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PART I Chapter 3

Networking for Educational Innovation: A Comparative Analysis

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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 crossnational 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

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), 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.

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

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 cooperation, 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.