios in all: 1. Attempting to Maintain the Status Quo (Scenario 1.a. "Bureaucratic School Systems Continue"; Scenario 1.b "Teacher Exodus – The 'Meltdown Scenario'"); 2. Re-schooling (Scenario 2.a "Schools as Core Social Centres"; Scenario 2.b "Schools as Focused Learning Organisations"); 3. De-schooling (Scenario 3.a "Learning Networks and the Network Society", Scenario 3.b "Extending the Market Model").
3. Since publication of OECD 2001a, the grouping of the scenarios has been revised, with the "meltdown" scenario as a worst case of continuing the status quo and "the market model" under "de-schooling".
4. The examination of developments and lessons from other sectors has been characteristic of the OECD/CERI analysis of knowledge management running in parallel to this work on Schooling for Tomorrow (see OECD 2000a).
5. This mix of complexity and imaginative solution is anticipated by the Netherlands government (Chapter 8) in relation to facilities: "community schools can get off the ground where the school building is owned by a third party (a not-for-profit organisation or private limited company). In that case, the school will be one of several tenants in a multifunctional building."

PART I

Analyses of Networking, Management and Governance

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART I

Chapter 1

Networking in Society, Organisations and Education

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Abstract. *This chapter examines why networking is important and the different forms it takes ("the community of practice", the "networked organisation", and "the virtual community"). It describes characteristics of networks: providing links with and among producers and customers, being interactive and with a degree of self-management, sharing a common purpose and reinforcing values and cohesion in certain circumstances, while not being permanent. Some of the examples are taken from education though the main references are to the broader organisational literature. Electronic means are increasingly important to networking, despite it being fundamentally a human activity. The links with knowledge management in particular are drawn out in this chapter, as networking is an important aspect of creating, mediating and using knowledge.*

This chapter examines why networking is important, and goes on to address different types and characteristics of networks. Some of the examples are drawn from education but the main references are to the broader organisational literature. Electronic means are increasingly important to networking, despite it being fundamentally a human activity. The links with knowledge management in particular are drawn out in this chapter, as networking is an important aspect of creating, mediating and using knowledge.

1. Networking, its Significance, and Knowledge Management

The term "networking" refers to the systematic establishment and use (management) of internal and external links (communication, interaction, and co-ordination) between people, teams or organisations ("nodes") in order to improve performance. Key elements of this definition are:

- Systematic management.
- "Nodes": experts, teams and institutions.
- "Links": communications, interactions and co-ordination between nodes.
- Performance improvement.

The use of network structures is increasing as sources of knowledge in themselves, as organisational structures to improve effectiveness, and as sources of innovation: "More and more of the innovation process takes place in networking as opposed to hierarchies and markets... only a small minority of firms and organisations innovate alone, and... most innovations involve a multitude of organisations" (Lundvall and Borrás, 1997, p. 104). The reasons are complex, and are rooted in fundamental changes in the world economy, including the increasing importance of knowledge and the global scale of capital, knowledge exchange, and so forth. Inexpensive, powerful electronic communication is becoming widely available and accelerating this process. Butler *et al.* argue that this factor may mean that the traditional role of intermediaries will disappear or be transformed primarily into support for market operations. In earlier times, organisations needed intermediaries to reduce transaction costs; as transaction costs fall, more consumers do their own searching using the new media and on-line search agents (Butler *et al.*, 1997).

Learning in networks represents a special mode of knowledge production, which cannot easily occur within organisations or in the open

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market. What are the features that make network learning so attractive? The following list covers some of the main reasons:

- Networks open access to a variety of sources of information.
- They offer a broader range of learning opportunities than is the case with hierarchical organisations.
- They offer a more flexible and, at the same time, more stable base for co-ordinated and interactive learning than does the anonymity of the market.
- They represent mechanisms for creating and accessing tacit knowledge.

We are beginning to understand that part of the knowledge base for policies and innovation cannot easily nor only be captured in written form, whether reports are based on academic research or on best practice and experience. Much knowledge is embedded in social structures, and within or between organisations. It is very difficult and sometimes impossible to make that knowledge explicit.

In education for example, there were high and optimistic expectations thirty years ago that research would provide the knowledge base for policy and practice. These expectations had to be tempered in the light of experience. The reasons for this are not in the first place the poor quality of educational research or its insufficient volume or even lack of transfer mechanisms. A more basic factor is that educational knowledge is for a large part (suggested estimates vary between 70-90%) tacit in nature. Exchange and development of tacit knowledge require different processes and structures than doing and implementing research.

The use made of written reports for innovation is often disappointing. One reason for this is that users need to share a tacit understanding of the process of codification with those who have constructed the report. This condition is often not fulfilled. Those engaged in the process of production have learned to analyse and combine data, to report in a coherent and attractive way, and so forth. Others, who have not been engaged in that work, find it difficult to understand what can be learned because they do not possess the necessary clues. To be able to use codified knowledge "complementary" tacit knowledge is needed (Lundvall, 2000; see also Lundvall and Borrás, 1997). As a document has not only an informative component, but also a social one, people need to develop "interpretative meanings" in order to make sense of it.[2] If the clients are heterogeneous, even several sets of "interpretative meanings" are needed in order to make a document usable.

Networking may help to mediate codified knowledge by developing the needed complementary knowledge and interpretative meanings. Networks may establish the "social life" of documents. So, networking may complement written, codified information, and it may help to make documents more

effective for action. In this way, it may function in itself as a creator of knowledge. The interactions between tacit and codified knowledge act as generators of knowledge creation. Nonaka and Takeuchi (1995) describe the four basic interactions: between tacit and tacit: *socialisation;* from tacit to codified: *externalisation;* between codified and codified: *combination;* and from codified to tacit: *internalisation.*

Networking may also replace the production of codified information because it is more cost-effective than producing books or databases. The effort of codifying is often difficult, costly and slow. Networks can facilitate exchange of tacit knowledge in a direct way – avoiding the effort and cost of first codifying it. The emerging networks for in-service training of teachers and school leaders, for example, tend to be very effective compared with courses based on academic evidence. The balance between codification and personalisation has been identified by Hansen, Nohria and Tierney (1999). But, knowledge production and learning do not always occur in networks; there are certain conditions that will enhance or inhibit them.

2. Types of Networks

There are many manifestations of networks. Familiar forms include the informal arrangements such as business clubs, mentorships, joint seminars, e-mail lists and electronic conferencing. More formal co-operation includes outsourcing contracts, joint ventures and network-organisations. Formal structures may often come to replace informal ones with time. Networks may function horizontally – between institutions from the same or different sectors, between firms and research centres, or between competing firms. Or, they may be vertical arrangements between clients and suppliers. Networks may have a regional or a global character. Local and regional networks find much of their strength in the exchange of tacit knowledge and often have a strong informal and social component. Global networks frequently organise interactions between codified and tacit knowledge. It is helpful to distinguish between the following three types of networks though in practice combinations occur.

i) *The "Community of Practice":* This type of network is driven by the need of practitioners to find solutions to practical problems. The term was introduced by Xerox, one of the first firms to exploit knowledge embedded in networks for the purpose of improvement of the company's performance. The knowledge exchanged and embedded in such networks is often not codified; exchange is based on the shaping and reshaping of experience, on redundancy and metaphors, on knowing who knows. Some networks of this type combine a well-organised database of codified experience (the "know-what" and the "know-how") with fast interactive communication

and searching (the "know-who" and "know where"). An example is the Anderson Consulting Network, (Finerty, 1997). Many of the educational networks are simple versions of this type.[3] The *virtual team* (Lipnack and Stamps, 2000) may come under this heading, as a group with a specific target, not bound by space and time, and relying on ICT to accomplish its task.

ii) *The "Networked Organisation"*: This type can be described as "an explicit or implicit co-operation between autonomous organisations, by establishing semi-stable relations. Added value for the combined client-groups is generated by using each others' core-competencies and specific market-positions" (Pullens, 1998). Advantages of the Networked Organisation are that each partner can stay autonomous and strengthen its own core competence, but can deliver a better product to its clients by profiting from the core competence of the partners in the network, and can serve the clients of the partner. An example is the co-operation between petrol stations and a grocery distributor. The petrol stations profit from the logistical competence of the grocery retailer, while the grocery firm profits from the distributed selling points on locations with easy access by cars. Both benefit from each other's client group.

iii) *The "Virtual Community"* is a term covering a wide variety of communities that make use of ICT to exchange information, build public influence, and achieve a specific result. Or a "virtual community" might just be for fun (*e.g.* Kim, 2000). It is an increasingly important form of network in the field of public governance.

3. Characteristics of Networks

Networks and networking have a number of general characteristics, which can be more or less evident. The following ones are particularly interesting:

- Links are established not only with producers (in educational circles, these include experts in educational research and innovation as well as teachers) but increasingly *with customers* (ministerial administrators, schools, teachers, students, parents and, with lifelong learning, other stakeholders such as employers). Networks are used to identify customer needs and to serve them accordingly.
- Links are *interactive*. Potential customers specify their needs at an early stage of a project or service and evaluate intermediate results. The use of expertise is not through traditional delivery/payment methods, but instead experts expect gain from being involved in a network. Co-operation contracts may well specify the expected mutual gains.

- *Networks enjoy a degree of self-management.* This does not mean that there are no leaders, or that the processes are not managed, as indeed these are even more critical than in traditional organisations. They are different from those practised in hierarchical and "one-place/same-time" organisations and they demand specific skills. Networks operate often with different leaders for different aspects, and leadership may be constantly changing. The group processes of working in a network differ from those in a more conventional team.
- The participants – *nodes* – in networks share a *common purpose.* This may be a vision, a mission or a more concrete goal. Participants stay active in the network so long as it delivers a benefit for them, which ultimately is also an advantage for the clients of the participants. In networked organisations, the profit is achieved while participants stay autonomous.
- Networks *come and go:* they are dynamic structures, they change – in terms of type and number of participants, roles of participants, etc. – and they come to an end.
- *Electronic means* underpin and enhance networking, but networks are *human.* Electronic discussions require a high level of agreed codes concerning respect, for example, and trust contributes to their success. Virtual teams are only successful if their electronic communication is backed regularly by face-to-face contacts, contacts that may have more a social than a task-oriented purpose.
- Large networks tend to be effective when they *create and maintain a sense of belonging, cohesion and reinforcement of values.* To be more directly productive, larger groups tend to break into smaller networks, and virtual teams often have a small active core of 5-7 people at the centre, even if there are extended memberships.

Networking may be controversial because of conflicts of values that characterise many Western organisations. It adds to and thus changes traditional management styles, and it reflects a shift in what is perceived as valued knowledge. Nonaka and Takeuchi (1995) describe the Western knowledge tradition in historical terms in contrast with that of Japan, where networking is a traditional feature of most organisations. Alice Lam (1998) explains the problems encountered in collaborative work between British and Japanese engineers in terms of contrasting knowledge systems – the professional and the organisational models. Contrasts are along three dimensions: knowledge base, knowledge organisation, and knowledge transfer (see Box 1.1). Both sources show the difficulties presented by the concept of "knowledge embedded in groups/networks" for professionals in Western societies.

Box 1.1. **Two Contrasting Knowledge Systems**

	Professional model	Organisational model
The knowledge base	Knowledge of rationality; Knowledge acquired by formal training; Rather abstract and theoretical, generic and specialised, highly rationalised and internally coherent; Relatively easy to diffuse, but not easy to apply to a specific practical problem and difficult to integrate.	Knowledge of experience; Knowledge acquired by action and experimentation; Embedded in specific organisational routines and procedures, understood and shared by members with common experience and values; Rather difficult to diffuse to different contexts, but more concrete, practical and integrative.
Knowledge structures and organisation	Task-specific, sequential, individual-based; Precise job descriptions.	Diffuse, overlapping, group-based; Job descriptions broad and ambiguous.
Co-ordination and transfer of knowledge	Explicit and document based; Written rules, procedures and detailed specifications.	Tacit and human network based; Intensive and extensive interaction between group members.

3.1. *Risks and benefits*

Among the risks and pitfalls of networking are the following:

- A network may inhibit change and be a conservative force in itself. People in a network may get used to the norms and values it expresses, which becomes a blockage to change. This may be a reason to set a deadline for the duration of a network, or for participating in it.
- A network may slowly move away from the interests of the participating partners. This is a common process in the life cycle of networks. Some participants may loosen their involvement and may join together to create a new cycle and network.
- A network may be formed without a common vision or purpose, or else have incompatible missions or which do not correspond to participants' aspirations.
- Roles are often not clearly identified.
- Certain nodes in the network may come to dominate and disturb a collaborative culture.

Hutt (2000) describes the functional and personal relations in a network, and checklists exist on setting up and managing a network, which can help to minimise these risks if not avoid them altogether.

To understand the benefits and costs of networking, it needs to be practised. In one sense, networking is not new, and all of us have formal and informal contacts that we manage on a daily basis. To reflect on this systematically offers a good start. Instruments for such a systematic reflection can be very useful. Core evaluation categories to help do this are: *people* involved (selection of partners, leadership roles, levels of participation), *purpose* (co-operative goals, tasks, results), and *links* used (choice of media, interactions, relationships of trust).[4] Improvement of established methods through new ways of working is the next step. If both steps become explicitly part of an organisation's culture, networking can be a powerful tool for improvement.

Networking is not a neutral issue. It is at once about what we judge is useful knowledge, and how we interact with external experts, colleagues, competitors, and with potential clients. It is also about how we interact with each other. It has to be learned, by building on existing experience and trying new ways. Systematic reflection on both is needed. There is much documented information about the functioning of networks in business, and increasingly for the field of education. In most countries networks between schools or teachers are already operating, albeit with different degrees of sophistication. There are also several international networks. Networking as such is an act of innovation. It would be interesting to bring together evaluative information about the functioning of these networks in different educational settings and to understand how they are changing the management and governance landscape. In so doing, the insights offered by other sectors, particularly in relation to knowledge management, can prove extremely valuable.

Notes

1. Consultant to CERI/OECD between 1995 and 1998.
2. Brown and Duguid (1996) have suggested that documents contain not just information, but that there are "communities of interpretation" around any document. There is complementarity between the fixed state of the document and the fluid state of interpretative communities.
3. A few of the many international networks in the field of education are:
   - *www.esp.uva.nl/* (European Schools Project for schools that use Internet).
   - *www.scienceacross.org/* (Science across the World).
   - *www.eun.org/eun.org/* (European Schoolnet).
   - *www.iecc.org/* (Intercultural Classroom Connections).
   - *www.ieam.org/professional/prof_connections.html* (professional development).
4. See: *www.virtualteams.com/library/lib_fr.asp*, for these categories, which offers a rich source of criteria by which to evaluate network effectiveness.

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART I

Chapter 2

Schooling for Tomorrow: Networks of Learning

by
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Abstract. *This chapter argues that to focus on networks and their implications for learning is potentially very fruitful for education. To support this, the chapter refers to recent advances in theory, science and language, social and political philosophy, and to developments in cognitive psychology and learning theory. The concept of "networks" provides a powerful basis for thinking about schools as organisations, communities as sites of learning, and co-operative policy development. The chapter examines these issues under a number of headings: educating young people for the networked society; creating a flexible, networked workforce; transforming learning environments through the promotion of teams and networks; lifelong learning through complex pathways; and the global network.*

* The author would like to acknowledge the contribution made by Professor David Aspin, Professor of Philosophy of Education, Monash University, Australia.

In the debate on lifelong learning and on the nature of schooling in the 21st century, there is an emerging discussion on the need for new concepts of schooling and strategies for provision, and a more flexible approach to innovation and change. The concept of "network" promises to be an integral part of all of these.

1. The Concept of "Network"

"Network" differs in nature from other terms that historically have been used in association with schools and other educational institutions, in their organisational arrangements and the ways of understanding innovation and change. It is distinct from traditional forms of grouping schools and systems, whether these are hierarchical and bureaucratic models or the more recent emphasis on organisational forms based on market philosophies and self-management. In contrast, "network" stresses the idea of "community" as the common element and the principle of connection between institutions. Schools are not just "clusters", which connotes geographical proximity, nor "groups", which suggests an almost accidental agglomeration of disparate institutions. Rather, they are overtly associated with each other in forms of connection that have been deliberately established and worked on in pursuit of common interests and goals. They are thus intentional constructions, linked together in a web of common purposes, in which all the constituent elements are equal in the weight of their enmeshment and the responsibility that they bear for contributing towards the furtherance of their shared interests.

An appropriate metaphor here is the World-Wide Web. Sites are set up and inter-linking connections are made between, and then followed along, a filigree of fields. Enquiry in one area leads through interconnecting pathways and linkages to a congruent or contiguous area from which further avenues of enquiry can be opened up, explored and expanded. The metaphor is especially helpful in considering the international arena, to underline that networks are not merely local but more general and universal. The "flows" of theories, thoughts, cultures, and innovations now being articulated between schools and other education institutions have an increasingly global import and impact.

The relevance of "network" is also about developments in philosophical theory. As opposed to the traditional view of structures based on empiricist

principles of disciplinary difference and demarcation, new conceptions have emerged in the philosophy of science and language. These argue that the world of theory, knowledge, and learning grows, develops holistically, and is integrated in a parallel way to the gradual construction of the spider's web. Each strand of thought is capable of connection to neighbouring or even distant other strands, along a tracery of cognitive connections. Together, these constitute an overall reticulation, a unifying cognitive nexus, of the "theory" we have about the world (see for example Quine and Ullian 1970; and Wilson 1998). The new lines of social and political thought have been developed from increasing disappointment with the contra-positions of existing social and political philosophies.

The new strands of thought have served to provide an increasingly powerful basis for envisioning schools as communities and as nodes in the evolution and establishment of learning networks. In recent years, concepts of community have been influential in social and political thinking (Etzioni, 1995,1996; Gray, 1997; McIntyre 1980; Sandel, 1981). They have underpinned new thinking about political morality, public policy and social relations, and the creation of innovative social forms, structures and interactions, with wide-ranging implications for education.

2. The Relevance of "Network" for Schooling in the 21st Century

2.1. Educating young people for the networked society

Diverse arguments have been made for the continuing importance of schooling in the twenty-first century. For instance, the role and significance of information technology will grow at an accelerating rate and communicative competence will continue to be and even increase as a major requirement for all in the "networked society". But not all have access to PCs and the Internet at home or even in cyber-cafes, which disbars them from participation in the wider economy and society that depend on such modes of communication. Some young people need thus to secure access to these modes and to the necessary ICT hardware and software, and to do this in a positive environment of guidance and support.

As Ackerman (1980) has shown, genuine communication can only take place in a group setting amid a network of interpersonal relationships, where conversations are underpinned by the observance of certain norms and conventions. Schools can be excellent places in which young people are helped to develop interpersonal awareness and, through conversations and communication, a sense of the importance of obligations towards fellow-members of the community. The young can be helped in schools along the road to active citizenship and interpersonal responsibility, learning how to weigh issues, make judgements, and be aware that their action is of

consequence to others. Learning of this kind is especially important when the Internet offers students access to untold possibilities, both beneficial and harmful. There are, in some parts of the world, increasing threats of social instability and personal insecurity. Young people are required, as future members of participative democracies, to develop opinions on matters of national and international importance. This kind of learning cannot be picked up from a file-server or a Visual Display Unit (VDU). Young people need models of appropriate forms of interpersonal and social conduct through which to acquire understanding of responsibility and community obligation. The natural location for this is the family but a vital part is also played by a supportive range of significant others in which schools are prominent.

There is further argument for the indispensability of schools as agents of learning in complex societies. Young people need to be introduced to a very wide range of pursuits, from which to make their own selection in constructing a satisfying set of life options. Such a wide range cannot generally be provided solely in the home: there are interests, abilities and aims that are either unfamiliar in the home setting or impossible to cater for there. Schools are not, of course, the only place for following a wide range of activities, but they are well connected to diverse networks of learning and pursuits. They can give young people guidance in becoming selective among them. (Chapman and Aspin, 1997).

2.2. Educating flexible, networked workers for transformed workplaces

The OECD Study on Sustainable Flexibility (1997) argues that the nature of work will be transformed in the knowledge-based economy of the 21st century, with rapidly changing technologies and markets for products. This in turn alters expectations regarding the kinds of workers required. This transformation, the authors argue, will be characterised by flexibility and networking, in which there will be a complex interplay between more highly educated workers, prepared to learn quickly to take on new tasks and to be mobile, and best-practice firms promoting increased flexibility through training, multiple-task jobs, and employee decision-making. They suggest that the need to develop workers who have higher order problem-solving skills and who can help organise more learning has profound implications for schooling:

- It means that vocational education organised around specific skills for specific jobs is largely anachronistic, except when it can be used to develop problem-solving and organisational/teaching skills in those alienated from more academic approaches to learning.
- It suggests that learning in schools should be increasingly organised co-operatively, where students study and are evaluated in groups.

- The curriculum should develop networking, motivational and teaching skills, promoting an understanding of human and group behaviour. In the learning-centred Information Age, the processes of and motivation to learn should be endogenous to curriculum itself (*ibid.* p. 34-35).

Florida (1995, p. 535), in an examination of environments and infrastructures for the knowledge-based societies of the 21st century, concludes: "The industrial and innovation systems of the 21st century will be remarkably different from those that have operated for most of the 20th century. Knowledge and human intelligence will replace physical labour as the main source of value. Technological change will accelerate at a pace heretofore unknown: innovation will be perpetual and continuous. Knowledge-intensive organisations based on networks and teams will replace vertical bureaucracy, the cornerstone of the 20th century."

2.3. Creating optimal learning environments through teams and networks

In the 19th century, in most Western societies, free education became mandatory for all and schools were designed in terms of what was then accepted about the nature of institutions, the functioning of the mind, and processes of learning. The world-view of the late 19th and early 20th centuries stressed the idea of learning as linear, sequential, generalisable and mechanistic. Schools became characterised by hierarchical organisational structures; knowledge was compartmentalised into discrete and manageable sequences; assessment was based on the measurable and quantifiable. Such assumptions are no longer adequate, if ever they were, to meet the demands of learners preparing for the 21st century. New thinking about the nature and styles of effective learning, suited to students' own modes of cognitive progress and achievement, must lay the basis for work in schools of tomorrow. They should more accurately reflect the findings and implications of the current understanding of learning, knowledge acquisition, and of cognitive and meta-cognitive science.

Griffey and Kelleher (1996 p. 3-9), reviewing recent research, conclude that the optimum environment is one where learning is based on the provision of direct experience through action in the context in which it is to be applied, with experts practised in those contexts. Individuals should become conscious of their implicit theories about, and strategies for, learning, viewing it as under their control and as intrinsically rewarding. There should be conditions for collaborative teamwork giving experience in learning to learn and reflection on problem-formulation and problem-solving strategies. Facilitators and teachers should themselves engage in learning. In line with such conclusions are schools as centres of learning networks, aware of their own identity, their neighbourhood, society and the global community. To

achieve such a model, substantial reforms will be required in curriculum, pedagogy, learning provision and school organisation, including approaches to scheduling and the restructuring of time.

2.4. *Learning networks beyond the school*

More fluid combinations – of school-based provision and work, of formal and non-formal learning – are increasingly a feature of the life of schools. This calls for the provision of innovative ways and means for young people to learn through the workplace and the community. Young people need to be active agents, planning and managing their school and further learning opportunities, work experience, and their unfolding careers. Particular attention needs to be paid to how schools assist students to move away from being "at risk" to being "on target", which means *inter alia* more effective career counselling. Work- and community-based learning, in partnership with schools, necessitates considerable inter- and intra-professional collaboration and organisational change.

The new model for building articulated and interconnecting networks for learning in life will be one based not on linear progression through a sequential series of ladders. Rather, it will be built on the notion of a progressively complex and expanding climbing-frame, in which students explore numerous possibilities for personal development and career advancement (Smethurst, 1995). They acquire competence and confidence in moving along a diverse range of pathways, increasing their personal and professional learning gains, and the satisfactions these bring.

2.5. *The global network*

The notion of linking schools to the wider community is not only of local, regional or even national relevance but also relates to the international. Schools have traditionally been an important arm of the nation-state, but increasingly its dominance is being eroded, particularly in Europe as regards matters of finance, defence strategies, monetary policy, regional representation and decision-making powers. Schools are affected by the centrifugal forces generating this transformation. They must now address how best to foster among their students a national, regional and international awareness to prepare them for life in the 21st century.

One challenge this poses for schools is how to give all students access to the global society, with regard to employment opportunities, cultural literacy and sensitivity, and inter-cultural understanding. This is especially important when access to an internationally orientated education tends to come only at considerable financial cost, both to its beneficiaries and providers. Another challenge is to ensure that national cultures and a sense of community

identity can be sustained at the same time as citizens function in increasingly international settings, under the pressure of global trends. It is significant that just as the dangers become evident of the loss of local identity because of globalisation, there has been growing attention paid to the idea of "community" as a central feature of political, social and individual life. In education, an important issue is the realisation of lifelong learning for all through communities and learning networks.

To sum up, the focus on learning networks and innovation is potentially a very fruitful one for education. It has its intellectual origins in recent advances in theory, science and language, social and political philosophy, and in developments in cognitive psychology and learning theory. The concept of "network" provides a new basis for thinking about schools as organisations, communities as sites of learning, and co-operative policy development in which the interests of all in society are served.

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PART I

Chapter 3

Networking for Educational Innovation: A Comparative Analysis

by
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Abstract. *This chapter examines the rise and relevance of networking in the field of education at the regional, national, and in some cases cross-national levels. It describes the trend towards, and context of, networking as a form of social interaction of growing interest. It analyses the broader social and educational forces behind the formation of educational networks and the role and aims of networks in education innovation. It describes types of networks, stakeholders, initiators, membership, leadership and organisational factors. Incentives and preconditions likely to make successful networking are examined. The chapter concludes with a discussion of the role of networking in education and policy implications. It makes no claim to cover the multitude of networks across the OECD countries, but focuses on those involved in CERI/OECD activities and selected others in Europe and North America.*

1. Introduction

This chapter examines the rise and relevance of networking in the field of education at the regional, national, and in some cases cross-national levels. It begins by describing the general trend and context of networking as a form of social interaction of growing interest, and analyses the broader social and educational forces behind the formation of educational networks. There is then an analysis of the role of networks in education innovation, with a review of some of their broad aims. There follows a more systemic look at education networks and their role within a complex system of cross-institutional collaboration, through structures, initiators of networking, leadership and organisational factors. Incentives and preconditions likely to make successful networking are then examined, and the last section draws some conclusions on the role and future of networking in education and its potential for policy.

It should be emphasised that this analysis makes no claim to cover the multitude of networks across the OECD countries. It focuses on those that have been involved in CERI/OECD activities, especially the Lisbon 2000 seminar, and others in Europe and North America with which the author is familiar.

2. Networking and Innovation

Networking as a form of social co-operation and collaboration among different individuals or institutions has become increasingly popular over recent years. While social networks in physical proximity have existed for a long time, new communication technologies and a sharp decrease in communication costs have greatly facilitated networking across a much greater geographical distance. Networks are being established in fields as different as business, the arts and public policy. Professional learning has always taken place in informal collegial networks, in which individuals of similar experience, interest and background have exchanged their accumulated knowledge to enhance and stimulate mutual learning. Traditionally, social networks have allowed a flexible and inexpensive exchange of knowledge among peers.

The research on networks shows that they can take a wide range of different forms, and that there is little consensus about appropriate definitions (Hämälainen and Schienstock, 2000). It is safe to say, however, that within a network, various independent actors develop relatively loose

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relationships between each other to pursue some common goals (Johannison, 1987, p. 9). Networks in general can be differentiated by their geographical scope and can thus be local, regional, national or international. Horizontal networks connect individuals and institutions in similar functional areas, whereas vertical networks connect individuals and institutions in different but interdependent functional areas (*e.g.*, a production process).

As a form of peer exchange networks are more or less hierarchy-free institutions and do not depend on traditional top-down administration. Nevertheless, they need to be understood as requiring both relatively stable structures as well as some form of organisational leadership to function effectively. In that sense, any existing network assumes some form of administrative and managerial substructure that initiates the actual networking process, formulates principles and guidelines for membership, recruits members, creates a communication infrastructure, and facilitates the ongoing exchange among the members.

3. Innovation in School Systems

In the past, there has been little incentive for co-operation and mutual exchange between individual schools in most school systems. Especially in countries with only a very limited degree of school autonomy, individual institutions were operating more or less in isolation from each other. They received their administrative guidelines in a top-down process from their educational authority, typically a ministry of education or regional school board. With curriculum, teaching and learning practices, and administrative procedures largely prescribed by the bureaucratic superstructure, most systems provided little incentive for schools to develop individual profiles and professional managerial skills.

Since the 1980s, the development of schools has increasingly been seen as a process stimulated by leadership and initiative at the local level, rather than through changes imposed top-down by a distant educational authority. As a consequence, most industrial societies have granted greater autonomy to individual schools within a broad framework of standards and guidelines. In return for these new freedoms, the individual school has been made more accountable to the public for its development and effectiveness. Quality assurance and evaluation have become compulsory in many school systems. Different degrees of budgetary autonomy, the freedom to hire staff, as well as a greater role in devising parts of the curriculum have created a new need for support structures and professional development.

New ways of mutual learning and professional development have been most urgently sought by the innovative practitioners driving the newly encouraged process. Many of them – hitherto relatively isolated in

hierarchical and inflexible institutions – looked to outside support to provide them with additional ideas for enhancing their school development processes, for opportunities to exchange experiences, and for the guidance and feedback of critical friends. The "teacher centres" in various decentralised school systems like Australia, the Netherlands, Scandinavia, the United Kingdom, and the United States, that emerged during the 1970s and 1980s, anticipated later developments towards educational networks. They offered teachers from different schools opportunities to meet outside their schools for professional exchange and training. Especially in Norway and the Netherlands, they became places supporting regional innovation and change in schools by offering innovative practitioners the opportunity to meet and develop themselves professionally (Dalin, 1999, p. 351). Teacher centres are, however, expensive to maintain and many did not survive budget cuts.

Networks can be the platforms to serve educational practitioners in the changed times of greater school autonomy and accountability. In the past, it was uncommon for schools within the same geographic area to form partnerships for an exchange of ideas and good practice, and there was little incentive to do so. Even when schools acquired greater freedom over organisational structures and curriculum, schools within the same community often saw each other as competitors rather than peers and were thus reluctant to co-operate. They deliberately developed profiles of their own but avoided sharing information of strategic value with other schools in the neighbourhood, such as sources of sponsoring, ideas and contacts for co-operation in the local context. Participation in a school network, on the other hand, makes it possible to exchange knowledge and best practice with schools outside the immediate neighbourhood and community.

The rise and spread of new forms of networks among innovative educational practitioners and schools devoted to whole school change in the 1980s and 1990s thus needs to be understood as a consequence of more fundamental changes in the political steering of educational institutions, coinciding with technological changes that greatly facilitates communication over distance.

4. Networks in Education – Main Aims

Educational networks of varying size and kinds have been established at the regional, national and international levels, and can be horizontal or vertical in nature. Horizontal networks connect either individual teachers/principals or individual schools, whereas vertical networks connect functionally different but interdependent educational institutions, such as schools, school boards, educational researchers and ministries of education. One of the primary aims of networks is to create opportunities for an ongoing

exchange and collaboration of educational practitioners. Networking among institutions and individuals in education is therefore increasingly seen as a powerful stimulus to organisational learning and development. Innovative practitioners in education join networks to share approaches to teaching and learning, school culture and ethos as well as school management and leadership. Some education networks focus on facilitating peer exchange and professional development, others aim at stimulating whole school change.

In his research on innovative schools, Dalin defines networks as "temporary social systems in which individuals can gain maximum informational gains with minimal effort" (1999, p. 348). Educational networks differ according to their duration and sustainability. They can be formed to achieve a specific short-term goal. An example would be the so-called model projects ("Modellvorhaben") of the German Bund-Länder-Kommission,[1] which are aimed at the development and exemplary assessment of specific innovations in a small network of model schools over a period of three to five years.

Alternatively, education networks can pursue broader aims such as a comprehensive professional development for teachers or a process of whole school change (see next section). Those networks pursuing long-term objectives tend to assume a more stable and permanent form and infrastructure. An example is the Learning Consortium, a school/university partnership between four school districts in Ontario and the Ontario Institute for Studies in Education (OISE), University of Toronto (UT) whose focus is on improving the quality of education for students through teacher development and school development.

The aims of networking are multidimensional and typically comprise elements of one or more of the four following functions (compare Dalin, 1999 p. 349):

- A *political function*: Networking allows individuals pursuing a particular aim to meet with like-minded people. Their co-operation can lead to greater political force and input than they would individually have. Networks can thus serve as lobby groups for innovative ideas.
- An *information function*: Networking allows for the rapid exchange of information relevant for individual and organisational development processes, bypassing red tape and hierarchies.
- A *psychological function*: Innovators are often isolated within their organisations. Networking provides them with opportunities for collaboration and exchange and thus can empower innovative individuals.
- A *skills function*: Innovative work requires a range of new skills which are not necessarily offered by traditional training schemes. Networking provides innovators with opportunities for learning skills from their colleagues.

A definition of networks in education emerging on the basis of discussions during the OECD Lisbon seminar (see Chapter 10) also indicates that networks in education are multifunctional: they are purposeful social entities that may enjoy a commitment to quality, rigour, and a focus on outcomes. They can also be an effective means of supporting innovation in times of change. Networks in education promote the dissemination of good practice, enhance the professional development of teachers, support capacity building in schools, mediate between centralised and decentralised structures, and assist in the process of re-structuring and re-culturing educational organisations and systems.

4.1. *Professional development*

Many education networks provide their members with professional development in the form of conferences or training institutes. The training schemes afford opportunities to learn from and work with experienced school development experts and to exchange innovative practices with peers from other schools. Some networks have set up modular training courses in various areas of school development for their members. Forms of training schemes are part of Improving the Quality of Education for all (IQEA),[2] UK, the Good Hope Project/Portugal, the Learning Consortium/Ontario, Canada, and the Network of Innovative Schools in Germany. Schools joining IQEA, for example, form a school improvement group to be introduced to the IQEA principles and provided with training. The International Network of Innovative School Systems (INIS) organises annual summer academies on innovative methods of learning, teaching, and school leadership. In addition to professional development activities such as workshops and training institutes, some of the school networks provide schools with on-site coaching and consultancy. The Manitoba School Improvement Project/Canada, the IQEA Project/UK as well as the Coalition of Essential Schools (CES), USA offer their member schools professional support and coaching for their development process as well as evaluation of progress.

4.2. *School development*

Education networks can make the "best practice" generated by its members available to the public at large. School development tools in the areas of teaching and learning, school community involvement, student participation, co-operation with external stakeholders (*e.g.*, parents and businesses), management and administration are all shared among member schools. The Internet serves as a popular platform for dissemination and the publication of best practice. A number of tools for the management of school change processes has been made accessible on the Web page of the Manitoba School Improvement Project. A toolbox of educational innovations is also part

of the Bertelsmann's Network of Innovative Schools in Germany, tools generated from the innovative practices and experience of the network's member schools. It is claimed that all the tools exhibited for public access and downloading have been tested and evaluated in the daily practice of innovative schools to ensure feasibility and effectiveness.

4.3. *Catalyst for systemic change*

Some education networks are primarily self-centred, providing members with the means of communication, exchange and sometimes professional training to benefit the schools forming the network. Others by contrast perceive themselves as an *avant-garde*, collaborating to bring about wider system change as lobby groups. Not surprisingly, networks of this type tend to invest considerable resources in public relations. Many pursue a deliberate strategy of dissemination to influential stakeholders who play a role in shaping the educational system and some open channels of communication to high-level policy-makers.

The Learning Consortium/Ontario publishes an "ideas book", on its web page, presenting best practice of its member schools addressed at teachers, students, parents and members of the community. To influence change in the system through the network schools, the Bertelsmann Foundation cultivates a range of contacts with ministry officials. Innovative practices and approaches gained through the networking process are regularly presented at conferences to which decision-makers are invited. Similarly, the European Observatory aims at fostering Europe-wide innovation by identifying, pooling and publishing knowledge on innovation and presenting it to high-level policy makers.

5. Structures and Characteristics of Education Networks

5.1. *Types of networks*

Existing educational innovation networks can be distinguished on several features. Firstly, networks vary in size and geographic scope. Some of the existing networks may be regional such as the Learning Consortium set up by four school districts and a university in Ontario/Canada and the Manitoba School Improvement Program/Canada. Many are national (such as the Network of Innovative Schools in Germany, The Good Hope Project/Portugal), and a few bring together schools and educational experts from different countries (Improving the Quality of Education for All/UK; the European Observatory/France; the International Network of Innovative School Systems/ Germany).

Secondly, networks differ in the range of members they address. There are those where networks of experts aim to bring together innovative individuals across functional levels to gather and exchange information and ideas on innovation. The European Observatory on Innovation in Education and Training/France (*www.inrp.fr/Acces/Innova/home.htm*) and the International Network of Innovative School Systems (INIS)/Germany are such examples. The Learning Consortium (*fcis.oise.utoronto.ca/~learning/*), a school-university partnership between four school districts in Ontario, brings together teachers, administrators and teacher trainers.

A second type of network seeks to stimulate whole school change by accepting entire schools as members, like IQEA/UK (*www.nottingham.ac.uk/education/*), the Portuguese Good Hope Project (*www.iie.min-edu.pt/proj/boa-esperanca/index.htm*) and the Bertelsmann Foundation's Network of Innovative Schools in Germany (*www.inis.stiftung.bertelsmann.de/set.htm*). Entire schools rather than innovative individuals comprise the network. This may be done through a written contract between the school and the network. A network's effectiveness in enhancing whole school change depends on its ability to incorporate the range of stakeholders of each member school in the change process (teachers, students, parents, the community). Thus, the contract may include a commitment that contribution to the network is backed by a qualified majority of stakeholders within that school.

In some of the school networks, membership is restricted to a particular type of school. In the Accelerated Schools Project/USA (*www.stanford.edu/group/ASP/*), more than 1 000 elementary and middle schools are committed to the idea of improving schooling for children in at-risk communities by offering enriched curricula and instruction programmes traditionally reserved for gifted and talented students. The Network of Agenda 21 Schools/Germany (*nibis.ni.schule.de/agenda/projekt.htm*) facilitates co-operation and exchange among primary, secondary and vocational schools, focusing on commitment to the Agenda 21 principles on sustainable development. The network of Core Knowledge Schools/USA (*www.coreknowledge.org/*) is devoted to implementing a core knowledge sequence – a grade-by-grade curriculum in all main subject areas (language arts, history, geography, mathematics, science and fine arts).

Alternatively, school networks may be open to any school providing evidence that it has reached a certain level of institutional innovation and that a majority of educators within the school is willing to enter into a more comprehensive school development process. The Bertelsmann Foundation's Network of Innovative Schools in Germany, for example, provides schools interested in joining the network with a questionnaire and asks them to send in its programme as well as additional material on its development process. To make sure that the schools participating in the network fulfil the basic criteria and are willing to become involved in collaboration with other schools, the

Bertelsmann Foundation has developed a complex application process. Any German school can join the network as long as it has started a comprehensive process of school development and is willing to share its methods and experiences with others in the network. The school applications are assessed by a team of experienced practitioners (*e.g.* innovative principals) and a member of the advisory council. If the school is included in the network, it receives a certificate to confirm membership.

5.2. *Stakeholders*

Many educational networks bring together different stakeholders who, despite their different functional roles within the education system, respect each other professionally and perceive mutual exchange and collaboration as beneficial. Typical stakeholders in education networks are:

- innovative teachers and principals;
- universities, research institutes, government agencies and charitable foundations;
- network managers, who can be the initiators themselves or some form of professional management put in place by the initiators of a network;
- consultants or trainers brought into a network to provide members with professional training, reflection and advice;
- evaluators and researchers collecting data relevant to the process and the evidence of a network's impact; and
- policy-makers invited into a network to further the cause of school improvement.

5.3. *Patterns of development*

Networks in education follow different development patterns. A number of educational networks came about because individuals took initiatives geared towards a specific idea or reform model. IQEA, for example, was established on the initiative of academics at Cambridge University, England, and the European Observatory was initiated by two educational experts in France.

Alternatively, educational networks can develop out of an isolated event, such as a key conference. The Bertelsmann Foundation's Network of Innovative Schools in Germany for example, was founded as a consequence of a national contest for school innovation. 330 schools that had participated in the contest expressed the need for a permanent platform. The Münster Declaration passed by the Network of Innovative Schools on 27 March 1998 calls for ongoing exchange: "Networks create a forum for the exchange of information and experience. They enable people to work together on projects

of their choice. They create ties and provide security. Networks pool resources and energy. They demonstrate that projects having common objectives can and must cross national borders." The Network thus developed out of the need for ongoing collaboration and exchange expressed by a dispersed group of innovative practitioners.

Networks are usually open constructs changing and often growing over time. Most in education start out from a small nucleus of experts and/or schools and expand over a period of time by integrating additional members. As they grow, they may develop regional substructures to facilitate face-to-face exchange. The Bertelsmann Foundation's Network of Innovative Schools in Germany, for example, has been operating on two levels from the outset. The larger network is open to schools from different parts of Germany and constantly takes on new members. Its sub-units – the so-called "regional learning networks" – are composed of 4-5 partner schools which focus on a shared issue of school development and agree to collaborate over a period of three years. Schools belonging to a "learning network" are from the same geographic area so as to facilitate communication, regular face-to-face meetings, and mutual school visits.

Another example of a network that expanded is the Coalition of Essential Schools founded in the United States in 1984 with a group of twelve schools. It now comprises more than 1 000 schools across the United States as well as abroad. It has 24 regional centres providing schools with on-going local support, opportunities for professional development, as well as technical assistance.

5.4. *Initiators*

In the past, initiatives for educational innovation have largely been triggered by top-down government action. More recent educational networking initiatives, however, have been initiated by different societal agencies.

One group is where the initiator is a *university figure or research institute* in education. One example is the Improving the Quality of Education for All Project (IQEA) established ten years ago at the University of Cambridge, England. As a university-led initiative, the project cannot automatically draw on government or foundation funds; it is self-funded and depends on the willingness of schools joining the project to contribute the annual subscription (GBP 3 500). Some Local Education Authorities cover all or part of the fee. In return, the universities provide a staff development programme as well as a so-called "link adviser" supporting each of the schools during its change process, acting as a consultant and "critical friend" providing knowledge and feedback to maintain momentum. The collaboration between participating

schools and university academics is research-driven. Member schools are encouraged to engage in internal enquiry and to use the external research base of state-of-the-art knowledge on learning and teaching.

In the United States, several university institutes and research centres have initiated school networks and served as headquarters of educational networks. The Coalition of Essential Schools (CES), started by Ted Sizer and colleagues at Brown University, was one of the first and most far-reaching school networks. Another is the Accelerated Schools Project founded by Professor Henry Levin in 1986 as a comprehensive approach to school change and designed to improve schooling for children in at-risk communities. Starting out with two pilot elementary schools, the Accelerated Schools Project has since expanded to cover more than 1 000 elementary and middle schools across the country. Ten regional satellite centres have been set up to co-ordinate the schools work. The National Center for the Accelerated Schools Project remains located at Stanford University, managing the complex structure.

A school network initiated and run by a university research institute can be understood as a symbiotic relationship involving mutually beneficial activities. While the university researchers provide the schools with state-of-the-art know-how and act as consultants, critical friends and evaluators, the researchers gain knowledge about complex developments and change processes in schools. Even when the network is not university-initiated (see below), it may well actively involve university researchers offering research-based guidance, studying development and educational change in the networks, and providing evaluations based on this.

Government institutions can also be initiators of educational networks. Various national and regional governments have sought to stimulate educational innovation by providing schools identified as potential innovators with the autonomy and the budgetary means to experiment. Experimental schools can play the role of an *avant-garde*, testing new ideas before these are to be disseminated more widely throughout the system. Innovative ideas that develop as good practice are then implemented beyond the experimental schemes.

This is widely used in Germany with the so-called "Versuchsschulen" (experimental schools), which are granted special status for a limited time period and receive additional resources to experiment with new forms of learning and teaching or management. This particular scheme has come under critical scrutiny, however, as having failed to solve the critical issue of dissemination. Experimental schools often create successful pockets of innovation but fail to make a sustainable impact on the development of others, and this has led to the reorganisation of government-led innovation

schemes. All of the schools are given greater autonomy to develop their own profile. The experimental schemes (Modellversuche) run by the "Bund-Länder-Komission für Bildungsplanung und Bildungsforschung" (BLK) have increasingly become educational networks, and typically centre on one area of school innovation (*e.g.*, civic education, didactics in the natural sciences, cultural learning with new media). The most innovative schools from different Länder form a group which over a limited time period such as three years receive additional support to exchange, test, implement and evaluate new practices under the guidance and coaching of researchers. The latter then make the results public and feed them back into teacher training schemes.

Another example of a government-initiated school network is the Portuguese Boa Esperança (Good Hope) Project, founded by the Portuguese government in 1998 (see Chapter 5), and funded through the State budget. It is co-ordinated by an educational research institute, the Instituto de Inovação Educacional in Lisbon, which serves as a facilitator and catalyst for thematic networking among various Portuguese schools.

The third group of initiators is *non-governmental organisations*, often private foundations committed to educational advancement and reform and able to provide the resources and infrastructure necessary to support school networks. Charitable foundations have traditionally stimulated educational reforms through funding research and supporting educational conferences for potential change agents. The establishment of educational innovation networks on the initiative of charitable private foundations is a fairly recent development. Establishing and managing a network, providing for its electronic communication infrastructure and face-to-face meetings, publishing results in print and on-line all require financial resources and an organisational infrastructure that individual schools would not be able to cover. Charitable foundations can thus play a valuable role in enabling schools to network, and are facilitators of networking processes in a form of public-private partnership.

The role charitable foundations play would be underestimated if they were seen only as facilitators of change processes in a number of innovative schools. Some of the charitable foundations active in education are themselves actively pursuing and disseminating educational innovations. One foundation that has set up an educational network is the Walter and Duncan Gordon Foundation, in Canada that initiated the Manitoba School Improvement Project in 1991 (*www.sunvalley.ca/msip/*) as the pilot site for a broader Canadian high school reform project. It has not derived its leadership primarily from university academics but draws heavily on the resource represented by the professional knowledge of innovative teachers. In relying on the leading innovative practitioners in the field, the network has anticipated government reforms aimed at school renewal.

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A similar role has been played by the Bertelsmann Foundation's Network of Innovative Schools in Germany, which also draws on the innovative practices developed in schools. By identifying certain areas of innovation such as education for the gifted or approaches to reduce drop-outs, and by selecting certain schools for their learning networks, the Bertelsmann Foundation can help to steer innovation processes and has thus shaped an agenda for school change within the broader school system.

5.5. *Membership*

Networks differ according to their degree of openness or closeness. Some networks allow access simply on the basis of the motivation to join. Others set criteria for membership with the aim of assuring a certain commitment to quality. School networks like the Network of Innovative Schools/Germany, IQEA/UK and the Good Hope Project/Portugal are open to schools which have already started a school development process and are able to provide evidence of their achievements. Members are often admitted on the basis of a written application in which the school documents its history and approach with regard to the network's focus, and commits itself to the network's principles and working structures.

The IQEA has established a selection procedure in which schools agree to a set of conditions prior to joining the project. As a first step to membership, they need at least 80% of their staff behind joining and to commit their staff development time to the IQEA project for a three-semester period. The school is then asked to form a *cadre group* in charge of leading the change process stimulated by the IQEA project. Each school admitted to the project declares its willingness to undergo both internal and external evaluation and to contribute their own resources and funds raised from their Local Education Authorities.

The Manitoba School Improvement Project, on the other hand, provides considerable funding to schools. In order to become a member and access those funds, each school must submit a pre-application plan which includes developmental aims, objectives, resource implications, a budget and an evaluation methodology. Applications are assessed as to the degree to which they are school-based and teacher-initiated, incorporate a collaborative and participatory approach within the school, address fundamental issues of educational improvement, focus on the needs of adolescent students, include an appropriate evaluation component, and have the potential to make a sustainable long-term impact on the school. Schools can choose their own developmental focus so long as it pays attention to supporting "students at risk" and engages the whole school community in a communication process on improvement. Once the school plan has been approved, it can claim substantial multi-year funding and support.

5.6. *Incentives, cohesion, and preconditions*

As co-operation in an educational network often calls for considerable outlays of time and energy, sustainable networks must offer the participating schools and individuals benefits surpassing these outlays. Many networks are based on the "give and take" principle. Principals and teachers provide the network with information on their own innovative practice, which benefits the other participants, but many networks also offer in return member establishments a range of services to assist their school development.

Sharing personal experiences and reflections are ingredients of "deep", productive networking instead of loose forms of exchange. The technological ease in communication across distances notwithstanding, educational networks typically require regular face-to-face contact among their members to function effectively. Trust-building and personal reliance are important in creating individual commitment to networks. Regional substructures within the broader network are another means of creating commitment in a loosely-coupled structure. Educational networks can thus be understood in terms of both wide coverage to facilitate the broad spread of ideas and practices but also regional substructures and personal contact for building trust and commitment.

The example networks analysed in this chapter hold regular conferences. Members of the Coalition of Essential Schools, for example, have the opportunity to take part in an annual Fall Forum as well as other local and national meetings. The Bertelsmann Foundation's Network of Innovative Schools provides the member schools in the smaller learning networks with grants enabling them to get together for face-to-face meetings at regular intervals. These meetings are crucial to the process of exchange and collaboration without which the networks' ability to produce common results would lose momentum.

Nevertheless, the stability of networks varies considerably. Because of their loosely-coupled nature, they are relatively fragile social organisms. The experience of networking is frequently described as "double-edged" – as stimulating and frustrating. Certain conditions are needed to promote success. Because they are loosely-coupled they require leadership. Basic rules of conduct are preconditions for ongoing participation. Effective networks tend to have certain management structures and institutionalised leadership. Communication, both face-to-face and through the Internet, needs to be facilitated. The geographically dispersed nature of networks makes sustained commitment difficult as mutual social stimulus and control are limited. Developing and agreeing on rules of conduct creates a common basis of shared standards. Trust is a precondition of "give and take". As mutual openness, exchange and learning are not necessarily given, trust and

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social competence need to be deliberately developed through training and team-building activities.

6. Conclusion

Over the past three decades, there has been a growing conviction that greater autonomy and empowerment of individual schools is needed to stimulate sustainable high-quality school development. This paradigm shift towards autonomy, combined with the demand for public accountability, is consistent with the proliferation of school networks. Networks bring together individuals or institutions in a horizontal partnership, where the rationales are democratic exchange, and mutual stimulation and motivation, rather than top-down reforms.

Although a precise assessment of the impact of innovation networks is limited by lack of empirical evidence, it can safely be assumed that they are a vibrant, powerful force for the dissemination of innovative educational practices among principals and teachers in different schools. Networks help to overcome the isolation of schools and educators by providing opportunities for organised professional exchange, development and enrichment. Schools perceive networks as support structures for strategic development. They fulfil different purposes, such as sharing and disseminating good practice, the professional development of teachers and principals, and organisational development through critical feedback and breaking down teacher isolation. Networks can provide an effective approach to support clusters of schools rather than single schools.

Networks can thus represent vibrant motors of change in education. They give otherwise isolated schools and innovative individuals new ways of connecting with like-minded institutions and individuals, as well as a vehicle through which to speak to the broader public. Compared with traditional styles of educational governance, networks can offer a number of structural advantages such as increased opportunities for peer exchange and co-operation, teacher professional development, and the greater political force that comes through collaboration. It can thus safely be assumed that networks will play an important role for future educational policy-making.

Notes

1. A joint commission of the Federal and the Länder governments to co-ordinate education policy.
2. The project is currently led and managed by school development researchers at the Universities of Cambridge and Nottingham in England and includes more than fifty schools in England and Wales, Iceland, Puerto Rico and South Africa.

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART I

Chapter 4

Governance, Management and Leadership

by
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Abstract. *Glatter presents four ideal-type models of educational governance: competitive market (CM), school empowerment (SE), local empowerment (LE), and quality control (QC). He examines their implications in reference to international research for key factors of governance and management: autonomy; accountability, intermediate authority and functions, and school leadership. Mulford presents key findings from the Leadership for Organisational Learning and Student Outcomes (LOLSO) Research Project in Australia, relating these to broader international research. The leadership that makes a difference in secondary schools operates indirectly, not directly, to influence student outcomes via organisational learning (OL) that creates a collective teacher efficacy. He also describes the "transformational" school principal and rejects "the great man or woman" theory of leadership. Shuttleworth presents key findings from an OECD/CERI "What Works" study published in 2000 that analysed innovation in school management in nine countries. It discusses the tension between "top-down" reforms and "bottom up" renewal through knowledge leadership.*

1. Models of Governance and their Implications for Autonomy, Accountability and Leadership: (Ron Glatter)[1]

1.1. *Models of governance in school education*

"Governance" offers an over-arching concept to establish a framework within which other common concepts relating to structure and process, such as autonomy and accountability, can be located. This paper presents a framework, developed from Glatter and Woods (1995) and summarised in Table 4.1, of different models of governance in school education. Four models are distinguished: competitive market (CM), school empowerment (SE), local empowerment (LE), and quality control (QC). These models should be seen as ideal types and are by no means comprehensive; in practice, each system will operate some composite of them. Sometimes they may complement and reinforce each other as they impact on localities and schools but their interaction is also likely to cause tensions which participants must seek to resolve. The framework provides a useful instrument through which to examine some key issues of structure and process in the governance of school education. Examples of policies characteristic of each model are shown first, and then specific features of each of them are identified against a number of issues of structure and process.

Competitive market: The major perspective underlying the CM model is the analogy with the commercial market place. The school is viewed as a small- or medium-sized business with a high degree of autonomy and few formal links with the governmental structure. The main focus within the system is not on the individual school but on the relevant "competitive arena" (Woods *et al.*, 1998), which will contain a group of (generally) adjacent schools in competition with each other for pupils and funds. The nature of this arena will vary depending on factors such as the socio-economic character of the area, including access to private transport, and the relative density of the population; where the population is very thinly spread there may be no arena at all.

School empowerment: Policy-makers often claim that they are seeking to empower school-level stakeholders, in particular the head teacher or principal and other staff as well as parents. The delegation of functions to school level has been "legitimised by a discourse of empowerment" (Arnott, 2000, p. 70). The perspectives underlying this model (SE) might be political (in the broad

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sense of dispersing power) and/or managerial. In some national contexts, the emphasis has been purely managerial based on the principle that decisions are best taken as closely as possible to the point of action, while in others the arguments have also been couched in terms of freedom and choice. Although the SE model is often in practice combined with CM, it is analytically distinct and the picture conveyed of the school is different. The focus in SE is more on the institution itself and the way it is run than on its competitive activities "against" other institutions. It encompasses ideas of participation, identification and partnership – the school conceived of as an extended community – and in this respect it contrasts with the CM model. The unit within the system that provides its "centre of gravity" is the school itself.

Table 4.1. **Models of Governance in School Education**

Models	Competitive Market (CM)	School Empowerment (SE)	Local Empowerment (LE)	Quality Control (QC)
Indicative policies	Pupil number led funding *e.g.* by vouchers; More open enrolment; Published data on school performance; Variety of school types	Authority devolved to school on finance, staffing, curriculum, student admissions; Substantial powers for school council/ governing body	Authority devolved to locality on finance, staffing, curriculum, student admissions; Substantial powers for local community council/governing body	Regular, systematic inspections; Detailed performance targets; Mandatory curriculum and assessment requirements
Main perspective(s)	Commercial	Political and/or managerial	Political and/or managerial	Bureaucratic
How the individual school is viewed	As a small business	As a participatory community	One of a "family" of local schools	As a point of delivery/ local outlet
Main focus within the system	The relevant competitive arena	The individual school	The locality as a social and educational unit	Central or other state bodies
Nature of schools' autonomy	Substantial	Devolved	Consultative	Guided
Form of accountability	Contractual; consumerist	Responsive; "dual"	Responsive; community forum	Contractual; hierarchical
Purpose of performance measurement	Inform consumer choice	Provide management information	Benchmarking across units	Monitor and develop system
Key school leadership role	Entrepreneur	Director and co-ordinator	Networker	Production manager
Function of intermediate authority	Minimal	Supportive, advisory	Strategic co-ordination	Production supervision as agent of controlling body

Source: Glatter and Woods (1995), Glatter (2002).

Local empowerment: Some countries have been more concerned with devolution to local and municipal authorities than to schools, and this model needs to be represented explicitly within the framework. Although the LE

model shares the term "empowerment" and some features with SE, there are also significant differences between them. As with SE, the justification for this form of empowerment can be in political or managerial terms or both. However, the perception of the individual school is different. The school is here viewed more clearly as one of a "family" of schools, as part of a local educational *system* and as a member of a broader community in which there are reciprocal rights and obligations. The contrast with the CM model is particularly evident. Martin *et al.* (2000 p. 12) have developed a framework which "contrasts a system of local education devolved according to the principles of community governance as against those of the market", in which they compare "consumer" with "local" democracy. With the LE model, the main focus is on the locality as a social and educational unit and its representative bodies, though implementing representative local democracy satisfactorily is fraught with difficulties.

Quality control: Under the pressures of global competition and growing demands on public expenditure, governments are increasingly seeking control over the quality of key school processes and products even in highly devolved and/or market-like systems. The major underlying perspective in the QC model is bureaucratic, laying down rules and requirements and operating through set procedures, controls and monitoring arrangements. The implied picture of the school is of a "point of delivery" of many of the educational "goods" on offer. The established targets – "product mix" and "product quality" – are set at either the central or state level, depending on the constitutional arrangements. Under the QC model, the units within the system which provide the "centre of gravity" are located within, or closely connected to, central or regional government.

1.2. *School autonomy*

The above framework suggests differences in the nature of schools' autonomy under each of the four models. The concept of autonomy is connected with the trend to devolve power to lower levels in many countries. Green (1999, p. 61) has described the variety of forms that this trend can take: "Decentralisation has variously meant devolving power to the regions, the regional outposts of central government (deconcentration), the local authorities, the social partners and the institutions themselves". He maintains that clear differences remain between countries despite the trend, especially between those where most power lies at the centre (such as France and Japan), where regional control is strongest (such as Germany and Switzerland), where local control now predominates (the Nordic countries), and where substantial power has been devolved to schools and the market-place (Netherlands and the UK).

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Clarification of forms and trends is thus needed in which key questions are autonomy for whom? Over what? Bullock and Thomas (1997) distinguish between the autonomy of the individual learner, the educator and the institution. They argue that the level of autonomy of one of these might be increased while at the same time being reduced for the others. That autonomy is a relative concept is also seen in considering the domains in which autonomy might be given to schools. Sharpe (1994) presents a "self-management continuum" from total external control to total self-management, and identifies movements along four sub-continua in Australia over a twenty-year period. These are concerned with *input* variables, such as finance, staff and students; *structure* variables, such as decisions about the patterns of provision; *process* variables, such as the management of curriculum; and *environment* variables, to do with reporting and marketing. His conclusion is that increased government control in some areas has modified or even nullified the impact of enhanced self-management in others.

Bullock and Thomas examined decentralisation in eleven very diverse countries, including China, Poland, Uganda and the USA, along four dimensions: curriculum and assessment, human and physical resources, finance, and access (pupil admissions). They found movements towards both more and less autonomy, and conclude that the impact of decentralisation on autonomy appears to be uncertain and problematic. They also noted the "paradox" in some countries such as England and New Zealand of simultaneous centralisation and decentralisation – the former occurring in the curriculum field and, to some extent, funding regimes, with greater government powers over the definition of educational priorities, alongside schools having scope to decide how best to implement them. Simkins (1997) distinguishes between *criteria power,* concerned with determining purposes and frameworks, and *operational power,* concerned with service delivery. Karlsen (2000, p. 531) also refers to such a distinction in his analysis of educational governance in Norway and British Columbia, Canada – "a decentralisation dynamic in which initiating is a central task, but in which implementation and accountability are local duties".

The paradox of "decentralised centralism" notwithstanding, substantial autonomy has been accorded to schools in England in recent years. The process has led to a much larger role for head teachers (principals), particularly in relation to resources. The external pressure for enhanced performance and for the implementation of curricular changes has increased the scope and intensity of the work, and the head's role is now commonly exercised together with a group of senior staff including the deputy head (Levacic, 1998; Wallace and Hall, 1994). The autonomy of other teaching staff has arguably declined as a result of the advent of the national curriculum and the impact of school-based budgeting on many teachers' employment position (Bullock and Thomas, 1997).

The evidence that devolution has an impact on pupil learning is extremely thin, due at least in part to the complexity of the processes involved and the inherent difficulty of investigating them. There is evidence that devolution has significantly enhanced the quality of schools' internal planning capacities and processes (Levacic, 1998). Enhancing school autonomy in some respects while extending central control in others, in the context of a limited "market", has had another somewhat paradoxical effect. Schools have on the whole tended not to differentiate themselves in order to focus on a specific *niche*, but rather have sought to appeal to a broad grouping of parents and pupils. Nor have the structural arrangements tended to promote diversity among institutions as they have mainly sought to emulate the dominant high status school model (Woods *et al.*, 1998). At the time of writing, the British government is seeking to introduce measures to promote diversity (Department for Education and Employment, 2001). A key issue in any move towards devolution is the effectiveness of support systems, including development opportunities.

An OECD study of 14 national school systems (OECD, 1995a) sought to distinguish three modes of decision-making: full autonomy; decisions made after consultation with another authority at an adjoining level; and those made within guidelines set by another authority, generally at the top. In Table 4.1 this simple classification has been adapted to the framework of models of governance. In the CM model, the autonomy of schools would be very substantial though "full" autonomy is virtually unimaginable as there are always constraints, not least legal constraints, (even for a highly unorthodox independent school, see Sharpe, 1994). A key purpose of the SE model is to maximise schools' autonomy within an overall system, so here "devolved" is the descriptor. The LE model emphasises the school as a member of a co-operating family of institutions, so here the term "consultative" is taken from the OECD 1995 typology. In the QC model, the role of the senior authority at central or state level is more pronounced, so the appropriate form of autonomy here is "guided".

In commenting on school-based management (SBM) in the USA, Wohlstetter and Sebring (2000, p. 174) maintain: "An underlying premise of SBM is that school-level participants trade increased autonomy for increased accountability." It is to accountability we turn next.

1.3. *Accountability*

Accountability is a contested and complex concept, and has been described as "the engine of policy" (Cotter, 2000). An important distinction is that between *contractual* and *responsive* accountability (Halstead, 1994). Contractual accountability is concerned with the degree to which educators are fulfilling the expectations of particular audiences in terms of standards, outcomes and results. It is based on an explicit or implicit contract with those audiences and

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tends to be measurement-driven, with the factors to be measured – educational, financial or other – selected by those audiences to fit their perceived preferences and requirements. Responsive accountability refers to decision-making by educators, after taking account of the interests and wishes of relevant stakeholders. It is more concerned with process than outcomes, and with stimulating involvement and interaction to secure decisions that meet a range of needs and preferences.

Such a distinction cannot be applied too sharply, but it indicates differing accountability emphases. Thus in the CM model the provision of schooling is analogous to a commercial service and so the predominant form of accountability is contractual. In the SE model, with its focus on the school as a participatory community, the dimension of responsiveness is uppermost. In LE, the broader local community is the pivotal unit, so responsiveness to stakeholders is even more pronounced here. Finally, in the QC model the contractual form will be the significant one, and specified by governments or their agents rather than by parents or "consumers" as in CM. With accounting entrenched at the government level as a relatively straightforward way of conveying information to the public, QC will tend to draw on the "accounting model of accountability that has pre-specified categories and accounts in terms of discrete scales of measurement. This will often drive the bureaucracy to organise the tests and deliver the numbers" (Cotter, 2000, pp. 4;12).

Each of the models implies a different mode of accountability. In CM, the mode is consumerist, with power in principle being placed in the hands of consumer-surrogates (parents or guardians) to decide whether to choose the school for their child or to keep them there. The position is more complex in the case of SE. Many formulations (*e.g.* Halstead, 1994; Kogan, 1986) refer to professional accountability but in school empowerment models, professionals often have to share authority with school boards which include parents and community members. These are often characterised as relatively weak bodies with unclear roles and with agendas set by the professionals, particularly the principal and other senior staff (Levacic, 1995). However, the SE model does allow the possibility of a significant element of non-professional participation, especially, for example, in senior schools or colleges where employment interests may be represented on governing boards. Hence, the mode of accountability in this model can be characterised as "dual".

Within LE, the accountability mode can be characterised as "community forum", indicating that ultimate authority lies at a local level beyond the school, though with many variations in the size and socio-geographical nature of this unit and whether it operates on collegial or directive principles. There is the possibility in this case of extensive network or partnership arrangements with their tendency to produce fragmentation and "opaque accountability" (Rhodes, 1999). The mode in QC will be hierarchical, in that

accountability will be owed to the body with power to define and control quality, located generally at national or state level.

A final aspect of accountability to be considered in relation to the models concerns the purpose of measurement. Although measuring performance is more prominent in contractual than responsive versions of accountability, the recent rise of target setting, performance management, and the "audit society" have been notable aspects of public service operations in many countries. The prime purpose of such measurement varies depending on the model. In CM, the chief purpose will be to inform consumer choice. In SE, performance measurement and analysis will be conducted in order to provide management information to facilitate organisational improvement. In the LE model, a key purpose will be to provide comparative benchmarking information across organisational units to promote local system enhancement. Under QC, the main purpose will be to monitor, control and develop the system as a whole.

1.4. *Intermediate authority and functions*

The key functions and roles of the intermediate authority – where such a level exists – differ significantly between the four models of governance. In a pure CM model, its functions are minimal, covering perhaps the provision of information to parents and support for pupils with additional educational needs. In the SE model, the intermediate authority's role will be primarily supportive and advisory. Under LE much will depend on whether the geographical scope of its responsibility fits with the "local system of schooling" concept underlying the model. In some contexts it does, in others cluster arrangements have been developed (for example the Education Action Zones in England, DfEE, 1999) based on areas which are smaller than those covered by the relevant intermediate authorities. Intermediate authorities in some countries, for example the municipalities in Sweden and many school districts in the USA, come closer in size to a model of "community governance" than their counterparts in other countries. For simplicity this range is not elaborated in Table 4.1, so that in the LE model the intermediate authority's key function is presented as strategic co-ordination. By contrast, in QC the authority becomes more of a production supervisor as an agent of the central controlling body. In reality, the eclecticism of many national arrangements is the source of major tensions and dilemmas, including for schools and their leaders.

1.5. *School leadership*

The governance models imply distinct roles for school leadership. In CM, school leaders are expected to provide the kind of education sought by the consumers, or more particularly their surrogates – parents and guardians. Thus, "the identification and stimulation of parent demand for the kind of education the organisation can produce most efficiently, becomes a primary

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task of the manager" (McGinn and Welsh, 1999, p. 47). It requires primarily an entrepreneurial style of leadership. In the SE model, the school leader has to draw together the many different educational, managerial and financial threads in the work of the school, as well as to stimulate and if possible inspire the professionals to greater achievement. Evidence suggests that under devolved school management both the roles of chief executive and educational leader attain greater significance (Levacic, 1998). In addition, there is a demanding external dimension: "although head teachers have gained more autonomy, they also have to meet increasingly diverse demands from all sides and are often caught in conflict. Head teachers get headaches" (Hernes, 2000, p. 2). Both a directing and a co-ordinating style are required.

In the LE model, there is a key requirement for school leaders to become effective networkers, both to promote the school's interests within the local system and to collaborate productively in a partnership mode with their peers. Under QC, the school leader's role is more akin to that of a production manager, organising the school and its staff to deliver products or outcomes of the requisite quality.

This analysis is necessarily an over-simplification. In practice, school leaders will interpret and enact their role in a variety of ways depending on their individual personalities, the cultures of their schools, and other factors. The analysis does suggest, however, that the governance context is an important and often neglected influence on school leadership. Generalisations are frequently made about the features associated with effective school leadership without taking into account the specific and diverse frameworks of governance within which it is exercised. For example, Cotter suggests that "the current exhortations to principals to be transformational do not sit easily beside narrow forms of accountability" (2000, p. 8). He argues that such forms, in which principals are expected to accept given categories without reflection, are more consonant with transactional forms of leadership, as in the above analogy with the production manager in the QC model.

Life in practice is more complex still, and school leaders face not a single model of governance but several. It is common for elements of the CM model to be combined with others from SE and QC. As Leithwood (2001, p. 228) suggests, in the face of this "policy eclecticism", school leaders "can be excused for feeling that they are being pulled in many different directions simultaneously. They *are* being pulled in many different directions simultaneously". This gives rise to tensions and dilemmas for school leaders, as when within their school "the principal is required to be both a member of the cast and the star" (Wildy and Louden, 2000, p. 180), and within the wider system they are expected both to collaborate and compete. School leaders have the task of successfully managing these tensions and ambiguities. A major skill is to buffer the staff from external pressures that conflict with the school's goals without insulating them from

legitimate influences for improvement. Realising this difficult task is among the most important faced by school leaders today.

Structures of governance vary widely between different national contexts. As a result of the high level of reform activity in many countries, these structures are often in considerable flux. Practitioners need to analyse their own contemporary settings closely and take this analysis into account in developing their approach to the management of external relations. This paper is intended to contribute to this challenging task.

2. Leadership for Organisational Learning in Schools and Improved Student Outcomes (Bill Mulford)[2]

2.1. School reform needs an evidence base – the contribution of Leadership, Organisational Learning and Student Outcomes (LOLSO)

Reforms for schools, no matter how well conceptualised, powerfully sponsored, or closely audited will often fail in the face of cultural resistance from within schools, whether from students (*e.g.* Rudduck and Flutter, 2000), teachers (Berends, 2000), middle managers (Busher and Harris, 2000), or head teachers (Leithwood and Duke, 1999). Sometimes, such resistance is desirable so that schools do not fall prey to the itinerant peddlers of new movements, who arrive exhorting their latest elixirs of "quick fix". Yet, resistance means that reforms with great potential can equally fall to the same fate.

How can schools and systems choose the genuine ideas offering long-term improvement from the superficial and short-term? A robust evidence base for school improvement is needed and this has become a growing emphasis for policy and practice in recent years. Its value will depend crucially on the validity of the evidence itself, so as not to fall foul to the old computing phrase "garbage in, garbage out". This paper presents some key findings from a quality evidence base relevant for school reform – the Leadership for Organisational Learning and Student Outcomes (LOLSO) Research Project in Australia. Its quality derives through having integrity and predictive validity as well as clearly defined variables. It is able to capture complexities that more closely match the realities faced by schools than much of the previous research. It has been gathered from sources other than head teachers, who tend to overestimate the effectiveness of reforms compared with classroom teachers (Mulford *et al.*, 2001), and by those without a vested interest through having designed or implemented the reforms.[3] It has predictive validity through being able to link leadership with organisational learning (OL) and, unusually, student outcomes.

LOLSO is especially powerful as a data base by its particular combination of: *i)* a large secondary school sample; *ii)* longitudinal design; *iii)* clearly defined variables; *iv)* inclusion of the concept of OL; *v)* use of student and teacher "voice";

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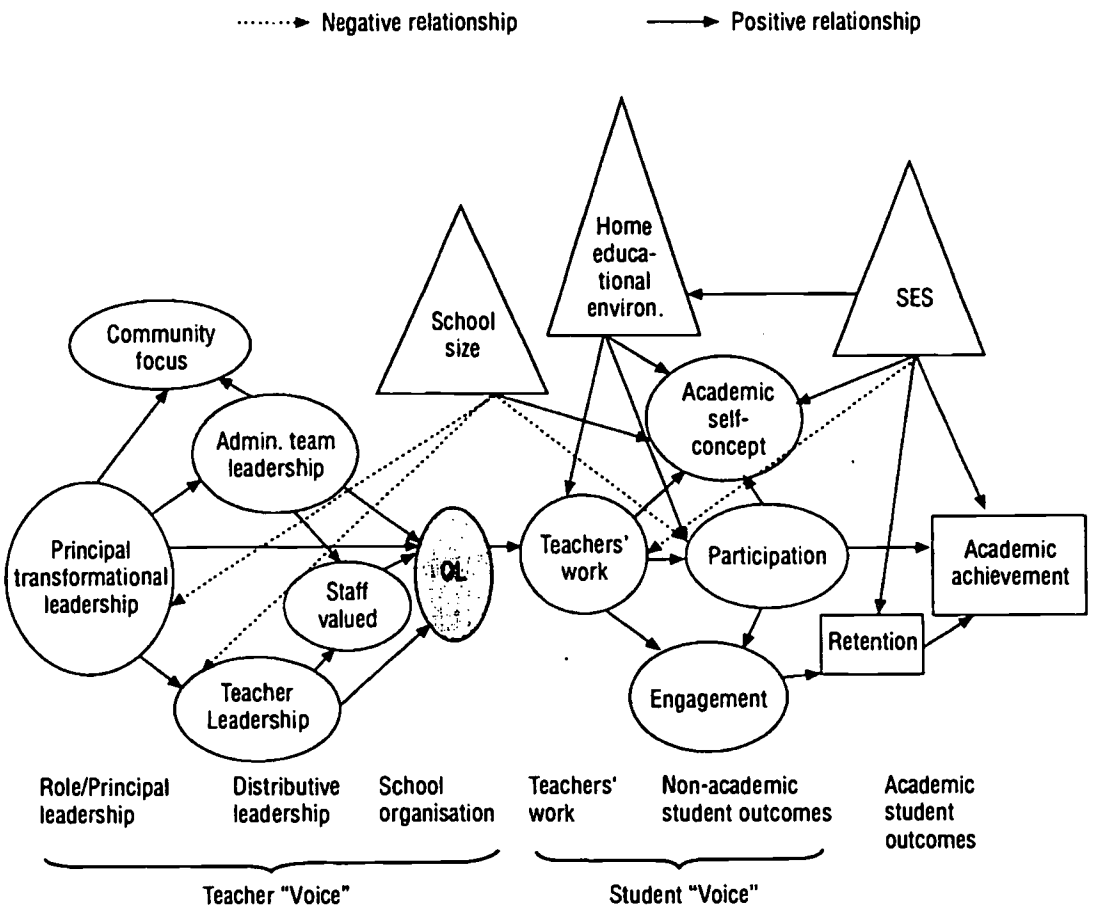
vi) a large number of variables covering leadership processes, organisational learning and student outcomes as well as the context of Socio-Economic Status (SES), home educational environment and school size; and *vii)* consistent with OECD's (2001c) recent Programme for International Student Assessment (PISA) report a measure of student outcomes wider than only academic achievement. LOLSO's research design combined four phases of data collection and analysis over four years, allowing for iterative cycles of theory development and testing and using multiple forms of evidence.[4] The key relationships established empirically through LOLSO data are shown in Figure 4.1.

Figure 4.1. **The main school relationships explaining student outcomes and achievement**



Source: Author.

2.2. Leadership, organisational learning and student outcomes – the relationships

The LOLSO research shows that the leadership that makes a difference in secondary schools is both position-based (principal) and distributive (administrative team and teachers). But both are only *indirectly* related to

student outcomes. Organisational Learning (OL), or a collective teacher efficacy, is the important intervening variable between leadership and teacher work and then student outcomes. That is, leadership contributes to OL, which in turn influences what happens in the core business of the school – the teaching and learning. It influences how students perceive the way teachers organise and conduct their instruction, and their educational interactions with, and expectations for, their students. Pupils' positive perceptions of teachers' work directly promote participation in school, academic self-concept and engagement with school. Pupil participation is directly and pupil engagement indirectly (through retention from Year 10 to Year 12) related to academic achievement as measured by a five-subject aggregate Tertiary Entrance Score.

The LOLSO research demonstrated clearly that the best leadership for OL and a range of improved student outcomes were a principal skilled in transformational leadership and administrators and teachers who are actively involved in the core work of the school (shared or distributive leadership). What is especially important is that staff are actively and collectively participating in the school and feel that their contributions are valued.

The transformational school principal was found to focus on:

- *Individual Support* – providing moral support, showing appreciation for the work of individual staff and taking account of their opinions.
- *Culture* – promoting an atmosphere of caring and trust among staff, setting the tone for respectful interaction with students, and demonstrating a willingness to change.
- *Structure* – establishing a school structure that promotes participative decision-making, supporting delegation and distributive leadership, and encouraging teacher decision-making autonomy.
- *Vision and Goals* – working toward whole-staff consensus on school priorities and communicating these to students and staff to establish a strong sense of overall purpose.
- *Performance Expectation* – having high expectations for students and for teachers to be effective and innovative.
- *Intellectual Stimulation* – encouraging staff to reflect on what they are trying to achieve with students and how they are doing it; facilitates opportunities for staff to learn from each other and models continual learning in his or her own practice.

OL was found to involve a clear sequence of factors from establishing a trusting and collaborative climate, followed by having a shared and monitored mission, and then taking initiatives and risks within a context of on-going, relevant professional development. The higher the teachers rate the school on

these sequential dimensions defining OL, the more positively teachers' work is perceived in classrooms by their students which, in turn, impacts on the outcomes of their schooling.

We also found that gender of the principal and of teachers, and teacher's years in education and age, were not factors promoting leadership or OL. However, school size does: the larger metropolitan schools of over 900 students do not provide the environment most conducive for transformational and teacher distributive leadership or for student participation, although having a larger school was positively related to students' academic self-concept. Our results add weight to the research extolling the advantages of smaller schools (Lee and Loeb, 2000). This issue has been recognised in some parts of the USA with large schools now dividing themselves into smaller units in order to provide the web of support necessary for student and teacher involvement with the school and improved learning outcomes (Hodges, 2000).

Another important contextual factor was found to be the socio-economic status (SES) of the school. SES had its expected positive relationship with student academic achievement, retention and academic self-concept. Interestingly, SES had a negative relationship with student perceptions of teachers' work. On the other hand, the students' home educational environment (having a space and aids for study as well as having discussions at home and help with school work and conversations about world events) had a stronger relationship than SES to students' academic self-concept. It also had a strong positive relationship with students' participation in school and their perceptions of teachers' work.

Having a community focus in a school – the teachers perceive the school as in productive relations with the community and the schools' administrators are sensitive to and work actively with it – was found to be another outcome of leadership in both its transformational principal and distributive forms. However, no link was found between having a community focus and either OL or improved student outcomes. Some may find this to be problematic: on the basis of our results, if a choice had to be made between working with and being sensitive to the community and improving home educational environments, the latter will have a more direct and immediate impact for student outcomes. Finally, it is worth noting the possibly controversial finding that students' academic self-concept was not related to their academic achievement.

2.3. Discussion

The LOLSO findings are consistent with recent research identifying the main elements in successful school reform (Silins and Mulford, 2002). Success

is more likely where people act rather than habitually react: they are empowered, involved in decision-making through a transparent and supportive structure, and are trusted and respected. The professional community should share certain norms – valuing diversity, the continuous enhancement of learning for all students, and breaking from individual professional isolation through collaboration and reflective dialogue. There should be a clear capacity for learning, exemplified through a positive professional development programme.

In the USA, both Goddard *et al.* (2000) and Heck (2000) have found close links between school environments and improved student learning. The first identified collective teacher efficacy as a significant predictor of student achievement and of greater impact than any one of the demographic controls (including SES). Heck found greater-than-expected improvements in student learning over time where the head teacher leadership was rated as supportive and directed towards instructional excellence and school improvement, and the school climate rated positively. In the UK, detailed case study follow-up research in eleven schools found to be effective in disadvantaged areas five years earlier identified the levers of improvement prominently to include distributive leadership, pupil participation and engagement, and organisational learning (Maden, 2001). In their review, Riley and Louis (2000) focus on leadership as an organic activity involving the formation of values-driven relationships rather than simply role-based, and such dispersed leadership depends on an important voice for both pupils and teachers.

Our findings reject "the great man or woman" theory of leadership, which might bring initial success but results eventually in mediocrity if not failure through the dependency relationship it creates. This is far removed from the focus emerging from LOLSO on support, trust, participation, and whole staff consensus.

The LOLSO and some other contemporary research suggest we should place much less emphasis on organisational and managerial strategies, or transactional leadership, than has often been accepted wisdom. There is little evidence to link them either to OL or student outcomes. The temptation with many managerial approaches is to "do things right rather than doing the right thing". Sizer (1984) has described this as "Horace's Compromise" – working toward a facade of orderly purposefulness. Successful school reform, on the other hand, is not about following procedures but genuine development and, therefore, learning. This raises another important principle: one needs stability in order to change. First, the distributive leadership, collective teacher efficacy, and collaborative climate must be secured. Once that is done, this will contribute to developing a strong focus on the educational objectives, including having a shared and monitored mission. Once that is secured, and there is confidence in what the school is doing and why, then the leaders and

school can focus explicitly on learning and change, including through working with other schools in network arrangements.

The further implication of the LOLSO research is the importance of the context for leadership and school reform. Socio-economic background, home educational environment, and school size have a clear interactive effect on leadership, the school, and student outcomes. This suggests we should be wary of "one-right-way" leadership styles. Recent research on leadership in schools facing challenging contexts suggests that to be effective, leadership in these schools should best be "tight" on values, purposes and direction but "loose" in involving others in leadership activity – combining clear direction with widespread involvement(Harris and Chapman, 2001). These schools may call for leadership that is more initiating as compared with more managing in advantaged, academically successful schools. This is so long as the visionary head teacher does not actually distract teachers from concentrating on teaching and learning.

3. Management and Leadership for the 21st Century – Redefining Innovations (Dale E. Shuttleworth[5])

The OECD "What Works" study (OECD 2001d) set out to analyse innovation in school management in nine countries. How is innovation to be pursued and supported in the post-industrial age? The study drew attention to the tension that exists between the "top-down" approaches to reform, based on an industrial-age scientific managerial style, and those seeking renewal from the "bottom up" through knowledge leadership in 21st century learning organisations. This paper identifies some of the important trends and examples from that study relating to governance, management, evaluation and leadership. Naturally, the cases mentioned are only illustrative.

3.1. *Trends and cases*

Among the countries featured in the OECD study, Flanders (Belgium) and the Netherlands have a long tradition of decentralised local school management through their right-of-choice policies, with the private non-profit sector operating the majority of schools. The national government provides the funding, while retaining control of curriculum and programme standards. This "loose/tight" system appears to offer an effective approach to national and local accountability. The devolution of operational responsibility to the local level also allows for flexibility in responding to the emerging needs of religious, immigrant and migrant communities. The Hungarian system, where the private sector has the right to establish and operate schools, is another example of decentralisation/deregulation in action. The market-driven system includes privatised in-service training (INSET) and quality

improvement (see Comenius 2000 Quality Development), using private consultants selected by tender to assist in their implementation. Charter schools in the US. are another example of private sector operations in the public system, and a further example from England is its national school inspection system using teams brought in on a contract basis.

Most countries have a standardised testing procedure in place to assess student achievement at fixed grade levels according to standards mandated in a national (or state) curriculum. Test results are often published in the media. Controversy continues to be expressed as to the content and methodology used in test administration. Whether minority language and cultural backgrounds are adequately catered for in assessments of ability is also an issue. That the Industrial-age scientific management movement remains the dominant paradigm, as opposed to comparative indicators of Information-age learning and employability skills, is cause for concern. So is the impact that such procedures may have on classroom practice (*e.g.* teaching to the test) and on the morale and self-esteem of teachers, parents and students.

The English Office for Standards in Education (OFSTED) has implemented an inspection system whereby every school is assessed by an external team of inspectors within a four-year cycle. The teams are trained using procedures set out in a Manual of Inspection. The quality of teaching and learning in each subject is reviewed, as is school management. The system allows for parental and student input and results in a formal report following the visit. The system is transparent in that the Manual of Inspection laying down the inspection procedures is publicly available. The formal report is also a public document and schools are required to circulate its summary to all parents. External top-down assessment remains controversial, and questions inevitably arise about the competence, qualifications and experience of the contracted teams.

An inspection assessment system is also a strong feature of the system in the Netherlands. The Primary Education Inspectorate conducts regular 2- to 3-day intensive visits every two years based on the school plan. Greek schools have traditionally been resistant to any form of top-down inspection and a Self-evaluation Project has been introduced in six pilot schools as a less threatening and intrusive approach to school improvement. It is co-ordinated by the Pedagogical Institute and, actively involves teachers, parents and students. A handbook to guide schools in developing self-evaluation methodologies has been published by the Institute. The federal government of Mexico has also launched an innovative project for self-evaluation in elementary schools. Beginning with 200 schools in 1997-1998, the School Management in Elementary Education Research and Innovation Project had already by 2000 been extended to 2 000 schools in 20 states.

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On the management of diverse structures, community education approaches promote the local co-ordination of human services (*e.g.* health, employment, child protection, adult literacy, family support, leisure, etc.) A number of countries and school districts have such approaches in place. The active participation of the school, and the leadership of its principal, are essential in meeting human service needs, particularly in disadvantaged socio-economic areas. Sweden has innovated in merging services for children – the clear lines that once distinguished childcare, pre-school, recreation centres, and primary schooling have been deliberately blurred. A curriculum has been developed to strengthen integrated pathways from pre-school to compulsory schooling. Pre-school education for infants from one-year old is available for parents working or studying, and often a child will spend all day in an integrated pre-school/primary school/recreation centre. In this integrated management model, one leader (or a team) from any of the three disciplines may be in charge of the facility.

3.2. New roles and tensions for school leaders

The role of the school administrator emerged in the 20th century through the addition of technical responsibilities to the work of the practising teacher. As the century progressed, in many countries the role grew and became that of a full-time professional manager of human, financial and other resources. Instructional leadership, staff evaluation, budget management, performance assessment, and community relations have been progressively added to the job remit. When the school operated to the Industrial-age model, duties were relatively straightforward; many teachers, often men, aspired to a principalship as the pinnacle of their educational careers. Further changes, including the educational reform movement, have transformed expectations about the job. Principals are now called on to be motivational leaders and knowledge managers in the New Economic Age, inspiring high standards of performance from students and teachers and their continual self-renewal in learning organisations.

Decentralisation has often brought site-based management, deregulation has blurred school boundaries. The role of the local school has been emphasised in decision-making and management. These developments place a premium on enhanced business and marketing skills, including in recruiting students on the open market. School managers are an integral part of a micro-political milieu of networks, made up of individuals and groups in schools and their surrounding areas. The networks compete for scarce resources and even political power. The actors in this drama include principals, teachers and other staff (including unions), central office officials, school board members, parents, students, other community service personnel and employers. The micro-political school environment increasingly calls for active involvement

and leadership within shared decision-making bodies, interagency collaborative structures, and responsiveness to the demands made by local politicians and to socio-economic realities and community development. The skilled understanding of micro-politics has become an essential means of survival for school leaders in many systems (Lindle, 1997).

As competition grows for a limited supply of public funds, schools and their governing bodies are reaching out for alternative sources of financial and in-kind support. The search for special government project funding, philanthropic donations and commercial partnerships help to explain the interest among school leaders to acquire skills in fund-raising and drafting proposals. One such approach has been the creation of an educational foundation or non-profit charitable organisation to seek alternative sources of funding and material support for school innovation and programme enrichment (Shuttleworth, 1993). Educational spending cuts have often had the predictable results of poor maintenance and deteriorating school buildings. Greece, through its *Reorganisation of School Premises* Project, has demonstrated that school facilities can be upgraded and the physical learning environment of the school improved significantly. The importance of school leaders in transforming a deteriorating shared-use facility into a more secure and educationally viable building was demonstrated in secondary schools in the Athens area.

The Foundation for Catholic Education in Maastricht, the Netherlands, is but one advocate in a growing movement to provide salary differentiation on the basis of merit. Through consultation with professional unions, criteria have been established for a system of premium pay and temporary extra increments for teachers demonstrating exceptional performance, and principals have been trained in assessment procedures for their application. A large number of states and school districts in the United States provide salary bonuses or other incentives for teachers who earn National Board for Professional Teaching Standards certification. But, it remains the case that merit pay has been almost universally unpopular with teacher unions.

The burgeoning of demands on leaders and managers inevitably raises the question of their professional preparation. To date, such training has tended to be neglected. An innovative approach to the pre-service and in-service training of school leaders is to be found at the Vlerick School of Management in Ghent, Belgium, whose programmes seek to instill creative, critical and problem-solving skills in school teams in their local environments. There is an unusual school-based management contest as the means to promote the combination of theoretical knowledge and hands-on experience. Also unusual is the way the programme is open to teams of school administrators, teachers, parents, school board members and other citizens. Another innovation in pre-service training is to be found in Sweden, where

university students study interdisciplinary human development curricula before later specialising in their professional field (*e.g.* teaching, childcare, recreation, social work, health services, etc.) This encourages more co-operation and complementary practice among future professionals operating in multi-use community facilities.

3.3. Conclusion: investing in schools and leadership

Within these competing pressures on school managers lies a major tension. Should they now be the supervisors of quality control standards consistent with models from the Industrial-age (the powerful principal), or multi-dimensional knowledge managers of human and physical resources, sharing power, and facilitating learner-centred communities? Can these roles be combined? Where are we to find such leaders?

During the past decade, many teachers and principals have felt devalued and confused by their changing role, and stress levels have risen as self-esteem has fallen. Many young people hesitate before or reject a career in education, while many practising teachers no longer aspire to a career path that leads to the stress of the principal's office. All this when thousands of new recruits are needed just to fill vacancies as the "baby-boom" teaching generation retires, and expectations about education's importance are higher than ever. Strong inspirational, yet empathetic, school leaders and management teams are needed to help forge the way from the hierarchical and linear assumptions of an earlier age and the infinite flexibility of the lifelong learning society.

Schools, teachers and principals should, of course, be accountable to the people they serve but standards should be created rather than set, achieved through continuous improvement based on a collective assessment of learning needs. An organic service delivery system must continually respond to diverse consumer needs, but as a public service it cannot pick and choose its clients nor manipulate its outcomes. Schools are but one facet of an essential public service infrastructure that has been struggling with decentralisation, taxpayer accountability, restructuring and privatisation against thin financial support. If societies are to get the educational service and leadership they deserve, we must invest in renewing the self-esteem, learning capacities, and leadership skills of these professionals.

Notes

1. This paper is based on the author's chapter "Governance, Autonomy and Accountability in Education" in *The Principles and Practice of Educational Management*, TC Bush and L A Bell (eds.), Paul Chapman Publishing (2002), London.

2. This paper was prepared in collaboration with Halia Silins Associate Professor, School of Education, Flinders University of South Australia.
3. It was carried out through the Australian Research Council.
4. Phase 1: surveys of 3 500 Year 10 students and 2 500 of their teachers and principals in half the secondary schools in South Australia and all the secondary schools in Tasmania. Phase 2: cross-sectional and longitudinal case studies of best practice were collected from four schools to enrich the survey data. Phase 3: South Australian teachers and principals were re-surveyed, as were students in Year 12. Phase 4: quantitative and qualitative results were used to develop professional development interventions for school leaders. For a fuller account of the results of the LOLSO Research Project see: Silins and Mulford (2002); Silins *et al.* (2000).
5. Lead author of the OECD "What Works in Innovation in Education" study *New School Management Approaches*. The featured countries were Flanders (Belgium); Greece; Hungary; Japan; Mexico; the Netherlands; Sweden; the United Kingdom and the United States.

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PART II

Conference Country Cases

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART II

Chapter 5

Strategies to Promote Good Practice and Innovation in Schools – The Portuguese Case

by
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Abstract. *This chapter addresses reforms made in Portugal to support innovation in education, Portugal being the site of the OECD/CERI 2000 Schooling for Tomorrow seminar on networking. Two such reform strategies begun in the latter 1990s are highlighted – the "Elementary Curriculum Reorganisation" and the nationwide "Good Hope Programme". Both employ "top-down" and "bottom-up" strategies, seeking links between school and teacher practices, on the one hand, and systemic-level innovation, on the other. They use the innovation and reform process as a formative tool for schools and in both there is a networking strategy for the support and dissemination of school practices. And, both employ a combination of research, support and training.*

1. Innovation in a Traditional System

Portugal is, historically, a highly centralised school system, with a largely dominant central administration. This reflects the historical influence of the Napoleonic models of administration that became predominant early in the 19th century, and were reinforced, most negatively, during the Salazar dictatorship and Estado Novo (1926-1974). The enormous changes and modernisation that have occurred since then in Portugal, especially democratisation and improvement of the educational system, have still been conceived of and implemented within the centralist parameters that frame the organisation of educational services as a whole. It has been mainly as a spin-off of school massification – especially after the extension of compulsory schooling to 9 years which took place only after 1986 (Law 14/86) – that modest movements have started to break into this centralism. Even these changes have been taking place slowly.

The centralism of the system has been most evident in two major areas: school administration and curriculum. With respect to *administration*, schools are used to depending heavily on the national budget, with little autonomy as they follow the directions provided by the ministry authorities for the majority of their actions. Schools work very much on the basis of laws, regulations and norms that come from the central or regional offices of the ministry, and very little on their own decisions and responsibility. Before 1974, school principals were nominated by the central administration, with selection oriented strongly towards political conformity. The system of governing schools after the Revolution evolved towards a more democratic process, in deliberate opposition to the earlier system and with the right of teachers to participate in the election of their ruling boards that includes teachers of the school.

With some changes during the last two decades of the 20th century, the system in place (DL 115/A/95 – Autonomy of Schools) allows for the election of the school's directive board, as well as the other bodies governing the school. This legislation also accords greater autonomy to schools and encourages stronger interaction with local communities. Teachers are still allocated through a national application system, however, which is intended to guarantee greater equity. This policy has always enjoyed the strong support of teachers and their unions, and so it is very difficult to change this practice. Schools thus have no powers to select their own teachers and this is one of the deeply rooted, problematic aspects of the Portuguese educational tradition.

With respect to the *curriculum*, the system has always worked within a model of prescriptive and uniform curriculum. This is conceived and prepared by the central authorities and teams of invited teachers and specialists, prescribed through a detailed syllabus for each area and discipline. Teachers' work is basically programme-oriented, since they have been rarely invited or allowed to make decisions about their own school curriculum, still less to create it. Teachers follow the syllabus and the "cover-it" syndrome describes well the curriculum practices of schools and teachers, especially in the higher levels of secondary schooling.

A major national curriculum reform was developed in 1989-1991, articulating learning in the elementary and secondary cycles into a more coherent sequence and creating better organisation and modernisation of the curriculum across the system. It also opened some room for interdisciplinary projects to be developed autonomously by each school and introduced personal and social education spaces and objectives. Though innovative in many respects, and consistent with curriculum reforms of the time in other countries, these reforms left untouched the levels of curriculum decision and the typical curriculum organisation and teachers' practices within schools. Hence, while schools are now dealing with better and more accurate syllabuses, they largely work in the same "content-covering" way as before, with little intervention or decision.

This brief history, though obviously simplified, is essential to understanding the particularities of contemporary change.

2. Centralism and "Pedagogical Experiments"

The above picture portrays a relatively unchanged situation of the Portuguese educational system in terms of its structure, organisation and curriculum. Nevertheless, a number of significant innovation movements have occurred within this rigid frame. One of the early legal mechanisms that allowed for that was a regulation from the late 1960s known as the "law of pedagogical experiments" (DL 47 587/1967). Conceived at a time when there was strict political control over education and schools, it created some space to do things differently so long as they were controlled and regarded as "experimental".

Many school innovations and local projects, individual and group initiatives, and even the introduction of a new curriculum "experimentally" by innovative policy makers within the Ministry for grades 7 and 8 in 1973, were done using this regulation. Its use and significance as a rule have declined, insofar as the political discourse in the last two decades has become increasingly enthusiastic about innovation and improvement. Nevertheless, the "culture of the experiment", conceived and experienced as an exception to

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the general rule that remains otherwise untouched, made its way deeply into schools and teachers' professionalism. To illustrate, the influential concept of *project*, which has been strongly emphasised theoretically and politically since the late 1980s and 1990s, appears today to have been largely assimilated with the earlier idea of *experiment* in the practices of Portuguese schools and teachers. This idea of doing "good experimental things" means predominantly something interesting and innovative that affects only some people in the school or segment of the system but not the routines and the largely dominant practices of teachers and schools.

There is thus evidence of tension if not paradox: the co-existence of a strong discourse of change and an almost unchanged system; the centralist organisation of school and curriculum alongside the proliferation of small and diverse innovative projects that are relatively impotent to effect fundamental changes in the system. These conflicting movements might characterise any system today, but they are particularly evident in Portugal and influenced by previous conceptions and traditions historically consolidated in the educational system. The debate on innovation and educational change has to be read against this particular evolution. Portugal's participation in several OECD projects, including CERI's Schooling for Tomorrow activity (starting with Institute for Educational Innovation (IIE) participation at the November 1997 Hiroshima conference), has helped to illuminate both commonalities and particularities of educational change as perceived by different countries. One common concern is precisely about the identification of strategies to link and transfer isolated innovations to broader change and improvement.

3. Two Strategies for Networking and Change: Elementary Curriculum Reorganisation (1996-2001) and Good Hope (1998-2001)

Networking and dissemination of "good practices" have consistently emerged in international discourse, as well as research, as promising improvement and innovation (Fullan, 1993, 2000; Hargreaves, 1994; Hopkins, 2001; OECD, 1999). Innovation has been constantly on the agenda of the past twenty years in Portugal, as indicated by the creation of the Institute for Innovation in Education (IIE) by the Ministry of Education. The Institute's efforts in supporting innovation and research generate still greater interest in these matters; IIE has been consistently funding, supporting and disseminating innovations produced in schools, through the Service of Incentives to Quality in Education (SIQE) Programme. But, support for particular innovations has had relatively little impact on the system as a whole.

In recent years, awareness of this limitation has increased and some political decisions have been taken to establish more appropriate innovation

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strategies. Such policies are themselves innovative in breaking with the usual methods for promoting change within the system. Two in particular should be highlighted:

- the *Elementary Curriculum Reorganisation*, under the direction of the Department of Elementary Education, 1996-2001, *Departamento de Educação Básica* (DEB);
- the *Good Hope Programme*, 1998-2001, under the direction of IIE.

A number of common features can be perceived in these examples for enhancing change and innovation. For both, there is a grass roots support for the innovative processes: with Good Hope, they start with successful practices; in Curriculum Reorganisation, they are supported by the experience of the schools that have volunteered to participate. There is a mix in both of top-down and bottom-up strategies that interact through seeking links between schools and teachers' practices to more global innovation at the system level. The aim in both is to use the change process as a formative tool for schools, generating from the "experiments" an informed action within those schools and towards others they are in contact with, as well as around the higher education institutions that provide support to the schools. In both there is a networking strategy for the support and dissemination of school practices, using a variety of modes of interaction: public information by the schools; regional events for the presentation of work to other schools of the area; seminars with groups of involved schools across the country, etc. There is a combination in both of research, support and training associated with change processes. Room for evolution is built into both processes – curriculum reorganisation continues. There is a common objective of dissemination and horizontal visibility in contrast with the vertical process of implementing change in macro reform.

3.1. *The Elementary Curriculum Reorganisation (ECR)*

The Elementary Curriculum Reorganisation (ECR) started in 1996 with the launch of a national debate on the curriculum concerns of schools facing a high rate of failure and an increasing diversity of student socio-cultural backgrounds. The main aim was to introduce change in curriculum organisation and management, increasing the autonomy of schools in building their own curriculum projects, and gradually breaking the centralist model.

Period One, 1996-97. In recognition of the complexity of the new problems facing schools, teachers of all elementary schools were invited to discuss a set of documents, prepared by a team of curriculum researchers and teachers under the Department of Elementary Education of the Ministry of Education (DEB). Curriculum issues were raised in terms of reflection on the difficulties encountered in its centralist, prescriptive organisation in Portugal and in school practices relating to student achievement. Proposed alternatives to empower

schools to make curriculum decisions with greater flexibility, based on international policy recommendations and recent research, were under consideration and debate during School Year 1996-97. These documents included:

- a general discussion of *curriculum trends*;
- a proposed set of *competences* to be attained by every student by the end of elementary school;
- a possible rearrangement of existing curriculum programmes in order to identify the core competences in each discipline and across the curriculum, in articulation with the desired universal competences referred to above;
- examples of situations of curriculum adjustment and improvement of learning facing schools and students to be debated by teachers.

Suggestions and proposals were requested of schools based on discussion of these documents, following guidelines provided by the central team. From the data, a national report was produced and disseminated to every school and ministry department. This first step was named "Participative Reflection on Elementary Curriculum" and the degree of response was high at around 80% of the elementary schools.

Period Two, 1998-1999. Following this debate, in 1997/98 the Secretary of State for Education Ana Benavente invited elementary schools to volunteer proposals aimed at adjusting the curriculum to their own situations through submission of a *school curriculum project* to the regional departments of the Ministry and the DEB. The Secretary of State's regulation referred to principles embodying a re-conceptualisation of the curriculum and greater autonomy for schools. It also included a suggested model for reorganising the curriculum timetable, proposing areas to be integrated and rearranging the time and space of a variety of disciplines.

At the same time, the DEB team continued to refine the competences. New documents were produced and disseminated to schools, both on general competences and on those specific to each discipline and curriculum area. A national council – comprising teacher association representatives, schools involved in autonomous curriculum projects, ministry departments, and curriculum specialists – was created to monitor the whole process. Studies were conducted by university and schools of education specialists on particular topics related to the intended curriculum change, focusing on the core competences and on school management of the curriculum. These were also distributed to every school to enrich the debate and support the reflective work of teachers.

The process proceeded gradually: 10 schools volunteered in 1997-1998, rising to about 30 in 1998-1999 and to 100 in 1999-2000. They report their

experiences annually to the DEB and the national council and some of the emerging suggestions have been taken on board. A new regulation in 1998-1999 was somewhat more prescriptive about the organisation of disciplines and areas, and was referred to as the Flexible Management of the Curriculum Gestão Flexível do Currículo (GFC). Several teacher education institutions (Universities and Polytechnics) were engaged in local support to the schools involved in the GFC Project as of 1998-1999.

Period Three, 2000-2001: new legislation on the curriculum was published (DL 6/2001). It establishes the principle of curriculum autonomy of schools; it also creates new areas for project work, study work and citizenship education and gives some possibility for schools to rearrange the times and spaces for the disciplines. Schools are obliged to define their own curriculum project and specific projects for each class, intended to adjust the national curriculum to the particular circumstances of different students. It will apply to grade 1 and 5 (first years of 1st and 2nd cycles of elementary education) of every school in October 2001, and gradually to the other grades and to third cycle (grades 7-9). However, national curriculum and syllabuses have not yet changed. At the central level, DEB (with the support of a new consulting team including researchers, teacher educators and teachers) is working on gradually implementing the intended reorganisation. This team is developing from the existing analyses and positions towards a redefinition of the curriculum system for the future, in terms of:

- a national definition of curriculum guidelines in a broader and less prescriptive way for the whole of elementary education following the competence orientation; and
- the strengthening of school-centred curriculum projects as established in the DL 6/2001.

3.2. *The Good Hope Programme*

3.2.1. *Aims*

The Good Hope Programme is a governmental nation-wide programme designed to support teachers and schools in the process of disseminating their good practices, seeking thus both to sustain the practices themselves and to spread them to other teachers and schools. The intention is that others will become inspired and profit from the existing experiences and solutions. To accomplish this aim, 28 good practices have been chosen, corresponding to the following themes:

- improvement of learning for all;
- organisational and social improvement of the school as an education institution;

- school-community interaction;
- educational uses of ICT.

3.2.2. History and background

The Programme was created by the Ministry of Education in March 1998. It became operational only in early 1999, after a period of preparation leading to the selection of innovative practices to be disseminated, and was designed to last for 3 school years. Good Hope was created in response to the need to define a deliberate policy for the support and promotion of successful innovations whose effects had before never been highlighted or evaluated. It is itself innovative in the Portuguese context, contrasting with the traditional centralisation by encouraging autonomy and experimentation through a process of producing research on emerging good practices, analysing and disseminating them, and supporting the work of teachers and schools. Teacher professional competence is recognised as well as the schools' capacity to organise themselves to be coherent with their aims and contexts. Good Hope respects the uniqueness of different situations and places public resources at the service of teachers so they can learn and share their experiences.

3.2.3. Procedures and stakeholders

The schools and teachers involved can rely on the technical support of regional teams composed of researchers, staff from central and regional departments of the Ministry of Education, and School Association In-service Training Centres. Others from local institutions can also be invited to join the teams whenever that is considered useful to further the aims of the Programme. In this process, public services, researchers, and teacher training institutions learn how to interact and create synergies in support of each recognised innovation. At the same time, to belong to Good Hope means that the practitioners and their schools should be available: for the investigation and evaluation of their practice by external observers/critics; to become agents of dissemination of their innovative practices and to produce publications and/or other kinds of materials; and to share their experiences with other schools and become development leaders.

The above-mentioned regional teams, in articulation with another team in the Institute for Educational Innovation charged with national co-ordination of the Programme, thus constitute an important network for the support of teachers and schools in improving and disseminating their practices. This network has been performing the following activities:

- Establishment of a common information platform, which includes a site (*www.iie.min-edu.pt/proj/boa-esperanca/index.htm*), where descriptions of all the good practices covered by the Programme are available together with

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relevant contact information. In addition, the co-ordinators' descriptions of their own practices are published in one of the Institute's magazines, NOESIS, which is widely distributed to basic and secondary education schools free from charge.

- The production and distribution of videos or CD-ROMs presenting the genesis, processes and outcomes of each innovation, when this is sought and is seen as a useful means to communicate the aims and nature of the innovation.
- Establishment of a forum to discuss issues of common interest, selected with the participation of those directly involved in the innovation and stimulated by invited experts. The first theme chosen was self-evaluation, aiming to support teachers in the process of improving, sustaining and disseminating their innovative practice.
- Providing technical support for the production and dissemination of documents and materials, to be published and distributed. There are also training initiatives through the Institute to help the participating teachers build their own Web pages.
- Promoting thematic meetings among practitioners to discuss problems being confronted and successes attained.
- Promoting school networking, to stimulate the development and transfer of good practice.
- Mediation to assure the necessary human and financial resources for the dissemination expected of schools once they join the Programme.

Schools are covered for reduced working hours and funding to be managed within the school for the co-ordination and implementation of the projects they design. The regional teams act as advisors and facilitating agents to obtain the resources teachers need, provided they are consistent with the Programme's aims.

3.2.4. *The flow of information*

Beyond these different procedures, there are several ways in which information flows. There is face-to-face networking among practitioners, within schools or from school to school, as a process of transferring their practice, one of the obligations they assume when they join the Programme. There are thematic and/or regional meetings for discussion of matters of common interest, as well as Internet discussion forums. Inter-institutional networking supports the development and dissemination of the practices involved, and meetings and seminars bring some of the practices to the attention of other teachers and schools and may motivate other partners to become involved. There are also conventional publications.

3.2.5. *Financial resources*

The whole activity is funded through the State budget assigned by the Ministry of Education and it is flexibly managed, according to the specificity of each practice and the needs identified in their annual plans. The funding is distributed through three types of activities: i) The co-ordination of the regional support teams, by the researcher and his/her institution through a financing formula that corresponds to half-time hours for a teacher at the top of the higher education teacher scale; ii) schools get the budget they request to accomplish the plans they have negotiated with the teams; iii) the production, publishing and distribution of disseminating documents and materials are covered by the Institute and funded through its own budget. Expenses related to the activities in i) and ii) have amounted to about EUR 300 000 each year, while the scale of outlays on iii) is not yet available.

3.2.6. *Teachers*

Teachers are at the heart of the processes of improvement, consolidation and dissemination of their practices; the Programme exists primarily to allow them to do this by creating the necessary technical, logistical and financial support. The Good Hope support network mainly functions as consultants on the innovations under the Programme. Professional development needs are identified by those involved with the technical support of the regional teams and is provided by school association in-service teacher training centres, which are also managed by basic and secondary education teachers. (These centres, as noted, may also belong as partners in the regional support teams.) The training initiatives they offer are funded by Programme of Educational Development (PRODEP) for Portugal (European Social Funding). Other professional development is provided by the practitioners acting as innovation multipliers, and is covered in schools' annual plans and hence funded through their budgets.

Besides reduced working hours, one of the benefits for teachers in participating in Good Hope is the possibility to go on working in the same school throughout the duration of Programme, no matter the school they are otherwise allocated to, following application for exemption to the national teacher allocation mechanisms.

3.2.7. *Evaluation and monitoring*

Teachers involved in the Programme are encouraged to evaluate their own practice. In addition, the Programme also is subject to external evaluation by non-Portuguese experts.[1] The evaluations of effectiveness cover such areas as:

- The knowledge produced on innovative solutions to problems, efficient resource use, and on learning quality improvement.
- The extent of the access to relevant up-to-date information on examples of good practice, according to the themes defined as the "Aims".

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- The resources and the various tangible outcomes produced on the experiences and studies done, that can be used by others;
- The knowledge produced on quality criteria and on the conditions that favour the emergence, sustainability and dissemination of good practice.
- The creation of operative networks as a strategy for educational development generating quality and innovation.
- The promotion of a culture of reflection in the different levels of the system.

The introduction of these two major innovations into the Portuguese educational system is very promising as an indication of new modes of thinking about education and through their promotion of strategies to improve teaching and organisational practices by giving greater ownership to practitioners. Both initiatives are still largely perceived by teachers, schools and the system, however, as experiments introduced by the central authorities. The culture of professionals and schools evolves only slowly and through complex processes. There is still a long way to go, building on what we learn about the successes and failures of these innovations, before they can be recognised as strategies for sustainable change.

Notes

1. This evaluation has been assigned to the French experts Françoise Cros and Francine Vaniscotte, both of whom were involved in the European Observatory represented at the September 2000 Lisbon seminar.

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PART II

Chapter 6

Public Management Reform and the Regulation of Education Systems – The Hungarian Case

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Abstract. *This chapter addresses governance and reform in Hungary, the site of the 2001 OECD/CERI conference on management in education. For more than a decade, the Hungarian education system has been facing the challenge of how to assure quality, effectiveness and equity while controlling complexity, risks and conflicts in a context of highly decentralised regulation. The chapter argues that closer links can usefully be drawn between the analysis and models of public management in general and of education in particular. Many of the new regulation mechanisms developed in Hungarian education are similar to those applied in public management reforms in other countries. Increased complexity requires more flexible and decentralised regulation regimes while more sophisticated instruments of regulation are needed so that the more autonomous local units contribute to system-wide goals.*

1. Key Characteristics of Educational Regulation in Hungary

Following a gradual development that started several decades ago and accelerated in the second half of the 1980s (see Annex to this chapter), by the beginning of the 1990s the Hungarian education system had become one of the world's most decentralised. (See OECD 1998: of the eight countries compared, only Finland had a similarly large proportion of decision-making residing at the school and local levels, and even then with a lower importance of the school level.) The key features of the regulation of the current system are described in Box 6.1 below (Balázs *et al.*, 1998; Setenyi, 2000).

Box 6.1. **Regulation in the Hungarian Education System**

Public educational administration is highly decentralised and responsibilities are shared between several actors. Horizontally, the responsibility at the national level is shared between the Ministry directly responsible for education and certain other ministries. Vertically, the responsibility is shared four ways between the central (national), the regional, the local and the institutional levels.

At the local and regional levels, the administration of education is integrated into the general system of public administration, with no separate organisational education administration.

At the local and the regional levels, public (and educational) administration is based on the system of self-government, under the control of politically autonomous, elected bodies. The central government cannot give direct instruction to the local governments, their behaviour can be regulated only indirectly.

The role of the regional level is quite weak, while the scope of responsibilities at the local level is very wide. The number of the local authorities (local governments) is high, with a small average size.

The current arrangements of governance are strongly determined by constitutional constraints. According to the 1990 *Law on Self-government*, municipal governments enjoying political autonomy are the owners of most public schools. This law can be amended in Parliament only through a two-thirds majority vote. The major challenge for state education policy in this

context is how to ensure that the broad public service goals like equity, quality and effectiveness are met. During the last decade, the education sector in Hungary has developed a number of new regulatory mechanisms that may help in meeting this challenge. Although there is no explicit discourse on management reform in education, and these new mechanisms are generally not seen as forming a coherent system, a careful analysis may reveal parallels between these and the umbrella developments of "public management reform" or "new public management".

In this chapter, the term "regulation" is used to designate a key function that characterises all public service sectors including education. It naturally is linked with others like "management", "governance" or "administration". Use of "regulation" here is to stress the "steering" dimension, and is close to the French word *pilotage*, which denotes in the French educational context the devolution of responsibilities and the maintenance of state control over basic educational processes (Michel, 1993).

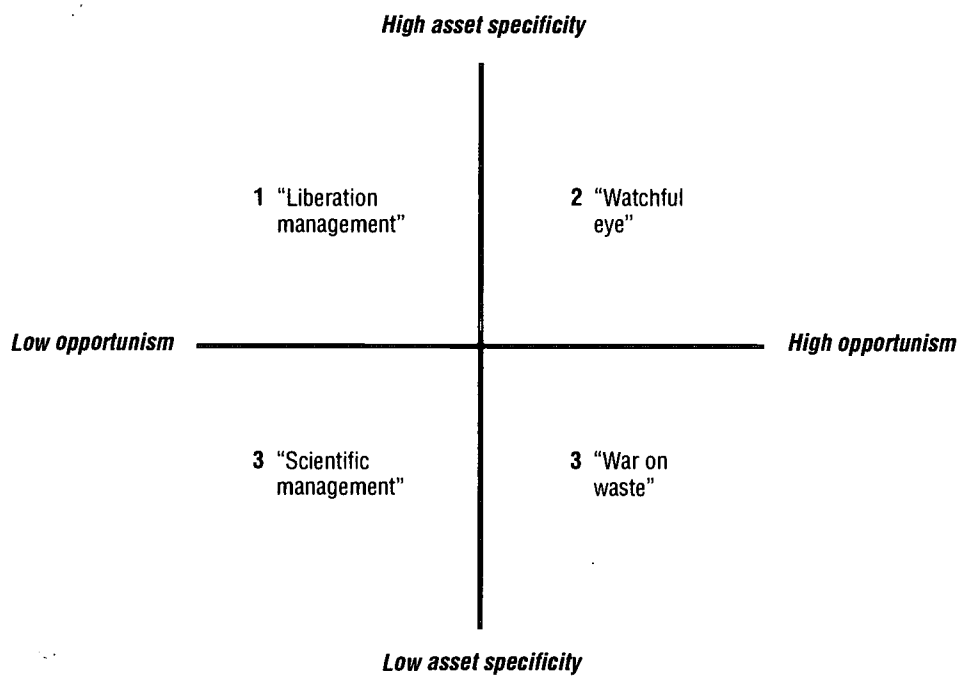
2. Public Management Reform and Educational Governance

In the analysis of public management reform produced by countries and the OECD, explicit reference to the education sector is not commonplace (see for example Hood, 1995; Hood and Scott, 2000; Paquet, 2001; OECD, 1995b; Trosa, 1995; Vignon, 2000; Wright, 1997) There are nevertheless some examples in which the education sector is the focus of analysis (for example Lee Hiu-hong, 2000; Sabel, 2001; Sabel and Liebman, 2001). Similarly, education sector reforms are rarely connected directly to broader public management reforms. However, as explicitly recognised in the OECD publication "New School Management Approaches" (OECD, 2001d), public management reforms have significant implications for the education sector, and many of the current educational changes may have significant public management implications.

One of the key themes for reflection on current public management reforms is the challenge raised by *increasing complexity and uncertainty for public management* (see for example Hodgson, 2000). Some see this factor as decisive in provoking the reforms. One of the main responses is *decentralisation* and the increasing *autonomy* of local executive units. Part of this process involves principles like contractualisation, agency formation and managerialism. It is assumed that turning formally regulated bureaucratic units into autonomous agencies and letting them be directed by contracted managers instead of career bureaucrats leads to an increased capacity to manage complexity and uncertainty. This logically leads to another major challenge: how to assure the *compliance* of the autonomous agencies and contracted managers with the line of national policy and with basic societal expectations.

Robinson (2000) develops further a reform typology based on earlier work by Paul Lights (see Figure 6.1). Based on the *principal-agent theory*, it provides a framework for understanding regulation changes in general, the education sector specifically, as well as the Hungarian case. For Robinson, public management reforms can be classified along two key dimensions (see Figure 6.1). The first relates to the question of "How specific are the tasks of the executing agency?". This question is closely linked with the centralisation/ decentralisation dimension, as a higher specificity makes centralised management more difficult. The second dimension relates to the question "Can opportunism by local executive units be avoided?". Decentralisation and local autonomy work when the level of opportunism is low so that the compliance of local units with broader policies can be assured.

Figure 6.1. **The Robinson model of public management reforms**



Source: Robinson (2000).

In his model (Figure 6.1), current public management reforms can be specified as Type 1 ("liberation management"). This presupposes high asset specificity – high complexity of the regulated field – and low opportunism – there is willingness by local units to follow central policy orientations. The model also suggests possible directions to address regulation problems: the "specificity" or complexity of the regulated area can be reduced (for example, by reducing functional differentiation), as can the "opportunism" of local units, for example by increasing professional commitment.

Robinson's model is manifestly applicable to education systems as well. Although he was originally concerned with *politicians* seeking to control the behaviour of *bureaucrats*, the analogy can easily be made with *education policy-makers and administrators*, on the one hand, and *schools and teachers*, on the other. Education systems can be characterised along two key dimensions. The first characterises the way society perceives the nature of education, the second concerns the willingness and capacity of schools and teachers to reflect basic social expectations towards education. The latter is in turn strongly dependent on the level of professionalism and commitment of teachers. The place an education system occupies in the space formed by these two dimensions determines how it can be regulated and the direction of possible reforms. The Robinson model adapted to the education sector is presented in Table 6.1.

Table 6.1. **Typology of Regulation Modes in Education**

		The level of commitment and professionalism of teachers	
		Teachers are characterised by high level professional and social commitment.	The professional and social commitment of teachers is low, the main motivation is to increase free time and income.
The social perception on the nature of education	Education is a highly individualised, complex professional activity with limited possibilities for standardisation.	**Regulation Type 1** *School autonomy, the stress of control on outputs and outcome.*	**Regulation Type 2** *Paternalistic, supportive supervision.*
	Education is a relatively simple professional activity that can be regulated by external, formal rules.	**Regulation Type 3** *Detailed curricular regulation, strict input control based on professionalism.*	**Regulation Type 4** *Meticulous continuous control.*

Source: Author.

With the growth of participation and the increase of internal differentiation, education systems have become extremely complex such that they can now be characterised by *high asset specificity*. It is not at all likely that the complexity of the system can be significantly reduced, and lifelong learning policies will almost certainly result in even greater complexity. The costs of assuring compliance in such systems are continually increasing. Theoretically the problem could be treated with a Type 2 Reform (in Robinson's terms, the "Watchful Eye") but increasing complexity makes this solution less and less practicable. Type 1 Reform "Liberation management" is regarded by most modern management specialists as the only conceivable option.

The solutions being identified in current public management reforms are particularly interesting for those facing the challenge of increasing complexity

in modern education systems; some specific features may be identified as follows:

- Procedural regulation ("Let's prescribe procedures for defining actions instead of prescribing actions").
- Consultation and participation ("Let people discuss things and let them try to elaborate their own solutions").
- Mediation and support for local conflict management ("Let's give external support for people who try to solve their problems among themselves").
- Client-centred approaches ("Look at the client – the user or the consumer – and see what (s)he wants").
- Communication and learning ("Let's help local players to adapt to new circumstances through facilitating communication and learning").
- Contractualisation ("Let us make contracts instead of giving one-sided assignments").
- Agencies led by managers ("Let's give the task to an agency instead of keeping it within the administration; let's hire a risk-taking manager interested in results instead of bureaucrats").
- Private/public partnership ("Let's work together with private companies and with individuals as entrepreneurs").
- Programmes and projects ("Let's concentrate on well-targeted projects instead of looking always at the entire service").
- Enhancing autonomy ("Let's give autonomy to the local units").
- Defining standards and evaluating results ("Let's define general standards and see whether they are met").
- Regulation through incentives ("Let's make local players interested in taking the initiative").
- Complex regulation sets ("Let's use several instruments reinforcing each other and acting in synergy").

3. The Hungarian Case – New Regulation Mechanisms

Coming to the specific Hungarian Case, our system is not only highly decentralised but also the level of decentralisation is fixed by broad case constitutional commitments that can only be reversed with a high degree of political and social consensus. The level of professionalism of the teaching body and the readiness of schools to exercise autonomy was in general lower when the trend to decentralisation started than in most other highly decentralised systems, partly as the result of several decades of strong central control and relatively weak civil society. The complexity of the education system is high, partly as the result of the developments outlined in Box 6.2.

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Box 6.2. **Growing uncertainty in the education system**

The growing heterogeneity of the student population leads to a higher proportion demanding particular treatment, making the planning of provision more difficult.

With the greater variety of programmes there are higher risks of individuals making wrong decisions and choices.

With the rapidly changing economy, it becomes more difficult to match educational outputs and economic needs; input-output mismatches become more frequent.

The enrichment of programmes and textbooks available makes their selection by schools more difficult.

This enrichment, particularly with new multimedia packages, makes the assurance of programme and textbook quality more complicated.

The acceleration of change means that conveying information from the centre to schools and teachers becomes more difficult: they often do not know the goals of central reforms.

The capacity of the national centre to manage this complexity is limited, as well as its capacity to assure the compliance of local players.

Since the early 1990s, many new regulatory arrangements have been developed and applied. This can be seen as a natural reaction to the challenges of decentralisation, complexity and compliance. The point to stress is that many of these new regulatory arrangements and instruments are consistent with public management reform trends although they were not actually generated by such reforms. The Hungarian case is an example of experiments with new forms of managing complexity and steering in a decentralised system. The regulatory arrangements and instruments have been developed as a response of the education sector to the tension between increasing complexity and decentralisation, on the one hand, and the desire of the state to keep the system within control and to meet the rising social expectations for improving equity, quality and effectiveness, on the other (see Table 6.2).

The complex regulation sets also deserve particular attention through two examples: one in the area of in-service teacher training (INSET) (see Box 6.3), the other in financing (see Figure 6.2).

To return to the Robinson typology, all the regulatory arrangements presented in Figure 6.2 may be classified under the *liberation management* umbrella, rather than the three other types of management and control. An

Table 6.2. New Regulatory Arrangements in the Hungarian Education System

New regulatory arrangements	Examples (date of introduction)
Procedural regulation ("Let's prescribe procedures for defining actions instead of prescribing actions")	• School-level strategy planning in a participatory framework (since 1993) • Compulsory local and regional planning in a participatory framework (since 1996) • The creation of programme accreditation bodies (since 1999)
Consultation, participation ("Let people discuss things and let them try to elaborate solutions")	• National, regional, local and school-level consultative bodies (legislation in 1985, 1993 and 1996) • Strong consultation rights of the teaching staff on the appointment of the principal (1986) • Territorial education planning (1996) • State support to national professional associations (since the early 1990s) • Series of open social debates (*e.g.* on national curricula during the 1990s)
Mediation and support for local conflict management ("Let's give support to people in solving their problems among themselves")	• Mediation by the educational ombudsman (since 1999)
Client-centred approaches ("Look at the client – the user or the consumer – and see what (s)he wants")	• The partnership approach of the Comenius 2000 QA programme (since 1999) • The educational ombudsman protecting parental rights (since 1999) • Publishing the results of schools (since the early 1990s) • Increasing electronic communication, public educational web-sites (since the second half of the 1990s) • National information system for helping the transfer from primary to secondary schools – "KIFIR" system (1999) • Marketing as a subject in educational management training (since 1998)
Communication and learning ("Let's help local players to adapt to new circumstances")	• State support for the organisation of professional conferences (since the late 1980s) • New INSET system (1996) • Research as a communication tool (since the late 1980s) • Educational media (no specific date)
Contractualisation ("Let's make contracts instead of giving one-sided assignments")	• The school level pedagogical programme formulated as a "contract" (since 1998) • The possibility for schools to go to court against their owner municipality (since 1993) • Project contracts (since the middle of the 1990s)
Agencies led by managers ("Let's give the task to an agency instead of keeping it within the administration; let's hire a risk-taking manager interested in results instead of relying on bureaucrats")	• New public companies for specific tasks led by managers selected through competition: – Central innovation fund – 1988 – European programmes – 1996 – Information services – 2001 – New INSET system – 1996 – Comenius 2000 QA programme office
Private/public partnership ("Let's work together with private companies and with individuals as entrepreneurs")	• School evaluation done by private consultants (since 1993) • State money given to schools and municipalities so that they can buy consultant services (after 1999) • Comenius 2000 QA programme – private consultants (since 1999) • Provision for private INSET supply (after 1997)
Programmes and projects ("Let's concentrate on well-targeted projects instead of looking at the whole of the service")	• Support from innovation funds (1987) • QA as a development programme (1999) • PHARE education development programmes (1996)

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Table 6.2. **New Regulatory Arrangements in the Hungarian Education System** (cont.)

New regulatory arrangements	Examples (date of introduction)
Enhancing autonomy ("Let's give autonomy to the local units")	• Schools as legal entities with their own funding documents (since 1993) • Extended rights of the teaching staff (1985, 1993)
Defining standards and evaluating results ("Let's define general standards and see whether they are met")	• Content standards in national curricula (1995) • Building, equipment and textbook standards (1998-2001) • National Centre for Evaluation and Examinations (1999) • Evaluation surveys based on social science methodologies (*e.g.* a kindergarten survey in 2001) • Regular national monitoring of student achievements (since 1986) • Accreditation of INSET programmes and course providers (1997)
Regulation through incentives ("Let's interest local players in taking the initiative")	• The new financing mechanism (1989, 1996) • Innovation funds (1987) • Local systems of application (1997)
Complex regulation sets ("Let's use several instruments reinforcing each other and creating synergies")	• The new financing mechanism (1989, 1996) • INSET (1996)

Source: Author.

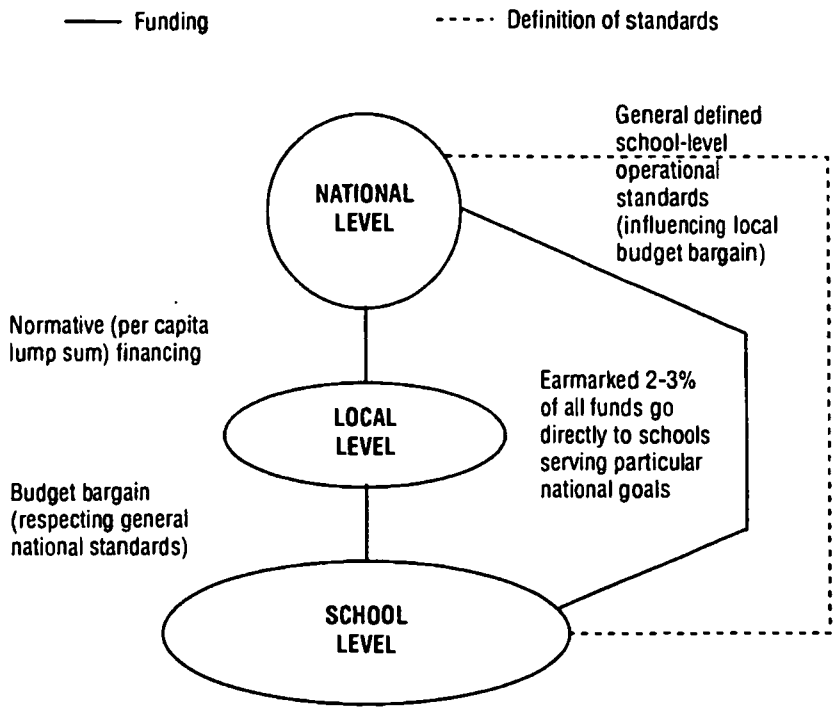
Box 6.3. **Regulating INSET in Hungary**

- Guaranteed financing from the state budget.
- Financial support for INSET transferred to schools from the state budget as a fixed amount per teacher.
- Open competition of programmes and course providers (including private providers).
- State accreditation of programmes and course providers.
- Regulation of school use of state financial support for INSET (*e.g.* school-level plans for enrolling teachers).
- Individual promotion at school level depending on INSET.
- A national centre for co-ordination, development and quality assurance.

apparent paradox in the fact that "liberation" aims at increasing control over the system is, I would argue, not really a paradox. If risks and conflicts are to be reduced and steering and compliance reinforced in a highly complex environment, well organised and structured "liberation" is probably the only feasible way for maintaining social control over public services like education.

Key aspects, as analysed above, are the levels of commitment and attitudes of teachers, on the one hand, and the dominant social perceptions of education, on the other (Table 6.1). If the professional and social commitments

Figure 6.2. **Mechanisms of financing school education in Hungary**



Source: Author.

of teachers are decreasing, for instance, there is greater chance for paternalistic and supportive supervision structures to re-emerge. If society tends to see teaching as a simple task that can easily be regulated by external rules instead of as a highly individualised, complex professional activity, more detailed and formal regulation may well increase. Theoretically, a scenario of regulation based on meticulous and small-minded continuous control cannot be ruled out (Regulation Type 4 in Table 6.1). However, due to the decentralised framework of governance fixed by the Hungarian constitution, the probability of this is very low leaving little alternative to Regulation Type 1, based on school autonomy, and output or outcome control. As a consequence, there is need to reinforce the professional and social commitment of Hungarian teachers and to emphasise that teaching is a highly individualised, complex professional activity.

4. Conclusion

Since the early 1990s, the Hungarian education system has been facing an increasing challenge of both how to assure quality, effectiveness and equity while controlling complexity, risks and conflicts in a context of highly decentralised regulation. Since re-centralisation is largely ruled out by both constitutional constraints and the limited management capacities of the central state apparatus, new regulation mechanisms have had to be developed. The analysis shows that many of the new regulation mechanisms

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developed in the education sector in Hungary are similar to those applied in the recent reforms of public management in other countries. This is probably due to the similarity of the challenges faced by modern public service systems. Increased complexity requires more flexible and decentralised regulation regimes while more sophisticated instruments of regulation are needed to assure the compliance of the more autonomous local units.

Annex

The main stages of integration and decentralisation after World War Two. (See Balázs *et al.*, 1998)

- In the 1950s with the introduction of the so-called council "soviet" system, the administration of education was integrated into the general system of public administration similar to the other countries of the Soviet bloc.
- At the end of the 1960s, the so-called "double subordination" of the local and regional units of educational administration was abolished. From that time on, the higher levels could no longer directly issue directives to the lower levels.
- At the end of the 1960s, a unified system of regional infrastructural planning was introduced, which incorporated educational planning.
- The so-called Council Act at the beginning of the 1970s empowered the councils with greater general autonomy, and also gave them wider responsibilities in the maintenance of schools.
- In the mid-1970s, the administration of the whole of secondary vocational training was decentralised from the national to the regional level; by the end of the decade the process went further and reached the municipal councils.
- In the early 1980s, the units within the councils responsible for educational administration were merged with units responsible for other fields (such as health care and social affairs).
- In the mid-1980s, with the 1985 Act on Public Education, educational inspection was separated from public administration and reorganised into a new support service, while the autonomy of schools was largely extended.
- In 1989, the earlier merger of the local and central budgets was reversed, state support of the local councils was changed to a normative system, and local governments had to take a role in raising their own revenues.

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- In 1990, the former local councils were replaced by the politically autonomous local self-governments, which became the owners of the previously state-owned schools.
- In 1992, teachers came under the Act on Public Employees and their minimum salaries determined by national salary grades.
- In 1993, the Act on Public Education authorised local governments with wide-ranging powers and annulled the tight central curricular regulations.

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PART II

Chapter 7

Deliverable Goals and Strategic Challenges – A View from England on Reconceptualising Public Education

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Abstract. *Based on Barber's address to the 2000 Rotterdam Schooling for Tomorrow conference, the chapter argues that public education systems could be swept away in the face of rising expectations, the new economy and globalisation unless there is significant, strategic change. In today's governance context, policy should aim to manage and transfer knowledge about what works effectively, intervene in cases of under-performance, create the capacity for change in the system and ensure that it is sufficiently flexible. The chapter elaborates a framework for addressing these issues, with reference both to international research and English educational policy. It presents four "deliverable goals": achieving universally high standards, narrowing the achievement gap, unlocking individualisation, and promoting education with character. Five "strategic challenges" are: re-conceptualising teaching, creating high autonomy/high performance schools, building capacity and managing knowledge, establishing new partnerships, and re-inventing the role of government.*

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1. The Challenge of Rising Public Expectations

The public education systems which became woven into the fabric of 20th century welfare states were the product of the two decisive forces of the 19th century: industrialisation and the nation state. They prepared populations to contribute to industrial society and shaped national identity. As the 21st century begins and we peer into the future through mists of complexity and uncertainty, our principal task is surely to justify the continued existence of public education systems. After all, both the industrial society and the nation state that prompted their existence are now in question. The new economy and globalisation, both the products of the extraordinary technological revolution in which we are engulfed, define the new era.

Without a clear rationale, public education systems could be swept away by these powerful new forces. Just as religion became a matter of private choice and individual conscience after the Enlightenment, education could head in the same direction as the economies of the developed world continue to grow through this prolonged boom. More and more parents have ever greater disposable income: might they not as a lifestyle choice decide they want to spend that income on their most treasured possessions, their children, buying an education tailored to their view of the world? And if they did, how easy then would it be to persuade them to continue to pay taxes to provide, among other things, for the education of everyone else's children?

The case for public education, therefore, cannot be assumed as it was in the 20th century. It needs to be restated for the new century that will result in a radically new conception of public education. In part, it is about an intensification of an old argument: a good education system is increasingly important not only to the success of a modern economy but also to the creation of a socially just society. In the 20th century, most educators believed this to be true but few, if any, education systems delivered the universal high standards it implied. The pace of social and technological change has become so much more rapid that any citizen without a good education who is fortunate enough to find work today cannot have confidence that they will still be in work tomorrow. In the emerging global market, every country will seek to match standards elsewhere as a means of attracting business as well as enabling its citizens to succeed in life. The distribution of good education in a population also crucially affects the distribution of income and the degree of social cohesion.

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A central question for anyone seeking to prioritise education reform and correct the failings of a 20th century school system is where to look for evidence on how to proceed. There is plenty of evidence available of what worked in the past but not of what will work in the future. The explosion of knowledge about the brain and the nature of learning, combined with the growing power of technology, create the potential to transform even the most fundamental unit of education – the interaction of the teacher and the learner. Moreover, huge social changes, such as growing diversity and population mobility, present educators with new and constantly changing circumstances. As a result, the characteristics which defined the successful education systems of, say, 1975, are unlikely to be those which will define success in the future.

The era of the large, slow moving, steady, respected, bureaucratic public services, however good by earlier standards, is over. In the new era, public services will need to be capable of rapid change, involved in partnerships with the business sector, publicly accountable for the outcomes they deliver, open to diversity, seeking out world class benchmarks and constantly learning. Indeed, they will share the characteristics of the most successful business organisations that mobilise all their available resources, human and otherwise, around the achievement of their goals and which are prepared to take risks in an increasingly complex world. In addition, though, they will have to convince an often sceptical and always impatient public that they are delivering high and rising standards.

The challenge of reforming public education systems is therefore acute. Those responsible are in no position to deal in certainties. What they can do is manage and transfer knowledge about what works effectively, intervene in cases of under-performance, create the capacity for change in the system and ensure that it is flexible and adaptable enough to learn constantly and implement effectively. We need to identify the "deliverable goals" and "strategic challenges" facing 21st century education systems, and this is the purpose of this chapter.

2. Four Deliverable Goals

2.1. *Deliverable Goal 1: achieving universally high standards*

In the past, the rhetoric of "success for all" was often used but the reality was very different. Some countries did better than others but all tolerated a substantial degree of failure or under-performance. The challenge for the 21st century is to make success for all a reality. This demands both that educators believe in the possibility of high standards for all students and that policies are designed to deliver this outcome across entire education systems. In short, the new century imposes a much more ambitious goal on education

systems than ever before. This explains in part the growing pressure on teachers and others who work in school systems.

As the standards drive intensifies, the logic of 20th century education policy will be turned on its head. Then, policy-makers concentrated on controlling or standardising inputs – numbers of school places, qualifications of teachers, the content of the curriculum, class sizes, hours of teaching each week, days in the year and provision of books and materials. In other words, the constants in policy were the inputs. Given the diversity of our societies and the varying backgrounds of students, the unsurprising consequence was that the standards achieved, the output, became the variable. The new challenge – high standards for all – means the output must become the constant in which case, necessarily, the inputs become variables.

Some students need more learning time to achieve high standards than others; that time should be provided. Some need intensive individual tuition; that should be provided. As they get older, some students learn better in workplaces or communities than they do in schools; they should have those options. Different approaches to teaching and learning suit different students; teachers should therefore tailor their pedagogy. To achieve common outputs, the inputs need to be varied in whatever way it takes.

In other words, the new challenge of high standards for all questions many of the assumptions that underpinned educational thinking in the 20th century. "If standards are a constant, then everything else must be a variable" will become our slogan. The next two deliverable goals follow directly from it.

2.2. Deliverable Goal 2: narrowing the achievement gap

The knowledge base about school effectiveness and school improvement and the policies that will promote them has expanded significantly over the past two decades. In England, a framework for continuous improvement is being put in place that puts this body of knowledge at the heart of policy. The elements of this framework should all be understood as contributing to a "high challenge, high support" system.

The evidence that this approach works is accumulating. It encourages the improvement of all schools and, as a result, the key performance indicators in England are moving in the right direction. To take one example, every case of serious under-performance is now identified and tackled. Since the framework was put in place, over 600 formerly failing schools have been restored to health and have continued to improve. Evidence from other systems with a similar approach – Texas or Kentucky in the United States for example – is also positive.

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Table 7.1. Framework for "high challenge, high support"

Ambitious standards	High standards set out in the National Curriculum National Tests at age 7, 11, 14, 16 Detailed teaching programmes based on best practice Optional World Class Tests based on the best 10 per cent in the 1995 TIMSS
Devolved responsibility	School as unit of accountability Devolution of resources and employment powers to schools Pupil-led formula funding Open enrolment
Good data/clear targets	Individual pupil level data collected nationally Analysis of performance in national tests Benchmark data annually for every school Comparisons to all other schools with similar intake Statutory target-setting at district and school level
Access to best practice and quality professional development	Universal professional development in national priorities (literacy, numeracy, ICT) Leadership development as an entitlement Standards Site (*www.standards.dfee.gov.uk*) Beacon Schools LEA (district) responsibility Devolved funding for professional development at school level Reform of education research
Accountability	National inspection system for schools and LEAs (districts) Every school inspected every 4-6 years All inspection reports published Publication annually of school/district level performance data and targets
Intervention in inverse proportion to success (rewards, assistance, consequences)	**For successful schools** Beacon status Celebration events Recognition School achievement awards scheme Greater autonomy **For all schools** Post-inspection action plan School improvement grant to assist implementation of action plan Monitoring of performance by LEA (district) **For underperforming schools** More prescriptive action plan Possible withdrawal of devolved budget and responsibility National and LEA monitoring of performance Additional funding to assist turnround (but only for practical improvement measures) **For failing schools** As for underperforming schools plus Early consideration of closure District plan for school with target date for completing turnround (maximum 2 years) National monitoring three times a year Possible fresh start or city academy **For failing LEAs (districts)** Intervention from central government Possible contracting out of functions to the private sector

Source: Author.

While the "high challenge, high support" model is necessary it is not sufficient. It will not raise standards fast enough to satisfy a sceptical public. Nor will it on its own do enough to narrow the achievement gap between schools in disadvantaged areas and those elsewhere. Some countries have done reasonably well in the past in minimising variations between areas but in others, including England, this challenge is acute, given the historic levels of social and economic inequality. Moreover, even in countries with fewer social divisions than England, the scale of recent immigration means that this issue is a growing challenge right across the OECD. All systems therefore need to give constant priority to narrowing achievement gaps between different areas or groups of students.

It is for this reason that, in addition to putting the framework for continuous improvement in place, the government in England has implemented the National Literacy and Numeracy Strategies. These have fundamentally changed teaching and learning in all 20 000 primary schools and dramatically improved the performance of primary students. Over 125 000 additional eleven-year-olds achieved high standards in literacy and numeracy in 2000 compared with four years ago, as the following graphs illustrate.

The evidence shows not just a general rise but also a narrowing of the achievement gap between advantaged and disadvantaged areas. The same holds for mathematics. Remarkably, the local education authority with the lowest levels of performance in the country now exceeds the average performance of the system as a whole four years ago. These strategies are laying the foundations for social inclusion in the next generation.

Moreover, the strategies are also narrowing the achievement gap in English between boys and girls, and areas with high concentrations of students from ethnic minorities are making faster progress in both maths and English than the population as a whole. These outcomes appear to be the consequence of consistent high expectations of all children and schools and of sustained investment in high quality professional development for all teachers. It is also the outcome of implementing a strategy which is *universal*, and therefore includes every school, but also *targeted*, and therefore provides extra support to those schools which face the greatest challenges. This is a radical shift from the largely disappointing attempts to reduce inequality in the past through well-meaning programmes for particular groups which, unintentionally perhaps, ended up separating them from the mainstream and lowering expectations.

We are now embarking in England on the secondary level strategies that will build on these successes at primary level. A new programme is currently being piloted in 204 secondary schools aimed at raising standards of

performance of 11- to 14-year-olds in English, mathematics and science. A targeted programme, *Excellence in Cities*, is also providing additional support to secondary schools in the most challenging areas. It is too early to be sure that these developments will narrow the achievement gap at secondary level but the early signs allow cautious optimism.

Only by sustaining the primary reforms for several more years and implementing the secondary reforms will we be able to capitalise on this early progress and make an irreversible difference. Other countries with different starting points and social histories will adopt different strategies, but narrowing the achievement gap will be a challenge for everyone in the decade ahead.

2.3. *Deliverable Goal 3: unlocking individualisation*

Making standards the constant and varying the inputs would ultimately be to tailor provision precisely to meet the needs and aspirations of each individual student. This may sound highly ambitious but, unless it is achieved, universally high standards will never become a reality. And, as other sectors of the economy have shown, the application of modern technology enables a degree of individualisation that was previously unachievable. The ICT company *Dell* does not sell you a computer off the shelf but builds one precisely to your specification. So it is with this kind of thinking that education systems should become sensitive and responsive enough to remove the barriers to learning both inside and outside school which prevent some young people from achieving high standards.

Examples from England illustrate what can be done. In around 1 000 secondary schools in large urban areas, learning mentors are being appointed to provide targeted individual support to those students whose complicated home circumstances stand in the way of their academic progress. As a direct consequence, behaviour, attendance and achievement are improving, not just for those individuals but for other students in their classes, too. Similarly, for students whose emotional and behavioural difficulties prevent them from learning well in the school environment, individualised full-time programmes are being designed. One experiment established as part of this provision is *Notschool.net*, an online virtual learning community of around 100 teenage students who have been placed out of school for a variety of reasons. The students are supported both electronically and by periodic one-to-one, face-to-face tutorials with teacher-facilitators. The BBC and the National Science Museum are partners in the project. It is too early to say what the outcomes of the experiment will be but a similar project organised by the University of the First Age in Birmingham has already achieved promising results. Interestingly, the unit costs of providing this kind of education are not significantly higher than for traditional education; they

are certainly a great deal lower than the social costs of not providing education at all for students in these circumstances.

Individualisation is also the key to meeting students' diverse aspirations that go beyond their learning in core subjects. Whether it be playing jazz piano, dominating midfield on a soccer pitch or painting a vase of sunflowers, education systems need to offer the opportunity for individual students to excel. As well as being valuable activities in their own right, through them young people can develop the confidence, self-efficacy and engagement for success across the entire curriculum. New provision is being made available in large English cities for gifted and talented young people and everywhere out-of-school learning opportunities are flourishing.

One challenge for the next phase of reform is to bring coherence to this wide range of developments. Each school will set individual, challenging, progress targets each term for each student, involving the students and their parents in the decisions. In the best primary and secondary schools, this is already established practice; through the dissemination of best practice and the professional development programmes the aim is for this to become universal. Then, in addition to the national and school curriculum, for the first time each student will have an individual curriculum, designed to make the most of the different learning opportunities available to them at school, out of school and at home. Instead of the 20th century approach of fitting individuals to a system, the system will be designed around the needs and aspirations of individuals.

2.4. Deliverable Goal 4: promoting education with character

The above argument is about achieving high academic standards for all students and this remains a top priority. But, the foundations of success for both individuals and communities involve a wider set of attributes, over and above academic achievement. The term "social competence" may be used in the Netherlands and "habits of the mind and habits of the heart" in the United States; Gandhi referred to "education with character". All are referring to a similar set of characteristics, calling for a broadening of the definition of standards over the next decade. One way of approaching this is summarised in the following Figure 7.1, based on work of Michael Bernard, the California-Based Australian psychologist.

What he describes as the foundations are often left to chance. Most schools concentrate on teaching the "academics" and assume students will pick up the necessary habits of mind as incidental benefits. The result, not surprisingly, is that some do and some don't. Yet, these foundations can be taught systematically and effectively, not separately from the academic curriculum but through it. When they are taught, academic standards rise.

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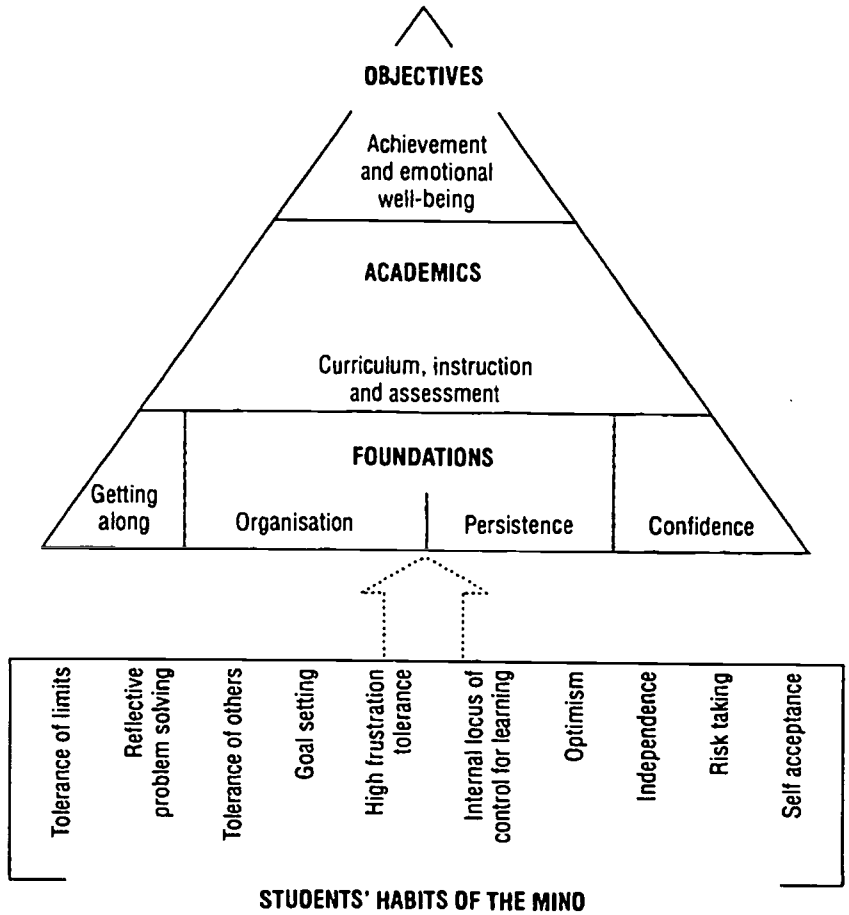
Figure 7.1. **A framework of standards**



Source: Author.

In England, this is only now receiving policy attention. Through the recent review, the teaching of thinking has been included in the National Curriculum. Citizenship – not just knowledge but also active involvement in the school and the community – will become a compulsory element of the curriculum from 2002. Through professional development programmes for secondary schools in the next three years, teachers will learn strategies both to improve the motivation of students and to teach higher-order thinking.

Every country will need to give greater attention to how we measure the performance of pupils, schools and the system as a whole in this area of social competence. Potentially, the independent Office for Standards in Education, which ensures all schools in England are inspected over a 4-6 year cycle, can provide a model for others. The framework for school inspection, for example, already requires inspectors to examine how schools develop the social, moral, spiritual and cultural attributes of their students. This provides important system-level information on these issues. There is also a growing field of research into student attitudes to and involvement in school, which is having

a significant impact at both school and system level in England, in Europe and the United States. These developments, alongside major international projects such as PISA, will provide us with the basis to develop the sophisticated measurement systems and performance indicators for "education with character" that we will need in the decade ahead.

3. Five Strategic Challenges

3.1. Strategic Challenge 1: reconceptualising teaching

It follows that if the goals of education systems change as radically as I suggest, then the education workforce – especially the teaching profession – will need to change radically, too. The necessary changes will encompass everything from attitudes to pedagogy. The shift from holding inputs to holding standards constantly requires a wholly new mindset for teachers. It requires, first of all, that they really believe that all students can achieve high standards. This is a matter of faith as much as hard evidence but no less important for that. Indeed, because high expectations are crucial to delivering high standards, this act of faith can become a self-fulfilling prophecy.

No-one should underestimate the difficulty of achieving this shift, day to day, classroom to classroom, across a country. When a student fails, for example, it means teachers asking not "what's wrong with him/her?" but "what do I need to do differently to ensure he/she succeeds next time?" In short, it means teachers who are prepared to stand up and be held to account for the results their students achieve. This in turn implies teachers who are constantly searching out best practice and refining and developing what they do. It means teachers who work in professional learning teams, not just within their schools but also outside. It means teachers who have the time and inclination to examine systematically in teams the students' work which emerged from a course of teaching, discuss the standards achieved and consider the pedagogical implications. It means teachers who accept the need for their teaching to be monitored and welcome opportunities to see best practice modelled by their peers.

Accepting accountability and the need for continuous professional development are only the first steps. A more dramatic revolution in teaching is needed. The technological revolution that has transformed so many sectors of the economy will shortly reach critical mass in education systems. Steady investment in hardware in many countries will increasingly be matched by investment in connectivity, system maintenance and teachers' skills in the use of Information and Communications Technology. Business investment in educational software of real quality is also rapidly growing. Furthermore, in the last two decades, there has been huge growth in our understanding of the human brain and how people learn. This combination of new technology and

new knowledge is the key to individualisation and the achievement of high standards for all.

As the revolution occurs, new combinations for organising teachers, other paraprofessional staff, experts beyond the school boundaries, and technology working together will enable new and powerful pedagogies to emerge. Already in some English specialist schools and Education Action Zones, teachers in one school are able to teach pupils in others through broadband and whiteboard technology. Students are able to pursue investigations into, for example, medical ethics by contacting academic experts in the field directly by e-mail. Interactive video-conferencing enables students to work collaboratively with their peers in other countries. Computer programmes such as RM *Successmaker* provide individual tuition, rapid feedback and positive reinforcement for pupils working alone. Specialist language teaching, for instance, becomes economic. Tests and examinations, increasingly computer-based, can become much more imaginative and provided just-in-time, rather than only at set times of the year.

If teachers remain wedded to old ways, the revolution will be very threatening. But if they embrace and shape it, it will become an enormous opportunity – to enhance their pedagogy, to build new teams, to innovate, to find more time for better quality professional development, and above all to enable their students to achieve higher standards. The technological revolution is the key to the individualisation. The choice facing teachers, as for the education system as a whole, is whether to ride the wave of change or sink beneath it.

3.2. *Strategic Challenge 2: creating high autonomy/high performance schools*

The pace of change is constantly quickening. It took almost 40 years before 50 million Americans listened to the radio. It took just four years before 100 million people worldwide were using the Internet. A major strategic challenge for every government is how to create an education system that is not only responsive to rapid change but also able to anticipate it. In England, we are seeking to do so by devolving more and more responsibility, including the employment of staff, and funding to the front line – schools. This mirrors developments in the business sector that has also largely devolved responsibility to front-line units.

In accordance with the policy principle of intervention in inverse proportion to success, we expect to delegate still further responsibility to schools as the system improves. We have set the goal of delegating 90 per cent of funding to schools compared with the current 85 per cent. The autonomy this offers to schools is not unconditional. It depends on schools

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demonstrating their performance through the accountability systems. Where there is under-performance, the local education authority, or in the last resort the national government, intervenes on behalf of the pupils. As the school system improves, the need to do so should be steadily reduced.

Meanwhile, schools that make exceptional progress or achieve sustained excellence will be rewarded both with salary bonuses for the staff and with the opportunity to become beacon schools, which have a responsibility to contribute to disseminating best practice. This process of delegating responsibility to the front line will almost certainly become more widespread across the OECD in the next decade because centralised bureaucracies will not be capable of changing fast enough. There will be a variety of models for doing so and in some cases a community or school district rather than an individual school may be seen as the front-line unit of delivery.

It remains to be seen how this process will affect the nature of relationships within the education service. The old-fashioned bureaucratic systems had a tendency to create a dependency culture: when a problem arose, those in the school system asked themselves what the government would do about it. Once 90 per cent of all funding, as well as much of the responsibility, lies with schools, this becomes inappropriate. It ceases to be the responsibility of government to regulate, for example, class sizes at secondary level but is the decision of the school. Only now are we seeing the signs of a shift in the relationships between school principals and government, as principals are beginning to see that the response to a problem is not "what will government do about it?" but "what can we together do to solve it?" The aim should be the creation of a culture in which everyone, including the minister, accepts both their responsibility for student outcomes and their part in solving the problems that inevitably arise in any fast-changing service.

3.3. *Strategic Challenge 3: building capacity and managing knowledge*

There is a paradox about the concept of high autonomy/high performance schools: they can only achieve high performance through collaborating with other schools and through voraciously consuming the knowledge generated by the educational infrastructure, such as university research departments. All schools, however autonomous, depend on joining self-confident partnerships. A parallel to this paradox is found repeatedly in the business world today.

Research on school effectiveness and improvement has shown what can be done within a school to improve student outcomes. This is important but not enough. As David Hargreaves argues in an unpublished paper:

> Schools, like businesses must find new ways in which to manage and exploit their intellectual assets, especially the teachers. Since teachers

> have a weak knowledge base on how to develop the new knowledge and skills required by pupils, they will have to learn how to create this professional working knowledge and then transfer it rapidly and effectively through the teaching force... A model of school improvement thus requires concepts of knowledge creation, innovation and transfer as a means of generating new forms of high leverage.

There are two consequences of this argument. First, within any school, high levels of trust and a collaborative professional culture are essential. Second, schools need access to knowledge about best practice created elsewhere and incentives to share their knowledge with the rest of the system. This is the argument for thinking radically and imaginatively about the intermediate tier in an education service between individual schools and the central authorities. The need for attention to this level is the rationale behind England's reform of the role of local education authorities. They now have clear responsibility for the planning of school places, monitoring performance of all schools, intervening where a school is under-performing, and encouraging the dissemination and adoption of best practice. There is growing innovation among them on how to carry out their role. Some are working in partnership with business to improve the quality of their services; many are facilitating partnerships of schools to enable them to work together to share the problems they face.

In addition many schools, encouraged by central government, are building networks and partnerships of their own. Secondary schools in England's largest urban areas, for example, are collaborating to implement the Excellence in Cities programme. Over a thousand schools are in Education Action Zones. The beacon schools are rapidly creating best practice networks. The National College for School Leadership is doing the same. New research networks involving schools and universities are developing.

Government's role has been to design and trial the various models of collaboration and to provide incentives to schools to participate. The quasi-market put in place in the late 1980s and 1990s has been radically reformed to ensure that collaboration, knowledge-sharing and the contribution of individual schools to solving the problems of the system as a whole are all valued and recognised. Government has also invested extensively in professional development for teachers to ensure that best practice is not only disseminated but also adopted.

In these ways, the early steps have been taken towards the knowledge creation and transfer systems as proposed by Hargreaves above. There are many other examples worldwide. One of the most successful is the El Paso Collaborative for Academic Excellence in Texas, which has brought together a national foundation, a local university and three school districts with

dramatic impact on student outcomes. The goal is to create what Fullan (1993) describes as "capacity" – the ability to learn and bring about successful change – at every level in the system. The old hierarchical, bureaucratic models of the past will not be able to do this in the future, nor will any single alternative model. Building capacity involves providing a variety of sources of knowledge and expertise from which teachers and schools can select the most appropriate to solving their particular problems.

3.4. Strategic Challenge 4: establishing new partnerships

As described in the previous section, building capacity in school systems requires new partnerships among schools, local authorities and universities. The next decade will also demand new partnerships that go far beyond the school system and link education both to other public services and to the community and business sectors.

For many individuals and families, especially in disadvantaged areas, education is one of a number of public services on which their lives depend. If they do not collaborate at the local level or, still worse, if they operate contradictory policies, far from solving people's problems they may actually exacerbate them. Reducing social exclusion requires problem-solving collaboration between various aspects of the public service. A number of recent initiatives are designed to achieve this. In the English county of Hertfordshire, the local authority has brought together its social and education services to address the problems of children and their families. Some Education Action Zones, such as that at Wythenshawe in Manchester, involve health, social and police services alongside education in tackling their local problems. New creative partnerships in large cities bring education and cultural organisations together to improve access to theatre, music and the arts in disadvantaged areas.

Schools are being given both the responsibility and the means to address some of the wider problems of their students. For example, instead of teachers being distracted by social problems from their core task of good teaching, full-time professional learning mentors are assisting them. In 19 Education Action Zones, over 800 undergraduate students from local universities are working with disaffected 14- and 15-year-olds to raise their expectations and attainment. In addition to their intrinsic merit, such initiatives have the important benefit of fostering public support for high quality public education by giving a far wider range of people a stake in the system.

The same argument applies to the growing involvement of business in education. The business sector has always been one of the "consumers" of the "products" of the education system. In the highly competitive global market, access to highly educated staff has become crucial. Potentially, therefore,

businesses are powerful advocates for public education but only if it achieves high standards and is reasonably cost effective. Especially in the United States, but also elsewhere – Hong Kong for example – business leaders are often at the forefront of reform efforts. Where they are, they can help to give reform a radical edge and they contribute to greater public confidence. Most importantly, they can help to sustain a reform effort over the long term, regardless of the vagaries of the political process. A fine example of this is the 15 years of commitment of the Pritchard Committee to radical reform in Kentucky.

Business will also increasingly become a partner as an investor and provider of services in education. It will not be possible for governments to provide all the necessary services for successful education systems in the immediate term. For example, the explosion of the Internet and other new technologies demands investment in new software products; businesses, not governments, will largely make that investment. The rate at which computers become obsolete presents a funding challenge which governments on their own will not be able to solve. Maintaining and developing a stock of school buildings fit for the new century demands huge capital expenditures. In each of these fields, the question is not be whether there will be business sector involvement but on what terms. The Private Finance Initiative and National Grid for Learning in the UK. are different means of building the necessary public-private partnerships.

Increasingly, too, business expertise will be applied in areas more traditionally reserved for public sector provision. This will happen not just because of the investment it will bring but because of the capacity for effective delivery it will enable. Hence, government has encouraged business to take on new roles in the provision of advice and services to schools, especially in those places where traditional local authority services have been demonstrably inadequate. Each of these developments is an illustration that the old public policy question "who provides?" is being replaced by "how is the public interest to be secured?". There will be those working within public education systems who feel threatened or even offended, but this is to look backwards at a time of rapid change. The shift is better perceived as an opportunity to improve provision and strengthen public support for public education.

3.5. *Strategic Challenge 5: reinventing the role of government*

In an education system of the future, the role of government will need to change radically. This final section briefly maps out the key tasks for a government in relation to public education.

3.5.1. *Investment*

If governments will the ends, then they must also will the means. Successful public education systems in the 21st century will be expensive. Business will invest and individuals will be increasingly willing to contribute but these extra sources of funding will not substitute for investment by government. On the contrary, if all students from whatever background are to achieve high standards, then governments will have to invest more in the future, not less. Within overall rises in expenditure, to ensure a universal service they will need to target additional resources to the areas of greatest need in order to promote equity. They will need to link the greater investment to the delivery of improved outcomes so that it buys change rather than reinforcing the *status quo*. They will need to invest steadily rather than haphazardly, so that schools can think ambitiously and confidently about the future.

For some governments, this may have been normal practice for some time. In the UK, the switch to three-year instead of one-year expenditure planning is relatively recent and the linking of investment across all services to Public Service Agreements between spending departments and the Treasury is still in its infancy. The promise of real growth in education expenditure of over 5 per cent per year for each of the next three years has given the education service new confidence; it has brought a new sense of priority within each service and a greater focus on effective delivery.

3.5.2. *Vision and strategy*

Given the increasing importance of education to the success of societies, governments need to ensure that education is a high priority – politically, socially and economically. They need a compelling vision of the role education can play in fulfilling a society's ambitions and meeting the aspirations of citizens. They need to anticipate trends and open up discussion of the future so that it becomes a central aspect of public discourse. They should celebrate success and provide a commentary on progress, and should take on in public argument those who defend the status quo or seek a return to the past.

Turning the vision into practice involves more than investment: it also requires strategy, the third key role for governments. The history of education reform is littered with promising initiatives that were abandoned or neglected before they had had the time to have a lasting impact on student performance. Given the pressure on education systems to change, the impatience of citizens for improved performance from public services, and the limits of their tolerance to pay higher taxes, inadequate implementation is simply no longer acceptable. Governments need a clear sense of priorities and a profound understanding of how to implement successful change. This in turn demands that governments learn the lessons of successful change from other

organisations and countries. Just as schools need to learn from best practice wherever it is to be found, so do governments.

Excellent examples in England are found in the National Literacy and Numeracy Strategies for primary schools. They have been described by Michael Fullan, their Canadian evaluator, as: "among the most ambitious large scale reform strategies in the world." The government has already invested in them for three years [time of writing, 2000] and plans to continue to do so for at least a further three. When they were launched they looked excessively ambitious and impossibly demanding to those in schools whereas now they are well accepted and have genuinely changed classroom practice. Independent surveys show that primary teachers now get pleasure from teaching English and mathematics, not least because for the first time they have been given the opportunity to learn systematically pedagogies that actually deliver results. Key to this progress has been what Fullan describes as their "explicit and comprehensive attention" to what is required for successful reform.

3.5.3. *Learning*

A fundamental challenge for successful governments in an era of rapid change is to know how well their policies are working at any given moment. Governments need to be open to new ideas and capable of learning. Just as knowledge creation and transfer are vital for schools, so they are for governments. These processes do not occur by chance: governments need constantly to build the means of learning rapidly and accurately about both what is good and what is new.

In England, there have been a number of radical experiments to improve our capacity in this respect. These range from the modest – ringing up school principals who write in complaining about policies in order to understand their complaint better – to the ambitious such as arranging five conferences in different locations in five days with several hundred principals at each for them to comment on current strategy and debate future strategy. Both examples imply a shift from depending for feedback on intermediaries or teacher representatives to opening up of direct communication with the front line. Given the rapid pace of change, this has become essential and new technology will make it a great deal more effective. The leaders of Hong Kong's education system are in direct e-mail communication with every teacher and in England the new National College for School Leadership supports an online network of principals that ultimately will include all 24 000 of them. This will provide them with a means of learning rapidly from each other and give government a means of testing ideas and seeking feedback. Rapid, direct feedback enables constant refinement of policy and should significantly

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enhance the success rate of education reform efforts, which historically has been very low.

The means of generating new policy thinking has also altered. The committees or forums of representatives of the education establishment that used to determine policy thinking have largely been replaced by a range of different sources, including research organisations and think tanks. The ideal would be that any team in government responsible for policy development seeks, as part of the policy design process, international best practice in the particular field. International benchmarking not just of student outcomes but also policy approaches should become routine practice. These approaches will only work if civil servants are in touch with reality, highly knowledgeable about policy development, implementation and delivery, and work daily with practitioners in the field. They need to be experts in change, rather than administrators of stasis. This is why the process of modernising government must go hand-in-hand with the modernisation of public services themselves.

4. Conclusion

In this brief chapter it has only been possible to open up the challenges facing public education in the next decade. They are immense at every level, from the teacher-pupil interaction to the government. There is a great deal of research and experience on which to draw but even cumulatively it does not provide answers to all the questions. We will also need to use the ingenuity and expertise of people in education systems and elsewhere who are committed to the future success of public education. In short, we need "faith, the evidence of things not seen".

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART II

Chapter 8

Schools and Governance in the Netherlands – Recent Change and Forward-looking Policy Thinking

by
The Netherlands Ministry of Education, Culture and Science

Abstract. *The Netherlands hosted the international Rotterdam* Schooling for Tomorrow *Conference in November 2000. It has sought over recent years to introduce more long-term strategic policy thinking into education, to make it more demand-driven, and to bring the different key actors into new forms of networked co-operation. The chapter is based on extracts from two recent major think-pieces produced by the Ministry of Education about the future of education. The first, "Strong Institutions, Accountable Government" appeared in 1999 as a Green Paper that since has become official policy. The second, "Learning without Constraint" came out in 2001 as a "foresight study" on education and research for the year 2010. The chapters refer specifically to primary and secondary schools, with a particular focus on sections of these reports devoted to management and governance.*

The Netherlands enjoys a long tradition of dialogue in education and decision-making. There has been a sustained drive recently to introduce more long-term strategic policy thinking into education, to make it more demand-driven, and to bring the different key actors into new forms of networked co-operation. As well as, or perhaps as a reflection of this, the Netherlands hosted the international Rotterdam Schooling for Tomorrow Conference in November 2000. For these reasons, the Netherlands case is an essential element of this section of the report.

The chapter is based on extracts from two recent major think-pieces produced by the Ministry of Education about the future of education. The first, "Strong Institutions, Accountable Government" appeared in 1999 as a form of Green Paper that since has become official policy. The second, "Learning without Constraint" came out in 2001 as a "Foresight Study" on education and research for the year 2010 (Netherlands, 1999 and 2001). The extracts taken for this chapter refer specifically to primary and secondary schools. The discussion documents were not limited only to schooling, however, and covered education and learning more widely. Given the scope of this OECD report, those passages most revealing of management and governance issues have been selected.

1. "Strong Institutions, Accountable Government"

Education is vital to society. But, the education system is permanently changing. Some changes are generated from within, and others are imposed by the world outside. After all, the education system does not exist in isolation. It has to respond to many socio-economic developments, such as globalisation, immigration, the advance of individualism, developments in information, communication and other technologies, the increasing influence of market values, and the growing proportion of women at work. New developments may offer solutions to problems, but much more often they present us with new issues and challenges. How should we respond?

We as a government intend to respond to the developments that we expect to face the education system in the medium to long-term future. We set out our views on the threats and opportunities ahead and describe the direction we aim to take and have to some extent already taken. We have three core objectives:

- *high-quality education for all:* focusing on individual differences, widening access, and giving all recipients the best possible opportunities;

- *public enterprise*: strong, accountable institutions capable of identifying socio-economic developments and taking a lead in responding to them;
- *strategic networking*: ensuring that educational institutions are an integral part of the communities they serve, "making education central to society and society central to education".

More than in the past, we are calling on the stakeholders – the institutions, teachers, parents, recipients, and employers – to act with greater autonomy. But there is a paradox to this approach: on the one hand, we need a determined government to drive through change; on the other, the government should not concern itself with details. If we are to create the broad public support that autonomous and accountable institutions need, the debate on the future of education will have to engage not only those with a direct stake in it, but all sections of society. This is why we aim to steer education in a new direction: towards strong institutions and strong, accountable government.

1.1. *Strong, dynamic institutions and an accountable government*

Effective responses to developments must come mainly from the educational institutions themselves. They need elbow-room, autonomy, and a demand-driven attitude: elbow-room to respond to developments; autonomy to do so effectively from a position of strength; and a demand-driven attitude to meet real social needs. Above all, they must be able to respond to developments fast and flexibly. They, more than anyone, are able to deliver tailored solutions. It is they, after all, who are charged with delivering quality. The flip-side of autonomy is that the institutions must be accountable. They have a duty to explain to students, parents, and the government how they intend to deliver quality. And they have to be held accountable for their results.

The government must provide effective frameworks for strong educational institutions. It should apply four criteria: quality, accessibility, effectiveness, and accountability. The government is responsible for the overall system. It has to forge links, create the right conditions for success, and take an overall lead. It has to ensure that high-quality education is available to both young and old, that everyone has opportunities, and that the conditions are in place to enable the system to deliver quality. It has to ensure proper co-ordination within the system. And it has to create the right strategic conditions for stakeholders to work together to produce the necessary solutions: parents with schools, employers with employees, head teachers with school governing bodies, and municipalities with direct and indirect stakeholders at local level.

However significant they may be, it is not the government's job to intervene at that level: certainly not if it means constantly restricting the ability of institutions to manage their own affairs. This also requires a determined government. Change must have a chance to work, and

institutions must be made accountable. To an extent, this is part of the normal interplay of social forces, but since some stakeholders can find themselves at a disadvantage, the government sometimes has to protect the "weaker" ones – not to be patronising, but to improve the quality of teamwork. And teamwork must not be confined to stakeholders within education. The education system has strong ties with other domains: business, civil society, community action, childcare, the police, etc. We need to create better conditions for effective teamwork – which requires joined-up thinking and an open door to education. The intention is not to saddle the education system with more problems, but to strengthen cohesion through teamwork and come up with better solutions to social problems and challenges.

1.2. Making education central to society and society central to education

Educational institutions now belong to strategic networks at various levels and have to be able to develop their identity within them. Various institutions, tiers of government, and businesses now work together to meet social needs while sharing expensive equipment, etc.

Box 8.1. **Vocational education in strategic networks: technocentres**

Technocentres are intermediary organisations set up by business, educational institutions, and local/provincial government in a particular region. They are not new institutions. As authoritative regional networks, they aim to overcome obstacles and develop opportunities in their region's labour market. They broker deals, forge links, and organise. As structured public-private regional consortia, they improve the interface between education/training and the labour market, help circulate knowledge, and enable institutions to share equipment. The technocentres offer their member institutions (regional training centres, colleges of higher professional education, and secondary schools) ample opportunities to strengthen their roots in the region.

Another result of recent socio-economic developments is the need to "decompartmentalise" at various levels of public administration. Cities, for example, need the scope to pursue integrated social policies and achieve synergy by bringing social and infrastructural innovations to different neighbourhoods simultaneously and in concert. The different tiers of government should be helping and encouraging, not hindering, schools or

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regional training centres that are trying to implement part of an effective local or regional policy.

Education has important social, cultural, and economic functions in our society. But, it cannot fulfil them successfully in isolation. The best strategy is synergy with stakeholders in other areas of socio-economic policy, such as urban affairs, youth, minorities, etc. Synergy is also a powerful instrument of public enterprise: by actively seeking links with business and civil-society organisations, educational institutions make themselves more effective and avoid the risk of isolation, or worse still, unwittingly conflicting with other organisations. This development also changes the role of the Ministry. The generation of policy within networks makes the Ministry's role more diverse. Interactive policy development requires new working methods and a wider range of policy instruments.

1.3. *Growing diversity and pressure on schools*

Our society is becoming more diverse. The standard family has given way to various forms of cohabitation and lifestyle. Both partners often go out to work, but not always from 9 to 5. The arrival of immigrants in recent decades has brought great diversity not only of culture, ethnicity and religious practice, but also of mother tongue – with dozens of languages sometimes being spoken in the same school.

Primary and secondary schools are increasingly being asked to do more for their pupils (and their parents) than just educate them. Some parents fail to teach their children basic good manners. Some send their children to school without breakfast. Such problems have fuelled the debate on the role of the school and the teacher. There is growing pressure on schools to perform extra tasks, especially in the large urban areas. The teachers regard social problems as a hindrance to their ability to perform their core task: delivering high-quality education. Driven by concern for their pupils, they and the schools do their utmost to find solutions.

As part of our policy to combat educational disadvantage, some large and medium-sized municipalities are introducing "community" and "multi-service" schools, where staff and resources from outside deal with problems that now demand too much teacher attention. The strategy is to integrate the school into a close social network and thus free it to focus on its core tasks. Such a strategy is applicable in all schools, not just those in deprived areas. And we believe that it can help improve the delivery of childcare, lunchtime and after-school care, and pre-school and early-years Dutch language programmes.

As part of its urban regeneration policy, the government is preparing an approach in which all the stakeholders will work together to improve the quality of education in these schools. It can be done, as Rotterdam's KEA

project (a small-scale experiment in alleviating deprivation) has shown. There are schools that deliver quality despite being in deprived neighbourhoods and having a high ethnic-minority intake, and their experience will serve as an example for the government's action plan for multi-ethnic schools. The specific problems identified by the Inspectorate in the mainly urban multi-ethnic schools require a specific approach that draws on past experience and applies four basic principles: that the schools must strengthen themselves as institutions, improve quality systematically, work with other educational and non-educational institutions; and that government (central and municipal) must create the right conditions for them to do so.

1.4. *The public and market sectors*

It is understandable that many individuals and businesses are willing to spend some of their disposable income on more and better educational opportunities – for themselves, their children, their partners, their employees, etc. Private spending on education varies from the purchase of cheap educational software and after-school coaching to expensive degree programmes at private universities abroad. In addition, students in publicly funded education also have to spend some of their own money on such items as tuition fees and textbooks.

Not everyone can pay for extra or alternative education out of their own pocket. We must keep a close eye on the social impact of the increase in private funding. Adjustments to funding methods may be one way of influencing how the education budget is distributed among different groups in society. An existing example is the weighting system used in distributing resources to combat educational disadvantage. The means testing applied to student assistance is another good example, because it requires individuals to contribute to the cost of their education (if they can) while ensuring that people with a low income are not excluded.

The breakdown between public and private educational funding also influences our views on sponsoring, voluntary parental contributions, and the services for which schools ask parents and pupils to pay. We believe that it would be counterproductive to restrict them. After all, if schools were unable to offer these services, other ways would be found to meet the needs and desires of parents, and differences in opportunity would persist, albeit in a more heavily disguised form.

But we must not allow sponsoring to create the wrong impression. The government is and will remain the biggest spender in education – which means no advertising in the playground. Nor must we allow sponsoring to undermine the quality of education or restrict young people's opportunities. The publicly funded system must give everyone equal opportunities. Codes of

conduct for schools and other institutions, possibly drawn up with trade associations, might help them deal with advertising and sponsoring in a balanced way. We have to allow such developments, but it is the government's responsibility to scrutinise their impact on access. We therefore adhere to the voluntary agreement concluded with the educational organisations.

The extent to which people are willing to pay for privately funded education is a touchstone of the quality standards in the publicly funded system. If publicly funded education is good and accessible to all, people will be happy to use it. Our priority must be to promote the quality of the entire publicly funded system from primary school to university, while recognising that private funding can offer interesting complementary provision and serve as an engine for change. The relationship between publicly and privately funded education varies from sector to sector, for example with regard to such issues as the recognition of qualifications. We do not foresee any change in the relationship between publicly and privately funded education during this government's term of office.

1.5. *The scale of management and co-decision-making*

The view of educational institutions as "public enterprises" also raises questions about the role of parents and pupils and how it is incorporated in law. Are they simply the institution's "clients"? Or are they committed members of an institutional community, taking part in decisions about its future direction?

One solution may be new forms of co-decision-making for parents and pupils at the level of the school or institution. This would allow schools to maintain the strength of the small-scale operation while still benefiting from intra-institutional management and strategic planning. Parents and pupils must at least have a say in areas that are important to them.

Parents can contribute at various levels. First of all, at class level, they and the teachers should make solid agreements, if necessary in writing. We are currently experimenting with "home-school contracts". Secondly, at school level, parents must have access to full information on all local schools in order to choose an appropriate one for their child. This information is available to the public in school prospectuses, school plans, and Inspectorate reports. Once parents have chosen a school, they must have some say in how it works. To this end, they must be able to share in decision-making and be represented on the governing body. Finally, at national level, the position of parents merits full attention in the formulation of education policy.[1]

Strategic planning, management, and administration are becoming fully professional areas in both primary and secondary education. The schools are increasingly seeking to plan and manage at a level above the individual school.

Box 8.2. The scale of strategic planning in primary education

Primary education is small-scale. In 1999, 53% of the governing bodies oversaw only one school; in 1991, the figure was 63%. In 1997, the average primary school roll was 214, compared to 167 in 1991.

More governing bodies are merging. Between 1991 and 1997, the number of primary-school governing bodies fell from 3 488 to 2 562.

As well as these mergers, governing bodies are increasingly working together in consortia, encouraged by a government scheme from which, in 1998/99, 372 groups benefited (representing 60% of the schools): 229 "larger" governing bodies and 143 consortia.

This has great advantages, but it requires solid agreements on the input of the various parties in decision-making. At the same time, we must remember that many schools, especially in the primary sector, are small and have their own independent governing body. These schools will need institutional strengthening, despite the constraints imposed by their size and that of their governing bodies.

2. "Learning without Constraint"

The primary and secondary education systems are governed by a network of interconnecting regulations and complex controls involving many different actors. To the schools, this feels like "over-regulation". The fragmentation of funding and the complexity of the regulations makes integrated management impossible. Furthermore, quality data about the education system are still not sufficiently transparent or available to stakeholders, and schools are still not being held sufficiently accountable for poor results.

The policy strategy for primary and secondary education must be directed at resolving these problems and must enable schools to perform their primary task – that of providing good-quality education, now and in the future. In the process, the autonomy which central government allows the schools must not be reduced through the imposition of new regulatory straitjackets by other tiers of government or educational organisations.

In the future, the image of the profession can be improved by introducing new approaches demanding more specialised skills. One example might be team-teaching, and another some kind of "partnership" arrangement. Greater job differentiation would produce new kinds of posts, from classroom assistant and assistant-teacher positions (requiring qualifications at secondary vocational level), via junior and senior teacher posts (at higher professional level) and the temporary use of other professionals at that level,

through to appointments for specialists with university degrees. Partly as a result of ICT, traditional classroom teaching in fixed groups will give way to more flexible teaching and learning arrangements. In some cases, ICT may also help to relieve the problem of teacher substitution and create greater opportunities for staff to concentrate on teacher-pupil interaction.

Schools will be given greater room to manoeuvre but will only be able to exploit it if they have access to sufficient staff with the right degree of professionalism, as well as to adequate resources, proper premises and effective management. Action is required on all these points. Schools themselves will constantly adapt the education they provide to take account of developments within society or in education itself. Since this will demand vigorous integrated management with a strong educational vision and effective internal quality assurance, extra investment will be required in the training and development of heads of institutions. They must possess the right kind of expertise.

Because of the public importance of primary and secondary education, it is essential that all schools can achieve basic quality[2] without depending on third-party funding. Nevertheless, the autonomy of schools should include the freedom to recruit income from non-governmental sources, provided this does not entail pupil selection. Schools should be given a block grant. In primary education, this would be a new departure. In secondary education, block grants already exist but the way in which they are calculated needs to be modified to reflect new expectations of the schools. It is essential that budgets should be integrated and deregulated so that schools can decide freely on how they use their resources. The block grant should include a weighted amount for each pupil, to be used to cover all the costs of education (including remedial and special needs provision, and perhaps also school buildings).

2.1. Social demand

An important issue is the position of the school within the community. The number of community school initiatives is increasing rapidly. Three-quarters of Dutch local authorities wish to set up between one and five such schools within the next few years. Most such schools work hand in hand not just with playgroups and childcare centres, but also with welfare, cultural and sports facilities. Schools – and more particularly primary schools – are starting to play a larger role within the local community and this is having valuable spin-offs for society. Community schools also provide a solution to people's growing need to be able to combine work and care responsibilities.

Closer co-operation between schools and youth care services can help schools deal with pupil's personal and social problems. The local authority

will co-ordinate and direct provision (welfare, adult education, youth, recreation, culture, sport, land-use planning, housing, etc.) This kind of role will call for a clear definition of responsibilities and for partnership between government, schools, organisations and private-sector initiatives. Central government can stimulate this development. Community schools can also get off the ground where the school building is owned by a third party (a not-for-profit organisation or private limited company). In that case, the school will be one of several tenants in a multifunctional building.

2.2. *Parental demand*

Parents are becoming more vocal and critical. They want to choose the best possible school for their children. Quality, distance and (to a decreasing extent) the religious or ethical basis of the school are the main criteria. To help them, they need easy access to reliable and comparable information on schools and school performance. School plans and prospectuses are only the first step. The Inspectorate will also have a major role to play. However, parents form an increasingly diverse group; more and more of them (especially those with a non-Dutch background) are unable to cope and need extra help. Parents already play many roles in the education system, as volunteers, on participation councils and as members of school boards. There is scope for further expansion of such input. Parents must be given the opportunity to express their wishes for their children.

Schools could also conclude contracts with parents containing specific additional commitments on both sides (as in the case of the existing personal budget or "rucksack" for pupils with disabilities). However, differences in financial contributions from parents must never lead to pupil selection or to a situation in which the education received by children is directly related to the level of contributions made by their parents.

2.3. *Pupil demand, customised education*

Every child has the right to receive education geared to his/her abilities, learning style and talents. There are various ways in which schools can provide this: differentiation (*e.g.* in pace), ensuring a smooth transition between primary and secondary education, continuous processes of learning, individual flexible learning pathways, ICT, pupil monitoring systems (made possible by the individual computer code attached to each pupil's records), flexible timing of assessments and diagnostic tests. Problem pupils must receive proper help. This can be done within the school, for example by providing specialist support for teachers and parents, or alternatively by calling in outside help via case managers. Schools can also make their own arrangements. Help with homework, combinations of learning and working, and time-out projects can all help to reduce the drop-out rate.

In the short term, the schools could be helped by introducing computerised pupil monitoring systems and experiments could also be run to improve support for disadvantaged pupils and those with special needs.

2.4. *Municipalities, the freedom of education, and information*

Over the years, the municipalities have been given different roles within education. The oldest of them is that of school board for publicly run institutions. To this has gradually been added responsibility for school buildings, the co-ordination of action to combat educational disadvantage, minority language teaching, and the provision of school advisory services. As the local authorities increasingly become co-ordinators rather than providers, and as the schools become stronger parties within the system, the various roles and responsibilities of the municipalities are likely to create ever greater conflicts. An example is the dual role of the municipality as both school board and decision-maker on the use of resources available for local action to reduce educational disadvantage. These roles will have to be reconsidered if the municipalities are to be able to undertake their responsibilities for co-ordination.

Other trends also have major consequences for public-authority education. For example, the development of the multicultural society and increasing individualism have reduced the differences between public and private education. The rights and freedoms of publicly run schools are different from those of privately run institutions; the question is whether this disparity continues to be justified, for example in relation to admission policies, the establishment of new schools, the amalgamation of publicly and privately run schools and the role of parents and pupils in the school.

This issue touches on article 23 of the Dutch Constitution, which dates from 1917 and establishes freedom of education and the right of schools to receive public funding. The effect of this article is to provide a universal right to education in accordance with parents' religious or other beliefs. This principle is no less important to Dutch society now than it was in the past. Yet the trends identified above raise the question of whether the present wording and interpretation of the Constitution are adequate to facilitate the reforms which are now needed.

2.5. *Efficiency, transparency, quality*

Greater emphasis on the results of education would create a demand for information both about the individual results achieved by pupils and about the added value produced by schools. They can only be held accountable for results if there are proper means of establishing these. This is no easy matter. For example, it is difficult to identify the exact contribution made by the

school (or the teacher) to the results achieved by pupils. Moreover, existing tests are mainly focused on cognition and less on the measurement of skills.

Even so, better information on the output of the education system is essential. Good pupil monitoring systems and diagnostic tests centre on individual pupils and their abilities. ICT can offer viable instruments for this. But there is also a need to develop entry and exit tests which can be used to conduct nationwide comparisons and which would measure both cognitive performance and skills. Such tests will make it possible to compare different schools and this will eventually clarify the output of education. In the longer run we shall be able to see how resources have been used and what potential there may be for filtering out "under-performing schools", offering appropriate measures and support, or rewarding individual teachers or teaching teams.

The Inspectorate would have to play a stronger and more independent role in accordance with its statutory powers and responsibilities, reporting annually on the state of education without intervention by the minister. If the Inspectorate finds that schools are systematically under-performing, planned improvement action could be undertaken (for example under the direction of an independent body set up for the purpose).

3. Conclusions – the Role of Central Government

Under the strategy plotted above, the role of central government would differ in several key respects from the role it plays today. Schools would gain autonomy: within fixed limits, they would be able to take responsibility for themselves and set their own priorities. Maximum autonomy for schools means that central government would have to provide the right conditions and resources for them. Government would have to regulate less and co-ordinate, equip and stimulate more. As the freedom of the schools increased, so too would the differences between them. For this reason, it would remain essential for government to safeguard general standards of quality and access. It would have to set clear conditions in this respect and hold the schools accountable for meeting them. Strong schools would need strong countervailing powers. The administrative balance of power would change. It is important therefore to think about how the system could be restructured to reflect the new situation.

A very important issue is how government sees its future role. The current form of government control is frequently ineffective. The system is still too much based on the supply side of the education and research systems and on traditional institutions, rather than on consumer demand. Institutional change is required to ensure that the education and research systems respond more sensitively to demand from pupils, students and the

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users of research. This implies a change in the role of central government. It will need to be based on three key principles:

a) *Direction*: central government must establish outline policies. In the case of the education and research systems, it must demand satisfactory quality, access and efficiency. In the case of other parties, government will have to provide clear information on public responsibilities, the conditions under which these are to be met, the resources available and the results expected.

b) *Scope*: central government must offer more scope (room for manoeuvre) for schools, local authorities, employers and other parties to achieve these results. After all, if each individual learner is to have the chance to achieve his/her unique potential to the full, professionals in the field (and other parties relatively close to the field) must be given greater freedom to organise the process of education as they see fit. They are in a better position to identify the local needs and circumstances to which the education system needs to respond. In addition, central government will maximise competition in the interests of customisation and efficiency.

c) *Accountability*: some 50 billion guilders[3] of taxpayers' money are currently being spent on education and research. It needs to be clear both to government and to parents and other sections of society what results are being achieved for that money. This means that institutions must be held more accountable than in the past for achieving measurable results. These must be available for public scrutiny. Where results are unsatisfactory, government should not hesitate to take action, for example by calling the boards of institutions to account for their actions, or by imposing financial sanctions. The law already offers opportunities for this.

These three concepts – direction, scope and accountability – are of course closely interconnected. The more direction central government provides, the less the individual room to manoeuvre for schools and local authorities. Greater scope (whether offered by government or claimed by other parties) can also produce a greater need for accountability.

Notes

1. In addition, if a sufficient demand from parents is visible in the community for a particular type of school to be established, then legislation stipulates that such forms of denominational, "free" or other school must be set up.
2. The term "basic quality" is used by the Inspectorate and is operationalised in its evaluation frameworks. These include essential quality criteria for each sector, derived from legislation, research and the views of parents, teachers, trade unions, school boards and other parties.
3. EUR 22.7 billion.

PART III

Conclusions from "Schooling for Tomorrow" Conferences, 2000-2001

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART III

Chapter 9

Schooling for Tomorrow – Principles and Directions for Policy

by
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Abstract. *Johansson, the former Swedish Minister of Education, as Chair of the Rotterdam* Schooling for Tomorrow *conference produced these conclusions. She argues that schools "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". Her conclusions are presented as* Orientations for Future Policies *under the following headings: high ambitions, strong organisations; schools as democratic agents for social cohesion; well-resourced schools to meet demanding public responsibilities; networks and partnerships are critical; from teaching to learning; teachers and leadership; and ICT as a learning and development tool. She also addresses issues relating to* Fostering and Disseminating Innovation, *referring to national standards, school autonomy; bold experimentation, evaluation, and dissemination; the key role of partnerships; and sustaining innovation and improvement.*

We have been privileged to be part of the Rotterdam "Schooling for Tomorrow" Conference. I would like to thank the City of Rotterdam and the energetic team of conference organisers and educators, the Dutch authorities, and the OECD. Together they put together a programme that really did allow us to explore the key issues confronting schooling for tomorrow while remaining rooted in the action and realities that we can see today. And, I would like to thank all of you – participants from many different countries, with different responsibilities – for making this conference the success it has undoubtedly been.

We need new forms of governance and policy-making to prepare our schools for the 21st century. Our conference has itself embodied many of the principles we have identified as the basis for this: international in scope and reference but grounded in local action; long-term in vision but relevant today; ambitious and demanding; a dynamic synergy of different partners engaged in networking and dialogue. We also need a very rich and relevant knowledge base. For our conference, the reports produced both through the OECD and the many national case studies have offered us just this. The OECD analytical report provided a particularly useful starting point by reflecting on the nature of childhood at the outset of the 21st century, and a range of vital issues to do with families, communities, values and social cohesion, as well as those aspects of rapidly-changing knowledge-based societies and of education that are more frequently recognised as setting the agenda for schooling in the future.

Policy-making, not just students, teachers and schools, must be in a process of constant learning. For this, methods and strategies for long-term thinking are needed. Despite the fact that education is *par excellence* about long-term investment and change, forward-thinking methodologies are woefully under-developed in our field. I found, as others, that the scenarios for the future presented in the OECD report represent a valuable tool for clarifying the strategic choices that our societies are confronting.

The OECD has produced five scenarios: "The Status Quo Continues", "Schools as Key Social Centres", "Schools as Focused Learning Organisations", "The Market Model", and "Technology and the Network Society".[2] We have given our own assessment through a survey of conference participants of both the desirability and probability of these different futures. A clear viewpoint has been expressed here in favour of the "re-schooling" scenarios – especially

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Scenario 3, "The School as a Focused Learning Organisation" – and rejection of the market model.

To move to what we would like to happen defines a challenging policy agenda, fostering innovation and dynamism at all levels. My conclusions cover both general directions for policy and support for local-level innovation.

1. Orientations for Future Policies

High ambitions, strong organisations: In the knowledge societies of today and tomorrow, schools need high ambitions in order to fulfil their potential and to survive as highly relevant organisations for our societies. It is vital to narrow the achievement gap, within and between schools. Schools, and other places for learning, must be strong, independent, and well equipped. Well-developed systems of assessment and accountability are needed to provide the knowledge that schools' high ambitions are being met within the larger national goals.

Schools as democratic agents for social cohesion: An integral element of their ambitious agenda is building cohesion and social capital. Schools are among the most effective avenues of inclusion, and this should be one of the main outcomes on which their success is judged.

Well-resourced schools to meet demanding public responsibilities: If schools are to meet demanding objectives, they must be well-resourced. They should be confident of their funding to meet their clear public responsibilities, whether this comes directly or indirectly from the public purse. While diverse partnerships are now such an important feature of education, schools should not have to be reliant on them to meet their core funding needs.

Networks and partnerships are critical: School autonomy goes hand-in-hand with being connected to the community, other educators, and the broader society. Hence, the key role of networks and partnerships. Too much educational practice in OECD countries is characterised by isolation: schools from parents and the community and from each other; teachers and learners in isolated classrooms. Partnerships may address skills and employment, society and culture, or bring together different parts of the educational world; parents are among the most important of schools' partners.

From teaching to learning: the curriculum is at the heart of schooling. The focus needs to shift from teaching and towards learning. Guiding this shift in focus should be the underlying aim that schools are laying the foundation for lifelong learning – the knowledge, competences, and motivation to go on learning in the many settings beyond school. Facilities in schools need to be attractive, flexible and fitted for a wide variety of purposes if they are to foster this shifting curriculum emphasis.

Teachers and leadership: Far from implying any lessening of their importance, the shift from teaching to learning calls for still more demanding professional repertoires. Teachers should themselves be highly motivated and work through networks and teams. It is a matter of the utmost concern that in many countries severe problems of recruitment and teacher supply are emerging. New incentives are needed across the whole range of conditions and rewards, both to attract high-quality recruits and maintain a vibrant, diverse teaching force. Strong autonomous schools meeting high ambitions also call for strong leaders, principals and managers. Professional development for leadership and management is thus vital.

ICT as a learning and development tool: ICT should be used to the full in school learning, and for this there needs to be a shift from basic investments in hardware to the development of the innovative use of ICT in the classroom. Investments to support teachers working together to use ICT as a learning tool can foster a deeper pedagogy of the whole school. Teachers and students should exploit ICT's enormous potential for communication and collaborative learning. There must be much closer links in ICT learning strategies between schools, homes and communities in order to bridge any emerging "digital divide".

2. Fostering and Disseminating Innovation

An important element of the success of this conference has been in the site visits to innovations in Rotterdam – some in schools and others in community initiatives – and their comparison with parallel programmes in other countries. Policies should work to provide the environment in which innovations can flourish and good practice can be disseminated; certain conclusions relate specifically to this.

National standards, school autonomy: Authorities should set clear and ambitious standards for schooling, but there must be adequate space for local initiative in meeting those standards. Schools should flourish as autonomous learning organisations and educational innovation should be firmly rooted in locally defined needs and problems.

Bold experimentation, evaluation, and dissemination: A climate of experimentation should be fostered within the broad frameworks of national goals, with imaginative solutions devised for the real challenges being confronted on the ground. Evaluation and feedback are critical. Some "failures" are inevitable and must be accepted in order to encourage risk-taking; valuable lessons can be learned from them as well as from the successes. Lessons learned and successful practices should not remain isolated examples, but be disseminated so that they can enjoy a much broader impact. We lack good dissemination strategies, and these are a priority.

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The key role of partnerships: Partnerships are fundamental to schooling for today and tomorrow: they open new learning opportunities and knowledge; they provide the critical links between schools and their communities; they broaden the support base on which dynamic schools and teacher professionalism depends.

Sustaining innovation and improvement: There should be high levels of support for successful innovation and experimentation to ensure that the benefits are sustainable. Those facing the greatest challenges, in situations of compound disadvantages, most need that support. Local excellence and innovation cannot be sustained simply through the idiosyncratic influence of the charismatic individual – teacher, principal, community leader – though such figures are critical sources of inspiration.

In sum, 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. We have pointed the way to how this can be done.

Notes

1. Chair, European Schoolnet Strategy Forum; former Swedish Minister of Education, and Chair, OECD/Netherlands Rotterdam International Conference (2000).
2. Extended to six scenarios after Rotterdam (see OECD 2001a).

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Networks of Innovation
Towards New Models for Managing Schools and Systems

PART III

Chapter 10

Understanding Networks for Innovation in Policy and Practice

by
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Abstract. *Hopkins' conclusions as rapporteur of the 2000 international Portugal seminar on networking were based especially on the experience of five major networks – the Portuguese Good Hope Programme; the Durham District School Board and The Learning Consortium, Ontario, Canada; the German Network of Innovative Schools established by the Bertelsmann Foundation; Improving the Quality of Education for All (IQEA), England and beyond; and the European Observatory on School Innovation, co-ordinated from France with 13 participating countries. He identifies key conditions for effective education networking: consistency of values and focus, clarity of structure; knowledge creation, utilisation and transfer; rewards related to learning; dispersed leadership and empowerment; and adequate resources. He also identifies and discusses the role of key stakeholders – innovative teachers, principals and schools; network initiators; network managers; consultants/trainers; evaluators and researchers; and policy-makers. The chapter includes a discussion of the role of governments and policy.*

1. Networks and the Lisbon Seminar

The Portuguese seminar made an important contribution to the work on the OECD "Schooling for Tomorrow" programme through its focus on networks and innovation. The seminar aims were: *a)* to understand the nature, conditions, and potential of particular networks and initiatives, with different structural features and from different educational traditions; and, *b)* to discuss the role of policy to support such networks/initiatives and identify relevant policy guidelines. The five contrasting network cases (see Box 10.1)[2] made no pretence to be comprehensive and represent all types of networks but were chosen to illustrate a range of networking practices. They are sufficiently different as to provide the basis for identifying an emerging typology of networks, and sufficiently similar to suggest common characteristics.

Various interpretations of the network concept notwithstanding, seminar participants were adamant that they are not simply "clubs". Although networks bring together those with like-minded interests, they are more than just opportunities to share good practice. The following definition of networks emerged from the discussions during the seminar:

> Networks are purposeful social entities characterised by a commitment to quality, rigour, and a focus on outcomes. They are also an effective means of supporting innovation in times of change. In education, networks promote the dissemination of good practice, enhance the professional development of teachers, support capacity building in schools, mediate between centralised and decentralised structures, and assist in the process of re-structuring and re-culturing educational organisations and systems.

Although not all of the cases share all of these characteristics, in general they have resulted in the following advantages from collaborative working:

- the reduction of isolation;
- collaborative professional development;
- joint solutions to shared problems;
- the exchange of practice and expertise;
- the facilitation of knowledge sharing and school improvement;
- opportunities to incorporate external facilitation.

Box 10.1 An overview of the five study networks

Good Hope Programme, Portugal: The Good Hope Programme was established by the Ministry of Education in Portugal in March 1998. Originally designed for 3 years, it began operating in January 1999. This nation-wide programme is innovative in the Portuguese context. It contrasts with the traditional pattern of centralisation by encouraging autonomy and experimentation through a process of producing research on emerging good practices, analysing and disseminating them, and supporting the work of teachers and schools. There are four strands to the Good Hope Programme: *i)* the improvement of learning for all; *ii)* developing the school as an educational institution; *iii)* ensuring school/community interaction; and *iv)* the educational uses of ICT.

Durham District School Board and The Learning Consortium, Ontario, Canada: The Learning Consortium was established in 1988 as a school/university partnership between four school districts. The purpose of the consortium is to improve the quality of education for students in schools and universities by focusing on teacher development, school improvement and the restructuring of local school districts. The Faculty of Education at the University of Toronto provides support to the Consortium on a regular basis. Teacher training is at the core of the improvement work. In-service workshops, institutes and conferences are tailored to meet the demands from teachers to upgrade their skills in instruction and assessment.

German Network of Innovative Schools (NIS): The German Network of Innovative Schools was established in 1998 at the Munster Conference by the Bertelsmann Foundation as a follow-up to the Carls Bertelsmann Prize "96" Project. The Network is designed to facilitate knowledge transfer between schools for the purpose of school improvement and reform. It is an open network of 460 schools, with 13 Learning Networks that are funded for 3 years (1998-2001). The network provides the means not only for exchanging information between innovative schools, but also acts as a new form of professional development for teachers who have traditionally been isolated.

Improving the Quality of Education for All (IQEA), England and beyond: The IQEA network was originally developed in 1990 at the University of Cambridge, and is now based at the University of Nottingham. Some 200 schools have been involved in the programme, mainly in England but also internationally. The IQEA programme aims to improve schools' capacity to manage external change for the purpose of continuous improvement, as well as creating the conditions for more effective teaching and learning. Although the IQEA approach to school improvement works with individual schools, it is most effective when schools come together in networks to share their own good practice and learn from each other.

Box 10.1 **An overview of the five study networks** (cont.)

European Observatory on School Innovation – The European Observatory was established in 1994-95 following the ratification of the Maastricht Treaty to facilitate the creation of information networks to help resolve educational issues relating to national policies and priorities set by the EU. The Network involves participants from 13 European countries and is supported by the Institut National de Recherche Pédagogique (INRP), in Paris. The aims of the Observatory are to: *i)* gather and analyse information on innovation; *ii)* identify signs of change and "hot spots"; *iii)* allow innovators to network and raise theoretical issues; *iv)* foster Europe-wide innovation; *v)* describe and compare national and regional policies; and *vi)* pool and compare knowledge on innovation.

Networks have more potential than perhaps has previously been realised to support and enhance educational processes and outcomes.

The following quotations from the seminar provide a flavour of the enthusiasm for that potential.

- Good networks are horizontal partnerships that value professional expertise and mutual learning. In so doing, they overcome hierarchy and create connections between different levels of the system. They are support structures for teacher and school development.
- Good networks are in the knowledge-creating and teacher learning business. They are motivated and bound together by the desire to improve our schools and the lives of the young people who travel through them.
- We want to develop young people who are participating members of society. We must model that by being collaborating members of the educational community.
- Co-operative learning is not an educational philosophy – it is a way of life.
- It is always a pleasure when people of good will work together.

2. The Conditions for Effective Networks

The qualities of networks to meet their potential for innovation and change are not, however, easily acquired. A number of key conditions need to be in place, as identified at the seminar:

Consistency of values and focus – it is important that networks have a common aim and purpose, and that the values underpinning the network are well articulated and "owned" by those involved. This

consistency of values and purpose also relates to the need for the focus of the network to be consistent with the overarching policy framework.

Clarity of structure – effective networks are well organised with clear operating procedures and mechanisms for ensuring that maximum participation is achieved within and between schools. These structures promote involvement that is broad based, preferably with a whole organisation or systemic focus, rather than being narrow, limiting or particular.

Knowledge creation, utilisation and transfer – the key purpose of networks is to create and disseminate knowledge to support educational improvement and innovation. Such knowledge and practice needs to be based on evidence, focus on the core features of schooling, and be subject to robust quality assurance procedures.

Rewards related to learning – those who belong to networks need to feel that their involvement is worthwhile. Rewards for networking are best related to supporting professional development and the encouraging of learning. Effective networks invest in people.

Dispersed leadership and empowerment – highly effective networks contain skilful people who collaborate and work well together. The skills required by network members are similar to the skill sets associated with effective teams and include a focus on dispersed leadership and empowerment.

Adequate resources – networks need to be adequately resourced particularly in terms of time, finance and human capital. It is not necessarily the quantum of resource that is important, more crucially there needs to be flexibility in the way in which it is deployed.

3. Key Stakeholders in Networks[3]

To identify and support exemplary educational practice, most networks aspire to function as horizontal partnerships valuing co-operation and a mutual exchange. Many different groups and individuals are involved in facilitating and maintaining networks, and learning takes place among the respective stakeholders who take each other seriously as professional partners. The co-operation among the different stakeholders is of an ongoing nature and ideally leads to a more systemic understanding of innovation and change among all the partners. Although different networks will have a different configuration of stakeholders, it is important to identify these groups and the contributions that people within them can make. This highlights a key feature of networks in that they reflect a way of working based on an investment in people and relationships, rather than structures and hierarchies.

The most important group of stakeholders is the *innovative teachers/ principals and their schools*. Although they provide the focus for networking activity, they do not always initiate it.

The second group of stakeholders, sometimes overlapping with the first, is thus the *initiators*. These can be innovative teachers or principals, but are often universities or research institutes, government agencies or charitable foundations.

A third stakeholder group are those who *manage* a network – its steering group. The steering group can be the initiators, it can be made up of representatives of the schools as main stakeholders, or it can consist of some other form of management put in place by the networking initiators.

Many networks involve *consultants or trainers* as a fourth group of stakeholders. Their role is to support the development work of the network. Sometimes consultants are brought in from outside agencies to provide professional training, but often teachers from innovative schools within the network act as trainers for other network participants.

When a basic level of development has been achieved, many networks start to evaluate their progress and effectiveness: *evaluators and researchers* comprise a fifth stakeholder group. There may be some overlap with the other stakeholder categories as when the consultants to the networking schools engage in research or evaluation. The function of this stakeholder group is thus to identify and collect data relating to process and evidence of impact.

Finally *policy-makers* comprise a sixth stakeholder group. Networks for innovation frequently aim to impact on the political framework to further the cause of school improvement. In order to create ownership and acceptance, they need to involve appropriate policy-makers at an early stage of the networking process.

4. The Role of Networks in Supporting Innovation

Networks in education have a key role to play in supporting innovation and development, and accordingly need to be regarded as support structures for innovative schools. They do this not only through disseminating good practice, but also in overcoming the traditional isolation of schools, and to a certain extent even challenging traditional hierarchical system structures. In the past, most school systems have operated almost exclusively through individual units – teachers, departments, schools or local agencies – and such isolation may have been appropriate during times of stability. But now in a context of change, there is need to "tighten the loose coupling" in order to increase collaboration and establish more fluid and responsive structures. Networks are an important means of doing this.

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Networks do not just facilitate innovation: they can also be an innovation in themselves by offering the possibility of new ways of working. This is particularly important in contemporary educational systems, as there is a tendency to reduce "meso level" support for schools. It may well be that these support structures, traditionally provided by local education authorities or school districts, local universities, and other agencies, have often been more effective in buttressing the *status quo* than in supporting change. Even so, the meso level has become increasingly important in times of innovation and change, in the form of creative and responsive structures for working with and between schools, not as outmoded institutions.

Networks can thus provide a means of facilitating innovation and change as well as contributing to large-scale reform. They offer the potential for "re-inventing" the meso level by promoting different forms of collaboration, linkage, and multi-functional partnership – sometimes referred to as "cross-over structures". In this respect, the network enables stakeholders to make connections and to synergise activities around common priorities. The system emphasis is not to achieve control (which is impossible), but to harness the interactive capability of systemic forces (see Fullan 2000).

All the featured network cases in their different ways fulfil this function. The Good Hope programme as a government-supported initiative is directly linked into the policy agenda, but also promotes grass roots developments. The Durham District School Board together with the Learning Consortium creates ways of networking that support schools and engender local empowerment. The German Network of Innovative Schools as a large and significant national grouping is able to support wide-scale innovation in schools as well as influencing the national policy agenda. The IQEA project works effectively within a well-defined policy context and acts as a pressure group to persuade policy makers that educational reform needs capacity building. The French Observatory as an international network has influence across the European Union.

The analysis of the cases also suggests that networks need to be engaged from the very beginnings of a change process, as well as providing support once the process has been established; they have a role to play during all the phases of the change. For instance:

During the "initiation phase" networks encourage:

- shared commitment and ownership;
- leadership at a variety of levels;
- external facilitation;
- clear focus on goals and purposes.

During the"implementation phase" networks encourage:

- understandings about learning and the management of change;
- more flexible and creative use of space, time, communication structures, and people;
- social and technical support;
- early success and its celebration.

During the "institutionalisation phase" networks encourage:

- widespread collaborative ways of working;
- planning for "scaling up";
- the redefinition and adaptation of ideas through the use of evidence;
- internally useful data feedback and externally useful evaluation.

In sum, networks have the potential to support educational innovation and change by:

- Providing a focal point for the dissemination of good practice, the generalisability of innovation and the creation of "action oriented" knowledge about effective educational practices.
- Keeping the focus on the core purposes of schooling, in particular in creating and sustaining a discourse on teaching and learning.
- Enhancing change agent skills and abilities in managing the change process in teachers, leaders and other educators.
- Building capacity for continuous improvement at the local level, and in particular in creating professional learning communities, within and between schools.
- Ensuring that systems of pressure and support are integrated, not segmented; for example, that professional learning communities incorporate pressure and support in a seamless way.
- Acting as a link between the centralised and decentralised schism that results from many contemporary policy initiatives, in particular by contributing to policy coherence horizontally and vertically.

4.1. *Towards a Typology of Networks*

At the Lisbon seminar, it was apparent that networks could operate at a number of different levels; in reflecting on this range of purpose an evolving typology of network types emerged. At the basic level, networks facilitate the sharing of good practice; at the highest level they can act as agents of system renewal. This gives an emerging typology of networks.

- At its most basic level, a network can be regarded as simply groups of teachers joining together for a common curriculum purpose and for sharing good practice.

- At a more ambitious level, networks can involve groups of teachers and schools joining together for the purposes of school improvement with the explicit aim of enhancing teaching and learning throughout a school or groups of schools, not just of sharing practice.
- Networks can also serve not just the purpose of knowledge transfer and school improvement, but also join together groups of stakeholders to implement specific policies locally and possibly nationally.
- An extension of this way of working is found when groups of networks, within and outside education, link together for system improvement in terms of social justice and inclusion.
- Finally, there is the possibility of groups of networks working together not just on a social justice agenda, but also as an explicit agency for system renewal and transformation.
- Not all categories in this typology were reflected at the seminar, but it does provide a way of categorising networks as well as emphasising their potential role. It is explicitly situated within a systemic perspective and has implications for the role of governments and for policy.

5. The Role of Governments and Implications for Policy

In considering the relationship between governments and networks, it is initially attractive to seek to distinguish between those networks that are supported by governments and those that are not. Such a simple distinction, however, masks the complexity of the relationships and trivialises the potential synergy between policy aspirations and network practice. The five cases discussed at the Lisbon seminar illustrate this complexity well.

Two of the cases – Good Hope and the French Observatory – could for different reasons be described as supported by government, as they receive some governmental encouragement and resource. But, both networks foster autonomy and experimentation on the part of educational organisations and influence government policy and reform by their scale, results and methods. By way of contrast, the Durham School District Board/Learning Consortium and the IQEA programme could be regarded as being independent of government, which is true to the extent that governments did not establish them nor do they receive direct funding. Yet, these networks were established principally to assist schools in interpreting and managing centrally-imposed changes; their most successful schools are also those that not only pursue their own school improvement agendas but do so in a way that is complementary to governmental reform initiatives. In addition, both the Durham School District Board/Learning Consortium and IQEA subtly influence the process and substance of policy.

The German Network of Innovative Schools established by the Bertelsmann Foundation provides another perspective on the complex relationship between government and networks. To some commentators, this network was established in order to critique and, through success, directly influence government. Viewed more positively and strategically, it offers a model of a "public/private partnership" that could well be influential in future networking arrangements.

So, differentiating networks on the basis of governmental support risks oversimplification, particularly as in the future governments will use networks increasingly as a means of implementing their educational reform programmes. Despite the dramatic increase in educational reform efforts in most OECD countries over the past decade, their impact on levels of student achievement has not been as impressive as had been hoped. Admittedly there are pockets of success, such as the claims made for the English National Literacy Strategy, but in general the failure of recent reforms to accelerate student achievement in line with policy objectives has been widely documented (Hopkins and Levin, 2000). The main reason for this is because government policy on education has not been adequately informed by what is known about how schools improve so that an enormous source of synergy is lost and student learning lags behind its potential (see *e.g.* Hargreaves *et al.*, 1998). This provides a strong argument for governments to embrace networks not only to assist in the implementation of their reform agendas, but also as an innovation in its own right. Without doing so, it is likely that the aspirations of educational reform, particularly in decentralised systems, will continue to rise beyond the capacity of the system to deliver (see Hopkins 2001, especially Chapter 10).

The specifics of a policy framework for networking are beyond the scope of this chapter, but in line with the above discussion, it would focus on:

- How networks support both the adaptive implementation of reform, and also act as a vehicle for informing second level reform.
- How networks can become the agents of not just knowledge dissemination but of knowledge creation, transfer and utilisation.
- How networks can become increasingly effective locations for the professional development of teachers and as a means whereby schools can develop the capacity to better implement (and withstand) the reform priorities.
- How networks can ensure horizontal and vertical integration of support and coherence of policy by exploiting synergy between existing structures and creating new ones.

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- How networks can support "scale up", especially when the purpose of the network is the dissemination of teacher professionalism or ethos, rather than a comprehensive curriculum and instructional programme.
- Above all, governments should insist that schools be thoughtful in their approach to change and improvement, but not necessarily require that everyone do the same thing in the same way at the same time. Networks are perhaps the best way we have at present to create and support this expectation of thinking.

The Lisbon seminar took place within the context of an OECD programme on Schooling for Tomorrow. The future of schooling requires a systemic perspective, which implies a high degree of consistency across the policy spectrum and an unrelenting focus on student achievement and learning. Networks, as a natural infrastructure for innovation and for informing government policy, provide an important means for doing just this.

Notes

1. Head of the Standards and Effectiveness Unit at DfES and former Dean of Education, University of Nottingham; rapporteur of the Portugal/OECD "Innovation and Networks" Seminar held in Lisbon September 14th-15th 2000.
2. At least one practitioner and facilitator represented each of these networks. In addition, a number of international experts was invited to participate in the seminar.
3. This draws on the analysis of Dr. Anne Sliwka, see Chapter 3.

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PART III

Chapter 11

The Management of Learning, Schools and Systems

by
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Abstract. *Hirsch writes this chapter as the rapporteur of the December 2001 international conference on management and governance in education. The conference discussion built on the OECD/CERI 2000 "What Works" study on innovation in school management in nine countries. The Budapest conference, reports Hirsch, emphasised the centrality of management issues to the future of schooling. It examined these issues first at the "micro" level of the classroom and other learning environments, then the management of schools as organisations, and third the "macro" issues of educational governance and public reform. He concludes from the conference that improvement in how students learn is always shaped by the ways in which schools themselves develop as learning organisations. They are complex entities to manage but are not unique in this respect, with scope for adapting models of change developed in other sectors, both public and private.*

* Rapporteur Hungary/OECD seminar on "Managing Education for Lifelong Learning", 6-7 December 2001, Budapest.

1. Introduction

Issues of school management are intricately wrapped up in wider issues about schooling. The OECD's study of *New School Management Approaches* (OECD, 2001d) underlined that good management is about much more than finding strong and effective individuals to run schools: it is about improving the organic development of the school itself. The follow-up Budapest seminar to this study emphasised the centrality of management issues to the future of schooling. Teaching, learning and managing education have become inextricably intertwined. The seminar examined these issues first at the "micro" level of the learning environment, then by considering the management of schools as organisations, and finally considered "macro" issues concerning educational governance and public reform. These three levels themselves interact considerably.

Hungary's education minister, József Pálinkás, introduced the discussion by describing how the country is endeavouring to create new kinds of learning and new processes to achieve it. In the past decade, Hungary has decentralised its education system, and is now preoccupied with the challenges of meeting demanding learning outcomes and quality standards within decentralised structures. A new curriculum and assessment system aims to combine managerial autonomy for schools with an approach to learning content that allows schools to develop more useful curricula, with greater emphasis on competencies for lifelong learning, and less on the reproduction of knowledge in university-imposed end-of-school examinations. At the heart of this is a redefinition of teacher competencies and career structures.

2. Creating and Sustaining High Quality Learning Environments

"For a century", declared Mats Ekholm the head of Sweden's National Education Agency, "education has been about the transmission of knowledge from old to young heads; only recently have we started to teach students how to learn". Across OECD countries, educators are trying to engage students more directly in learning, to make them co-workers with teachers in the learning process rather than just recipients of knowledge. "Real schools" are places where real learning takes place in the sense that students do things because they are interested not because they must. Alexandru Crisan from Romania, whose system was in the past governed tightly from the centre, saw

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gradual decentralisation as a prerequisite for creating and managing an effective learning environment. It depends not just on the centre letting go, but also on building capacity in institutions to enable teachers and students to be in greater control of learning processes. Zoltán Poór from Hungary reflected on the associated challenge of developing autonomous personalities, capable of setting specific aims and objectives, of defining the content of learning, and of identifying their own needs.

There was thus some consensus that new kinds of learning relationships are desirable in 21st century schools. There was also a strong sense that change in this direction is slow: the traditional model – the teacher in front of the classroom – still very much prevails. At the same time there was some questioning at the seminar of whether more open methods of learning are always preferable to the tested, tightly structured approaches; what works in a given educational setting cannot be prejudged. Part of the challenge for schools is to evaluate approaches as they unfold, and be willing to adapt them in the light of outcomes, as well to apply multiple strategies as appropriate to different contexts. In other words, schools themselves have to be good at learning.

This underlines the importance of ensuring that training and development give sufficient attention to managing the learning environment, implying new types of relationship between students, teachers and managers. They must each develop greater autonomy. Autonomous learners must, for example, be able to identify their own objectives and to select appropriate tools for meeting them. Teachers, in their turn, have to take responsibility for their own work and help to formulate the curriculum rather than just acting as agents for the system. School managers have to be able to deal with staff with a variety of attitudes and skills, and to reflect on their own performance.

Thus, new approaches to managing responsibilities in schools are linked to approaches to student learning. In the process of leading schools, principals need to understand how factors connected with engagement help to motivate teachers and students. Evidence presented to the seminar suggests that the relationship between strong leadership and good student results is not a direct one. Australian research presented by Bill Mulford (the "LOLSO" project) shows that leaders operate in a complex web of relationships in which good leadership helps foster the kind of school climate in which learning flourishes, rather than directly inspiring students to achieve: "Organisational learning, or a 'collective teacher efficacy', is the important intervening variable between leadership and teacher work and then student outcomes."

That principals' influence on learning works indirectly rather than, for example, as a direct inspiration on students might seem self-evident, yet in recent years the emphasis on the role of the school leader has led some to pin

excessive hopes on the charismatic principal. This has rarely provided a long-term solution to schools, and has sometimes even proved counter-productive. The achievements of magnetic leaders tend to fall away after they leave, unless their approach has worked through to the transformation of others. Certainly some of the best examples of successful school management identified in the OECD's study involve team approaches. But, as was pointed out at the seminar, this does not just mean building a cohesive team of senior managers. Some believe that the key is to extend the responsibilities of ordinary teachers beyond the context of their individual classroom to make them part of, and make them feel part of, the management of change. In this context, the single most important reform identified by the Hungarian Education Minister was the creation of a new career structure for teachers with varying levels of responsibility, pay and status at each career point.

Two particular messages can be reiterated: first, good management and leadership do make a clear difference to learning outcomes; second, managers need to operate cleverly within a complex set of relationships rather than seek simplistic solutions. School managers at every level need to deal with the complexity resulting from the multiple stakeholders and processes involved.

3. Managing Schools for Complexity and Change

The second seminar session considered management in schools in the context of societies and systems undergoing rapid change, including in decision-making structures with many responsibilities devolved to schools. The relationships between the school and the wider community interests become critical in this new environment, adding to the complexity of a school's mission. These challenges were explored in detail in OECD's report on school management (*ibid.*) that served as a key reference document for the seminar. As one of its main authors, Dale Shuttleworth set out in introducing the session, new political and societal demands are being made on schools, often provoking a sense of perpetual pressure or crisis. School leaders may well feel that these new demands are not being matched by support and resources needed to meet them. Yet, there are also many instructive cases of schools responding to new challenges by effectively changing the ways in which they work.

The Hungarian government has recently emphasised quality improvements in school education through its Comenius 2000 programme. This provides a national framework for school level initiatives, based on the assumption that quality assurance concepts developed in industry can be adapted for application in schools. An important aspect of this approach is the use of consultants from a range of backgrounds including the private sector. The programme involves a three-fold model, with the key principles laid down

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for each. The first aims to create a commitment to stated goals defined in partnership with local communities to meet relevant needs. The institution should develop and introduce a documented quality management system, which covers all the processes capable of influencing the educational and teaching activities of the institution, with appropriate assessment, feedback and control mechanisms. The second is the implementation of total quality management through the creation of learning organisations, whereby the management of the institution should consciously develop its organisational culture by involving staff members, with systems and processes specified to do this. The third is the dissemination of this process throughout the system: the management and staff of the institution should be able to apply the "plan-do-check-act/standardise-do-check-act "(PDCA-SDCA cycle) continuously in every area of the institutional operation.

These processes are by no means unique to Hungary. Some countries have attempted to engage a wider range of external expertise in helping to improve quality. The Flemish Community's education system in Belgium, for example, has been keen to bring in skills of outsiders. While school managers must be formally trained teachers, they may be outsiders who have left active teaching, and the system has asked a private management consultancy firm to draw up job descriptions incorporating a competency profile based on discussions with panels of employers, principals and teachers. The United Kingdom government wishes to engage the private sector in the provision of public services where it can improve delivery, which can be controversial. In education, for example, private sector companies have been brought in to provide services on behalf of local education authorities that are failing or severely under-performing. Recently, three schools in difficulty in the county of Surrey have been entrusted to private companies contracted with the local education authority to improve performance in return for an annual management fee.

It is one thing to elaborate a model for change and quite another to implement it successfully. The seminar discussion brought to the surface a range of difficult issues that need to be addressed. One derives from the challenge of becoming less insular. Schools can benefit from working not just with those from other schools but from outside the education sector altogether. Yet, it can also be difficult, and not just because of cultural resistance by educators. For instance, outside consultants need to understand the intricacies of schooling and the constraints of education policy. Nevertheless, there was optimism about the benefits to be gained from looking beyond established recruitment sources for school managers. One participant suggested that recruiting managers without professional teaching experience could have a twofold benefit. First, being detached from the teaching profession can make it easier for such managers to be more directly

accountable for outcomes; second, their presence could help schools deal with some of their outside partners, for example, other public sector organisations such as health or social services.

Perhaps the biggest challenge relates to how schools as organisations go about learning. In working with others inside the education sector, the challenge of "horizontal learning" from colleagues – within and beyond the same school – and hence of networking is crucial. To be effective there will often need to be an important culture change, in which classroom teachers learn to work in collaboration with colleagues to a far greater extent than in the past. The systematic approach of identifying goals, analysing what needs to happen to meet them, and openly monitoring progress while learning from one's mistakes requires a very conscious effort by school managers, as this has tended not to be established practice. Politics and the policy-implementation processes of education do not always make this easy for schools, as their efforts to develop as organisations are overlaid by many external demands and day-to-day pressures.

3.1. Openness and accountability...

An important tension in managing education as a public service arises from the need simultaneously to be effective in producing desired outcomes and to be open about the processes through which these outcomes are realised. The honest self-evaluation that is essential to a learning organisation can create problems for bodies that are publicly accountable and vulnerable to the charge of failure. At the same time, a school cannot easily keep its operations secret. Different countries have responded in different ways to these dilemmas. In some, there is still confidentiality surrounding information designed for internal monitoring. In others, there is a legal requirement to publish results. The transition from the first situation to the second can be accelerated by the assertion of the public's "right to know". In the Netherlands, for instance, a newspaper went to court to oblige schools to publish results that had come from a benchmarking exercise not designed to produce public comparisons.

The seminar discussion suggested two possible ways of addressing this problem. The first is to develop assessment tools that are more consistent with the goals that schools want to reach. Publication of crude tests of students' performance may sometimes create perverse incentives if they are not accompanied by wider outcome measures. The OECD's Programme for International Student Assessment (PISA) is a step in this direction and includes measures of student characteristics as learners, but a still wider range of indicators would include non-cognitive outcomes of education. Even were assessment instruments perfectly matched to a school's objectives, there

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may still be a disincentive for a school to look honestly at its performance as part of the improvement process.

A second part of the solution therefore needs to be to regard failure in a more constructive way, as sometimes occurs in the private sector. For failure to be seen as a normal part of experimentation, a new political discourse would need to understand educational initiatives, in systems and schools, as part of a continuous learning process, rather than each being sold as a guaranteed recipe for success. Some progress has been made in this direction over recent years, but more remains to be done in creating a sophisticated set of instruments for correcting and learning from failure in an open environment.

3.2. ... *experimentation and innovation*

- "We are still structuring classroom instruction around a nineteenth century model based on single-teacher classes and short subject periods. We need to try out other models to see what works."
- "Teachers are constantly being subjected to new initiatives and change. Most of these initiatives fail to produce what they promised, or are quickly superseded by the next fashion."

These two (paraphrased) attitudes present conflicting perspectives about the desirability of implementing radical change. On the one hand, it is identified as urgent and not to be ignored; on the other, schools already achieve huge tasks in terms of socialising children and providing stability in often fragile communities. It is certainly not easy to "start again from scratch" in designing the logistics and methods of schooling without endangering this stable set of functions, but this is not to deny the value of change.

In confronting this dilemma, the seminar reflected on the distinction between piecemeal initiatives and a genuine process of experimentation. When political initiatives are piloted, for example, governments, local authorities or schools must be prepared to abandon what does not work and to build on what does. This means accepting that just because a new educational idea is intuitively attractive, this does not mean that it will work or be appropriate in all circumstances. As regards evaluation, it may take so long on grounds of rigour that by the time it appears it has little scope to influence the project in question. New approaches are required to produce independent yet timely assessment of whether changes are working.

A related issue is how successful innovation is disseminated. The Hungarian model puts a strong emphasis on active dissemination across the system, as do initiatives such as Beacon Schools in the United Kingdom. But, can the broader need to ensure that change is not fragmented and that the best gets disseminated be reconciled with local autonomy? Squaring this

circle depends importantly on the strength and success of networking mechanisms. A major task for governments is to build and support these linkages, rather than trying to impose innovation by decree. The seminar also showed some enthusiasm for cross-national dissemination of successful innovation – participants acknowledged the extent of change from the days when lessons from other countries were of only incidental interest. For example, the close attention being given to the international benchmarks represented by the recently-published OECD/PISA findings is indication of the extent to which educational change is already being judged in cross-nationally, as well as in national and local frameworks.

3.3. System-wide "macro" issues, reform and governance

The final session in Budapest tackled the broader horizon of management and governance at the system level: decentralisation and its implications, and the main currents of public management reform relating to education. This theme overlaps with the previous one, since the "system" level of public management cannot easily be distinguished from the "organisational" level, especially in decentralised systems. The focus on governance was understood not just in terms of the formal structures and directions given by governing bodies and central agencies but also of how multiple stakeholders' views and interests help govern a school's actions and objectives.

Introducing the session, Professor Ron Glatter from the UK's Open University argued that education governance is relatively neglected compared with management: "Theories of management abound, those of governance are few." Getting to grips with governance is not easy. He outlined a wide range of governance arrangements in different countries categorised as competitive markets, school empowerment, local empowerment and quality control. The four models do not exist anywhere in pure form but are combined in differing degrees. Which model prevails shapes which type of leadership is appropriate, although sometimes school managers feel themselves pulled in several directions simultaneously. This framework raises the question of the degree to which different models can compete, conflict or co-exist.

A great deal of the seminar discussion analysed decentralisation, in terms not just of its benefits but of the tensions it can create. In most countries recently, power has been flowing away from central management and towards local control in the governance of schools. In some countries, this has been overlain by new forms of assessment mechanisms and centrally defined outcome and accountability requirements. In others, including Hungary, there has been a concern that decentralisation might initially have led to standards becoming less even and a reduced capacity to meet system-wide goals. Kari Pitkänen of Finland's National Board of Education emphasised

the degree to which education remains a public issue backed by a national educational strategy.

Countervailing the trend to decentralisation, however, is an emerging supranational agenda. As regards Europe, certain of the principles underpinning this were outlined by Guy Haug for the European Commission, especially in relation to key goals such as the development of skills for the knowledge society, the specific development of ICT competence, and the need to focus on science and technology. The pursuit of this agenda is voluntaristic, based on agreements among countries to share functions, develop common instruments to monitor progress, share information, and to establish Community-wide action where this is perceived to add value. These common interests – as reflected in the Budapest event itself – have now grown strongly and with it the pressure for collaboration at the international level, for example in the dissemination of good practice.

In seeking to reconcile decentralisation with overall system quality and objectives, each country is having to work out new sets of relationships. The result, according to one participant, is that the "rolling back of the state" is being combined with a "rolling in of new, dispersed forms of control"; as another put it, that the attempt is made to "re-establish control where accountability has been devolved". This can create contradictory pressures and tensions, as well as multiple forms of governance and control. Very different mechanisms for maintaining quality are appropriate compared with in the past. The Hungarian model of establishing quality-management processes in some schools and then spreading good practice is a far cry from a centrally managed system. However, when it comes to who decides, for example, what is in the curriculum, a stable model has yet to emerge. In Finland, the movement is currently towards greater school autonomy in curriculum matters, while other countries such as the United Kingdom have opted for a centrally defined model, even though presently they are looking for ways of encouraging local diversity.

The position of local authorities and other bodies between the central state and the school has become uncertain. While some seminar participants saw them as useful mediators between central requirements and local priorities, the importance of this mediating layer has in many countries been reduced. There are other forms of mediator, such as Hungary's education ombudsman, whose rôle deserves further attention. The boards and other bodies directly governing schools, which are the mechanisms through which local communities have a stake in the running of schools, have not been adequately studied, either. For the principal and other school managers, running a school means negotiating with multiple powers that each have a stake in the governance of education, rather than simply asserting the

school's autonomy as an independent unit or following the orders of a single authority.

4. The Route Ahead

This seminar underlined the fact that it is impossible to detach the improvement of the ways in which students learn within schools from the ways in which schools themselves develop as learning organisations. Schools are complex entities to manage but are not unique in their complexity, and there is scope for adapting models of change developed in other complex sectors, both public and private. There are multiple pressures being exerted on education systems, raising acute tensions for those who manage them. With no clearly defined route map, and no ideal model of teaching practice, educational structures, or other elements that make schools work, change cannot be a linear path towards clear predefined models. It needs to progress along a route in which the map is constantly being refined. Even so, there are likely to be certain stable signposts. One of these is the centrality of genuinely participative teamwork in the running of any successful school rather than relying on a few charismatic leaders. Engaging all the staff does not preclude hierarchical relationships, but cannot take place without a shared sense of mission and responsibilities.

Two particular tensions stand out on the route ahead. One is between constructive evaluation and accountability. Can organisations learn effectively when they are in the spotlight? A more tolerant attitude towards short-term experimentation (and hence possible failure) may help, but at a political level this is hard to achieve. Second, there is a tension between the radical change required to foster "real learning" and the need to preserve stable, workable systems for instructing children. Apart from the political resistance to radical change, the scale and complexity of the educational enterprise in practice constrain the speed at which such change is feasible.

And what of the people who will have to follow this route map, and to revise it *en route*? What is needed beyond a pedagogical leader is someone capable of making complex systems work – able to listen, negotiate and steer while keeping sight of the organisation's fundamental goals and values. It may thus be as important that those who work in schools and systems should better understand the principles of good public management as it is that they should improve their understanding of how students learn.

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Schooling for Tomorrow

Networks of Innovation

TOWARDS NEW MODELS FOR MANAGING SCHOOLS AND SYSTEMS

OECD countries are increasingly referred to as "network societies". This brings to the fore questions about educational networks: to what extent can they replace cumbersome bureaucracies as forms of management and as sources of innovation and professionalism? Some, such as Professor Michael Barber in this volume, predict the demise of large, slow-changing public services. But if so, what will take their place, and how do we ensure that it will be for the better? As schools become more autonomous and the world more complex, what forms of organisation and governance will ensure that education does not just fragment into chaos? These are among the questions that inspired seminars held in Hungary, the Netherlands and Portugal, organised with the OECD's Centre for Educational Research and Innovation (CERI). They were concerned with the "how?" and not just the "what?" and "why?" of changing schools for the future.

The resulting analysis is presented in this latest published report in CERI's *Schooling for Tomorrow* series. The report complements earlier volumes on innovation, schooling scenarios, ICT in schools, and the learning digital divide. It analyses examples of innovative educational networks and policy programmes, and brings together related research from different countries and disciplines. It also presents the main directions for future policy and practice that emerged from the seminars. The report will be useful for both the shapers and students of educational change across the OECD.

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