Abstract

The purpose of this report is to examine how Finnish doctoral theses describe management of educational institutions. Its main sources include doctoral theses completed during the 21st century, but other Finnish and international research literature has also been used in support of the analysis.

In keeping with the doctoral theses used as its main sources, the report focuses on changes in school management within the general education sector in Finland over the last two decades. The numerous significant social changes in Finnish society during the late 1990’s and the early 21st century seem to have inspired doctoral researchers both to study school management and to examine its phenomena during the last two decades in their theses. The most prevalent focus of their interest has been school management within general education. There has been very little research into school management within the vocational education and training (VET) sector, with the exception of professional higher education.

The first chapter of this report provides a concise review of research into and the recent history of school management in Finland. The review determines the report’s overall analysis, where multidimensional change and the increasingly significant role of knowledge in management emerge as key perspectives. Change is involved in everything discussed within the report in one way or another. The second chapter explores the increasingly significant role of knowledge in management in more detail. It discusses why knowledge has become such an important part of management, what knowledge management means and how the increasingly significant role of knowledge influences management. In addition, the chapter provides an overview of how doctoral theses have produced information about school management.

The third and fourth chapters examine school management from the key perspectives adopted in Finnish doctoral research in the 21st century. Chapter 3 focuses on changes in school principals’ status and key operating environments, i.e. municipalities and schools. Principals themselves are the main focus of Chapter 4. Both chapters aim to outline current school leadership in general terms as well as to provide principals with practical support for their own school management work.

The fifth chapter of the report concentrates on broad pedagogical leadership which, based on 21st century Finnish doctoral research, seems to form a key part of current and future principals’ school management work. It examines the concept and meaning of pedagogical leadership and discusses how pedagogical leadership should be implemented at educational institutions. In addition, the chapter deals with the link between broad pedagogical leadership, on the one hand, and knowledge management, distributed leadership and the new roles of teachers and principals as agents of the future, on the other.

The report ends with a review of future research topics put forward in doctoral theses and highlighted in the report’s analysis; what is essential to study in the future. The hope is that the report’s list of references will help both those working in different positions in the education and training field and researchers with their efforts to develop school
management and the school system in Finland. As to the English version of the report, the authors wish the report to provide international readers an extensive and up-to-date picture of school management in the 21st century Finland.
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Preface

Dear Reader,

School management has become an increasingly important factor in the education policy debate. As resources become scarcer while demands are growing, issues relating to management, leadership and principalship emerge in a new light. At the same time, the extensive nature of management becomes more prominent. School management is not only about administrative management but also about pedagogical and knowledge-based leadership. Leadership and leaders still play a crucial role in terms of school development as well.

Educational institutions have more and more power to decide both on financial and operational matters. Who exercises this power in reality is therefore not insignificant. The opinions of leaders and principals are reflected in the decisions being made – some more than others. New opportunities have also brought about more and more responsibility for the effects of decisions and the relative weight assigned to different functions. The structure of the teaching staff and the distribution of their competencies are not without consequence, nor are the school head's and principal's own preferences – say, a strong interest in sports – or the type of club activities offered by the school or whether any emphasis is given to the use of new working methods and communications. All choices and priorities have a bearing and can be seen in schools' everyday operations and in their future. In this way, they will surely also become visible in pupils' and students' everyday lives and in the construction of their mindsets.

It is therefore highly justified to highlight the significance of leadership and leaders. As an expert central agency, the Finnish National Board of Education (FNBE) wants to participate in raising the deliberations set out in this status review for further debate. The status review also provides an overview of the phenomena and trends of Finnish school management in a changing society.

By nature, status reviews are concise literature reviews compiling research, statistics and indicators relating to the theme in question. Status reviews contribute to carrying out an approach in line with the FNBE strategy where existing information is put together, processed and offered to decision-makers and various interest groups in an easy-to-use form. The aim is to consolidate a knowledge-based approach in monitoring and development of education and in decision-making processes.

Helsinki, 11th May 2012
Petri Pohjonen
Deputy director general
Finnish National Board of Education
1 Introduction

The purpose of this report is to examine what the most recent Finnish doctoral theses reveal about school management, its developments and role in a changing Finnish society. In international terms, research into school management has already been conducted for several decades. It is fair to say that Anglo-American research literature, in particular, appears to have had a considerable bearing on the way in which Finns have approached school management (e.g. Kurki 1993). In Finland, research in this field has emerged quite late in the day, mostly in the late 1990’s, and only about thirty doctoral theses on principals have been published to date (Risku & Kanervio 2011). The number may seem modest, but it is, nevertheless, more than the amount published in other Nordic countries, for example (Johansson 2011).

While there is plenty of school management research on an international scale, it is important that school management is also examined from the perspective of Finnish society. It is only through new domestic research that we can find out what school management entails in Finland, how changes within municipal educational and cultural administration influence the work of Finnish principals and in what ways these changes need to be taken into account in development of Finnish school management.

This report focuses on doctoral theses produced on school principals in Finland during the 21st century. The report charts the types of phenomena studied and the methodologies used in the research. Furthermore, the report describes the key results of the studies and its authors aim to create an overview of Finnish school management in the 21st century, drawing on key research results. To create the overview, the authors have also relied on international research and other Finnish literature on school management. The report can be considered to be a continuation of the review prepared by Kolam and Ojala (2001) for the Nordic Council of Ministers and the Finnish National Board of Education, which focused on school management in Finland during the 1990’s.

1.1 Chain of changes

While this report mainly concentrates on the last two decades (1990–2010), changes that have influenced school management have definitely been made earlier. Changes in different decades can be viewed as forming a chain of changes, which has resulted in current school management. Based on doctoral research examining principals’ operating environments, work, role and identity development over the last ten years, the chain of changes seems to have culminated during the last two decades. The operating environments and duties of principals of the 1980’s and the 2000’s differ significantly from each other (Risku & Kanervio 2011). It can also be presumed that the chain of changes will continue and become even more intense (Kanervio & Risku 2009).

Prior change in the work of school heads and principals has been described by Isosomppi (1996) in her doctoral thesis entitled Jobtaja vai juoksupoika (‘A leader or a messenger’). She concluded that principals’ work had long concentrated on dealing with everyday operations. Their work consisted of administration and its routines – dealing with the post, filling in forms and attending to other day-to-day business. Responding to tasks
assigned from higher levels of the school administration took up a considerable share of a principal's working day. The principal's work was not independent, as the duties were determined by the hierarchical structure of the school administration. The principal's role was to implement and supervise implementation of instructions issued by higher administrative levels. The central government's school administration had very strict control over local authorities. A school head was the local representative of the state's school administration at school level (Mustonen 2003). During the 1960's and 1970's, an authoritarian top-down school administration was emphasised – and culminated – in the work of principals and school heads, until it started to unravel in around 1972 and 1973 due to growing social pressure (Alava 2007).

The priorities and responsibilities of school management seem to have been strongly linked to other developments taking place in society (see Varjo 2007), such as changes in the occupational structure, urbanisation, renewal of values and organisational cultures, EU membership and other internationalisation, as well as changes made to education policy and school legislation as a result of these. In this context, it is good to take note of two years that have been essential turning points in developments in the work of principals and school heads: 1978 and 1999.

In 1978, principals' status changed considerably due to a so-called decision on principals, which introduced overall working hours for principals working at general upper secondary schools and at lower secondary stages and large primary stages of comprehensive schools. This reform realised the objective of permanent posts for principals, advocated by individual principals and the Finnish Association of Principals ever since the 1950's. Recognition of the principal's occupation as a specific profession in its own right made considerable progress. Regardless of this step forward, the job description and duties of comprehensive school principals, for example, were still regulated by detailed lists of principals' mainly administrative duties set out in the Comprehensive Schools Decree. These duties were even further specified by numerous local standing orders and rules of procedure, which were also task lists with the main emphasis on administrative responsibilities (Alava 2007; Taipale 2000).

At the beginning of 1999, Finland completed a comprehensive reform of educational legislation, which was preceded by legislative reforms in 1985, 1991 and 1993, among others. The 1985 reform of legislation governing comprehensive schools and general upper secondary schools dismantled provisions on group sizes and introduced the lesson framework system. The 1991 deregulation exercise abolished the task lists of school heads and principals from both the Comprehensive Schools Decree and the General Upper Secondary Schools Decree. 1993, in turn, saw reform of the government transfer system and a shift from task-specific transfers to a system based on certain calculation criteria. (Souri 2009.)

1.2 Boundaries, structures and parameters and breaking them down

The change affecting principals' operating environments and work is only part of the change taking place in global society as a whole. This change is of such a fundamental nature that, along the lines of Zohar (2007), we can speak about a change of paradigm in the way in which our world works. The Newtonian world, based on permanence,
unambiguous concepts, clear administrative structures and predictable consequences of action, is changing into a quantum world characterised by constant change, ambiguity of concepts, diverse networks and increasing difficulty in terms of anticipation.

Constant change is caused by the ongoing paradigm change, the quantum world in itself as well as our inexperience in leadership in a new paradigm. Concepts take on several meanings as we operate in different networks, which are required for the quantum world to work and enabled by technological developments. This brings about both global trends and local – or glocal – interpretations of and solutions to these trends (Knuuttila 2001; Vartiainen 1998). Anticipating the future in such a world is much more challenging than it used to be.

The operating environments for school management in Finland mainly consist of local (municipal) authorities or joint municipal authorities. Only a small proportion of educational institutions are private or directly run by the State. (Opetushallitus [Finnish National Board of Education] 2011.) Regardless of education provider, principals always have boundaries, structures and parameters steering their actions. General education as well as vocational education and training are governed both by national statutes and local standards and guidelines issued by individual local authorities and joint municipal authorities. Likewise, liberal adult education and basic education in the arts are regulated both by special legislation and through each provider's own guidelines.

Guidance and regulation mechanisms have changed considerably over the last 20 years. The underlying factors of this change are effectively outlined in the doctoral theses by Kunnari (2008) and Varjo (2007). Varjo studied Finland's education policy in the 1990's and, in particular, the effects of international education policies and trends on formulation of Finnish education policy. Controversies between development of the welfare society and promotion of the market economy emerge as a key observation. Varjo suggests that the end result has been strong education policy thinking based on performance guidance. Kunnari's research into the methods and practices of normative guidance in the organisational culture of general upper secondary education from the 1950's through to the 21st century, in turn, indicates that changes in education policy thinking are manifested in the descriptions of schools' organisational cultures.

With the introduction of performance guidance, Finland has shifted from normative to information-based guidance, which will be discussed in more detail in Chapter 2. At this point, it is essential to point out that the process of adopting the new guidance method is still ongoing. Both the world paradigm and the resulting change in guidance method call for new structures and procedures as well as for a new leadership style at all levels of the education system. The national education system, municipal educational administration and educational institutions are faced with a new situation. The entire education and training sector is challenged both by the currently ongoing worldwide uncertainty and by our radically changing conception of knowledge. They challenge both the roles of teachers and principals and leadership in educational and cultural services in a completely new way.

The new situation calls for all those operating in municipal educational administration to adopt an even stronger future orientation alongside traditional teaching and management duties. In the future, teachers should therefore be seen more and more explicitly as being agents of the future, while principals should be seen as being their leaders in
their new role. Whether this can be done within the current boundaries and parameters is questionable. Challenges will include, at least, teachers’ employment and pay systems and specification of professional qualifications requirements and management training for principals and directors of education and culture (superintendents). It ought to be clear that we must find new creative solutions and ways of thinking, either within the existing boundaries and parameters or by breaking away from them.
2 Knowledge management as part of change

This chapter examines knowledge management, focusing on two perspectives. Firstly, it discusses what knowledge management means and why there is a current tendency to manage by information. Secondly, it describes how and what research has been produced on school management in Finland during the 21st century.

2.1 Conception of knowledge management

Our current society is often called a knowledge or information society and we speak about knowledge management, management by information, information management and information-based guidance. What does this all mean?

According to Karvonen (2000), information is knowledge that is stored in a specific format to enable further communication. Information becomes knowledge when recipients interpret it and incorporate it into their own knowledge structures. Our society is called a knowledge society because knowledge is considered to be 'the most important production resource and the source of organisational power'. When speaking about an information society, the emphasis is on the technological processing of knowledge and its nature as information. (Jalonen 2007, 100.) In its current form, the significant role of knowledge in management is quite a new phenomenon, which is why its research and terminology have not become structured (Lönnqvist 2007). It seems, however, that the concept of knowledge management is becoming established as the term used for the subject and field of research in Finland (see Lönnqvist et al. 2007).

Wilenius and Kamppinen (2001) examine the knowledge society, and similarly to Matter-lart (2003), among others, suggest that societies have always functioned on the basis of knowledge. According to Wilenius and Kamppinen, the deviation of the modern society from earlier ones is specifically based on the change in the relationship between knowledge and information. As technology develops, knowledge residing in people's minds is converted into information in an ever wider range of formats, faster and faster and in larger and larger amounts. The information generated can be processed, transmitted and reproduced more and more efficiently, until it will again be transformed into knowledge in people's minds, forming the basis on which society functions.

Due to technological developments, the usability of information as a management tool has grown significantly while also becoming increasingly challenging. Converting knowledge into information and processing information have become so easy that the amount of information challenges our ability to take in the information we are faced with in order to glean the knowledge that is relevant in terms of the workings of society. People speak about concepts such as information overload (e.g. Levy 2008; Meier 1962; Murphy & Gross 1969; Toffler 1970) and its Finnish equivalent infoähky (Koski 1998).

In addition to the improved usability of information, the changing world has essentially increased the significance of knowledge as part of management. The quantum world described in Section 1.2 calls for a completely new type of management, where information and knowledge play a key role. People need increasing amounts of ever more...
up-to-date information, which must also be more and more diverse. The most relevant knowledge is often built in an organisation’s operating processes and people’s competencies (Jalonen 2007), which is why people must be capable of dialogical processing of knowledge (e.g. Kangaslahti 2007; Strandman 2009) and management must include mentoring (e.g. Nikander 2003; Raasumaa 2010; Vulkko 2010). According to Risku, Björk and Ferrigno-Brown (2012), Finnish schools can no longer operate successfully and to a high quality standard without effective dialogue with pupils and their parents. Knowledge plays a more essential and complex role in management than ever before.

As the role of knowledge in management grows, the type of knowledge that is available and the ways in which knowledge is formulated and used become more and more essential. The essential role of knowledge in management is aptly illustrated in the Ministry of Education Development Plan for Education and Research 2007–2012, among others. The Development Plan states that political decision-making must be based on well-analysed evidence. In terms of its usability, the Development Plan suggests that well-analysed evidence must both evaluate implementation of measures and anticipate their impacts and that it needs to be produced diversely both by universities and by separate research institutes. In an increasingly international world, knowledge is more and more global and international comparison of the performance of education systems is all the easier. The Development Plan therefore considers it essential for Finland to be involved in global production of information, not only in terms of using it but also as a key participant in determining the knowledge being formulated. The Ministry of Education and Culture Development Plan for Education and Research for 2011–2016 consistently continues along the lines set out by its predecessor.

This report aims to support knowledge management by providing knowledge and information about Finnish doctoral research into principals mostly carried out in the 21st century for the purposes of developing school management in a changing Finland. Consequently, the report contributes to realising the objectives set for research in the Ministry of Education and Culture Development Plans for Education and Research for 2007–2012 and 2011–2016. In addition to producing domestic information, the report can be considered to be linked to global information production in at least two ways. Firstly, the report makes use of the study by Risku and Kanervio (2011) on Finnish principals, which forms part of a metastudy examining research into principals carried out in 13 countries in the 21st century (Johansson 2011). Secondly, the report complements an international research programme that studies educational leadership at administrative, school and class levels. In Finland, the research programme is being funded by the Ministry of Education and Culture and is being carried out by the University of Jyväskylä’s Institute of Educational Leadership, which is also represented in the steering group of the international research programme. The programme’s publications include a study on the status and changes of educational leadership in general education in Finnish municipalities by Kanervio and Risku (2009) and an article on Nordic superintendents’ leadership roles by Johansson, Moos, Nihlfors, Paulsen and Risku (2011).

Regardless of the fact that knowledge management is a fairly new field of research, a review by Köppä and Vuorio (2007) indicates that there has already been quite a lot of research into this topic in Finland. While there are quite a few studies on knowledge management in Finland, Köppä and Vuorio were only able to find two doctoral theses completed in the field of education on knowledge management – those by Stähle (1998) and Tuomi (1999). Neither of these deals with the principal’s role.
Several of the 28 doctoral theses identified in the review of research into principals by Risku and Kanervio (2011) can be regarded as being linked to knowledge management. However, research specifically concentrating on knowledge management can mainly be considered to include the doctoral theses by Lapiolahti (2007), Raasumaa (2011) and Svedlin (2003). Lapiolahti and Svedlin studied local evaluation of education. Their findings will be discussed in more detail in Section 3.2, which examines municipalities as principals’ operating environments. Raasumaa studied management of teachers’ knowledge. His research will be dealt with in more detail in Section 4.5, which focuses on the future and knowledge management.

2.2 School management from the perspective of research

During the period from 2000 to 2010, a total of 28 doctoral theses that may be considered to deal with principals were produced at Finnish universities. The figure is about 4% of all 661 doctoral theses completed in the field of education and behavioural sciences during this ten-year period. (Risku & Kanervio 2011.) Risku and Kanervio divide the doctoral theses relating to principals into the following two categories: 13 focus on the principal’s work and identity and 15 deal with the different operating environments of their work. Of all the doctoral theses, 23 included research into principals at comprehensive schools, whereas principals at general upper secondary schools and polytechnics were covered in eight and five theses, respectively, and principals at vocational institutions were studied in one thesis. This report does not include a more detailed discussion of the five doctoral theses focusing on polytechnics (Antikainen 2005; Huuhka 2004; Nikander 2003; Tiusanen 2005; Toikka 2002).

Doctoral theses have been produced comprehensively at different universities, including the Universities of Helsinki, Joensuu, Jyväskylä, Tampere, Turku and Oulu. The highest numbers of doctoral theses have been completed at the Universities of Jyväskylä (11 theses), Tampere (7) and Helsinki (5). In terms of timing, their publication years concentrate on the end of the decade, specifically on 2006–2010 (18). They are also characterised by the fact that several authors have either worked or are working as principals themselves (Risku & Kanervio 2011). With the exception of one English-language thesis and one Swedish-language thesis, all doctoral theses were written in Finnish.

The methodological solutions used in the doctoral theses are diverse – however, the small number of quantitative studies may be a cause for concern. Most theses have been carried out using qualitative data collection methods, a few are based on both qualitative and quantitative data, whereas only a couple are purely quantitative. Data has at least partially been collected through interviews in almost all qualitative studies. With a few exceptions, data has also been collected through observation, written contributions or documents in parallel with interviews. Since the doctoral theses were mainly qualitative, the number of participants is limited, ranging from less than ten to about 30 interviews. The above-mentioned use of different methods does, however, complement the interview data in several studies.

Laudably many of the doctoral theses have been carried out with a view to collecting data from different parts of Finland. Understandably, the research objective and an individual researcher’s resources set restrictions on implementation of research, which means that the data collected from the entire country remains, in particular in qualitative
studies, based on contributions collected from 10–20 people. Nevertheless, the value of these studies should be noted, similar to those theses that have only focused on a single educational institution.

2.2.1 School management through the eyes of principals

The fact that about half of the doctoral theses focus on principals themselves or their training and work is clearly visible in terms of from where and from whom research data has been collected. Research data was exclusively collected from principals in nine doctoral theses, while only a few did not include any principals’ perceptions. The voices of principals can be clearly heard in research in this field.

The themes of the theses exclusively based on principals’ perceptions are very diverse. Some take a feature or factor that unifies principals as their premise. In these cases, the target groups have included award-winning principals (Hänninen 2009) or principals with a coaching background (Pulkkinen 2011), or the perspective has been on principals’ gender (Juusenaho 2004) or identity (Ahonen 2009). A couple of studies have examined how principals cope with their work (Karikoski 2009, Lehkonen 2009). Other studies concentrating on principals’ perceptions deal with their training (Taipale 2000), building a school’s vision (Kirveskari 2003), schools’ organisational cultures (Kunnari 2008), management of a multicultural school (Kuukka 2009) and management of comprehensive schools as a phenomenon of its time (Pesonen 2009).

Many of the theses based on principals’ perceptions have been carried out by collecting data from different parts of Finland. Examples include studies by Ahonen (2008), Hänninen (2009), Juusenaho (2004), Kirveskari (2003), Lehkonen (2009) and Pulkkinen (2011). Depending on the research topic, they have either used purposive or random sampling. Many studies have also aimed to examine school management with different types of educational institutions in mind by including the perceptions of principals of comprehensive schools, general upper secondary schools and vocational institutions in the research data.

2.2.2 School management through the eyes of different educational practitioners

The perceptions of other educational practitioners besides principals have also been included in research data in about half of the doctoral theses completed during the review period. In these cases, research data has mostly been collected from teachers and other school staff in addition to principals (Hellström 2004; Kanervio 2007; Lahtero 2011; Mustonen 2003; Mäkelä 2007; Vuohijoki 2006). The research objects have included the school atmosphere, coping at work, organisational culture, change and development, implementation and realisation of changes, as well as what principals are needed for and what principals do.

In addition to principals, teachers and other school staff, research data has been collected from municipal directors of education and culture, members of management teams and municipal school boards, expert and consultative groups, as well as other municipal civil servants (Johnson 2006; Kanervio 2007; Kangaslahti 2007; Lapiolahti 2007; Nykänen 2010; Pennanen 2006; Raasumaa 2010). These theses have usually adopted a broader perspective beyond a school level. They have most commonly focused on a municipal level and its various phenomena, which have been examined from the perspectives of different municipal practitioners. Examples include strategic leadership of municipal
educational administration, evaluation of education, the system of guidance and counseling services, management of comprehensive schools and change as a municipal challenge.

Similar to studies concentrating on principals’ perceptions, the authors of those studies involving data collected from different educational practitioners have also aimed to compile comprehensive data. The data used in five doctoral theses has been collected from several municipalities (Mustonen 2003; Nykänen 2010; Pennanen 2006; Raasumaa 2010; Vuohijoki 2006), while another three include comprehensive data collected from a single municipality (Johnson 2006; Kangaslahti 2007; Lapiolahti 2007). Studies focusing on examining a single school organisation aimed to include perceptions from the entire staff in their analysis (Kanervio 2007; Lahtero 2011; Mäkelä 2010).

There were only two studies among the doctoral theses that did not include any principals’ perceptions in their research data. Vulkko (2001) has collected data for her thesis relating to school-level decision-making exclusively from teachers, whereas Varjo's (2007) thesis on drafting education legislation is solely based on documents.
3 Changes in principals’ formal status and operating environments

3.1 Principals’ formal status

Everyone seems to agree that the formal status of principals has changed significantly over the last two decades and that the principal’s position must be seen as being a specific profession in its own right (Risku & Kanervio 2011). Analysis of the change in principals’ status can be regarded as forming the starting point for several studies and it is taken into account in practically all doctoral theses completed in Finland during the 21st century. Aho, Pitkänen and Sahlberg (2006, 119) summarise the change as follows:

*The role of school principals also has dramatically changed since 1990. Principals are not only the educational leaders of their schools but managers who are responsible for financing, personnel, and the results of their institutions. Previously, a school principal was an experienced, senior teacher who was promoted for good service to education. Today’s school principal must be a qualified leader who understands education development and has solid management skills to lead a school. Selection of new school principals is often based on procedures more typical of the private sector, with interviews and psychological tests to confirm the suitability of the candidate.*

While the formal status of principals appears to have been addressed in almost every doctoral thesis on principals completed in the 21st century, none of these concentrates directly on studying principals’ status. Consequently, research information concerning principals’ formal status and changes to it has to be gleaned from those sections of the theses that discuss this aspect and from other studies.

A report drawn up by Souri (2009) for the Finnish Association of Principals suggests that principals’ formal status is currently determined to a larger extent by general legislation than by special legislation governing education and training. Souri does not consider this development to be divergent from Finland’s general legislative trend.

The 1998 Teaching Qualifications Decree (986/1998) enabled university-level qualification training for principals, which is considered necessary by most municipal directors of education and culture, among others (Kanervio & Risku 2009). According to the Decree, which is still in force, a person is qualified as a principal, when he or she has a higher university degree; the teaching qualifications in the relevant form of education; sufficient work experience in teaching assignments; and completed a qualification in educational administration in accordance with requirements adopted by the Finnish National Board of Education or studies in educational administration with a scope of no less than 25 credits organised by a university, or otherwise obtained sufficient knowledge of educational administration.

Reports by Taipale, Salonen and Karvonen (2006), Alava (2008), and Värrri and Alava (2005) provide an illustrative overview of qualification and continuing training for principals in Finland. Although principals’ continuing training, in particular, has developed over the last few years, there is still cause for concern about Finnish principals’ qualifica-
tion training, as expressed in an OECD report by Pont, Nusche and Hopkins (2008), and reason to hope that it will also be developed in parallel with continuing training. This has also been proposed by the Finnish Association of Principals (Souri 2009). By way of example, Norway and Sweden started university-level qualification training for all principals in 2010 (Hybertsen Lysø, Stensaker, Aamodt & Mjøen 2010; Skolverket [Swedish National Agency for Education] 2010).

Special legislation governing education and training requires each educational institution to have a principal, who is responsible for its operations. As the person responsible for institutional operations, the principal must act in compliance with legislation and the curricula drawn up in accordance with it. In discharging their duties, principals are subject to official liability, i.e. primarily to compliance with general legislation governing municipal civil servants (Act on Civil Servants in Local Government 304/2003). Special legislation governing the education and training field and curricula are primarily binding on education providers, which have an obligation to create conditions for and to evaluate implementation of statutory operations, rather than on principals. For this reason, the Finnish Association of Principals advises principals to lodge a complaint against the education provider in the event of failure to create the conditions required for statutory school operations. (Souri 2009.)

In Finland, each education provider decides on the principal’s posts required and selects principals, who primarily serve the education provider rather than central government. In municipalities, principals are generally selected by the local education committee (77.1% of municipalities) through an open application procedure (83.8% of municipalities), placing special emphasis on candidates’ formal qualifications, education, leadership qualities, experience and personality in the selection process (Kanervio & Risku 2009, 93–95). Principals’ duties are determined in further detail in the standing orders, administrative regulations and rules of procedure of education providers, i.e. mostly local authorities (Local Government Act 365/1995). The detailed task lists of school heads and principals were abolished as part of the 1991 deregulation process. Task lists have not been reinstated, unlike in Sweden, for example, where legislation effective since 2011 again determines principals’ duties through detailed descriptions (Skollag [Swedish School Act] 2010/800).

As legislation does not define principals’ duties in further detail and as local authorities have very different circumstances, there is considerable variation in principals’ job descriptions. Consequently, the majority of doctoral theses on principals (e.g. Ahonen 2008; Karikoski 2009; Lahtero 2011; Lehkonen 2009; Mustonen 2003; Mäkelä 2007; Pennanen 2006; Pesonen 2009; Raasumaa 2010; Vuohijoki 2006) concentrate on how the latitude offered by principals’ formal status is manifested in their work in practical terms. These findings will be examined in Chapter 4.

At this point, it is essential to bring up two aspects. Firstly, those who wish to see the principal’s task lists of old reintroduced into Finnish legislation are probably few and far between (see Souri 2009). Secondly, something still needs to be done, because the legal status of principals appears to cause plenty of problems and contradictions in their practical work. These problems involve issues such as principals’ time management (Karikoski 2009; Mäkelä 2007; Pennanen 2006) and well-being (Lehkonen 2009; Vuohijoki 2006; see also Suomen Rehtorit [Finnish Association of Principals] 2005). Contradic-
tions are caused, in particular, by pressures from different expectations (Ahonen 2008; Vuohijoki 2006) as principals try both to safeguard school operations according to the obligations set out in special legislation and to act as representatives of the education provider, i.e. their employer. A principal's role may be very ambivalent, as they are supposed to simultaneously carry out measures such as temporary lay-offs ordered by the education provider and safeguard pupils' rights during lay-off periods, create a positive image for the school and guarantee pupils' right to a safe learning environment by making public suspicions about indoor air problems in the school building, or assume responsibility for evaluation of school operations in their own unit and improvements required based on it in the midst of pressures to make savings (Souri 2009; see also Lapi-olaihty 2007 and Svedlin 2003).

3.2 Municipalities as principals’ operating environments

The relationship between central and local governments has been changed considerably over the last two decades. According to the currently effective Local Government Act (365/1995), Finland is divided into local authorities where the autonomy of residents is safeguarded in the constitution. Local authorities must perform the functions laid down for them by law, but they can autonomously decide the ways in which the functions are performed. The Basic Education Act (628/1998) requires local authorities to organise basic education for children of compulsory school age residing in their respective areas. There is every reason to say that municipalities are key operating environments for principals. According to statistics compiled by the Finnish National Board of Education (Opetushallitus 2011), there were 3,100 municipal comprehensive schools in Finland in 2009, whereas private schools only numbered 90. Local authorities are also the most common providers of general upper secondary education, as municipal schools accounted for 92% of all general upper secondary schools in 2009. According to Kanervio and Risku (2009), almost all local authorities (96.7%) provide basic and general upper secondary education on their own. Most principals consider that decisions made at municipal level are the most important ones in terms of their work (Pennanen 2006).

Local authorities are required to organise their administration in compliance with the Local Government Act (365/1995), but statutes give them considerable freedom to organise their administration as they see fit. This freedom is also exercised in practice and, at present, municipal organisations differ considerably from each other. In addition, municipal organisations are changing constantly – partly on their own initiative and partly under the central government's guidance through the Act on Municipal and Service Restructuring, for example. In 2008, 94.3% of directors of education and culture felt that provision of education and training services would change considerably within their own municipality by 2015 (Kanervio & Risku 2009). As principals’ formal status is quite open in legal terms, it is natural that it is defined in very different ways in municipal standing orders, administrative regulations and rules of procedure and that their day-to-day job descriptions differ even more. Based on the points described above, it is not surprising that the majority of research into principals and school management is placed in a municipal environment.

Varjo’s (2007) doctoral thesis includes an analysis of why and how the relationship between central and local governments has changed in education policy to become what
it is today. Varjo suggests that development of education policy is part of society’s general development, where the system-oriented centralised state administration has been under pressure to change ever since the mid-1980’s. For advocates of decentralisation, the system of centralised administration has been too rigid and incapable of meeting the challenges of a changing society. Furthermore, advocates of decentralisation appear to believe that Finnish society is ready for local decision-making. Advocates of centralised administration, in turn, seem to consider that the real motive of those advocating decentralisation is to strengthen the market economy as a social force, which they believe will endanger the existence of the Finnish welfare state. (See also Rinne, Kivirauma & Simola 2002; Simola 2010, for example.) In addition to – and also in lieu of – standards and their control, it seems that evaluation and performance guidance are becoming more and more prominent management tools. (See also Ryynänen 2004.)

Kanervio and Risku (2009) suggest that local authorities appear to aim for independent long-term and strategic development, with due consideration given to the operating environment and the views of the central government. They aim to anticipate changes in the operating environment and adjust functions accordingly, with a view to safeguarding services and ensuring sustainable development. Strategic development seems to be significantly hampered by the scarcity of resources available for management of educational administration. According to Kangaslahti’s (2007) doctoral thesis, strategic leadership of municipal educational administration means seeking, identifying and resolving complex problems on a continuous basis. In order for strategic leadership to be successful, problems need to be examined openly, diversely and with dialogue through close co-operation and discussions between elected representatives, top-level municipal civil servants, staff and parents. Kangaslahti’s research points out significant shortcomings in the ways in which principals have been trained for and involved in the strategy work of municipal educational administration. Kangaslahti’s main results are supported by a doctoral thesis by Strandman (2009), among others.

Since 1998, education providers have had a statutory obligation to evaluate their operations and the effectiveness of these (Basic Education Act 628/1998, General Upper Secondary Schools Act 629/1998). The doctoral theses by Lapiolahti (2007) and Svedlin (2003), respectively focusing on a municipal level and a school level, suggest that local evaluation of education does not, at least as yet, succeed particularly well in fulfilling the obligation. Local evaluation of education does not seem to be linked to curricular objectives, thus failing to provide sufficient operational guidance for municipal educational administrations and schools. One of the reasons for problems in local evaluation may be attributed to the scarcity of staff involved in educational evaluation in municipalities (Löfström, Metsämuuronen, Niemi, Salmio & Stenvall 2005; Rajanen 2000).

On the whole, local authorities have too few administrative staff to support both directors of education and culture and principals. As a result, directors of education and culture seem to delegate their administrative duties to principals, who in turn pass their tasks on to teachers. (Kanervio & Risku 2009; Pont, Nusche & Hopkins 2008.) When speaking about scaling back administration, perhaps we ought to specify whether we mean reductions in administrative work or in administrative staff. Although staff are no longer needed for implementation of standards, supervision of implementation or reporting on these, it seems fair to assume that knowledge management, among other things, would still require adequate human resources. In addition, we should thoroughly deliberate on what the basic task of administration is in our current society. Could the
task of administration be to cater for schools as diversely as possible by freeing up principals' and teachers' time from administrative routines to schools' core work, for example? When analysed through doctoral theses (Karikoski 2009; Mäkelä 2007; Pennanen 2006), principals seem to spend an unreasonable share of their working hours doing administrative work, even as teachers seem to expect them to offer more and more pedagogical leadership (Mustonen 2003; Mäkelä 2007; Raasumaa 2010).

In the light of research, municipalities appear to make for quite challenging operating environments for principals. This challenging nature is emphasised by the non-existent boundaries of principals' formal status. It is hardly surprising that principals do not seem comfortable being responsible for school operations. Nor do they feel that directors of education and culture or municipal organisation structures are capable of supporting them in their work. (Ahonen 2008; Suomen Rehtorit [Finnish Association of Principals] 2005; Lehkonen 2009; Vuohijoki 2006.)

3.3 Schools as principals’ operating environments

As principals' operating environments, schools have changed significantly over the last two decades. Gone is the school that the principal administered, ensuring implementation of standards and reporting on implementation. Today, a school as a principal's operating environment is a profit centre run by the principal as the manager of strategy, finances, administration, human resources, pedagogy, performance as well as a diverse service centre.

According to Kanervio and Risku (2009), every school had its own principal in 82.9% of Finnish municipalities in 2009. The figure is not directly comparable with the results (about 85%) of research conducted by Pirhonen and Janhunen (1995), but it probably goes to show that there has not been any significant change over the last couple of decades. A considerable proportion (21.4%) of directors of education and culture still operate as principals, but the figure is slightly smaller than the percentage (25.1%) in a study by Rajanen (2000). Assistant principals (in 13.8% of municipalities) and district principals (in 6.2% of municipalities) are still not very common, but their numbers appear to be growing as schools and municipalities become larger. It seems to be more common for principals to head integrated primary and lower secondary schools than both lower and upper secondary schools. The constantly decreasing number of schools – i.e. the fear of closure of one’s own school – must be visible in many principals' work, even though the topic has not been studied at doctoral level, with the exception of Kanervio (2007).

The descriptions provided in the previous two sections (3.1 and 3.2) about principals’ formal status and municipalities as principals' operating environments also create the framework for schools as principals’ operating environments. Nevertheless, schools definitely have their own unique meaning as operating environments for principals. Consequently, there are quite a few studies that specifically examine principals and school management at a school level and from the perspective of managing a school.

As a general rule, doctoral research examining principals and school management at a school level focuses on change. In Kanervio’s (2007) doctoral thesis, the school as the principal's operating environment creates a challenge for the principal, where at stake
is the existence of the school and, in broader terms, perhaps that of the private school type as a whole. As a result of a battle for survival, the school is spared and legislation is reformed. The doctoral thesis produces a theory of change, where the main result is recognition of a crisis as key to change.

Hellström (2004) and Johnson (2006) studied how national school reform is carried out at school level. As a result, Hellström’s doctoral thesis lays down a 20-point manifesto of a successful school project, which will be examined in more detail in Section 4.1. Johnson’s doctoral thesis emphasises teachers’ co-operation opportunities and the importance of well-planned and co-ordinated continuing training.

The doctoral theses by Kirveskari (2003) and Kunnari (2008) can be considered to highlight the meaning of making things visible amidst change. What is expressed supports achievement of what is desired. Kirveskari examined school management from the perspective of envisioning, i.e. creating visions. According to Kirveskari, envisioning and visions intrinsically contain an expression of strategic intent and a statement on implementation of the intent. In addition to intent, a true visionary also expresses ideas about organisation, equally masters the past, the present and the future, bears social responsibility for their environment and society and is able to limit the number of challenges. Kunnari’s research focused on a school’s organisational culture. According to Kunnari, the way in which members of a school community describe their school’s organisational culture also reveals something about their own thought patterns and ways of operating. Describing the school’s organisational culture intrinsically supports its development in alignment with the expressed goals and visions.

The perspective of Raasumaa’s (2010) and Vulkko’s (2001) doctoral theses is not perhaps directly related to change management, but their findings will definitely support change management at a school level as well. Raasumaa studied a principal’s actions at a school level as the leader of teachers’ knowledge, connecting knowledge management to broad pedagogical leadership in line with the description provided in Chapter 5 of this report. Raasumaa suggests that a principal needs to focus actively and intensively on teachers’ knowledge management. To support this objective, Raasumaa included in his thesis a detailed handbook of knowledge management, which will be discussed in more detail in Chapter 4 of this report. Vulkko’s analysis focuses on teachers’ perceptions of the school’s general decision-making culture. She suggests that principals and teachers have different perceptions of preparation and implementation of decisions and their school’s financial situation. Based on a survey conducted for basic education teachers (N=201), teachers feel that a good decision-making culture is made up of sufficient background information and preparation, open atmosphere, involvement, commitment to and monitoring of decisions, clear procedures and the principal’s appropriate action. According to Vulkko, both teachers and principals seem to emphasise the significance of interaction.

When examining schools as principals’ operating environments, it is fair to point out, in addition to the prominent role of constant change, that co-operation and networking form an essential part of a principal’s work today. In itself, a school as an operating environment creates the need for co-operation and participation in internal networks. It is probably quite clear that a school does not operate in isolation but forms part of the education provider’s consortium – i.e. generally a local authority – and participates in sub-regional, regional, national and international co-operation. All this means that a
school as an operating environment requires the principal to participate diversely in a wide variety of networks.

The ways in which doctoral researchers analyse co-operation, dialogue and networking seem to vary quite considerably, which is why it is difficult to estimate the time spent by principals on co-operation and networking commensurably from a research point of view. Several researchers suggest, however, that co-operation, dialogue and networking both within and outside the school form an important part of a principal's work at present. Karikoski (2009) writes about the huge amount of interactive situations that principals are faced with. Principals involved in a doctoral thesis by Mustonen (2003) perceived co-operation with stakeholders to form part of their core job description. Mäkelä (2007) suggests that networking takes up a significant proportion (22%) of a principal's time. In Pennanen's (2006) doctoral thesis, principals included co-operation in everyday life management as an essential part of their work. According to Pesonen (2009), principals expect school management to develop towards collegial management between principals from different schools and to expand to take place in both internal and external school networks. The changing society seems to set challenges for school management, involving aspects such as development of pupils' further study and life skills through diverse co-operation. For her doctoral thesis, Nykänen (2010) specifically studied these types of sub-regional guidance counselling and pupil welfare networks, suggesting that networks require distributed leadership in order to succeed in their tasks. She further suggests that it is important for principals to participate in multidisciplinary and cross-administrative co-operation at its different levels.
4 Change in principalship

4.1 First steps towards pedagogical leadership

1999 was an important year in terms of development of municipal educational administration, as it marked the completion of a significant reform of school laws. The reform process had already started in 1985, when the previous legislative reform of comprehensive schools and general upper secondary education entered into force. The new lesson framework system increased local decision-making powers and local authorities and schools had to assume responsibility for provision of education – they were no longer able simply to resort to legal provisions or guidelines issued by the State Provincial Offices. This significant delegation of decision-making powers both changed and increased the content and responsibilities of principals' work. This change and, in particular, the transition from the 1990's to the 21st century is illustrated by Mustonen (2003) in his doctoral thesis entitled *Mihin rehtoria tarvitaan* ('Why do we need a principal?').

Initially considered a minor tweak, the lesson framework reform ultimately turned out to renew the principal's role in quite a significant way. For the first time, principals were now supposed to take a genuine lead role in their own school's pedagogical practices, responsibilities and priorities, instead of simply implementing legal standards and regulations. The road towards pedagogical leadership had been paved. At school level, this reform did not by any means progress without problems. It is obvious that not all principals were able to distribute lessons properly within the lesson framework, because this was a completely new area of management skills, which differed essentially from their prior job descriptions that had mainly consisted of managing administration and day-to-day routines. On the other hand, if teachers felt that lesson distribution was somehow carried out against their own ideas, they opposed the planned implementation method. Principals started to experience a new kind of resistance to change. Even as principals were given considerable added responsibilities and powers in terms of teaching arrangements, they also immediately noticed that their work had become more difficult and that they required new management skills. The need for management training increased.

As Mustonen (2003) points out in his doctoral thesis, the focus of regulation in the 1999 legislation was no longer on the school institution, but on education, its objectives and the conditions for its implementation. The new laws laid down provisions on the objectives and contents of education, levels of education, forms of provision, and pupils' rights and responsibilities. With a few exceptions, they no longer included detailed provisions on educational institutions, implementation of teaching, administration of education or the position of school staff.

The main idea of this considerably radical reform of school administration was that the objectives set for schools would be achieved through developing school-specific procedures and objectives based on regional, local and school-specific circumstances. These operating models no longer come from up high; instead, a principal needs to be capable of ensuring the viability of the school on their own and its ability also to perform well in the long term. Delegation of decision-making powers to principals and school heads genuinely emphasises the leader's responsibility for performance. (Mustonen 2003.)
One of the most important instruments guiding school operations is the curriculum based on the National Core Curriculum. Every curricular reform has stirred quite heated debates and implementation of reforms has generally caused problems at school level. One of the most significant projects to carry out curricular changes was the so-called Aquarium experiment implemented in 1992–1994, which continued as a broad Aquarium project. The implementation method and success of the pedagogical development projects under the Aquarium project has been studied in a doctoral thesis by Hellström (2004). His research data was quite extensive, covering 339 projects co-ordinated by the Finnish National Board of Education.

The objectives of Hellström's doctoral thesis were both theoretical and practical. At a theoretical level, the aim was to develop and deepen the concept of change approach used in the development projects. When studying the projects, Hellström noticed that participants involved in successful development projects were enthusiastic, innovative and knowledgeable and that they carried out the projects of their own accord. In order to be successful, a project had to be genuinely necessary and useful for the school. Successful examples included both strategic and interactive elements. Project implementation required the principal's strong pedagogical leadership and teachers' well-being at work. Hellström distilled his theoretical analysis into 20 practical tips for a successful development project. He suggests that a successful development project requires, among other things, concrete objectives, project participants’ own interest and expertise, a genuine need for the project, a sufficiently innovative and even radical approach, involvement of reform-minded and enthusiastic teachers, ensuring teachers' well-being, maintaining a good atmosphere, as well as monitoring and rewards.

### 4.2 One leader is no longer enough

As principals were assigned increasingly extensive and demanding duties and responsibilities relating to finances, human resources administration, implementation of integrated basic education, integration of special needs pupils and, on the whole, overall pedagogical development of schools, the idea that principals could not solve and decide everything on their own started to become all the more clear. Along with increasing responsibilities, another significant change in principals’ work in the early 1990’s was the need to expand leadership by putting the principles and practices of distributed leadership into practice. This change was also not easy, because the single leader approach had been dominant for decades.

The view that an organisation only has one leader goes back a long way and involves a yearning for a great, strong and charismatic leader. However, practical school management and a principal’s work have started to become something completely different. Mustonen (2003) suggests that although ultimate responsibility still rests with the leader, the leader promotes their own leadership by sharing responsibility and working with teachers. Teachers' co-operation and increasing ability to exercise decision-making powers relating to their own work, in turn, support teachers' professional development. When allowed to participate in preparatory work, teachers will also become more committed to the decisions. Thus, the expansion of a principal's leadership brought about the first steps towards distributed leadership. As noted above, along with increasing responsibilities, this was a new orientation for many principals, who were used to making administrative decisions alone in their offices. The change also opened up a new development
pathway towards teacher leadership, which introduces a completely new dimension into both the teacher’s role and school management.

4.3 Major change of job description

A more detailed description of the principal’s work and its content has been of interest to Finnish researchers for a long time now. The first broader studies on the topic were carried out during the 1980’s by Vaherva (1984) and Hämäläinen, Luukkonen, Karjalainen and Lonkila (1987). Based on the analysis presented by Mustonen (2003) in his doctoral thesis, it is fair to say that the results of these two studies differ from each other in an interesting way. According to the study carried out by Vaherva on principals’ career profiles and training needs, a principal is first and foremost a pedagogical leader whose primary duties include their own teaching work, following what happens at school, drawing up school timetables, monitoring and evaluating their own school community’s activities, as well as evaluating achievement of the teaching and educational objectives set for schoolwork. Hämäläinen, Luukkonen, Karjalainen and Lonkila, in turn, suggest that principals see themselves more as administrators than as educational leaders. Principals feel that they should primarily attend to administrative duties, routines and interpersonal relationships. The research data of Mustonen’s own doctoral thesis included perceptions of pedagogical leadership among early 21st century principals (N=129). Several principals placed pedagogical leadership in the area of tricky interpersonal skills, which they regarded as being a particularly challenging – or downright disagreeable – area of operation.

In light of the most recent doctoral theses analysed in this report, the seemingly different findings described above are easier to understand. It seems that, in order to outline the current work of a principal, we need to perceive management work as a larger whole, where the concept of pedagogical leadership, in particular, is being determined in a new, more holistic way.

In his doctoral thesis on leadership of comprehensive schools, Pennanen (2006) deliberates both on the emphasis of the principal’s work and on its unique and contextual nature. According to his data, managing things is still emphasised in management work (70% of working time). The principals participating in the study only spent a third of their working time on leading people. Pennanen points out that comprehensive school leaders feel that their work emphasised both comprehensiveness and co-operation regarding the management of practicalities. The participating leaders considered their work to be demanding and future-oriented. They also perceived their work to be closely bound to the school context. Management of school operations was characterised by dealing comprehensively with practicalities and dependence on decisions made externally. Local level decisions were regarded as being of particular importance. It is therefore fair to say that, since the turn of the millennium, school leadership has been increasingly bound to the school and to the specific local authority, joint municipal authority or some other provider organisation within which the work is being done.

A specific additional challenge to the above-mentioned role of contextuality is introduced by the fact that, in keeping with municipal autonomy and new school laws, there is no single municipal educational administration that one could study and then apply in the same way in any municipality. There are just as many local educational adminis-
trations as there are municipalities and new ones are being created all the time, as the country’s municipal structure is undergoing major reform. (See Ryynänen 2004.) It is important to understand that leadership today is highly contextual. In addition to the range of local authorities, every school is different. At play within schools are various cultures, structures and internal power relations – in a sense, school micropolitics (Malen 1995; Flessa 2009).

We may say that leadership is always born again; it cannot be carried over in the same form. When a principal is appointed to a new educational institution, they cannot bring their leadership from their previous school; instead, leadership needs to be reborn in a new context, in a new administrative system and in a new culture. It is very difficult to imagine that we could write a handbook on school management that would lay out every single detail of administration, finances and management. Such a handbook would have to be drawn up for each local authority, joint municipal authority or other provider organisation, because they are all different. Due to the individual nature of organisations, the challenges of management training in a school context are quite new.

According to Pennanen (2003), an additional problem for school management is brought about by the fact that municipal school administration may be dominated by a traditional culture of management by results or objectives and a top-down administrative tradition, even if a new management style were pursued in terms of school management. It ought to be clear that not all municipal educational administrations have as yet entered the era of new school laws and new kinds of educational services. Pennanen suggests that social issues and, in particular, potentially conflicting expectations are directed at management by way of the school, which calls for solid expertise and skills in leading people alongside administrative duties and task management – in other words, leadership skills in addition to traditional management skills. Consequently, the basic role of a comprehensive school leader requires a new kind of professional competence.

The early 21st century is typically characterised by the speed of phenomena and a certain chaos. It is possible to identify several phenomena at municipal and school levels that we cannot interpret by means of traditional rational approaches. (Aula 2000; Juuti 2001.) In a transformed operating environment, administrative competence is no longer enough on its own in practical school management work. In many cases, the prevailing premises for management at a municipal level are management by results and objectives, with no room for leadership of people. The old bureaucratic management culture plays a key role. It is therefore possible that the organisational culture of a new, dynamic and future-oriented educational institution and the municipal administrative culture are in conflict with each other. In Pennanen’s (2003) study, the management of a municipal school department still seemed to emphasise the importance of hierarchy when considering the significance of national decisions, for example.

4.4 Conflicting pressures on principals’ working time – time for pedagogical leadership

In his doctoral research, Mäkelä (2007) used the autoethnographic approach to establish what principals really do. This extensive research, charting Mäkelä’s own work as a principal over a period of 18 months, substantiated some earlier ideas of the work of comprehensive school principals, but it also revealed a significant new functional area,
the implications of which are discussed by Mäkelä in his thesis. Based on Mäkelä’s use of his own time, comprehensive school principals spend 33% of their working hours on administration and decision-making, 31% on co-operation and management of interaction, 22% on human resources management and 14% on pedagogical leadership. One of the significant findings of the study was how much time was spent on co-operation and management of interaction, i.e. networking, as Mäkelä calls this functional area. In his work, Mäkelä ponders how time spent on networking affects use of time in other areas of management. Of particular concern to him appears to be the fact that the time spent on pedagogical leadership seems quite modest considering the significance assigned to it. For both Mäkelä and many other researchers, examination of pedagogical leadership seems to be complicated by the ambiguity of the concept. In his own analysis, Mäkelä associates the concept with teaching arrangements and development and curricular work, while including working time arrangements under administration and in-service training under HR management.

Pesonen (2009) shares Mäkelä’s concern for principals’ slanted use of time. Pesonen studied the perceptions among principals working at comprehensive schools in a city located in Eastern Finland of their work priorities, asking them to examine their recent past (the 1980’s and the 1990’s), their present (2000–2010) as well as their future (the 2010’s and the 2020’s). According to these principals, at the time of the research at the turn of the millennium, school management diversified in terms of content, even as principals’ operating field expanded significantly. The principals felt that education and teaching were ‘getting trampled’ in management work. According to Pesonen, the principals experienced the situation to be conflicting, because management of educational and teaching work was precisely what they regarded as being an essential part of their management work.

Karikoski (2009) studied the work of primary and lower secondary school principals by means of shadowing. She classified the observations that she had collected on principals’ functions according to their underlying factors, including quality improvement, daily routines, strategic thinking and emotional skills. Working hours were emphasised as follows: duties relating to management of day-to-day school operations took up about 40% of working hours, while tasks requiring emotional skills and strategic thinking accounted for over 30% and over 20%, respectively. Conversely, the time spent on duties involving quality improvement according to the criteria set out in the study only accounted for about 8% of the total working hours.

Karikoski, Mäkelä and Pesonen express their concern about the inappropriate distribution of principals’ time. Karikoski suggests that the most important challenge of a principal’s work is to assure and improve the quality of teaching and learning. The prerequisite for success in this respect is strengthening collaboration both at a regional level and within individual school communities. This will not succeed without distribution of leadership, networking, continuous interaction and discourse, as well as command of emotional skills. How principals faced with this challenge can manage to remain innovative and inspiring leaders is, according to Karikoski, a serious issue.

Pulkkinen (2011) studied the leadership styles of principals with top-level coaching backgrounds. The aim was to find out whether there were any shared elements in the leadership of sports coaches and principals and, in particular, whether there were so-called transferences between these areas, i.e. whether there was something in the
leadership of a top sports coach that would benefit a principal's leadership and vice versa. As a result of the study, Pulkkinen identified five categories of leadership transferences, i.e. areas of leadership that, according to Pulkkinen, can be utilised within both the sports world and the school world.

**TABLE 1. Categories describing leadership transferences (Pulkkinen 2011, 160).**

<table>
<thead>
<tr>
<th>Leadership TRANSFERENCE</th>
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<tr>
<td>1. Orientation towards people (anthropocentrism)</td>
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<tr>
<td>2. Cyclicality</td>
</tr>
<tr>
<td>3. Extensiveness of position</td>
</tr>
<tr>
<td>4. Change tolerance</td>
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<tr>
<td>5. Leadership behaviour</td>
</tr>
</tbody>
</table>

According to Pulkkinen's study, orientation towards people and related human action is one of the key dimensions describing leadership transference. Based on the study, it is fair to say that it is important that the potentially hard varnish of a leader conceals a humane individual who knows how to deal with people – also as a leader. The second category, cyclicality, describes the nature of the leader's work and the cyclicity that dominates the annual calendar of both the sports and the school worlds. The third category, extensiveness of position, describes the changing world and those new areas that need to be taken into account as part of leadership of both of the worlds being studied. The fourth category, change tolerance, is related to change management. Those interviewed in Pulkkinen’s study considered change tolerance to be the kind of skill facilitating their own leadership that had most frequently been transferred from the sports world to the school world. The fifth category of the study, leadership behaviour, covers both educational and coaching leadership. This leadership had provided respondents with good self-esteem and self-confidence while also maintaining healthy humility and understanding of the limitations of their own knowledge. In both worlds covered by the study, leadership behaviour was based on taking people into account and interactive leadership.

These doctoral theses paint a picture of the principal's work that highlights comprehensiveness and solid professionalism. The comprehensive nature of work seems to be linked to strong and growing conflicting pressures enabled by factors such as the principal's formal status (see section 3.1). Principals' use of time does not seem to be appropriate in all respects. The concern about adequate opportunities for principals to carry out one of their primary functions – pedagogical leadership – appears to be legitimate, to say the least.

### 4.5 Towards the future and knowledge management

According to almost all the studies covered in this report, the operating field of schools, principals and teachers is becoming more and more complex and challenging. At the same time, the principal’s work seems to be getting more diverse and difficult. Change and its implementation, meeting pedagogical challenges and continuous development of teaching staff are playing an increasingly prominent role.
Kirveskari (2003) has studied the role of vision and strategic management in change management. The research data comprised 17 principals' responses to a thematic survey and interview. In her study, Kirveskari concluded that vision management covers both a strong will to change and renew and a vision for practical implementation of change. In the study, vision and strategic managers are classified into two main categories: visionaries and developers. Kirveskari suggests that visionaries express how things should be and feel responsible both for their own organisation and broader society. They take the past, the present and the future into account in their actions. Developers' behaviour, in turn, is characterised by self-interest. They are more externally directed than visionaries and they have a more passive attitude towards the future.

In her extensive doctoral thesis dealing with leadership and management in guidance and counselling services, Nykänen (2010) studies students' learning pathways and analysing and correcting shortcomings detected in these. Nykänen examines guidance and counselling services comprehensively across different structural levels and dimensions, ranging from the operational policy dimension to the temporal dimension, i.e. the learning pathway. She also studies management of guidance and counselling services as multidisciplinary co-operation and networking between educational institutions. The study provides an illustrative outline of the challenges and problems involved in today's cross-administrative activities. The thesis challenges all those influencing a pupil's learning pathway to participate in close networking activities in order to safeguard the learning pathway.

In her conclusions, Nykänen puts forward proposals for improvement of four different areas of management, namely, management of structures, processes, personnel and client processes. Nykänen suggests that management of structures should emphasise examining guidance and counselling services as a whole within an organisation and achieving resource synergies through multidisciplinary and cross-administrative co-operation. In terms of process management, the emphasis should be on the division of work in the internal network, management of services based on evaluation, as well as creation of vision, strategy and organisational culture in order to guarantee inclusive services. Personnel management should highlight a leadership approach based on genuine caring, creation of collaborative teams, development of distributed leadership and broad participation in both planning and implementation. In addition, management of client processes should be based on early identification of pupils' needs, individualisation of studies, equality of guidance and counselling services, as well as guaranteeing special support for those who need it.

Raasumaa (2010) has approached the problem area of responding to future challenges through knowledge management. In his study, he has started by defining what knowledge means in basic education. Through this definition, he proceeds to discuss knowledge management. Raasumaa's thesis is extensive and thorough and it is not possible to present its results and themes briefly, but it is a good idea to take note of two important results: firstly, how Raasumaa crystallises knowledge management and, secondly, how he opens up the concept of broad pedagogical leadership.

In his research, Raasumaa comes up with the following areas of a principal's knowledge: pedagogical knowledge, communal knowledge, external collaborative knowledge, leadership knowledge, individual development knowledge and personal knowledge. The doctoral thesis opens up these knowledge areas diversely, functioning not only as a
scientific study but also as a handbook guiding towards practice in terms of both definition and management of knowledge.

Raasumaa classifies the leadership theory premises of different knowledge areas and leadership styles as shown in the following table.

**TABLE 2. Principal’s knowledge areas and their leadership theory premises (Raasumaa 2010, 261).**

<table>
<thead>
<tr>
<th>Principal’s knowledge area</th>
<th>Leadership theory premises</th>
</tr>
</thead>
<tbody>
<tr>
<td>pedagogical knowledge</td>
<td>pedagogical leadership, teacher leadership</td>
</tr>
<tr>
<td>communal knowledge</td>
<td>team leadership, functional approach to leadership</td>
</tr>
<tr>
<td>external collaborative knowledge</td>
<td>management in networks, information management</td>
</tr>
<tr>
<td>leadership knowledge</td>
<td>management by objectives, change management, leadership styles, trait theories of leadership</td>
</tr>
<tr>
<td>individual development knowledge</td>
<td>contingency theories of leadership, situational leadership, path–goal theory, transformative leadership</td>
</tr>
<tr>
<td>personal knowledge</td>
<td>psychodynamic leadership approaches</td>
</tr>
</tbody>
</table>

At the end of his thesis, Raasumaa draws up a synthesis of his results, showing a basic education principal as a broad pedagogical leader. In addition to planning and organising teaching work, a principal as a broad pedagogical leader also attends to the qualitative development of knowledge and learning. This means that knowledge management focuses, first and foremost, on identification of the contents of learning. The focus of knowledge management lies on contextual knowledge development processes relating to teachers’ professional development objectives.

Based on Raasumaa’s study, broad pedagogical leadership is determined on two main dimensions, namely, influencing actors’ self-regulation and promoting dynamic interaction. According to Raasumaa, these dimensions, in turn, consist of the following areas of management and leadership:

**Influencing actors’ self-regulation**
- the principal’s successful self-management
- knowledge of teachers
- promotion of self-leadership and empowerment
- supervision and help
- guidance, sharing of information and advice
- safeguarding opportunities for supplementary, further and continuing training

**Promoting dynamic interaction**
- formulation of shared understanding
- utilisation of distributed leadership
- creation of a progressive learning culture
- creation of lateral capacity required for learning
- long-term and sustainable school development
- management of network-based learning
- creation of new pedagogical infrastructure
Raasumaa’s study opens up in a significant way the new dimensions and knowledge areas of leadership that principals of comprehensive schools (and other educational institutions as well) will need to master in the future in order to be able to function as knowledge leaders and as principals leading their schools towards a renewing future.

4.6 Construction of principals’ leadership identity

Ahonen (2008) challenges all those working in school management to explore their own leadership identity. Her doctoral thesis opens up an important point of view on principals’ identity as part of their increasingly challenging, diverse and complex job description. The essence of leadership in a principal’s personality becomes the key question.

As the themes of Ahonen’s research may be less familiar to many, it is necessary to start by examining its definition of concepts. According to Ahonen, identity is the way in which individuals define themselves through differences and similarities in relation to their environment. Identity is constructed socio-culturally and has a strong connection to language. Leadership is defined by Ahonen as the set of meanings that directs leaders’ orientation towards leadership. This set of meanings, in turn, becomes concrete in their speech and leadership action. Finally, leadership identity is the way in which leaders define their leadership as part of their own selves. This leadership identity is constructed in a social interaction process.

In terms of research results, Ahonen’s observations support the above-mentioned observations made by Pennanen (2003) on the fact that Finnish school leadership is socially constructed and contextual, meaning that teachers, pupils, other staff and stakeholders play a significant role in construction of leadership. According to Ahonen, principals feel that they are under almost constant tension and conflicting pressures due to different expectations. Solutions to coping with tensions and conflicting pressures construct and shape a principal’s own leadership. Ahonen’s research suggests that leadership is not static but instead varies from one situation and interaction to another. The principals’ leadership styles also vary accordingly.

Construction of a principal’s leadership identity is essentially determined by the fact that almost all principals have worked as teachers prior to becoming principals. Every principal’s professional identity thus includes personal experience of a teacher’s professional identity. According to Ahonen, the fact that a principal’s self covers both principal and teacher identities causes internal conflicts for principals. Ahonen’s research suggests that principals aim to soften conflicts by means such as sharing decision-making powers, changing meeting practices and regulating their own leadership. Through changes to their own school’s organisational culture, principals aim to influence the meanings assigned to leadership. The objective of changing the meanings, in turn, is to create space for their self-definition and their own professional development.

In line with Ahonen, every principal can explore their own school through those practical meanings that school staff seem to assign to the school’s functions. According to Ahonen, the meanings assigned to functions by staff form the school’s space of meaning, which is interpreted personally by each member of staff. These interpretations form the school’s context and culture, where each principal’s own leadership identity is constructed.
The doctoral thesis by Hänninen (2009) is one of the few doctoral theses exploring leadership in vocational education and training (VET). Hänninen focused her interest on what sort of elements make up leadership and principals' work in vocational education and training. In addition, she used the grounded theory (GT) method to examine the elements of good that VET leadership is built on. The grounded theory method applied in the study means that the researcher does not have a predefined theoretical basis when embarking on the research because there is no certainty in advance of what theoretical discussion the phenomenon being studied is related to. The GT method is challenging for the researcher, but it enables theorising, or creation of a new theoretical basis for the phenomenon being studied.

Hänninen identifies five dimensions of principals' work: a principal cares, a principal wants to lead, a principal exercises power, a principal defines the pedagogical foundation and a principal lives in the time. These categories reflect both strong leadership and genuine humaneness. The thesis also discusses the factors that unite all of the five above-mentioned dimensions of a principal's work. The uniting factors appear to be responsibility, power and caring. In Hänninen's study, responsibility means dedication to the work, fairness and attending to people's needs. Power, in turn, refers to the principal's presence in all important decision-making processes and definition of policies and decision-making practices. The third uniting factor, caring, can be seen in terms of respect, humanity and collaboration. Hänninen regards humanity as being the core category uniting and cutting through all of the above.

When analysing the research results presented in the previous two chapters on the change in principals' job description (Ahonen 2008; Hänninen 2009; Karikoski 2009; Mäkelä 2007; Pesonen 200; Pulkkinen 2011; Raasumaa 2010), the aspect that inevitably emerges at the forefront is a strong need for people skills and pedagogical knowledge. At the same time, the more and more demanding job description appears to limit principals' opportunities to spend time on and take action in precisely these areas. A principal is increasingly 'caught between two fires'. On the one hand, there are growing pressures from the management of the local authority or the joint municipal authority for the principal to act as a strong change manager and a reformer of finances and structures. On the other, pedagogical development of the school requires the principal to bear responsibility and have solid people skills, pedagogical understanding, a highly developed leadership identity and a value basis that places emphasis on caring.

4.7 Organisational and leadership culture

One of the most important reforms of basic education at the beginning of the 21st century was the transition to an integrated basic education lasting nine years. This change has been studied by Johnson (2006) as action research with focus on change of structures and teachers' perceptions of change and by Lahtero (2011) from the perspective of an integrated comprehensive school's organisational culture. In his research, Johnson examined all schools providing basic education in one city and interviewed more than 70 teachers. The study indicated that although hierarchies and teachers' roles seem to change slowly, education appears to include more and more integration. The prerequisites of successful development activities identified in the study were safeguarding teachers' broad participation and interaction, continuous training and good planning and co-ordination of projects.
In a very similar vein to how Ahonen discusses a principal’s leadership identity, Lahtero defines leadership culture as a network of meanings. Lahtero’s research approach to leadership culture is symbolic-interpretive. The thesis examines a principal’s leadership by means of the school culture and the symbols associated with leadership by school staff. Lahtero defines organisational culture as being a network of symbols and meanings through which members of the school organisation interpret their experiences and which directs their actions. He defines leadership culture as being a subculture of organisational culture; a product of a meaning assignment and interpretation process relating to leadership, which is incessantly shaped through the school’s social structures.

Lahtero’s research opens up the organisational culture of one integrated comprehensive school in an illustrative manner. The study describes the integrated comprehensive school’s organisational culture at three levels: functional, verbal and material. The thesis analyses these levels by means of symbols representing them. The analysis provides a very detailed view of the integrated comprehensive school’s organisational culture. In addition to this detailed view, the analysis provides an excellent illustration of how complex and strong a school’s organisational culture is.

In addition to describing the integrated comprehensive school’s culture, Lahtero’s study dealt with the concepts of leadership and management. Lahtero’s analysis is based on Sergiovanni’s (2006) argumentation, which does not make a distinction between leadership and management. Sergiovanni regards leadership as metaphorically consisting of five forces: technical, human, educational, symbolic and cultural. In Sergiovanni’s model, a principal uses the first three – technical, human and educational – forces to maintain school operations. According to Sergiovanni, the symbolic and cultural aspects of leadership, in turn, are more profound forces, which help schools to reach excellence in commitment and performance.

Based on his research data, Lahtero critically assesses Sergiovanni’s above-mentioned model. He agrees with Sergiovanni in that the division into leadership and management is artificial. However, Lahtero argues that separating the symbolic and cultural forces of leadership from its technical, human and educational forces is questionable. In Lahtero’s study, artefacts that initially seemed only to be manifested as technical, human and educational leadership forces ultimately became symbols as well, as school staff also assigned symbolic meanings to them. In other words, cultural and symbolic leadership also seem to be linked to technical, human and educational leadership, as shown in the figure below.

<table>
<thead>
<tr>
<th>TECHNICAL LEADERSHIP</th>
<th>HUMAN LEADERSHIP</th>
<th>EDUCATIONAL LEADERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYMBOLIC LEADERSHIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CULTURAL LEADERSHIP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1. The five forces of leadership (Lahtero 2011, 154).*

Lahtero’s research opens up a new perspective on leadership culture by examining it as a network of meanings. In addition, Lahtero’s work offers an illustrative perspective on the complexity and role of the school’s organisational culture as part of the principal’s everyday activities. It is fair to believe that both perspectives are useful for every principal as they deliberate on their own leadership activities.
4.8 Principals’ well-being

As this chapter on principals’ changing role clearly demonstrates, principals’ work has become more and more demanding, stressful and time-consuming. This change in principals’ work has also been a cause for concern for the Finnish Association of Principals, which conducted a survey of Finnish principals’ work reality in 2005 (Suomen Rehtorit [Finnish Association of Principals] 2005). The report clearly revealed both principals’ increasing workloads and how work pressures were reflected on their well-being at work. While the survey does not provide an actual average of how many hours principals work per week, the answers given in interviews would suggest that their weekly working time can be as high as 50 hours and, according to some respondents, ‘absurd’. This survey also identifies increasing burn-out, even cynicism towards work, and a desire to switch jobs as further causes for concern.

Principals’ well-being was a key focus of research in a doctoral thesis by Vuohijoki (2006) entitled Pitää vain selviytyä; Tutkimus rehtorin työstä ja työssä jaksamisesta sukupuolen ja virka-aseman suhteen tarkasteltuna (‘You just have to cope: the work and professional well-being of principals researched in relation to their sex and official position of authority’). The study, carried out using the role-playing method, or the method of empathy-based stories, focused particularly on school management, principals’ job descriptions and well-being at work. The results painted a disquieting picture of principals’ well-being. As many as 80% of principals felt overstressed and almost half wanted to switch to another job. One of the reasons behind principals’ well-being problems seemed to be the fact that, in parallel with their customary principal’s duties, the majority of principals also regularly performed other tasks (such as office and property maintenance tasks) which would be more naturally assigned to someone else. The results are similar to those of the 2005 survey by the Finnish Association of Principals. The diversification of principals’ job descriptions corresponds to the results of several studies described earlier in this report (Mustonen 2003; Mäkelä 2007; Pennanen 2006; see also Kanervio & Risku 2009).

In addition to charting principals’ well-being, Vuohijoki discusses ways to improve it. She stresses the importance of creating adequate conditions for management work and suggests that the conditions have declined significantly over the last few decades. Vuohijoki argues that principals’ professionalism should be given stronger emphasis. The principal’s work should be seen as being a specific profession in its own right, for which it should also be possible to acquire proper training. Vuohijoki highlights the significance of university-level training for principals and its development in an increasingly professional direction. Furthermore, Vuohijoki proposes that principals’ status within municipal administration be strengthened and calls on their superiors to provide them with stronger support. Vuohijoki’s research indicates that only 10% of principals felt that they received enough support from their superiors.

4.9 Conclusions

Chapter 3 examined principals’ operating environments and Chapter 4 focused on principals themselves through 21st century Finnish doctoral research. These discussions may be distilled into the following six conclusions about what types of principals appear to be needed in 21st century Finnish society.
Firstly, every individual aspiring to become a principal must understand that the principal's work is currently completely different from what it used to be as recently as in the early 1990's. They need to have the right orientation towards the principal's position. They need to be aware of the demanding nature of the job while also understanding the great opportunities provided by the new school laws for principals to develop their schools. This new principalship challenges individuals with a strong orientation towards reforming the school – and, consequently, Finnish society – to get involved.

Secondly, principals' job descriptions are becoming more and more extensive. Even if it were possible to remove tasks that do not belong to the job description successfully, as suggested by Vuohijoki (2006), the field of a principal's management and leadership skills would still remain very extensive, as evidenced in doctoral theses by Mäkelä (2007), Lahtero (2011) and Raasumaa (2010), for example. When pupils' holistic learning pathways are taken into account in the analysis, as they should be, the requirements of principals' management and leadership skills are further supplemented with broad networking and multidisciplinary co-operation skills, as outlined by Nykänen (2010), among others.

Thirdly, based on all of the above, it is increasingly clear that the principal's occupation is a specific profession in its own right, which should be supported through solid university-level initial training and extensive and integrated further and continuing training. This training needs to be based on research, which means that it is also necessary to ensure the conditions for research into Finnish school management.

Fourthly, principals need to internalise the major changes that are currently taking place in the teacher's role and its essence. An essential part of this development is the change of leadership towards distributed leadership and broad pedagogical leadership.

Fifthly, it is imperative to be able to meet the expectations, emerging from research as ever stronger conflicting pressures, on principals to function both as pedagogical leaders of their schools and as managers responsible for dealing with increasing administrative workloads. These conflicting pressures seem to put unreasonable physical and mental strain on principals.

Sixthly, it is necessary to place a stronger emphasis on the future-oriented nature of principals' work. This necessity is manifested in two different ways. Firstly, there will be significant structural changes at a municipal level in the near future (see e.g. Kanervio & Risku 2009), which require consideration of the objectives and views of and competent involvement from municipal educational administration. Secondly, meeting the challenges of the quantum world of the future requires new types of knowledge and learning from our society and its members. Schools must be capable of enabling this new knowledge and learning. Teachers' and principals' work should place emphasis on building the future through the learning of children, young people and adults as well as through schools' participation in society as a whole.
5 New pedagogical leadership

This chapter concentrates on broad pedagogical leadership which, based on 21st century Finnish doctoral research, seems to form a key part of current and future principals’ school management work. The chapter discusses reasons why pedagogical leadership has become as significant as it appears to be today. It examines the concept and meaning of pedagogical leadership and discusses how pedagogical leadership should be implemented at educational institutions. In addition, the chapter deals with the link between broad pedagogical leadership, on the one hand, and knowledge management, distributed leadership and the new roles of teachers and principals as agents of the future, on the other.

5.1 Background to a new kind of leadership

As Chapter 2 indicates, there has been a significant change in school management. In the simplest terms, this change can be described as a transition from normative guidance to information-based guidance, but it is, in fact, a much broader phenomenon. The change is not only about whether we use legal standards or information for guidance or what the relationship between normative and information-based guidance is. What is much more relevant is that the entire way in which we perceive the nature of knowledge in the first place is changing profoundly.

The educational administration and school management that functioned in the operating environment of a Newtonian world, based on permanence, unambiguous concepts, clear administrative structures and predictable consequences of action, are becoming something completely new in the operating environment of a quantum world. The quantum world is characterised by constant change, ambiguity of concepts, diverse networks and increasing difficulty in terms of anticipation. The quantum world calls for a different type of management and leadership than the Newtonian world. The new central position of knowledge and its significant role in management become more prominent. Already, the previous Ministry of Education and Culture Development Plan for Education and Culture for 2007–2012 considered it essential for Finland to be involved in global production of information, not only in terms of using it but also as a key participant in determining the knowledge being formulated. The latest Ministry of Education and Culture Development Plan for Education and Research for 2011–2016 logically continues along the lines set out by its predecessor.

The train of thought created by the new definition of the relationship between knowledge and management in Chapter 2 is consistently supplemented by the reviews of doctoral theses in Chapters 3 and 4. The new kind of relationship between knowledge and management seems to require both new types of knowledge and learning and increasingly significant and intensive influence of knowledge and learning on management. The dimension that is emerging as being key to school leadership is broad pedagogical leadership. Pedagogical leadership has interested researchers and school heads in Finland for a long time now, but no common definition or interpretation has been created (see, for example, Toivonen 1976; Hämäläinen 1986; Their 1994; Kurki 1993; Lonkila 1991; Mäkelä 2007; Raasumaa 2010). The situation is even more problematic in
international literature and research, where the contexts and concepts and paradigms of school management differ considerably between different countries.

5.2 Pedagogical leadership as a network of development processes

A very high number of the doctoral theses presented in Chapter 4 of this report deal with pedagogical leadership from several different perspectives, but none has comprehensively linked pedagogical leadership to school management. The researcher who has perhaps proceeded farthest in this respect is Raasumaa (2010), whose synthesis finishes up presenting a basic education principal as being a broad pedagogical leader. In addition to planning and organising teaching work, Raasumaa suggests that a principal as a broad pedagogical leader also attends to the qualitative development of knowledge and learning. Raasumaa includes knowledge management under pedagogical leadership and expands pedagogical leadership into a need and concept relating to the entire organisation.

Building on the doctoral thesis by Taipale (2004), among others, it is probably possible to expand Raasumaa’s view even further also to cover other organisations besides schools. Taipale’s doctoral thesis is a case study on superiors as team tutors and pedagogical leaders in a process organisation. The study was carried out in a company and reversely utilises educational research and terminology concerning pedagogical leadership. Taipale (2004, 72) defines pedagogical leadership as being ‘the superior’s ability to guide subordinates towards the common goal, make the specified visions and objectives visible and teach people to understand and interpret, as well as discuss and manage interaction by means of positive interdependence and openness’.

It is probably fair to say that the role of every organisation’s leader nowadays is to be the organisation’s pedagogical leader responsible for development and management of organisational knowledge, staff’s professional development, utilisation of distributed leadership, development of a creative learning culture and management of network-based learning. The new broad pedagogical leadership seems to be formed in a network of interaction and development processes used by the superior to influence and develop staff’s attitudes, behaviours and actions. A principal’s broad pedagogical leadership may be crystallised as presented in Figure 2.
A principal's broad pedagogical leadership covers both direct and indirect pedagogical leadership while also being interactive. The key aspect in a principal's direct pedagogical leadership is the principal's direct guidance and support for teachers' knowledge and learning both as part of everyday school operations and by means such as development discussions. A principal's indirect pedagogical leadership refers to the way in which the principal leads the school's key development processes, which indirectly guide and support knowledge and learning both among teachers and within the entire school organisation. A principal's pedagogical leadership needs to be interactive so as to allow resources at different school levels to participate in pedagogical leadership as appropriately as possible. In this case, members of the school organisation will form a community of learners, where the principal is a learner along with everyone else.

At an educational institution, it is possible to distinguish four key development processes:

1. curriculum development;
2. development of the organisational culture;
3. creation of vision objectives and agreeing on strategies; and
4. specification of the basic mission.

It is essential to carry out the four above-mentioned functions as development processes rather than individual events and measures. It is also key to ensure that the development processes form an integrated whole. Furthermore, it is important to understand that development processes need to be led. It is precisely the leadership required by development processes that makes them key practical pedagogical leadership tools and channels of influence for a principal.
The curriculum is a school's most important management tool and management of the curriculum planning, implementation, evaluation and improvement process lies in the core of the principal's pedagogical leadership. The curriculum is the end result of this curriculum development work and provides a guideline for the school. The curriculum planning, implementation, evaluation and improvement process is work that requires broad interaction which involves both the need and the opportunity for the principal to exercise significant influence and leadership vis-à-vis teachers. As part of curriculum development, it is necessary to examine teaching staff's competencies, development needs and knowledge management. The curriculum development process highlights the roles of both teachers and the principal as learners and developing individuals. It is therefore possible to consider that the objective of internal school development is to create a community of learners (see Moilanen 2001).

Management of the curriculum development process lies in the core of a principal's pedagogical leadership. If the principal does not lead the process, it will be led by someone else, which means that the principal gives up perhaps their most important pedagogical leadership tool. Since management of the curriculum development process cannot solely be technical management, it is also fair to say that a school principal needs to be a solid pedagogue with teaching qualifications. Being a professional manager is not enough on its own for successful school management.

Several international studies (e.g. Barth 2007; Sergiovanni 2006) have indicated that a school's organisational culture has an essential bearing on the school's performance and learning outcomes. Similar results have also been obtained from other organisations (e.g. Harris & Obgonna 2000; Van Houtte 2004). The Finnish doctoral researchers dealing with school cultures include Kunnari (2008), Lahtero (2011) and Vulkko (2001), offering similar views (for more information, see Chapter 4).

The significance of a school's organisational culture is included in the instructions issued by the Finnish National Board of Education to those involved in drawing up local curricula. According to the Finnish National Board of Education, a school's educational objectives, values and cross-curricular themes should also become concrete in the organisational culture. The aim is to create a culture which is open and interactive and supports co-operation both within the school and with homes and other areas of society. (Opetushallitus [Finnish National Board of Education] 2004.) An organisational culture is not created at a weekend seminar; nor can it be forced into existence. An organisational culture is the result of long-term development work and it reflects the organisation's psychological past and its perception of its values and management (see also Kunnari 2008).

Development of an organisational culture is a principal's second key pedagogical leadership tool. On the other hand, if the principal does not lead development of the school's organisational culture, someone else will do it anyway and the culture will nevertheless develop in some way. As the organisational culture seems to have an essential bearing on a school's operations, it would be a big mistake on the principal's part to fail to take the lead on the school's organisational culture.

A school's objectives should be oriented towards the future and they should not only include short-term targets but also long-term objectives. In this respect, we often speak about vision objectives, the significance of which is discussed by Kirveskari (2003) in
her doctoral thesis. Several studies have indicated that the vision plays a key role in organisational change and reform processes (see Alava 1999; Antikainen 2004; Kotter 1996; Porras & Silvers 1991; Tiusanen 2005; Taipale 2004). Besides the role of the vision, research also highlights the fact that an organisation's vision cannot only be about the top management's vision. The vision must be created with emphasis on broad participation and utilisation of the entire organisation's competencies. This is also the only way to ensure staff's genuine commitment to the vision and organisational reform.

Management of the planning, implementation, evaluation and improvement process of the school's vision objectives is a principal's third key pedagogical leadership tool. If the principal does not lead the school's vision work, someone else will do it, or teachers will mainly have their own objectives and ideas of school development and its future. In the worst case, there may be several different ideas and interpretations of the school's vision within the school, which makes it impossible to develop the school in a determined manner.

Every school must note down its own basic mission. The mission gives both meaning and justification to the school's existence and operations. The mission needs to be recorded in the school curriculum and it should also preferably be visible in other important planning documents. It is regrettable often the case that people consider it unnecessary to discuss and record the mission because the school's basic mission has been laid down in legislation. This means that the ultimate purpose of and justification for the school's operations may remain detached from what people do at school and how the school operates. Neither does ignoring the basic mission enable its contextualisation for the school's operating environment.

Discussion about the school's basic mission is a principal's fourth key pedagogical leadership tool. Discussing the mission does not mean deviating from the law – quite the contrary. This discussion is essential because the school community needs to consider the purpose and justification of its existence thoroughly. In addition, the basic mission as described in legislation is implemented at every school in its own way and discussion about the mission offers an opportunity to support its implementation by supplementing it with the school's own local perspectives. School staff need to address their values and ethical principles when discussing the mission at the latest.

Principals' pedagogical role can also be examined from the perspective of teachers. Teachers graduate from university teacher training departments. Teacher training departments provide them with professional teaching qualifications, which may be regarded as being a sort of driving licence for the teaching profession. In the same way as a young person is not a fully-fledged driver once they receive a driving licence from a driving school, a teacher is not a fully-fledged teacher once they receive the certificate attesting to their teaching qualifications from a university. The teacher's work and development as a teacher have only just started, just like a newly qualified driver is only starting to learn to act naturally in traffic as a motorist. As a newly graduated teacher leaves university to start their first job, responsibility for their development shifts from the teacher training department and its didactic experts to the school's principal. This development responsibility will remain with the principal throughout the teacher's career, for as long as over 40 years. This career development of teachers has been examined in an interesting manner by Järvinen (1999) in her study on the different stages of teachers' professional development process and the principal's role in supporting teachers' professional devel-
development. The study emphasises the significance of the principal's pedagogical leadership throughout the teaching career. Järvinen's view receives international support from US researchers Blasé and Blasé (2001), among others, who found out, when exploring the actions of successful principals, that one of teachers’ most crucial wishes for their principal was support for their professional development.

5.3 Pedagogical leadership within educational administration and the school system

Section 5.1 examined pedagogical leadership from the perspectives of schools and, above all, principals. Pedagogical leadership is not, however, confined to school level but should be included at all levels of the school system from individual teachers to the Minister of Education and the Director General of the Finnish National Board of Education (FNBE). The same elements and principles that were examined in Section 5.1 in relation to principals' pedagogical leadership can be found at all levels of the school system. Only the change of pedagogical leaders' remits due to the change of levels has a bearing on conclusions drawn about the analysis of pedagogical leadership.

Although Finland's municipal structure and administration of municipal educational services are very varied, almost all local authorities have a person in charge of administration and management of educational services, who can be called an education director or a superintendent. In the same way as a principal is responsible for the learning outcomes and growth of pupils and students at their school, an education director is responsible for the outcomes of the schools operating under their educational administration. A principal's key resources include school staff, parents, pupils and students, as well as the funds allocated to the school. An education director's key resources are the same but at the level of the municipality's educational administration as a whole rather than an individual school. Just like principals, education directors are also bound by both national objectives and municipal strategic and education policy priorities. At the core of a principal's pedagogical leadership lies attending to knowledge and learning at their own school. At the core of an education director's pedagogical leadership, in turn, lies attending to knowledge and learning within the municipality's educational administration as a whole. Principals' pedagogical leadership focuses, first and foremost, on supporting teachers' knowledge and learning. An education director's pedagogical leadership, in turn, focuses on supporting principals' knowledge and learning in particular. Just like a principal, an education director is not only responsible for functioning as the immediate administrative superior but also for being the pedagogical leader of their subordinates' knowledge and learning. A principal's remit covers the school and an education director's remit covers the municipality's educational administration as a whole.

Based on several doctoral theses, Chapter 4 suggested that principals' time is often allocated inappropriately. Principals need more time for pedagogical leadership of their own school, but their working hours seem to be increasingly allocated to dealing with school administration. According to Kanervio and Risku (2009), the amount of conflicting pressures on the use of education directors' time is at least equal to those facing principals. Municipal education departments often seem to have too few staff to perform the strategic and pedagogical leadership duties required of education departments. Education departments' human resources only appear to stretch mainly to dealing with the necessary administration.
According to Kanervio and Risku (2009), education directors are definitely aware of the significance of strategic leadership; human resources just do not seem to allow consistent strategic development of municipal educational administrations. As for pedagogical leadership, it seems that education directors often impose it on principals both for time management reasons and because they do not understand the new nature and role of pedagogical leadership in development of educational administration. In the same way as at a school level, someone else will also fill the void of pedagogical leadership at a municipal level, if the education director does not act as the pedagogical leader. If this is the case, the education director will lose one of their most important tools for managing educational administration. If an education director fails to act as the pedagogical leader, this may lead to inconsistent development of educational services and increasing inequality between schools, among other things. According to Vuohijoki (2006), principals need much more support from their education directors than they seem to be getting at present.

The demand for education directors’ pedagogical leadership naturally sets new requirements for their own competencies, qualifications and management training. The current situation, where education directors are not even provided with nationally defined qualifications requirements or holistic management training programmes, does nothing to promote their pedagogical leadership skills and willingness to act as pedagogical leaders.

In the same way that we have examined the pedagogical leadership responsibilities of principals and education directors, we can also study the pedagogical leadership of the Minister of Education and the FNBE Director General. Based on their respective remits, the Minister of Education and the FNBE Director General are both responsible for the learning outcomes of the educational institutions of all Finnish education providers, which makes them the highest pedagogical leaders in the country. Their essential duties include definition of national education policies at a political level and balanced development of different sectors of the education system. Their key pedagogical leadership functions should include attending to knowledge and learning within the school system, so as to ensure that national learning outcomes correspond to the objectives specified for these. Their pedagogical leadership should focus, in particular, on supporting knowledge and learning among education providers and municipal civil servants responsible for educational administration. Similar to education directors at municipal level or principals at school level, their pedagogical leadership and its implementation require substantial understanding of both the new nature and role of pedagogical leadership and time investment, strong dialogue, and management and leadership skills.

5.4 Spotlight on distributed leadership

The school development processes described in Section 5.2 cannot be implemented through traditional administrative or management-oriented leadership. According to many Finnish researchers (e.g. Kirveskari 2003; Pesonen 2009; Raasumaa 2010) as well as the extensive OECD report on improving school leadership by Pont, Nusche and Moorman (2009), for example, these processes require broad distributed – i.e. shared – leadership. We have travelled a long way from the Great Man theory of a single leader, which used to define management of both schools and other organisations. While distributed leadership is widely accepted in principle as the current approach to leadership, there is still much to be done in terms of its practical implementation.
A school is a unique management environment and differs significantly from other organisations. Schools are characterised by the fact that they are loosely-coupled organisations (Weick 1985) which, in addition to the principal and staff, include the maintaining organisation, pupils and students and their parents, as well as a wide variety of other stakeholders.

If we examine school management from the principal's perspective, we can imagine the principal being at the centre of the school organisation and all parties involved in the organisation placed around the principal, as if on the circumference of a circle. In the resulting figure, the principal becomes surrounded by what is often perceived to be a 'grey' area, which conceals a considerable resource for distributed leadership.

We can examine this distributed leadership resource made up of different parties in terms of both expert and ownership powers and responsibilities. The principal's broad pedagogical leadership means guiding and supporting this distributed leadership resource. Guidance and support should focus both on each party individually and on ensuring that the distributed leadership resource made up of different parties forms an integrated whole in terms of school operations.

Every relationship between the principal and a party involved in the school organisation contains areas and functions of distributed leadership which are typical of the relationship in question and which the principal must lead as the school’s pedagogical leader. Leading the distributed leadership resource made up of teaching staff means that the principal enables and leads teachers' powers and responsibilities in terms of influencing the school's key elements, such as operational policy, curricula, learning materials, budgets, human resources policy, continuing training, evaluation and practices. As the pedagogical leader of the distributed leadership resource comprising pupils and students, the principal enables and leads the genuine involvement of pupils and students in school development. Just like with teachers, pupils and students, leading the distributed leadership resource consisting of external stakeholders also requires the principal to engage in new cooperation relationships – partnerships. Leadership shared with parents, in turn, includes aspects such as shared responsibility for education and the school's mission, values and practices.

Distributed leadership is an absolute prerequisite for broad pedagogical leadership to succeed. Distributed leadership creates involvement and ownership and, through these, collaboration. Distributed leadership enables making the most of the organisation's full potential. In broad pedagogical leadership, distributed leadership focuses on leading the entire organisation's knowledge and learning. As a key way of functioning in leadership interactions emerges a partnership enabled by dialogue and mentoring, where every member of the organisation is a learner. The organisation thus becomes a community of learners.

5.5 New roles of teachers and principals

Distributed leadership increases teachers' power and responsibility, both requiring and enabling them to assume a completely new role in school development. Almost every doctoral thesis examined in this report contains a vision of a radical change in schools' operating environment and renewal of management philosophy required by this change.
According to Kanervio and Risku (2009), among others, the operations of both municipal educational administrations and schools will be fundamentally reformed in the near future. A major challenge will be how teachers and principals respond to changes and reforms.

It ought to be clear that a teacher’s job description can no longer be based on holding the required number of weekly lessons, but it needs to take their participation in the school’s holistic development into account in a visible manner. A change in the job description will bring about at least three types of challenges. Firstly, initial and continuing teacher training will have to support the change in teachers’ job description more effectively. Secondly, teachers’ pay system will have to be reformed so as to meet today’s needs. Thirdly, it is imperative to make room for strategic thinking and school-level development in teachers’ professional orientation.

Finland’s development into a welfare state after the Second World War can be regarded as being its nation-building phase of national unification, which has several points of contact with the efforts of 21st century developing countries to develop their societies. Development of the education system, educational administration and educational institutions has played a key role in the nation-building efforts of Finnish society. We have made basic, upper secondary and higher education available to the entire nation free of charge. We have created an effective and high-quality school system, which provides studies and qualifications that are highly appreciated. This appreciation extends to both general and vocational education and training. Working in various professional roles within the school system is among young people’s most popular dream jobs year after year.

Achievement of the educational objectives that played a key role in Finland’s nation-building work can also be considered essential for the social development aspirations of developing countries of the 21st century. Education and training, knowledge and learning are key to national unification. Just like in Finland, professional development of teachers and principals also plays an essential role in school development in developing countries.

While Finland is by no means complete as a country, it is probably fair to say that our country has finished the basic nation-building phase of our national unification. We are now moving on to the next phase in our national development, where the view on the future is key. The future includes the transition from a Newtonian world to a quantum world discussed in Section 1.2. Building a good national and global future in a quantum world – ‘future creation’ - becomes a key objective of social development.

In a situation characterised by uncertainty and instability both in Europe and throughout the whole world, educational administration plays an ever more crucial role. In a situation where external change is more and more frequently unpredictable and where predicting the year ahead is increasingly challenging, it is wrong to give up and submit to being carried along by market forces. This is precisely a situation that calls for agents of the future – and what party could be better equipped to take on this task than educational administration? The task of educational administration is, after all, to educate future generations. Furthermore, in global terms, educational administration is probably the largest industry in the world. It is time for educational administration to raise its profile and become more strongly engaged in building the future.
Teachers’ new key task needs to be *building the future*. The change in the role of teachers creates a major challenge for teacher training departments. The task of teacher training departments needs to be to *train agents of the future*. It is no longer enough for teachers to be well versed in pedagogy. In addition to pedagogy, teachers need a strong future orientation.

The new role of teachers requires reform of the role and responsibility of principals. Principals need to be *leaders of agents of the future* at their schools. The new role and responsibility requires new types of qualifications and competencies from principals, which is why principals’ qualifications requirements and management training will have to be reformed as well. In the future, principals’ training programmes should train principals as *leaders of agents of the future*. 
6 Future research objects and needs

The doctoral theses studied in this report mainly comment on individual research objects, but also some common themes for future research. The further research projects presented in the doctoral theses mostly concern more advanced or extensive research into the theme of the thesis in question. The perspectives suggested by the doctoral researchers mainly remain confined to expanding and deepening the themes of their own research. Some researchers would expand their research by comparing it with another corresponding research topic (Kanervio 2007) or by including perspectives of other school staff besides principals and teachers in the phenomenon being studied (e.g. Juusenaho 2004; Lahtero 2011; Pesonen 2009).

Among further research objects, it is possible to distinguish three research themes put forward in several doctoral theses. The first of these is research into change and development work. Hellström’s (2004) doctoral thesis focusing on implementation of a development project suggests a number of research ideas focusing on carrying through change as research objects for the future. Likewise, Kirveskari (2003) and Kunnari (2008) put forward further research topics concentrating on the change and development of schools.

A second future research theme mentioned in several doctoral theses is studying leadership at different levels of school and municipal organisations. Several objects of leadership and management taking place at different levels were mentioned. One of Kirveskari’s (2003) further research objects is examining the role of the management team’s work in long-term planning. Lahtero (2011) and Pesonen (2009) suggest studying assistant principals and network management, respectively. Both Pesonen (2009) and Mustonen (2003) propose investigating the most effective methods of centralising and decentralising tasks and decision-making processes at municipal and school levels. Since 2008, the University of Jyväskylä’s Institute of Educational Leadership has carried out a national research programme funded by the Ministry of Education and Culture, charting the status of and changes in educational leadership in general education at municipal, school and class levels. The programme has rapidly become international and will probably produce significant basic information about management and leadership at different levels of municipal educational administration as soon as within the next few years.

A third future research theme that seems to be common to some extent is distributed leadership. Doctoral theses have suggested that distributed leadership and research into the theme should focus on a school level (Kirveskari 2003; Pesonen 2009; Raasumaa 2010). The increasing focus of future research needs on different levels of leadership and distributed leadership are well in line with the significance of distributed leadership described in Chapter 5 and its understanding in broader terms beyond unit level.

In Chapter 5, the authors of this report suggest broad pedagogical leadership as a key perspective of the school system, municipal educational administration and school management. Several doctoral theses examining principals’ work and duties also highlight the need for pedagogical leadership and bemoan its scarce resources. Nevertheless, pedagogical leadership is not raised as a significant future research topic in the further research objects covered. According to the analysis set out in this report, however, broad pedagogical leadership should be an essential further research topic for the future. In
addition, the doctoral theses produced to date have mainly examined principals’ work here and now. The new role of educational administration as an agent of the future requires a perspective focusing more and more on studying what future principalship is and should be like.

Management of early childhood education and care should also become one of the essential future research themes at the latest by the time when early childhood education and care will be transferred from social to educational services in accordance with the Ministry of Education and Culture Development Plan for Education and Research for 2011–2016. It is necessary to examine the change and unification as well as leadership in early childhood education and care. It would be desirable that, in addition to the two doctoral theses focusing on leadership in early childhood education and care (Halttunen 2009; Nivala 1999), the topic would be equally important as a research topic as principalship, because the same bugbears and future challenges are also visible in leadership in early childhood education and care as in other sectors of educational administration.

While the doctoral theses produced in Finland during the 21st century are quite extensive and their data has often been collected from many different parties, they do have one distinct deficiency: only two theses examined the perceptions of pupils or students and only one studied those of their parents. The small amount of research into the perceptions of pupils, students and their parents is probably also reflected in the fact that only one doctoral thesis (Kuukka 2009) examined principalship in a multicultural educational institution. Even that research did not include perceptions of pupils, students or parents, but the data consisted of principals’ views instead. Johnson’s (2006) doctoral thesis focusing on basic education included a survey conducted for pupils and Tiusanen’s (2005) doctoral thesis examining polytechnics contained a few interviews with students. Kangaslahti’s (2007) doctoral thesis relating to basic education, in turn, covered a survey conducted for parents in the initial stages of research.

It is definitely understandable that the research topic limits the group on which the research is focused, but raising the voices of both pupils and parents would also have befitted several of the studies carried out during the review period. Pupils, students or parents are only mentioned among further research projects suggested in two doctoral theses. Antikainen (2005) mentions studying the interactivity of the teacher/pupil relationship through a pupil survey or interviews as one further research project, while also referring to the necessity of conducting a longitudinal study. Vulkko (2001), in turn, would continue research relating to decision-making by examining parents’ experiences of educational decision-making processes at a municipal level.

All of the above-mentioned themes put forward in the doctoral theses are certainly worthwhile research objects for the future. In this respect, the resources available to conduct this research will become a challenge. A doctoral thesis is most commonly produced by a single individual, which means that both qualitative and quantitative research will remain relatively limited in terms of data, for example. At the same time as it is necessary to attract new postgraduate students, it would also be important to safeguard other types of research. Today, research should be increasingly carried out in research teams and through research programmes. Building more extensive research schemes could deepen and expand research into educational administration which has, to date, been more or less dominated by doctoral theses. More extensive research programmes could
also result in interdisciplinary research, which could broaden 21\textsuperscript{st} century research based on an educational science orientation.

The University of Jyväskylä’s Institute of Educational Leadership has focused its research on the following four areas: The principalship and the development and identity of the educational leader; Understanding school change and developing organisational culture; Creating and leading a professional organisation and individual competencies; and Management structures and evaluation procedures in education. Doctoral theses have been produced in all these research areas and all are also represented in the further research objects described in this chapter. However, each research area also includes significant black holes. These black holes can only be partially filled by doctoral theses produced at different universities. In addition to producing fragmented information, each research area could form its own research programme. When planning new research, it is also important to ask what sort of information we need. Chapter 2 points out that a quantum world requires understanding of both global and glocal situations – this means that research needs are also both global and glocal.

Along with creating more extensive and long-term research programmes, another essential aspect is how the research information obtained will be used and made available. As the report points out, 28 doctoral theses have been produced on principals during the 21\textsuperscript{st} century – what is yet to be established is how well these have spread to the attention of principals and other people working with education. At the same time as we need support for research, we also need good channels to disseminate research information.
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