Chapter 7
Superintendent Leadership in Hierarchy and Network

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Abstract School superintendents are coupled hierarchically with the top apex of municipality organization through their membership of leadership teams and through personal ties to the top municipal manager, which provides opportunities to take part in strategic decision-making processes beyond the educational sector. Superintendents are also vertically linked to their school leaders through strong and dense network ties. Along the horizontal axis superintendents are active network players with peers, for example through superintendent associations or more frequently mentioned through personal ties to superintendent colleagues. Superintendents are linked to school boards through strong formal ties. In this chapter, the formation and utilization of network ties within the hierarchy by superintendents is analyzed in concert with horizontal network with peers. School board networking within hierarchy and with the political power center of the municipality is analyzed. Finally, the use that school leaders make of the network in relation to superintendents is discussed.

Keywords Governance hierarchy • Social network • Network structure • Network engagement • Organizational trust

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1 Networks in Contemporary Governance

There is today a broad consensus among scholars and practitioners that networks play an important role in corporate as well as public sectors (Castells 2000; Tsai 2001). Specifically, network engagement is a core characteristic of contemporary governance, characterized by greater influence from independent transnational and national bodies in policy processes and quasi-markets in the delivery of public services (Stoker 1998a). The term 'governance' was adopted in the 1990s to capture the changing nature of policy processes (Rhodes 1997), manifested as a shift from the hierarchical bureaucracy model towards a more complex model (of public administration) where network actors outside the circle of the bureaucracy were also found to be influential players (Hooghe and Marks 2010). In other chapters in this volume this pattern is described as the change from monocentric towards polycentric state models. This means by implication that policy processes goes beyond those taking place in formal government structures – not least in "self-governing networks of autonomous actors" (Stoker 1998b, p. 18), where actors and institutions gain power by blending their resources, skills and purposes in long-term coalitions that are kept viable in networks. It also means that the capacity to get things done does *not* entirely rest on the power of government to command and use authority – rather it also depends on the capacity to use new tools and forms to steer and guide (Stoker 1998a). Hierarchy and network can therefore be conceived as interdependent "twin concepts" that should be analyzed simultaneously to capture the full picture of the leadership and governance processes of public schooling.

We see this as particularly important for school superintendents who operate at intermediate levels in the hierarchical line of municipality organization, mediating between the top municipal management and school leaders. Superintendents are also connected to school politicians at the same governance level, and connected to a range of actors outside the municipal organization's boundaries (Paulsen 2014). It seems therefore evident that analyzing the role of superintendents at work solely through the lenses of the hierarchical governing line will not capture the full picture of contemporary school governance and leadership. Rather we see *both* social network engagement and handling the control span in the hierarchy as important avenues for superintendents to exert social influence and to practice educational leadership in Nordic systems.

2 The Twin Concepts of Hierarchy and Network

The concepts of hierarchy and network are not separate from each other, but rather overlapping and complementary, because networks in organizations typically cross two or more levels of analysis, such as from individual to group connections (Katz et al. 2004). They should therefore rather be treated as "twin-concepts" that add complementary value to each other in the understanding of contemporary school

governance. They are also supplemental forms of coordination and ways of exercising power (Powell 1990).

2.1 The Concept of Hierarchy

A hierarchy takes the shape of a pyramid with several layers of authority bound together in a control system spanning superiors and subordinates, functional specialization in separate units, downwards delegation and upwards reporting (Blau and Scott 2003). Thompson (1967) distinguished three levels of hierarchy; the technical (operational bottom), managerial and institutional (strategic top apex) levels. The links between these levels are in principle filled by middle level managers who "perform a coordinating role where they mediate, negotiate and interpret connections between the organization's institutional (strategic) and technical (operational) level" (Floyd and Wooldridge 1997, p. 466). This mediating role has significant potential for exerting social influence downwards as well as upwards (March and Simon 1993). From their mediating position, middle level managers also operate the external boundaries of the organization, for example through regular contacts with customers and suppliers (Thompson 1967) and stakeholders (Mintzberg 1993). In the administrative hierarchy of the municipal organization, superintendents can in many cases be seen as middle managers, who mediate between different and often conflicting perspectives and interests in the hierarchical organization, as well as between stakeholders in the environment and the municipal school administration (Paulsen and Skedsmo 2014).

According to institutional theorist W.R. Powell, a hierarchical structure is characterized by "*clear departmental boundaries, clear uses of authority, detailed reporting mechanisms, and formal decision making procedures*" (Powell 1990, p. 302). The most common principles of a hierarchy are that: (1) administrative efficiency is sought through the specialization of tasks by the members of functional units; (2) efficiency is sought by arranging the members of a group in a determinate hierarchy of authority; (3) efficiency is sought by limiting the span of control at any point in the hierarchy to a small number of people (Simon 1997; Weber 1947). The more qualified the employee, the less the span of control can be designed: a narrow span of control allows easy and frequent consultations on complex problems, whereas wide spans of control most commonly mean close supervision and control, and only infrequent person-to-person consultations (Perrow 1986). In cases where subordinates work on non-routine tasks, the demand for closeness, ad-hoc consultations and direct supervision increases significantly, which is typically the case in the relationship between superintendents and school leaders.

As noted, the high speed of operations and large volume of transactions in Nordic educational governance makes hierarchy a well-suited organizational form, and its strength is then its reliability – its capacity for repeatedly producing large numbers of services of a given quality – and its accountability, in terms of its ability to document how resources have been spent (DiMaggio and Powell 1983). Through the

exercise of authority, or other forms of influence, "*it is possible to centralize the function of deciding so that a general plan of operation will guide all members of the organization*" (Simon 1997, p. 8). This form of coordination is most often procedural, or routine-based, in nature, involving stable general descriptions of the behaviors and the relationships of the members of the organization (Nelson and Winter 1982).

2.2 Challenges Inherent in an Hierarchical Structure

Studies of administration have identified a series of challenges inherent in hierarchical organization, such as the span of managerial control, through which leaders at all levels control, supervise and support their immediate subordinates. The typical pattern in a hierarchy is an overload of person-to-person relations, which the manager has to deal with. In theory, "*the ideal span of control for a manager has typically been set at about six subordinates*" (Blau and Scott 2003, p. 168), which is far from practical reality in public sector organizations. Another well-documented problem is learning barriers created by the pyramid-shape of the hierarchy, where people perform their daily tasks in "isolated" subunits and staff departments (Nonaka 1994; Scott 2003). Furthermore, when hierarchical forms are confronted by unanticipated changes, such as radical new external demands from policy makers or other stakeholders in the environment, "their liabilities are exposed" (Powell 1990, p. 302).

2.3 The Concept of Social Networks

Networks, in contrast, are "lighter on their feet" than hierarchies. A social network, as a complementary model to hierarchies, is generally defined as a set of nodes (or actors), and it is "the ties that represent the relationship, or lack of relationship, between the nodes" (Brass et al. 2004, p. 795). Collaboration does not occur through administrative command but rather through relationships between people with a minimum of reciprocal actions that are mutually supportive, as described in Chap. 6 in this volume. Membership of networks, with their inherent access to knowledge and critical information, is also a function of mutual trust between the actors involved. The characteristics and differences between hierarchy and network as mechanisms of coordination and collaboration can be summarized, as in Table 7.1.

The content of social relationships between network members is most frequently theorized through the conceptual pair of weak versus strong ties (Granovetter 1973; Hansen 1999). The strength of a social tie is defined as the function of the "amount of time, the emotional intensity, the intimacy (mutual confidence), and the reciprocal services that characterize the tie" (Granovetter 1973). The strength is seen practically by frequency of interaction, close distances and the density of the partnership

Table 7.1 Key features of hierarchy and network

	Organizational forms	
Key features	Hierarchy	Network
Normative basis	Employment relationship	Complementary strengths
Means of communication	Routines	Relationships
Methods of conflict resolution	Administrative supervision	Norm of reciprocity – reputational concerns
Degree of flexibility	Low	Medium
Amount of commitment among the partners	Medium to High	Medium to high
Tone or climate	Formal bureaucratic	Open-ended
		Mutual benefits

Adapted from Powell (1990)

in terms of the number of tasks, activities or projects the collaboration is based on. The strength of network ties is *not* a static property: over time, weak ties might grow strong, and vice versa (Thune 2006, p. 69). Researchers have examined a range of characteristics of the ties involved in networks – such as formal ties (who gives information to whom); affective ties (who like to interact with whom); proximity of ties (who is close to whom) and cognitive ties (who knows whom) (Borgatti and Foster 2003; Katz et al. 2004).

2.4 Social Networks and Trust

There is evidently a trust-based component in social networks, and as the level of trust increase, cooperative attitudes replace calculative ones – and the perceived need for control decreases among the actors. Trust is defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al. 1998, p. 395). As a function of trust, relationships between the actors tend to be informal and long-term in nature, and also sustainable despite people changing their organizational affiliations. Arguably, organizational trust is an alternative to external control mechanisms both internal and external to the organization and co-temporal or retrospective to the event (Mayer et al. 1995). Simultaneously, actors in a trusting cooperation are influenced by a kind of self-obligation. Such self-obligation includes not engaging in activities that may betray the mutual trust relationships that characterize cooperation. Notably, trust-based network ties between actors must be based on the actors' shared perception that the collaboration is relatively risk-free. Conversely, if an actor perceives risk in collaborations with other network partners, they will most probably either leave the network or close or downplay the interactions (Høyer et al. 2014). A trusting actor, however, may have stronger expectations of a positive

outcome of cooperation and, thereby, have more solid basic trust, which in turn reduces the focus on risk (Høyer and Wood 2011). As argued, network should also be more common in work areas where the participants have some common background – ideologically, professionally or geographically (Powell 1990).

The image of a trusting relationship between school leaders and their superintendents emerges from data from the Nordic countries. For example, when Norwegian school leaders assess the level of organizational trust through different indicators, the main image is one of a high level of vertical trust towards superintendents. Norwegian and Danish school leaders also assess the quality of school leadership meetings in the municipality in a positive manner. The main image of trust can fairly well be linked to the various practices through which superintendents mediate and translate policy goals and municipal decisions in their direct personal links to school leaders. Specifically, we see a tendency for superintendents to perform their leadership tasks and activities within a school development discourse in which they systematically downplay quality management issues. For example, in the self-reported data on the most important tasks Norwegian superintendents bring into their regular dialogues with their school leaders, quality assurance issues are consistently ranked lower than school development issues. This also finds some resonance in data from Denmark and Sweden, where superintendents play important roles as coaches, sparring partners and mentors in developmental issues. In the Finnish case, superintendents also emphasize that their school leaders should prioritize leading pedagogical work in their schools, as well as keeping the budget, but with a particular emphasis on helping students face the challenges of meeting the criteria.

2.5   Broken Chains in the Hierarchical Line of School Governance

In our study of contemporary school governance in the Nordic countries we see a series of reform tendencies where the straightforward command and reporting line inherent in the traditional hierarchy model of school governing is broken. Specifically, we highlight four tendencies that will be analyzed below. Although these trends display different patterns and are also implemented in a different manner in the Nordic countries, they all represent a broken chain in the hierarchy, and thus challenges in the leadership chain seen from the school superintendent's perspective. First, as displayed in our data, there is a tendency in the Nordic countries to broaden superintendent's area of responsibility beyond education. Specifically, the majority of Nordic superintendents are also responsible for pre-school institutions. When the domain of responsibility, and thus also the control span, is significantly expanded, there is a risk that the hierarchical structure in itself will not offer enough meeting-points, meaning a gap in the governance chain. Informal network ties can therefore be seen as a compensational tool for superintendents for the purpose of exerting influence and gaining information.

Bypass of policy from national level to schools
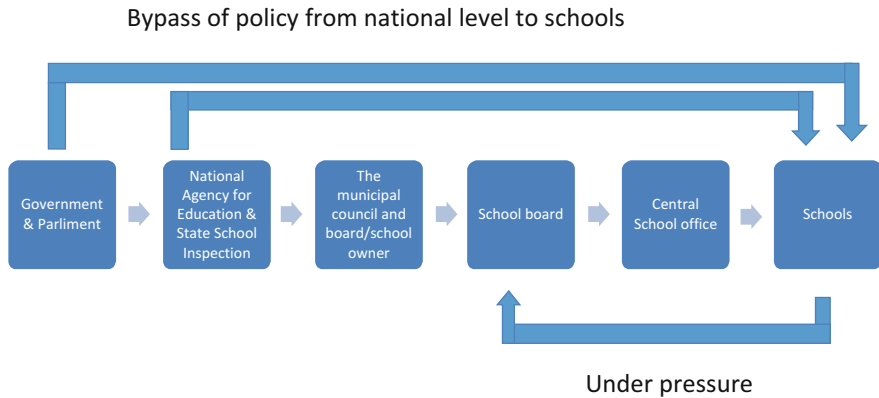
The governing chain with a by-pass government/agencies to school sand "under pressure" from schools to local political level/school board

Fig. 7.1 Methods of bypass and pressures in Swedish school governance (Johansson et al. 2014)

Particularly in the Swedish case, there is a strong observable tendency by the governmental department, the National Agency for Education and the Swedish Schools Inspectorate, to bypass the municipal level and carry out a range of initiatives, prescriptions and directives directly with schools. A similar effort could be identified in Finland in the 1990s when the relationship between the state and municipalities was revised. During the 2000s the governance system was stabilized so that the national level approaches schools mainly via the municipal level, as legislation is also defined. The pattern of bypassing municipalities is illustrated in the model in Fig. 7.1.

This tendency is also amplified by an image of mistrust in the Swedish governance chain, manifest in school leader propensities to trust the state more than the municipalities about how to best govern schools (Nihlfors and Johansson 2013). There is also a visible tendency in Norway to bypass the municipalities, as seen in the bulk of initiatives and projects launched by the National Directorate of Education and Training. For example, national assessment routines are developed by the directorate, and direct steering, are in most cases accompanied by state funded training programs for teachers in how to implement the initiatives. In a similar vein, the Norwegian directorate runs a series of national training programs for school leaders. Not surprisingly, Norwegian school board members realized that they were bypassed by means of a growing number of state initiatives (Paulsen and Strand 2014). Finland often appears as an outlier among the Nordic countries. In this regard, too, the national level seems to create a framework in which the municipal level operates very autonomously. Thus for municipal school board members, superintendents and principals, local decision-making is more important than that of the state. Thus in the Finnish system it is not easy for the national level to bypass the municipal one and directly govern schools.

The increased number of independent schools in primary education also represents a gap in the municipal school governance chain. A fourth tendency to break the hierarchical governance line is represented by the introduction of intermediate levels of leadership and management. For example in the Swedish case, an intermediate actor, labeled 'assistant superintendent', is visible – typically responsible for seven to ten schools working with the instruction of school leaders. They also report back to the superintendent on school leader performance. In the Danish case, a middle layer is introduced between the superintendent and the municipal top manager. As the size of municipalities grows in Finland, the solutions typical of both Denmark and Sweden may gradually become more common.

2.6   Summary

Taken together, it seems fair to interpret the tendencies presented above as breaks in the governance line of the municipal hierarchy. Whereas the extension of the superintendent's domain of responsibility is visible in all four Nordic countries, bypassing superintendents is more evident in Sweden. In a similar vein, independent schools and intermediate leadership levels seem to be more frequent in Denmark and Sweden. Over and above this, network engagement can be seen as a compensation strategy for superintendents in order to counterbalance these gaps through increased engagement outside the school office.

3   Superintendent Networking Within the Hierarchy

3.1   The Players and the Structure of the Superintendent's Network

The main picture from the data provided by the national surveys suggests that superintendents are frequently players in internal and external networks. Internal networks are both vertical and horizontal in nature, and may be a function of the line hierarchy as well as a function of trust-based dyadic and personal relationships. Hierarchy and network, therefore, are complementary analytical tools that are useful for the purpose of capturing the full picture of the social avenues, through which superintendents seek to exert influence. Networks are formed and maintained both vertically and horizontally. Whereas vertical ties between the superintendents and the municipal top management (upwards) and school leaders (downwards) are embedded in a formal line structure, horizontal network engagement takes the form of participation in temporary project groups and personal relationships with peers. Superintendents are also connected to school boards through formal subordination
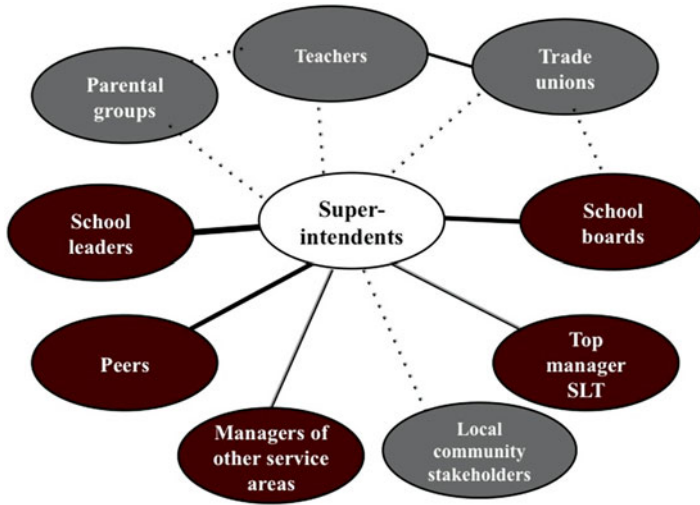
Fig. 7.2 Network structure of superintendents. *Bold lines* indicate stronger ties (more frequent interactions) whereas *broken lines* indicates weaker ties between actors

and through personal ties to the chair of the board. The structure of the superintendent's network is illustrated in Fig. 7.2.

Social ties between the superintendent and other important players in local school governance can typically take place as within group networks, for example in senior leadership teams at the top; as well as in school leader groups together with school leaders. These within-group relationships are supplemented by personal ties to the top manager, peers and individual school leaders. Since superintendents in Nordic countries perceive that they exert some influence on strategic decision-making of other service areas beyond their own domain of responsibility, it is fair to assume that they also maintain personal ties with managers of other service areas within their own municipality organization.

As shown in Fig. 7.2, superintendents are also in regular contact with representatives of teachers, parents and other local community stakeholders, however, there are significant differences between the ties formed and maintained with these actors. Whereas the social ties to school boards, top management and school leaders are strong, based on frequent interaction in formal and informal settings, the opposite is the case for teachers, trade unions and parental groups according to our data. These ties are weak, shaped by infrequent interactions, yet they provide superintendents with information that may be beneficial for mapping the power-landscape. On the other hand, as displayed in the data on stakeholder influence, teacher and parent interests are typically downplayed in decision-making processes that involve superintendents and school boards.

3.2   Upwards Network Engagement with the Top Apex

It seems that school superintendents across a variety of national and regional contexts maintain relationships that are embedded in strong ties to their immediate supervisor or manager. Strong ties by means of frequent meetings and day-to-day interactions are promoted by a series of coordination tasks that must be resolved, as well as decision-making processes taking place in regular meetings within the hierarchical governing line. The coupling mechanism between the superintendents and their immediate superior in the governance line follows a differentiated pattern, however. Specifically, Sweden with its 290 municipalities, has a more diverse pool of relationships between the superintendents and their immediate superior managers. The majority are connected to the municipal manager but 17 % are coupled directly to the school board as their immediate unit of command, and 15 % are subordinate to the political leadership of the municipality.

There are also other contextual differences across the cases. Whereas half Danish superintendents seem to be linked to a middle level manager between themselves and the municipal manager at the top, the other half are connected directly to the municipal manager themselves. The Norwegian superintendents are in most cases coupled directly to the municipal manager. This difference between Norway and Denmark can be fairly well explained by the heterogeneity of the municipality landscape in Norway, with a large number of small municipalities with a simple hierarchical structure, in contrast to the Danish situation with a more homogenous mass of 98 municipalities that are all large complex hierarchies. In Finland, the superintendent holds a series of strong ties to the political and administrative core of the municipality organization. Concurrent with the main images in the other Nordic countries, the Finnish superintendent is normally directly coupled to the municipal director, the top manager, through lines of reporting and command. The Finnish data also shows strong links between superintendents and the political power-centers in the municipalities through direct expert engagement in the municipality council and board.

When it comes to participation in the municipal manager's top leadership team, which is a strategic asset in most organizations (Wageman et al. 2008), most Nordic superintendents are regular members. There is also a picture running through the Nordic data that superintendents are engaged in comprehensive decision-making processes beyond their own specialism of education. For example, the Nordic superintendents perceive that they also exert influence on strategic decisions of other service sectors through their participation in the top leadership team, and also through the fact that they serve as responsible managers for more than education, as formalized in their job-descriptions. This pattern reflects an overall tendency to expand the work domain of superintendents to include neighboring sectors.

3.3 Density of Network Ties

A central question in network analysis involves the density of the network understood as the portion of potential connections in a network that are actual connections (Burt 1992). For example, if 80 out of 100 potential connections are utilized, the density ratio is 0.8. The analytical point is that a series of possible network ties embedded in a hierarchy does not in itself ensure a beneficial relationship – it is the utilization that makes network engagement a power instrument and a learning instrument. Density in networks is achieved through the breadth of the collaboration in terms of superintendents and top managers engaging jointly in a range of different tasks and projects. Although the density is *not* measured in mathematical terms in our study, the data supports some images of density. For example, by means of self-reported data the study captures the degree to which the superintendent's work is assessed by their immediate supervisor. The overall picture is one of regular contact and assessment by the superior manager: When examining the ways through which the superintendent's work is assessed (by the municipal manager), the majority reports with assessment and feedback once a year. For example, 95 % of the Danish superintendents report that they are assessed annually by their superior manager, however, in the Swedish data, there is obviously a deviant sub-population that perceives only mediocre feedback and assessment: remarkably, 29 % of the Swedish sample reports that they are either never assessed by their immediate superior, or that they do not know.

Norwegian superintendents perceive that the motives of the municipal manager in assessing their work cluster around a Management by Objective (MbO) discourse, most evidently in terms of identification of areas of improvement (based on comparisons of results with targets). This response pattern corresponds fairly well with the Swedish data, with the exception that deciding wages is ranked highest by 61 % of the superintendents. Similarly, 55 % of the Swedish superintendents perceive that the motives of their immediate superior, from which they are assessed, cluster round an ambition to identify the superintendent's strengths. Here again, 20 % of the Swedish sample did not answer this question. Also notably, only 33 % of the Danish superintendents have a written job instruction. In Finland every superintendent has a written job description, in practice. Evaluation is mainly conducted through developmental discussions with municipal directors but typically in Finland several other evaluators are also mentioned, such as the municipal inspection board and school board.

Regarding the nature of the relationship between the Norwegian superintendent and the top apex, the data shows a pattern of fairly frequent availability of the superior municipal manager (when needed), specifically for consultations about problems. On the other hand, the same immediate municipal manager plays a rather passive role in educational engagement in their relationship with their superintendents. The content of the relationships is, thus, more of a general nature, and the superintendents feel that their top manager has few contributions to offer to educational issues.

3.4   Downwards Engagement with School Leaders

The superintendents reported that the most important actors in the municipal governance are the school leaders. Running through the data sets is therefore a picture of strong ties between the superintendents and the school leaders, covering both formal meeting structures, informal coordination, support in strategic thinking and mentoring. This major inference can be seen as slightly paradoxical, as long as there is a strong tendency to have superintendents taking care of multiple institutions and thus not able to collaborate closely with all of them. Nevertheless, the data supports the image of a series of direct relationships between superintendents and their school leaders, to which they are immediate supervisor, and the nature of the relationships seems to be a blend of formal and informal ties. For example, superintendents hold school leader group meetings within the governance line, and as seen in the Danish data, these meetings are perceived as beneficial for solving strategic tasks and coordinating tasks related to the daily operation of schools. Also, as revealed in the Danish data, superintendents and school leaders use personal direct contact to discuss strategic issues of a pedagogical nature, where the superintendent also acts as a sparring, coaching and dialogue partner. This also finds resonance in the Norwegian and Swedish data. As commented on earlier, when Norwegian superintendents describe the content of their daily dialogue with their school leaders in their own words, school development tasks and pedagogical leadership issues are ranked highly. In that respect, the data suggests that formal and informal network ties add complementary value to the leadership dialogue with school leaders, as seen from the superintendent's perspective.

3.5   Summary

The analysis above confirms that superintendents are active network players within the vertical governance structure of the municipal hierarchy, and the analysis indicates a fairly high level of utilization of the unique position held by superintendents. Particularly, the professional ties between superintendents and school leaders emerge as important seen from the superintendent's perspective, yet there are also visible couplings between superintendents and the upper level of the municipal hierarchy. There are substantial differences across the Nordic countries when it comes to intermediate levels; upwards between the superintendent and the municipal top manager; and downwards between the superintendent and the school leaders.

4 Superintendent Engagement in Horizontal Networks

4.1 Internal Network Engagement in Project Groups

Superintendents span the internal boundaries of the municipal organization by means of strong ties to a wide range of professional forums and projects. The main picture from the data confirms that municipal school superintendents also maintain personal ties with a range of colleagues within their municipality organization through participation in project groups. Regarding the breadth of these ties, 40 % of the Norwegian superintendents report participation in more than three project groups, whereas the remaining 40 % participate in 1, 2 or 3 groups. The Norwegian data is silent about the content of the collaboration, however, such as in terms of agendas and issues that superintendents collaborate on across the municipality boundaries: it is fair to assume that these project groups engage in coordination matters with a broader range of interest. The Danish data confirms this image and adds supplemental information, in terms of superintendents participating in mostly 3–5 *ad hoc, municipal groups* in order to produce policy papers, administrative routines and carry out overarching and coordinating meetings with leaders at several levels from several sectors. The Swedish data confirms that almost all superintendents engage in social networks. In terms of the content of the network relationships, 91 % of the Swedish superintendents report about school issues. Over and above this, this form of horizontal networking in theory provides opportunities to exert influence on other domains, yet more importantly, the project group engagement external to the education sector offers access to valuable information and knowledge that might be used at a later point of time. Unsurprisingly, internal networking seems to form an essential part of the work of Finnish superintendents.

4.2 Networking with Peers

Superintendents continuously cross the external boundaries of the municipalities in their daily work, and the picture drawn from the data is that school superintendents engage frequently in professional networks with peers. For example, 63 % of the Swedish superintendents reported that they collaborate with peer superintendents on a great number of issues, and, in a similar vein, 55 % perceive that they are central actors in the collaboration with peers. In contrast, only 32 % of the Swedish superintendents ranked external collaboration with peers higher than similar collaboration with "other central actors in my municipality". Seventy-four percent of the Norwegian and Danish superintendents report that they have frequent contacts with other school superintendents. The Finnish results confirm the Swedish ones. The views of actors in their own municipalities are more important than those of peers in other municipalities. On the other hand, regional level planning has become more and more important in Finland and there are several attempts to compile

regional level curricula and strategic development plans which establish natural genuine platforms for superintendents to network. In addition, the Finnish Superintendents' Association, Opsia, is presently the most strongly growing trade union association in the education field.

The data is silent about the density of the relationships, however, and whether superintendents collaborate about "many things" or "few things" is not captured by the data. In the Danish case, peer-networks are described as important in everyday work: this is where new challenges, tasks and opportunities are discussed and explored. These could be described as learning communities, but they are rather loosely coupled to each other. Two peer-networks are mentioned most often in the Danish case: superintendent associations and the superintendents in the region. From these networks they receive professional development, inspiration, sparring, knowledge sharing, and community, meet the politicians and discuss political issues. In a wider sense, networking with peers offer opportunities for superintendents to scan, map and construct a picture of their environment, including predicting future trouble spots or potential allies (Daft and Weick 2001; Tushman and Scanlan 1981). Engaging in horizontal networks that cross the external boundaries is also an essential leadership function for organizations in order to assimilate fresh knowledge and critical information across the boundaries and to integrate it with the focal organization's own knowledge reservoir (Paulsen and Hjertø 2014).

5 School Boards in Local Governance Networks

5.1 The Network Structure

School boards take part in two discernable yet largely unconnected social networks. The first type of network identifiable in the data embraces the school board, its superintendent, and the administrative office to which the superintendents are immediately superior. In this form of network, school boards are politically superior to superintendents and the school office. The ties between the board and the school administration are strong and dense, since board members rank superintendents and school administration as their most valuable partners in the preparation phase of the policy process. The second form of network in which school boards are engaged involves the relationship between the board members and the municipal political organization – that is the municipal council and the municipal board. School boards are also in principle indirectly connected to school leaders and their teachers, although the data suggests that the ties between school board members and schools are weak and infrequent. The network structure is illustrated in Fig. 7.3.

The two networks in which school board members are situated provide different opportunities for exerting political influence. The ties to the municipal council and board are strong, through frequent interaction (in terms of double-membership). Ties to the administrative core of education in the municipality are also strong, yet
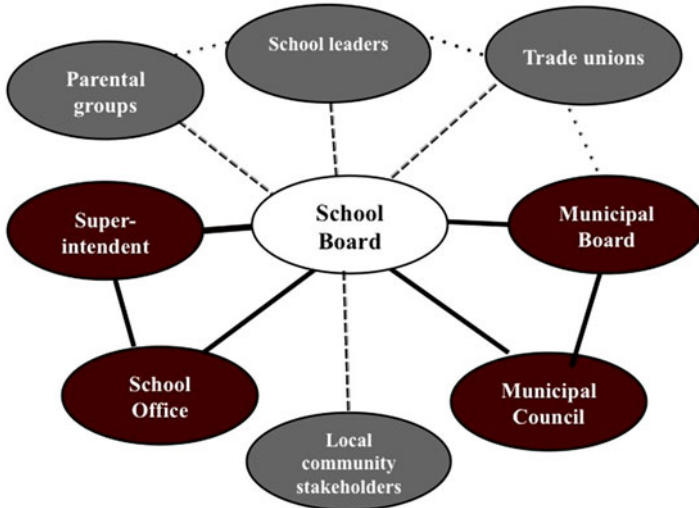
Fig. 7.3   Network structure involving school boards

of an asymmetric nature. Whereas the superintendent and the school office hold strong and dense ties to school leaders and teachers, boards are largely disconnected from this sphere. This leaves school board members in an asymmetric power relationship when it comes to governing schools. As reported in a Swedish study, however, there is also a risk of developing mistrust in the link between school politicians and school leaders (Nihlfors and Johansson 2013).

5.2   Network Ties to Administration and Superintendent and School Leaders

The two most important actors, in terms of their strength of influence on the decisions made by the board, are the school administration and the superintendent. In a theoretical sense, the social network ties between the school boards and the administrative school administration, including the superintendent, are strong, characterized by frequent interactions. It is therefore fair to interpret the ties between the school boards and their respective superintendents as dense, since they collaborate on many a range of policy issues and strategic tasks. Support for this inference comes from the self-reported data of the school boards that shows strong participation in the board's agenda setting from the superintendent. The social ties between the school board and the school leaders are weak, with infrequent interactions, and school leaders are *not* important stakeholders when it comes to the school board's decision-making processes. For example, only 28 % of Norwegian and Danish school board members see their school leaders as influential in decision-making. In

the Swedish data, a similar 29 % of the board members perceive that school leaders can exert influence on the decisions made by the board. Only 18 % of Swedish school leaders see themselves as influential in the board's decisions. In Finland the views of school leaders seem to be the third most influential for school board members but still significantly less important than those of the superintendents.

Conversely, school board members also assess their own influence on strategic and pedagogical decisions made by their schools and their respective leaders. In Finland school board members appear to have infrequent contact with school leaders but still be satisfied with their impact on strategic decisions at both the municipal and school level. It is noteworthy here that in Finland the curriculum is also regarded as a strategic document. On a more general level, 74 % of Swedish board members perceive that their work with the board has an impact on "*the development of the schools in our municipality*". Specifically, only 44 % of the Norwegian board members perceive that they can make financial prioritizations that impact the work of the school leaders and teachers, and the similar score for the Swedish board members was 39 %. Only 36 % of the Norwegian and 39 % of the Swedish board members perceive that they are empowered to set agendas for local schools within their municipality, and finally, only 20 % of the Norwegian members see themselves as empowered to make decisions on local curriculum development that interfere with the work of schools. Thus, when it comes to pedagogical matters and decisions at the local school level, the data indicates weak ties between school boards and school leaders, and, further, that these ties are embedded in an asymmetric power relationship in favor of school leaders and teachers in pedagogical matters at the school level. Taken together, the Nordic data indicates strong ties between school boards and superintendents, but in an asymmetric fashion in favor of superintendents, whereas the ties between school boards and school professionals are weak. Whereas a picture of empowerment emerges in relation to the municipal council, powerlessness seems to be a prevalent characteristic in pedagogical decisions in schools.

School boards and superintendents in Denmark have surprisingly diverse perceptions of many aspects of both parties' work and relations. For example, school boards and superintendents have different views on superintendent influence on school boards, but superintendents are seen to have gradually taken over more policy making, especially when it comes to administrative and legal issues. As noted, there are only infrequent contacts between school board members and schools leaders, and the board members perceive that they have at best only meager influence on school professionals' work. There are two main avenues to the way school Danish board members may exert influence on schools; first, through the strategic non-pedagogical decisions made in the municipal council, which in some cases also affect schools directly; and, secondly, through dialogue with the superintendent and the school administration. A similar pattern was visible when the Danish school board members were asked about their assessment of the most important source of information for their work on the committee, where information from the school administration is typically the most frequently specified category.

5.3 School Boards in the Municipal Policy Network

School boards and municipal councils are linked by some formal political routines, but more manifest through their dual membership. This is evidently the case in the Norwegian sample, where 83 % are regular members of the municipal council – which in itself constitutes strong ties. In Denmark, all board members also take part in the municipal council. In Finland 41 % were also members of the municipal council, 9 % also members of the municipal executive board, 14 % members of miscellaneous other boards and 40 % members of only the municipal school board. In the Swedish case, only 26 % of the board members were members of the municipal council, whereas 65 % of the board members were also members of the municipal board. Notably, it is the municipal council that constitutes the strongest power-center in the municipality's political organization, so the Swedish data suggests weaker connections between the school board and the municipality council. When it comes to the results of this network engagement, the school board members perceive a relatively high influence on municipal governance, particularly in the municipal council and board's strategic decisions and economic prioritizing. It seems that school board members perceive their work as having a significant impact on overall decisions at the municipality level. Here again, the Swedish data contrasts with this image, in terms of 52 % perceiving that the "*municipality board takes the school board's views into consideration in issues of education*". As noted and in contrasting, when it comes to a downwards influence in terms of agenda setting at the school level, the perception of influence among school board members decreases significantly, which again supports the image of weak network ties between the school boards and the school professionals.

5.4 School Board Ownership of Their Specialism

As Anne Homme (2008) showed in her study of municipal school governance in Norway, a series of school specialism issues were transferred from the school board's domain to the municipal policy-making and school administration (see Paulsen and Moos 2014). As noted, when local school issues appeared on the municipality's policy agenda, these issues (and the policy process of which they were part) tended to be assimilated into a broader policy process populated by multiple players: the leaders and boards of a range of municipal sectors (such as child care and culture), the municipal director, the mayor, the central administration, the dominant political coalition, and external stakeholders. Homme's (2008) point is that when this takes place, the school board loses its exclusive ownership of local school policy and governance. An implication of this pattern, at least as a speculation, is that the network engagement of school board members (with the municipal council and municipal board) emerges as an important counter-strategy in order to exert influence on municipal decisions in school matters.

5.5 Summary

Whereas school board members seem to be peripheral in relation to the pedagogical discourse in schools, operated by school leaders and teachers, they have strong ties to the municipal council and municipal board, mostly due to overlapping membership. This means that they might be fairly influential players in strategic decision-making in the municipality's political system, and also when it comes to educational matters, but they are evidently at arm's-length from micro-level implementation in the schools.

6 School Leaders in Networks

As noted, school leaders are connected to their superintendents in two distinct but overlapping ways. There is a consistently strong direct relationship between the school superintendents and the school leaders, and the latter group are thus the primary subordinates or collaborating partners to superintendents. They typically communicate person to person in supervision about strategic issues and leadership tasks. The typical pattern of collaboration is a broad range of issues of which superintendents and school leaders interact. The nature of the relationship is, as such, dense in terms of the breadth of issues. The school leaders' interactions in networks, as portrayed in the country reports is illustrated in Fig. 7.4.

In the Danish, Finnish and Norwegian cases, there is seldom another leadership level between the superintendent and the school leaders, such as the principals, (but they are increasing in Denmark and gradually in Finland). The person-to-person relationship is, as such, of a direct nature. The Nordic superintendents and school
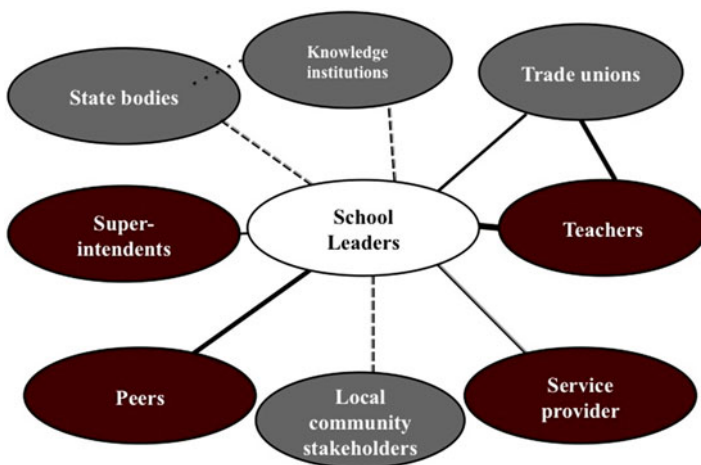

Fig. 7.4 School leaders in networks

leaders are also partnered in municipal school leader groups, which is a consistent pattern in the Danish and Norwegian and Swedish case. Superintendent and school leader networks are thus of a complex nature, since they comprise both dyadic (one-to-one) relationships and within-group relationships.

In the Danish case, the overall picture is that school leaders and their superintendents collaborate on day-to-day operations and strategies in group meetings, whereas deeper educational issues are discussed in face-to-face interaction. The Norwegian school leaders see their group meetings as useful overall, in terms of learning effects, such as their perception of strengthening competence through the group work, and a trusting climate in the meetings. As noted previously, the relationships between the school leaders and the school boards are more of an infrequent nature in terms of weak and non-systematic ties. In the Norwegian case, school board members describe weak connections and little influence on school leaders, and teachers, and the school leaders barely mention the board members in their descriptive data on influence and collaboration. In Finland, 25 % of school leaders reported having an intermediate level between themselves and the superintendent in 2013. Although the result is not directly comparable with the result of the superintendent survey in 2008 (6 %), it can be concluded that an intermediate level of sub-district principals is becoming more and more common in Finland. Finnish school leaders have on average monthly meetings with their superiors and mostly receive support from them in personnel, juridical and financial issues. They particularly expect to have mental support and trust, interaction and leadership from their superiors.

In Sweden, there is a middle layer between the municipal superintendent and the school leaders, as reported by 36 % of the municipalities in 2009. The ratio is expected to have increased in the current situation, due to re-organization initiatives. The existence of a middle layer changes the nature of the relationship between the superintendent and the school leaders because the social ties are then linked through an intermediate agent, but the superintendent meets the school leaders regularly, in any case, as shown in our data.

6.1 Summary

School leaders are linked to their superintendents by means of strong and dense ties. The main image of these relationships is that they are embedded in mutual trust, and they are perceived as valuable from the school leaders' perspective – not least through support, sparring and coaching. The analysis showed differences between Sweden and the other Nordic countries when it comes to intermediate levels between the superintendent and the school leaders.

7   Relationships to Teacher Trade Unions in the Networks

In the Nordic welfare state model, strong corporative partnership collaboration between trade unions and the civil services has been a consistent pattern since World War II (Hernes 1983; Nordby 1994). This regulatory element of the school institution has also been amplified by a collective sense of rationalism bound to this arrangement, manifest in the low occurrence of strikes and conflict in the labor markets. Collaboration between civil service agencies and trade unions has infused the school institution at the state level and the municipality level in various arrangements (Telhaug et al. 2006). Most collaborative arrangements, such as tariff agreements and hearings, have been dealt with at the national level, whereas rules for recruitment and personnel management have been negotiated at the municipal level between trade unions and civil servants, such as superintendents.

The empirical investigations underpinning this volume indicate different patterns between the Nordic countries when it comes to influence exerted by teacher unions in municipal school governance. In 2004 the Norwegian Ministry of Education transferred the responsibilities for teacher tariff agreements, including the wages and standards of working conditions, to the municipal sector, but the association of municipalities deals with the major part of tariff issues, and the municipal civil services are still bound to negotiate with teacher trade unions in a range of issues. This pattern also corresponds with the Swedish case, where teacher salaries are decided on the national level, but between other parties than previously, and these agreements are supplemented by local agreements in municipalities and occasionally also in schools. In Finland collective agreements are still negotiated and agreed on at the national level, however, gradually municipality- and school-based elements and considerations have been added to the agreements, and in Finland particularly school leaders, but also superintendents, seem to value teachers' opinions greatly, and also those of school board members. The views of trade unions, on the other hand, do not seem to be emphasized much by superintendents and principals but somewhat by school board members. Taken together, the transitions in the cooperative systems have resulted in different arrangements of more individually based salaries, however, when it comes to stakeholder influence, the data collected among Nordic superintendents and school board members indicates a decrease of teacher trade union influence. Only a minority of the school board members see the teacher groups and teacher unions as influential in relation to the decision-making processes taking place in the school boards. The same pattern is visible when it comes to superintendent assessments of external stakeholder influence: teachers and teacher unions are not influential.

8   Summary of Findings

There are some systematic differences in network engagement in Norway and Finland compared with Denmark and Sweden in terms of the organization of the hierarchical network structure. In the typical Danish administrative design,

superintendents are coupled with a middle manager next to the top, which means that there is another link in the chain upwards. Danish superintendents are also less frequently directly connected to a school board committee than is the case in the other Nordic countries. In the Swedish case, many superintendents have a link in the chain downwards between themselves and the school leader, which also affects the network structure. There are also more different distinctive types of superintendent role in Sweden, as a function of the size and scope of the municipality. In Norway and Finland, we see a more traditional pattern, where superintendents are linked directly to both the top level of the municipality as well as to the school leaders. The analysis presented in this chapter reveals firstly that the various forms of network engagement employed by superintendents provide opportunities for them to take part in strategic decision-making processes at the top apex of the municipal organization beyond their primary domain of responsibility. Second, and also along the vertical axis, superintendents engage intensively in networks with individual school leaders, and the analysis suggests that this form of person-to-person relationship strengthens the preconditions for superintendents to exert influence on the professional core of schools.

In all Nordic countries superintendents report a work-division of formal and informal collaboration with their respective school leaders, where person to person mentoring with school leaders, including sparring and support in strategic thinking, supplement the superintendent's work in formal school leader group meetings. Although the findings indicate that formal group level collaborations are important for strategic issues and coordination, deeper educational issues require personal direct communication. The findings also indicate that superintendents may play an important role for school leaders by acting as mentors and sparring partners in strategic and pedagogical problem solving. This also seems to be what school leaders expect from their superintendents, as the Finnish results show, for example. Network ties to individual school leaders accompany engagement in smaller networks of school leader groups at the municipal level, and the analysis indicates that these two network leadership practices employed by superintendents supplement each other. A third arena of networking activated by superintendents is professional engagements with peers, and the analysis shows uniformly that various forms of networking with peers are prevalent characteristics of superintendent leadership in the Nordic countries.

The analysis of the school board data brings evidence that board members are also linked to school superintendents through network engagements. Specifically, the ties between the boards and the superintendents emerge as strong and dense, but embedded in an asymmetric power distribution in favor of the superintendents. Whereas superintendents are important network actors seen from the school board members' perspective, school leaders are *not*: school boards seem to be only infrequently connected to school leaders and teachers. On the other hand, school boards are linked to local policy networks through membership of the municipal council. This is uniformly the case in Norway and Denmark, partly in Finland, and, yet as noted, significantly different in Sweden. The main trend is that school board members maintain stronger ties with the political center of the municipality than with the

schools. The superintendents operate in two discernable networks – with school leaders and politicians, and these two seem to be partly disconnected. It is therefore fair to assume that they are central actors in their local school governance chain. There are also some clear tendencies that the traditional corporative structure (including teacher unions) is weakened in the various network forms. Most clearly, the school boards seem to downplay the role of teacher unions and teacher groupings in their decision-making process.

Whereas the work role of school leaders is more strongly determined by the state in terms of legislative directives, this is not the case for superintendents. There is no doubt that superintendents have to adapt their work to state directives, but on the other hand, their work role is more strongly determined by the political and social context of the municipalities. We see this evidently in the vast variation in superintendent roles and job descriptions within each of the Nordic countries as shown in the data. From a theoretical stance, this particular difference in the context in which the work roles of school leaders and superintendents are situated, may create gaps in the local school governance chain. Visible trends of bypassing municipalities in the governing of schools through state initiatives may further amplify the image of a broken chain.

9 Discussion

9.1 The Situational Context of Network Engagement

The empirical studies undertaken in the Nordic countries justify the inclusion of social network theory in theoretical models of superintendent leadership in order to capture the full breadth of their work role and action repertoire in municipal school governance. A possible reason for the relatively high level of network engagement can be explained by the tendency to integrate several areas of responsibility to the superintendent's job. Their field of responsibility and work is thus being enlarged to cover child care and education from 1 through 18 years (Denmark), from 1 through 16 (Norway); and by implication, they are being involved in municipal governance beyond their particular field of work, education, in order to take part in shared municipal coordination and policy-making. In Finland, early childhood education has also been transferred from social to educational services, thus further expanding the role of the superintendent who, especially in small municipalities, may have a wide array of other areas of responsibility as well. Finnish legislation also mandates all public decision-making to be based on genuine dialogue between the various stakeholders. What is more in Sweden, some municipalities have more than one superintendent collectively responsible for the total education of children and young people from 1 to 18 years and in other fields of municipal services such as culture. In these cases, to a large extent determined by municipality cases, it means by implication that the number of layers and professional network ties increases, as does the complexity involved in the work role. All these tendencies point to the crucial importance of superintendents engaging in networks.

Another observable tendency in studies of local school governance in Norway is that strategic decisions about primary education (in the municipalities) tend to be absorbed by a wider range of influential actors – so that school board members and superintendents lose their sovereign role as decision makers in school matters (Homme 2008). In cases where school issues are transformed into a broader decision-making sphere in the municipality, it can be assumed, at least as a speculation, board members also must broaden their scope of engagement. Further, networking thus comes to the forefront. In a theoretical sense, the analysis in this chapter supports the central premise of governance theory in the sense of highlighting the importance of network in policy processes.

9.2 Superintendents and Their Network Position

Degree of centrality is defined by the number of direct relationships, or social ties, that an actor has with other actors in a network (Song and Miskel 2005, p. 13). Specifically, the central actor of a given network, characterized by being the hub of many relationships and thereby uniquely positioned to exclude some and include others, is a potent source of power (Cross and Cummings 2004). The "spider position" in a network gives the central actor several opportunities to control the flow of information, steer communication lines and to bypass some actors in order to exert influence over them. Actor centrality is thus used as a predictor of organizational influence, because the network ties empower the central actors by giving them greater access to valuable information (Pappas et al. 2004). We therefore ask whether or not superintendents can be assumed to be central actors in their networks, and, in a similar vein, whether we see patterns and trends that alter this position. On one hand, in the un-broken governance chain characterized by direct links between superintendents and the municipal top managers paired with direct links to the school leaders, the picture of a superintendent's actor centrality emerges as a fruitful analytical tool. Specifically, when superintendents are positioned to take part in decision-making processes at the top and translating these directly to school leaders through formal groupings and interpersonal relationships – we see that many communication links go through the superintendents. On the other hand, we see strong trends that seem to weaken the superintendent's network position in the Nordic governance systems. First, through the state bypassing the municipality level in governing directives, as in the Swedish case, the superintendent can be locked out of important communication lines in the vertical governance network. A similar effect can be seen through the implementation of intermediate levels of leadership, between the superintendent and the school leaders. Third, in a similar vein, the central position of the latter actor is also weakened by the introduction of a middle-level between the top municipal manager and the superintendent, as in the Swedish and Danish case. We also see different trends in the Nordic countries. Whereas the chain is more broken, seen from the superintendent's perspective, in Sweden and Denmark, there seems to be stronger links throughout the vertical governance line in Norway and Finland.

References

Blau, P., & Scott, W. R. (2003). *Formal organizations. A comparative approach*. Stanford: Stanford University Press.

Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management Studies, 29*(6), 991–1013.

Brass, D. J., Calaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47*(6), 795–817.

Burt, R. S. (1992). *Structural holes. The social structure of competition*. Cambridge, MA: Harvard University Press.

Castells, M. (2000). *The rise of the network society*. Malden: Blackwell.

Cross, R., & Cummings, J. N. (2004). Tie and network correlates of individual performance in knowledge-intensive work. *Academy of Management Journal, 47*(6), 928–937.

Daft, R. L., & Weick, K. (2001). Toward a model of organizations as interpretation systems. In K. Weick (Ed.), *Making sense of the organization*. Malden: Blackwell Publishing.

DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160.

Floyd, S. W., & Wooldridge, B. (1997). Middle management's strategic influence and organizational performance. *Journal of Management Studies, 34*(3), 465–485.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360–1380.

Hansen, M. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organizational subunits. *Administrative Science Quarterly, 44*, 82–111.

Hernes, G. (1983). *Forhandlingsøkonomi og blandingsadministrasjon* [Negotiation-economy and blended administration]. Oslo: Universitetsforlaget.

Homme, A. D. (2008). *Den kommunale skolen. Det lokale skolefeltet i historisk perspektiv* [The municipal school. The local school field analyzed from a historical perspective]. Doctoral dissertation. University of Bergen, Bergen.

Hooghe, L., & Marks, G. (2010). Types of multi-level governance. In H. Enderlein, S. Wälti, & M. Zürn (Eds.), *Handbook on multi-level governance*. Cheltenham: Edward Elgar.

Høyer, H. C., & Wood, E. (2011). Trust and control: Public administration and risk society. *International Journal of Learning and Change, 5*(2), 178–188.

Høyer, H. C., Paulsen, J. M., Nihlfors, E., Kofod, K., Kanervio, P., & Pulkkinen, S. (2014). Control and trust in local school governance. In L. Moos & J. M. Paulsen (Eds.), *School boards in the governance process* (pp. 101–116). Dordrecht: Springer.

Johansson, O., Nihlfors, E., & Steen, L. J. (2014). School boards and their functions in Sweden. In L. Moos & J. M. Paulsen (Eds.), *School boards in the governance process*. Dordrecht: Springer.

Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2004). Network theory and small groups. *Small Group Research, 35*(3), 307–332.

March, J. G., & Simon, H. A. (1993). *Organizations* (2nd ed.). Cambridge, MA: Blackwell Business.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*, 709–734.

Mintzberg, H. (1993). *Structure in fives. Designing effective organizations*. New York: Prentice-Hall.

Nelson, R. M., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.

Nihlfors, E., & Johansson, O. (2013). *Rektor – en stark länk i styrningen av skolan* [The school principal-a strong linkage in school governing]. Stockholm: SNS Förlag.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science, 5*(1), 14–37.

Nordby, T. (1994). *Korporatisme på norsk* [Corporatism in Norwegian]. Oslo: Universitetsforlaget.

Pappas, J. M., Flaherty, K. E., & Wooldridge, B. (2004). Tapping into hospital champions-strategic middle managers. *Health Care Management Review, 29*(1), 8–16.

Paulsen, J. M. (2014). Norwegian superintendents as mediators of change initiatives. *Leadership and Policy in Schools, 13*, 407–423.

Paulsen, J. M., & Hjertø, K. B. (2014). Exploring individual-level and group-level levers for inter-organizational knowledge transfer. *The Learning Organization, 21*(4), 274–287.

Paulsen, J. M., & Moos, L. (2014). Globalisation and Europeanisation of Nordic governance. In L. Moos & J. M. Paulsen (Eds.), *School boards in the governance process*. Dordrecht: Springer.

Paulsen, J. M., & Skedsmo, G. (2014). Mediating tensions between state control, local autonomy and professional trust. Norwegian School District Leadership in Practice. In A. Nir (Ed.), *The educational superintendent: Between trust and regulation: An international perspective*. New York: Lambert Academic Publishing.

Paulsen, J. M., & Strand, M. (2014). School boards in Norway. In L. Moos & J. M. Paulsen (Eds.), *School boards in the governance process*. Dordrecht: Springer.

Perrow, C. (1986). *Complex organizations. A critical essay* (3rd ed.). New York: Random House.

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior, 12*, 295–336.

Rhodes, R. A. W. (1997). *Understanding governance: Policy networks, governance, reflexivity and accountability*. Milton Keynes: Open University Press.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*, 393–404.

Scott, W. R. (2003). *Organizations: Rational, natural, and open systems* (5th ed.). Upper Saddle River: Prentice Hall: Pearson Education International.

Simon, H. A. (1997). *Administrative behavior: A study of decision-making processes in administrative organization* (4th ed.). New York: Macmillan.

Song, M., & Miskel, C. G. (2005). Who are the influentials? A cross-state social network analysis of the reading policy domain. *Educational Administration Quarterly, 41*(2), 7–48.

Stoker, G. (1998a). Governance as theory. *International Social Science Journal, 50*(155), 17–28.

Stoker, G. (1998b). *Governance as theory: Five propositions: UNESCO*.

Telhaug, A. O., Mediås, O. A., & Aasen, P. (2006). The Nordic model in education: Education as a part of the political system in the last 50 years. *Scandinavian Journal of Educational Research, 50*(3), 245–283.

Thompson, J. D. (1967). *Organizations in action: Social science bases of administrative theory*. New York: McGraw-Hill.

Thune, T. (2006). *Formation of research collaboration between universities and firms.* Doctoral dissertation, BI Norwegian School of Management, Oslo.

Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal, 44*(5), 996–1004.

Tushman, M. L., & Scanlan, T. J. (1981). Characteristics and external orientation of boundary spanning individuals. *Academy of Management Journal, 24*(1), 83–98.

Wageman, R., Nunes, D. A., Burruss, J. A., & Hackman, J. R. (2008). *Senior leadership teams. What it takes to make them great*. Boston: Harvard Business School Publishing.

Weber, M. (1947). *The theory of social and economic organization*. New York: Oxford University Press.