

Norwegian Ministry of Education and Research

Summary

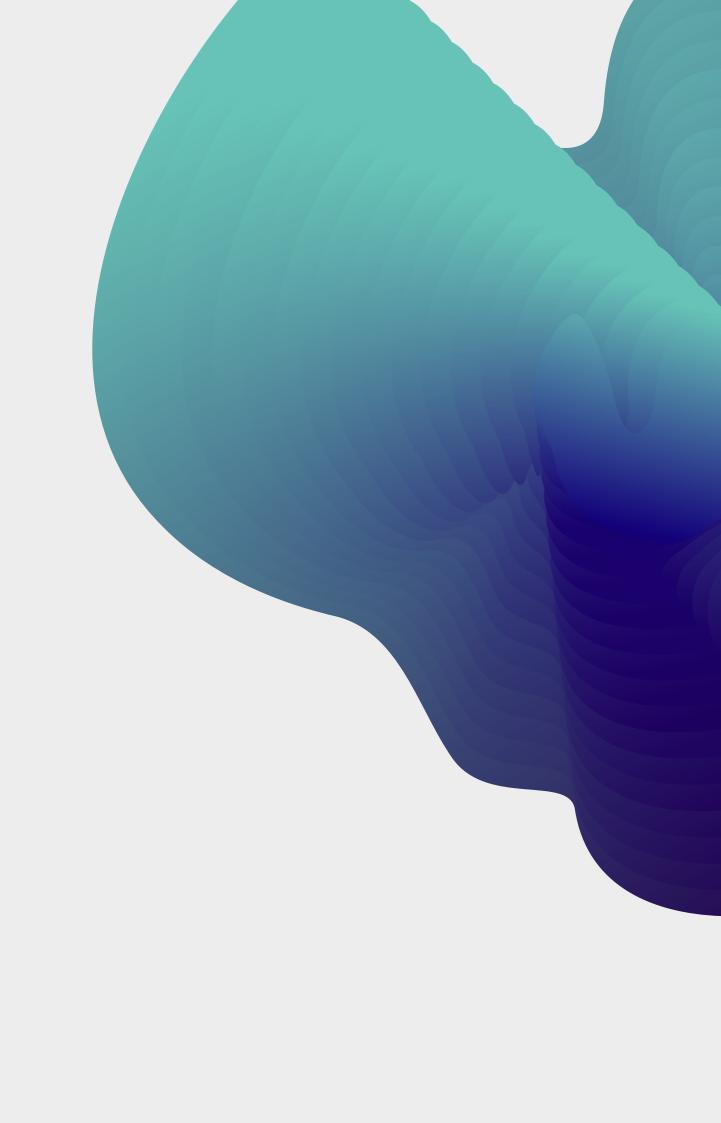
The kindergarten teaching profession – present and future

Summary of report developed by an expert group appointed by the Ministry of Education and Research



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Members of the expert group

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1. The kindergarten teaching profession – present and future

Introduction to the English summary

The Norwegian Ministry of Education and Research appointed an expert panel in September 2017. The panel was asked to examine and document the role of Norwegian kindergarten teachers and to develop recommendations on how the profession could be further developed.

The fact that the Norwegian government sees it as a policy objective to develop a profession is not very surprising in a Norwegian context. Norwegian professions have in many cases developed in close collaboration with the state, and professions are important building blocks in the Norwegian welfare state.

The expert panel included kindergarten teachers, EC educationalists, social scientists and a psychologist. In the panel's approach, a profession is understood in terms of how the profession relates to the children in its pedagogical work, how the profession relates to organisational and governmental frameworks as well as market processes, and how the profession relates to knowledge and development. Being a profession is about all these aspects. Knowledge, work with children, organisational objectives and government regulation will all involve choices in a pedagogical field, i.e. these relations concern how children are encouraged and given opportunities to play, to belong, to participate and relate to other children, to develop and to discover the world.

The present document is based on the concluding chapter of the expert panel's report, which was finalised in December 2018. It outlines the approach of the expert panel and sums up its findings on pedagogical work with children, the knowledge base for such work, the organisational and government framework and training of kindergarten teachers and their professional development. It goes on to discuss the need for further research, and finally, how the kindergarten teaching profession can develop in terms of work with children, development of knowledge, organisational frameworks, government regulation and professional training and development.

The Norwegian context has some distinct features. Even though Norwegian ECEC dates back to the mid-19th century, it has a history of marginalisation. Well into the 1970s there was little governmental interest in it, and very few children attended kindergarten. Both kindergartens and professional training were left to non-governmental actors. The few kindergartens that were established before the first ECEC law in 1975 were a mixture of municipal, religious, community-based and parent-run centres.

When the sector began to expand, slowly from the 1970s onwards, this mixture of different actors took part in the expansion. Today all Norwegian children have a legal right to ECEC from they are one year old, i.e. when paid maternity leave ends, until they start compulsory education at the age of six. In practice ECEC services are still provided by this mixture of municipal and private kindergartens. In some communities all centres are private, in others they are all municipal, and often there is a mixture of both.

Government control of private kindergartens is limited. Private kindergartens are entitled to the same government subsidies as municipal kindergartens, and there is a fee cap on parental contributions. Local authorities are obliged to provide ECEC to all children either by setting up their own kindergartens or leaving the task to private actors, but in as far as private kindergartens provide ECEC, they are not on contract with any government agency. The local authority ensures some very basic minimum standards in all kindergartens, and the government has issued national framework plans since 1996. The current plan was implemented in 2017. Other than that, hierarchical government control of kindergartens is quite weak. However, national agencies and some of the large municipalities do offer advice, training and networking to all kindergartens.

In this context the kindergarten teaching profession has played a crucial role in ensuring professional standards and coordination of services. Kindergarten teachers are trained at university level. The training programme takes three years and includes practice periods and leads to a BA degree. Master programmes are developed as well, but few kindergarten teachers go on to master level. The training of kindergarten teachers is fairly strictly regulated by the government, and most teachers are trained in government-owned universities and colleges. National legislation has for a long time ensured that kindergarten heads are trained kindergarten teachers and that trained kindergarten teachers are in charge of each group of children, with the title pedagogical leader. In most kindergartens there are many of them, depending on how many children there are. Recently the ratio of children per trained teacher (pedagogical leader) was made statutory. There must be one teacher for every seven children under the age of 3 and one for every 14 children over the age of 3. In addition there are assistants with no formal training at all and some assistants with ECEC-relevant courses at upper secondary level. In general, gualified kindergarten teachers make up well over 40% of the workforce, the rest being unskilled or trained at upper secondary level.

Kindergarten teachers have thus remained core actors in the sector. Within minimum standards set by the local authority and the national framework plan issued by the government, they have been in charge of ECEC. This is why the development of kindergarten teachers from a professional perspective is so important, and this report sums up current knowledge about the kindergarten teaching profession and elaborates on its further development.

The expert panel has been asked to make recommendations on how early childhood teaching can be strengthened as a profession, thus defining characteristics of and conditions for robust professional knowledge, good professional practice and capacity for self-development. To be able to define the kindergarten teaching role of the future on the basis of this mandate, we have elected to first give an explicit account of the theoretical assumptions on which we have based our evaluation. These assumptions are taken from Chapter 2 and include ideals on which there is likely to be a broad consensus such as play being a key part of early childhood education, that parents should be involved as partners, and conflicts surrounding how various considerations should be taken into account, such as how to balance progression and planned learning on the one hand and child participation on the other. In some areas it is fairly obvious which trajectory the profession should take, while other issues may invite multiple approaches to developing the profession.

The next step is to collate the analyses of the available information – as described in Chapters 5 to 12 – and identify the key characteristics of kindergarten teaching as a profession. This summary points partly to certain tendencies that could prove problematic given the assumptions we have made and partly to tendencies that must be seen as one of several potential perspectives on a complex issue. We have called the summary "Outlines of the kindergarten teaching profession" since many aspects of the profession and the framework within which it exists have barely been researched and can therefore be difficult to recognise.

The third step is to address some of these aspects of the kindergarten teaching profession and discuss them in more detail in light of the assumptions we have made. In some cases this results in specific proposals for change and development. At other times we have highlighted multiple options and what they will entail.

Precisely because so many aspects of the role are unknown or difficult to identify, it is important to build a more robust knowledge base with a view to developing the profession. As the nature of this particular proposal differs slightly from the others, it has been given a dedicated section in this chapter.

Boks 1.1 Facts about Norwegian kindergartens (Part of the English version only)

- There are 5788 kindergartens in Norway. 46 per cent of these are municipality kindergartens, while 54 per cent are privately owned.
- 91.8 per cent of children attend kindergartens (*barnehage*). The Norwegian word *barnehage* is a direct translation of the German word Kindergarten, covering the age group 0–5 years.
- In 2018, 91.8 per cent of children in the age group 1–5 years attend kindergartens (a total of 278 578 children). 96 per cent has full day care (at least 41 hour per week).
- 83.5 per cent of children in the age group 1-2 attend kindergartens.
- 85 per cent of minority language children attend kindergarten. In total, 18 per cent of the children in kindergartens are minority language children (50.900).
- 3.2 per cent of all children enrolled in kindergarten are receiving special educational needs support
- In order to obtain a permanent position as a kindergarten teacher, kindergarten teachers must be recognized as a qualified kindergarten teacher (bachelor's degree from university/ university College).
- Most kindergarten teachers hold responsibilities as head teachers or pedagogical leaders. Leadership in kindergarten is to be carried out by both the head teachers and by the pedagogical leader in their work with children, parents and colleagues. The task of leadership will differ from these two roles.
- The head teacher is the pedagogical leader for the kindergarten. She/he is the head of the staff and has the overall responsibility for activities to be carried out in agreement with the goals in the Norwegian Framework Plan for the Content and Tasks of Kindergarten, the assignment as a whole as well as the quality of the center. The Norwegian Framework Plan for the Content and Tasks of Kindergartens uses the professional title of pedagogical leader to target the leadership level under the head teacher. As pedagogical leaders, their responsibility is to lead the daily work for a group of children together with colleagues. Pedagogical leaders follow up on educational priorities and provide guidance to their colleagues in the team.

- The municipalities finance the majority (over 80 per cent) of the expenses both for the municipal and the private kindergartens. Parents cover approximately 15 per cent of the expenses on day-care activities, while earmarked government grants and other support from the municipality or owner finance the remaining.
- Parental payments are governed by the Norwegian regulations concerning Parental Payments in kindergarten https://lovdata.no/dokument/SF/ forskrift/2005-12-16-1478/§1. Parental payment for a place in kindergarten should not be set higher than a maximum limit. Payment for diet may be additional. The maximum limit applies to a full day care within the applicable law and regulations. From January 2019 the maximum rate for parental payment is NOK 2 990, - per month (from August 2019 it is NOK 3040, per month). The parental payment for the first child in kindergarten must at most comprise 6 per cent of the household's total income.
- To ensure that children from low-income families have the opportunity to go to kinder-garten, there are introduced moderation schemes. No one should pay more than 6 per cent of the income. For August 2019, moderation scheme applies to families with a total income below NOK 548,167 per year. Families with income below NOK 548,167 are also entitled to 20 hours of free time in kindergarten per week. In August 2019 free core time in kindergarten will apply to children from age 2.
 Some useful web-pages in English:
 - A revised Framework Plan for the Content and Tasks of Kindergarten entered into force on 1 August 2017. https://www.udir.no/ in-english/framework-plan-for-kindergartens/
 - Kindergarten Act https://www.regjeringen.no/ en/dokumenter/kindergarten-act/id115281/
 - The expert report the Norwegian report and the summarized version in English: The role of Kindergarten teacher - Present and Future? https://nettsteder.regjeringen.no/barnehagelarerrollen/rapporter/
 - More facts in English about Norwegian education (Kindergarten, primary and secondary education): https://www.udir.no/in-english/

1.1 Theoretical perspectives as a framework for developing early childhood teaching

Kindergarten teaching is defined by expectations for the role. Important expectations originate from the relationships with the children, the parents, teacher training, organisation, management and governance. As stipulated in our mandate, we view kindergarten teachersas a profession, which means that we assume theory of professions as our theoretical perspective on the expectations for the role and for the professional practices in question. This is supplemented with pedagogical theory and organisational and governance theory (Abbott, 1988; Molander & Terum, 2008). Such perspectives do not provide a definitive basis for determining how to develop kindergarten teachers as a profession. Yet they do generate some categories for describing the teaching role, and they enable us to identify important crossroads and evaluate them.

1.1.1 Working with children in a professional capacity

Central to kindergarten teaching are the actions of the teacher in their interaction with the children. When defining kindergarten teachers as a profession, kindergarten teachers are expected to have a reflected understanding of the nature of the task, to master a complex set of different pedagogical methodologies, and to be able to apply their professional knowledge to exercise judgement when planning and carrying out their work. The antithesis of this are teaching practices based on hierarchical commands or rules imposed externally which give little room for independent thought and practices based on unreflective habits and traditions.

Task comprehension, concrete pedagogical work and associated evaluations can be seen in light of multiple pedagogical factors. This is about how to approach and understand play, learning and care and how to combine these elements into a coherent pedagogical whole. Drawing on various theories, the literature on kindergarten teaching emphasises the need to take a holistic approach as opposed to fragmentation, including in subjects, for instance.

One element in this holistic approach is child participation. A key question is how much emphasis should be placed on participation. The same is true for how this participation should be shaped and whether it is primarily individual or group-based. The process of building relationships may also place varying degrees of emphasis on individuality and community. The children are a diverse group, and one important issue is whether to build a community with room for diversity or whether mainstream provision is defined in such a way that many children are excluded from this community and need individual arrangements.

The different learning areas¹ can either become part of this holistic approach or they can become sources of fragmentation. Every learning area will see tension between different approaches and priorities, but the expert panel has not had the capacity to address these variances. One central conflict is that between the approach that says play, learning and care should be integrated and a more fragmented, subject-centred approach. There are few proponents, yet considerable fear, of the latter.

How we view children – as subjects or objects – and childhood in general is linked to fundamental conflicting ideas about children and the group of children. *Care and play* are not unambiguous concepts. Professional care-giving is central to all relational work. Of great significance to children's life skills, bonding and sense of belonging is whether the care is given on the premise of acknowledging the child and on an ethical basis or whether it takes the form of routine actions in which the adults define what is best for the child without acknowledging the child's feelings.

One key question is whether play has inherent value or is merely a tool for learning. A fundamental conflict in connection with play – but also relational work and learning – concerns when the teacher should intervene and when the children's own initiative and free play should take precedence. As regards intervention, there is a fundamental conflict between structured/planned activity and flexible/ unplanned activity. Various theories of learning identify different approaches to learning, but early childhood learning has the added dimension of how strong and predefined adult interference should be. Language and communication are part of the holistic

The Framework Plan defines learning areas that kindergartens should focus on. They are roughly equivalent to Norwegian primary school subjects.

integration process. Language learning can on the one hand involve indirect learning in which language learning is integrated in linguistic and social activities and on the other direct learning organised in language groups using different kinds of language learning materials. The learning environment also includes the structure of the physical environment. The way in which the physical environment is structured can impede or promote child participation. There is a tension between planned activities scheduled to take place at certain times and activities in which time and place are determined as a result of the children's interests and of the content they have created together with the adults.

The expert panel considers the role of the kindergarten teacher to be linked to these issues. As a profession, kindergarten teachers are expected to take a reflective and knowledge-based approach to their job and therefore also to these issues. But is that what they do? And if that is what they do in practice, what decisions are they making in respect of the above-mentioned issues?

Pedagogical work with children involves making complex assessments of the needs that are present in a given situation and of the needs of individual children and the group of children. Such professional decision-making consists of three key elements. Firstly, it involves identifying the children's needs, something which requires information about the children. Knowledge about the children can be obtained in a variety of ways. The information can be restricted to what we learn from our day-to-day contact with the children, or it can be obtained more or less systematically by way of observation, research and pedagogical documentation. One key question is how kindergarten teachers develop an insight into the group of children. Secondly, it involves interpreting situations and needs, something which requires a complex knowledge base. An important component of professional practice is which knowledge base to draw on and how. How do practical knowledge and academic knowledge aid us in complex practice settings? Thirdly, complex assessments demand professional judgement. Professional judgement is sometimes exercised when pressed for time; on other occasions with more time at our disposal. How and to what extent kindergarten teachers exercise professional judgement is an important question

when analysing the professional judgement of kindergarten teachers.

1.1.2 Professional skills development

Professions are expected to engage in regular professional development and innovation. Thus, also kindergarten teachers are expected to be in a state of constant change, both individually and collectively (Smeby & Mausethagen, 2017, p. 12). Such professional development can be spurred on by various forces. Individuals and colleagues can develop existing practices, but external entities can also help create new perspectives and solutions. External initiatives can involve multiple actors. One important question to ask, therefore, is who is driving this development? Who is defining new problems and tasks, and who is developing new solutions and approaches? One premise for the expert panel's work is that there are multiple paths to development. There can be multiple contributors, but professionality implies that kindergarten teachers are participants and not just recipients in this process.

The innovation process itself can take a number of forms. It can involve systematic R&D based on empirical and theoretical research, but it can also mean copying trends and myths from other sectors. It can also take the form of politically driven change, or it can involve non-profit organisations developing their own concepts and associated methodologies. Change can also be effected by commercially motivated initiatives in order to generate cost-savings or user-adapted solutions, for instance.

Development can come in different shapes and forms: concrete prescribed actions with little room for adaptation or more general insight and capacity that can be applied locally in a variety of ways. This pits two different interpretations of professional quality against each other in a complex scenario: evidence-based procedure against skills development allowing for local judgement to be exercised. Another issue is how innovation created externally is communicated to the field of practice. There is a difference between courses, rules and instructions on the one hand and training as part of a development project - such as continuing education, in-service training or guidance - on the other. The digital revolution in the public and private sectors is transforming the way skills development and innovation are communicated, and this communication is increasingly taking place via online resources.

The expert panel welcomes the involvement of multiple actors in developing the sector, but it also believes that kindergarten teachers themselves must be involved in their professional development or at least be enabled to participate to prevent them from becoming powerless recipients of other people's innovations. This is of course linked to what their training empowers them to do (see below).

1.1.3 Professional autonomy

Viewing kindergarten teachers as a profession means that teachers are expected to enjoy extensive professional autonomy. This autonomy involves placing trust in them to meet important civic responsibilities and professional standards. Their autonomy exists within a jurisdiction, i.e. a field the profession demands and is given responsibility for. Such autonomy must be understood at various levels. Autonomy can be something associated with the profession as a national collective, often governed by organisations, publications and professional networks. As a national collective, the profession has what Grimen (2008b) calls stewardship of the professional task at an overarching level vis-à-vis the political authorities, for example. At the same time the profession has a collective responsibility for ensuring that its members maintain high professional and ethical standards.

Autonomy and professional self-determination can characterise the body of staff in a given workplace such as a kindergarten. At an organisational level kindergarten teachers enjoy considerable freedom to organise, evaluate and develop their own practice, i.e. collegial autonomy. In this scenario every kindergarten teacher is allowed a greater or lesser scope for individual autonomy.

Individual autonomy is interpreted as freedom to make independent decisions (Molander & Terum, 2008). Key decisions for kindergarten teachers can be which methodologies to use when planning, documenting and evaluating pedagogical practices and which considerations should carry most weight when making decisions.

Autonomy can exist to varying degrees at different levels, and they are contingent upon each other. It

would be unfortunate from a professional perspective if overall autonomy is restricted over time. One key question is how the professional autonomy of kindergarten teachers can be developed and strengthened.

1.1.4 Organisation and profession

Few professions are practised in isolation outside formal organisations. In the past kindergarten teachers would usually work in small, informal group structures (Børhaug and Lotsberg, 2016). Today professional practice is increasingly incorporated into large, formal organisations (Scott, 2008). In the kindergarten sector this could mean both individual kindergartens and their ownership structures. The organisational structure will have an impact on the differentiation between and specialisation of kindergarten teachers, on their duties (jurisdiction) and on their individual and collegial autonomy. Organisation is not merely about regulation. It is also about capacity and co-ordination, and small and large organisations build collective autonomy in different ways. In large organisations it often entails more formalities, division of labour and standardisation. For that reason there are differences between working professionally in a large, formal organisation and in a small, informal organisation. There is no one ideal organisational structure (Scott, 1992). The sector is likely to move towards greater variation in respect of organisational structures. Different structures have different advantages and disadvantages in terms of autonomy, division of labour and jurisdiction.

A formal organisation can take a number of forms. In formal organisations there is a fundamental conflict between hierarchy, formalities and standardisation on the one hand and the expert organisation - in which collegial processes play a bigger role – on the other (Strand, 2007). If kindergartens were to make a shift away from being a group organisation, the question arises of what they becomes instead and which parameters this sets for kindergarten teachers as a profession. Division of labour in a group organisation is underdeveloped, and the management structure is weak. In an expert organisation, on the other hand, tasks and responsibilities are distributed according to the subject-specific expertise of its staff. In a kindergarten this expertise could be specialist knowledge in different learning areas or expertise on play and relationships. Staff in an expert organisation also hold professional responsibilities and authority,

and there is room for professional evaluation processes. A hierarchical, bureaucratic organisation is more target and rule-driven. Important considerations and professional criteria can be satisfied by clarifying goals and rules. This may reduce staff autonomy, although it can also be increased by excusing staff from routine tasks. One key question is whether the teachers are able to maintain control of the kindergarten as it grows bigger or whether they become subordinate to other professions that fill the executive positions.

There are both advantages and disadvantages with any organisational structure, and with regard to the kindergarten teaching profession of the future it will be necessary to determine which organisational structure will be most conducive to professional development. Small and large organisations and different types of large, formal organisations offer different kinds of frameworks.

1.1.5 Leadership

It is especially important that the organisational structure allows for robust leadership. Leadership is a complex responsibility comprising a wide range of tasks distributed across the organisation. Leadership can be viewed as functions or as distributed management. The functions are often categorised as pedagogical leadership (production), administration, integration and entrepreneurship (Børhaug & Lotsberg, 2016; Gotvassli, 1990b). One key question is what comprises the different functions, i.e. how extensive are the leadership responsibilities?

This form of leadership can be distributed in different ways at different levels. Leadership in a kindergarten involves supervising the work with the children, managing the kindergarten as a whole and overseeing the ownership structure². The more complex the leadership process, the greater the distribution of the leadership functions, which may take on different forms.

A supplementary theoretical understanding of leadership is offered by various theories addressing the nature of the relationship between an organisation's management and its other staff, including management style theory, communication theory and group psychology. There are fundamental conflicts surrounding how dialogic or hierarchical the leadership should be and whether the management functions should be filled by one super-leader or be distributed across a management structure.

A well-established management hierarchy can organise other types of change processes than can self-governed groups. Leaders will be able to shift autonomy away from individuals to staff functions, or to themselves. Therefore, the way in which the management frames and develops professional practice and regulates the relationship with the wider world is important. Another key question is whether it is the teachers themselves who hold the leadership positions or whether they are being subordinated to others. If the leadership positions and management functions are being filled by teachers, it could mean more robust management which, in turn, will result in a professional hierarchy and an emerging distinction between professional superiority and subordination. However, produce leaders who are concerned with facilitating and safeguarding activities that are important to the profession.

1.1.6 Profession and users

The users are the children, but in some aspects also their parents. As professional practitioners, kindergarten teachers will be expected to demonstrate professional authority when interacting with the users. At the same time, the users can be both opponents and partners, and the relationship can take different forms.

The ideal embraced by both legislation and tradition is that there should be close co-operation between kindergarten teachers and parents but with the teachers acting as knowledgeable experts. Yet the relationship can take other forms, too. For example, parents can sometimes yield considerable power as users, something which will elicit counter-strategies from the teachers. It could also be that teachers are abusing their position of power and favour certain parents and children over others. This would spark a strategic response from the parents. The expert panel believes that the relationship should involve mutual co-operation, although that cannot be taken for granted. Efforts must be made to counter negative relationships where there is an imbalance of power.

² The national guidelines on kindergarten teacher training use the term *consolidated pedagogical leadership* to refer to the supervision of the children, the management of staff responsible for the children and the management of the kindergarten as a whole.

1.1.7 Profession and governance

The authorities try to frame professional practice in a variety of ways. This is especially true when it comes to regulating the jurisdiction and knowledge base, particularly the training and research being carried out in the field.

However, governance is also about how kindergarten teachers operate within their areas of responsibility. What is being regulated and which form the regulation takes are important. Different implementation structures involve different expectations and define different roles for owners and teachers, particularly those with management responsibilities. Municipal and central governance can, as has been traditional, be practised at arm's length and allow for delegative grass roots autonomy (i.e. limited governance above and beyond building the profession and giving it jurisdiction). This form of autonomy can be replaced or modified by other forms of governance such as the reporting of results, hierarchical regulations or consensus-driven governance. This may vary, especially between municipalities, and it may define different professional roles and frame autonomy and jurisdiction in various ways. However, governance is not all about regulating and curbing autonomy. The purpose can often be to strengthen and support professional development amongst kindergarten teachers. It can also come in different forms since Norwegian municipalities are as diverse as they are.

Tensions surrounding loyalties can emerge when the authorities and the profession have diverging interests. A profession is not merely a recipient of governance but a participant, too. The role of the participant implies that the kindergarten teachers, as a profession, can exert influence at both municipal and government levels.

Governance also involves co-ordination and co-operation across the field of practice in order to prevent professional silos. Major reforms in the Norwegian welfare state have sought to achieve such co-ordination. How and the extent to which this happens – and what impact it has on autonomy and jurisdiction – are important questions. Co-ordination also comes at a cost. As an example, various professional considerations must be made, and there are logistical challenges when it comes to cross-agency and cross-disciplinary co-operation. Yet it does pay dividends in the form of better provision for young children. There is no easy answer to the question of how democratic governance, professional autonomy and the need for co-ordination should be weighed up against each other. However, we need to ask these questions when considering how governance can enable professional quality.

1.1.8 Training

Training plays a key role in any profession, and it fills many different needs. It gives kindergarten teachers a general understanding of their professional obligations and has an impact on how they go about fulfilling those obligations. It is important that the profession has a say in teacher training so that its needs are met in practice. One key question is which role kindergarten teachers should play in kindergarten teacher training.

Professional practice is based on multiple forms of knowledge. It is important to establish which role these different forms - particularly academic and practice/experience-based knowledge – play in the training programmes. It is vital to prevent polarisation between practical knowledge and academic knowledge. Both contribute in different ways and are often evaluated based on flawed premises. Practical knowledge should not be general theory, and theory should not be used to give practical guidance. Academic theory serves other purposes. Academic knowledge is important in order to defend jurisdiction and autonomy. This means that it should also give kindergarten teachers a common nomenclature and discourse as a platform for professional communication and evaluation. The academic elements in kindergarten teacher training should provide a basis for the profession's scientific competence-building in the form of scientific master and doctoral theses and eventually also as a field of research. Does existing kindergarten teacher training offer sufficient foundations? Important decisions must be made on the very balance between academic and practical knowledge, which again can take different forms. One premise for the expert panel is that both are crucial to both training and practice.

1.2 Outlines of the kindergarten teaching profession

In Chapters 5 to 12 we analysed most of the research we have found on professional practice in the kinder-

garten teaching profession and the expectations and frameworks associated with it. Knowledge is scarce in many areas, and we are therefore unable to paint a complete picture of kindergarten teaching as a profession. In Section 13.3 we discuss how we can produce supplementary information. However, we can discern some outlines, which we will summarise here. These outlines include certain tendencies and priorities, and some of those are problematic.

1.2.1 Understanding the mission – core values under pressure

We have generally found little empirical data on how kindergarten teachers view their role. This is also true for how the fundamental values set out in the Kindergarten Act and the Framework Plan are interpreted. Describing complex value-based pedagogical practices is difficult. As the teaching role is developed further it will therefore become important to create and refine a professional nomenclature that can describe professional teaching practice. This is a challenge both in terms of teacher training and professional development. For example, kindergarten teachers do not see the term "teaching" as appropriate for describing pedagogical practices involving children.

They place emphasis on flexibility and child-centred practices. This is clear from their view on planning, one that appears to be primarily open and flexible and not predominantly focused on long-term goals or intentions as regards the values, goals and contents described in the Framework Plan. Their thoughts on planning are very much centred around the children's interests and experience, around the children as a group, and around organisation. When developing the kindergarten teaching profession further we should therefore also develop a didactic understanding that supports both the long-standing here-and-now perspective and the values, intentions and contents described in the Framework Plan.

Kindergarten teachers appear to be lacking a sufficiently deep understanding of what the integration between care, play, learning and formative development actually entails, even though they seem to recognise it as being a key issue. In the further development of the kindergarten teaching profession it is therefore important that this understanding is broadened and operationalised so that it can begin to shape professional practice. Kindergarten teachers are very much concerned with care-giving, security and relationship-building. Their interpretation of care is linked to children's learning (Vatne, 2012), values such as security, and the teachers' responsibility for building a good relationship with each child. Care is also linked to the corporal dimension and to relational consequences that occur as a result of the power held by the teacher to define the child according to its personal traits and behaviours. Care-giving is considered a value that is coming under pressure from what is described as efficiency values.

The definition of care that seems to prevail is an individual one, and one in which the child is primarily a recipient of care. This individual focus is also evident in the teachers' take on bullying, which is first and foremost linked to personal traits in the children and less to context and social processes.

Kindergarten teachers see play as being particularly important for children. Play enables children to explore boundaries over which they themselves have control. The inherent value of play is particularly conspicuous in risky play. When developing the kindergarten teaching profession further it is therefore crucial to clarify the interpretation of play, its role, and the teachers' relationships with play in kindergarten.

Participation and democracy are interpreted in different ways, and dilemmas are identified in respect of the children's opportunity to exercise genuine influence and participate. Even though kindergarten teachers appear to welcome child input and participation, it seems that the adults' power of definition, arrangements, rules and routines in kindergarten restrict their participation. There is often a tendency for participation to be taken to mean the decisions and input of individual children.

Kindergarten teachers do not have a uniform understanding of learning. In fact, it appears that their understanding of learning is associated with considerable uncertainty. There is also uncertainty surrounding the understanding of formative development and what specific pedagogical content should be assigned to the concept. However, kindergarten teachers have a complex understanding of learning that is both context-driven and forward-looking. They also wish to highlight and promote kindergarten as a unique learning arena. Science in particular is prompting divergent views on the role of the kindergarten teacher in children's learning processes.

With regard to children with special needs, the discourse surrounding the competent child raises questions about how to uphold values such as democracy, diversity, equality and equity for all children. Taking a too individually driven approach to special needs support could give children with special needs an ambiguous position as being different, especially if an inclusive, relationship-based approach is being suppressed. There are generally speaking few studies looking at how kindergarten teachers interpret the core values of kindergartens. In the further development of the kindergarten teaching profession it is therefore important to clarify the need for kindergarten teachers to balance individual and systemic perspectives in the best interest of all children's development, irrespective of individual circumstances. This also involves concretising the correlation between ensuring the needs, well-being and all-round development of individual children and promoting shared values and inclusive practices.

A dedicated nomenclature on kindergarten teaching should be created in the further development of the kindergarten teaching profession. One challenge will be to develop a broader and more complex definition of care and to clarify and concretise what it actually entails in respect of the relationship between care-giving and other intentions and objectives for child learning. There is also a need to give the concept of learning an early childhood content that allows for a complex understanding of kindergarten as an arena for learning. It is also necessary to clarify the requirement for kindergarten teachers to take on an active role as a learning agent by contributing to the children's well-being and all-round development. There is a need to develop a more complex understanding of participation founded on and applicable to everyday life in kindergarten and which gives the children varied experiences of democracy.

1.2.2 Holistic professional practice?

Many aspects of professional practice have not been researched in depth. This is true for issues such as care-giving, relationship-building and play as well as in many of the learning areas. Other unexplored areas include how the fundamental values laid down in laws and the Framework Plan are practised in kindergartens. There are very few research contributions addressing diversity. Considering how diverse the group of children can be, we know little about how kindergarten teachers address diversity issues such as gender, children with disabilities and social, cultural and religious background.

The majority of the research that has been conducted has been qualitative with relatively few informants. Existing research suggests that kindergarten teachers take an integrative approach in which they combine multiple strategies and rarely split the day up into different activities according to subject. Kindergarten teaching practices tend to assume a child-centred perspective in which the children's needs and interests are key and where the use of instructional pedagogy is limited. Practice research shows that kindergarten teachers are facing multiple tensions in which some practices appear to weigh more heavily than others.

We cannot say with certainty that kindergarten teaching is either structured/planned or flexible/ unplanned. It appears to be far more nuanced than that. Considerable emphasis is placed on ensuring that play and learning activities are based on the children's interests and curiosity and on the children making a contribution. We have found varying degrees of control in respect of who initiates an activity and who appears to manage the activity or situation. It is not the case that planned activities implies a practice whereby the activities are always and entirely controlled and managed by the teacher or that unplanned activities are always controlled and managed by the children. The degree of control relates to how the teachers switch between different roles and different forms of communication and patterns of interaction during the various activities. This determines how much of a say the children are given in the direction and content of the activities.

The research review identified examples of how kindergarten teachers incorporate the various learning areas during both planned and spontaneous activities. When addressing the learning areas during planned activities they will often combine them with spontaneous input and playful manifestations from the children. Kindergarten teachers operate in a domain where the pedagogical work needs to be planned and systematic while also being flexible. On the one hand, with their knowledge about the

different learning areas kindergarten teachers are responsible for bringing the children together in activities that foster learning and formative development while also arousing their curiosity and inspiring them. On the other, the content should also come from the children and their spontaneous contributions. Practice shows how the different learning areas are addressed throughout the day. We have seen no signs of subject-specific practices. Most of the information we have concerns the learning areas relating to languages and mathematics, but we do not generally know much about the subject didactics that are being applied. Nor do we know enough about how kindergarten teachers integrate multiple learning areas in their work or which subject didactics they adopt in their holistic approach to learning.

However, the studies that do exist on the teachers' work on the different learning areas show that the children are introduced to the learning areas through play-based activities which are both planned and unplanned, through play groups and through play that the children themselves initiate. There is little to suggest that play is used to achieve predetermined objectives and learning outcomes.

There is little documentation on how content and topics associated with various activities are explored, developed and documented by children and adults together. There is not enough information to be able to draw any conclusions on how the teachers, by assuming the children's perspectives, work with the children to explore content in which the different learning areas act together and complement each other.

Kindergarten teachers are concerned with the social and language learning that takes place during play, but they do not exercise control by taking over the activities. They support the children's play on the basis of what they know about each child and the group of children as a whole as well as the things they know the children are interested in. Play is more an arena for learning than an instrument for realising predefined learning objectives. Kindergarten teachers are keen to create a good environment for play to take place, and they do so by approaching play in a variety of ways. The different roles assumed by teachers during play give the children varying degrees of control over their own play processes, but the children appear to enjoy a relatively considerable degree of freedom when they play. We have found that the teachers support children while they play with other children, but there are indications that they are less inclined to expand and develop the play activities and help the children co-operate and explore the content of what they are playing.

Kindergarten teachers must constantly balance between meeting the need of individual children to be seen and heard and supporting collective values and encouraging group attachment. Most of the documentation we have looks at individual children and the adults' interaction with individual children and less at group processes. It appears that practices take an individual approach, which could limit the children's experience of democracy. Restrictions on the children's experience of democracy are also linked to structural issues, expectations and procedures in kindergarten. We do not know enough about child participation over and above letting the children choose activities and their input being heard. Examples of this type of participation can be that the children are given a say in planned activities and that their input is linked to the rest of the group's opinions and the contents of the learning areas. The knowledge we possess on special needs education shows that there are practices restricting the scope for creating an inclusive community for all children. Practices show that kindergarten teachers must work closely with the children in order to create a good environment conducive to care, play and learning. If the collective is to work as an important prerequisite for learning, there are clear indications that the way the group is organised is crucial to the teachers' being able to ensure and safeguard inclusive practices, the quality of relationships, care and safe bonding for all children.

With regard to the further development of the kindergarten teaching profession, it will be necessary to raise awareness of the various tensions that must be addressed and resolved on a daily basis. Although it is not easy to establish a practice whereby children are systematically and processually enabled to influence the direction and content of planned and structured activities, it is important that we do. There seems to be potential for developing a practice whereby the teacher expands and develops the play activities to a greater extent by helping the children co-operate and explore the content of the activities together. Due to the prevailing focus on individuals, more emphasis should be placed on improving practices where the collective acts as an important prerequisite for learning. It should be made clear that the way the group is organised is key to enabling the teacher to ensure inclusive practices, the quality of relationships, care and safe bonding for all children.

Languages and mathematics are the two learning areas we know the most about. When developing the kindergarten teaching profession further it is therefore important to develop a practice whereby we acknowledge the need to integrate additional learning areas in pedagogical processes and are conscious of which subject didactics to apply to the teacher's holistic and integrated pedagogical approach. There are also didactic challenges associated with how ICT can be developed to aid children's play, creativity and learning, i.e. how digital tools support children as they seek meaning in their relationships with other children.

1.2.3 Professional judgement

Professional judgement is expected to be founded on a professional knowledge base, i.e. the teacher interprets situations, needs and information about the child and the group of children by drawing on their professional knowledge base. Such professional judgement also involves using discretion whereby the teacher's chosen actions are adapted to the situation in question.

Professional knowledge base

Several studies have found that practical knowledge and academic knowledge synthesise or meet in the sense that both play a part in complex practice situations. Academic knowledge appears to provide an important platform for professional practice, allowing kindergarten teachers to make independent decisions. Their academic knowledge enables them to reflect on their own practices, while the Framework Plan often looks to serve as an important point of reference for professional development in and between kindergartens. The Framework Plan frequently appears to act as a knowledge base for teachers.

It would seem that the general knowledge amassed by students as they progress through their training is not directly transferable to the practical work they later do in kindergarten. At the same time, newly qualified kindergarten teachers find that it only takes them a few months to master the pedagogical processes and be able to improvise and demonstrate professional judgement.

Several studies show that the degree to which teachers are able to apply practical and experience-based knowledge when making decisions is very much dependent on the situation and that they need to have accrued experience over time in order to hone their skills. Some studies have also found that exchanges of practical, experience-based knowledge with colleagues are a main source of knowledge in kindergartens.

Many studies support the teachers' need for reflection and professional discourse with colleagues on literature and practices. Some studies warn that kindergarten teachers rarely engage in mutual learning processes in the workplace. This has been picked up on by studies into newly qualified teachers in particular. Even though newly qualified teachers are expressing growing awareness of the academic premise for professional practice, they do not always demonstrate it in the form of practical action. For the profession as a whole, this requires a systematic approach to professional issues through discourse and mutual learning processes designed to develop knowledge.

Exercising judgement

Kindergarten teachers are expected to exercise judgement based on a complex platform of knowledge in which both academic and practical knowledge are key. The decisions that professional practitioners make in practice can be described as complex assessments based on professional standards and rules combined with value-based assessments and theoretical knowledge. Many studies highlight teachers' use of judgement in complex situations. Sometimes they are pressed for time and have to make on-the-spot decisions; on other occasions they have more time to arrive at a conclusion. Support from colleagues in the form of learning processes involving guidance, development projects and professional networks is key to teachers' professional judgement. Generally speaking, we know little about which knowledge teachers draw on when exercising judgement and about what they base their decisions on.

Information about individual children and the group of children

Many studies show how kindergarten teachers develop their insights into the group of children beyond their day-to-day contact with them. They rely on observation, research, documentation and assessment to exercise professional judgement in their pedagogical practices. The studies that have been published have produced somewhat inconsistent results with regard to observation as a methodology. Many of them show that observation is the most frequently used methodology, while others conclude that written documentation is rare. One study explains this by how kindergarten teacher training is now far less focused on observation than was the case in the past. Teachers who gualified some years ago have a broader repertoire than those who completed their studies in the past decade. In terms of further developing the kindergarten teaching profession, it is therefore important that trainee teachers are introduced to a wide spectrum of methodologies and associated theoretical frameworks.

Reflection surrounding own practices in different contexts, both individually and collectively, is highlighted by many studies as key to boosting process quality in kindergarten teaching. Increasing emphasis on research-based knowledge can also raise the profession's standing and not least help improve the quality of the work with the children.

When developing the profession further, we should establish professional learning communities to help enhance kindergarten teaching terminology and the quality of the work. When teachers form communities, they also make it easier to develop and enhance the nomenclature. To ensure that practices are not arbitrary it is important that professional knowledge in relation to both teacher training and professional development is developed further in order to enable professional judgement.

1.2.4 Large and small organisations

Although there is scant research on many aspects of how kindergartens are organised, there is much to suggest that there is a shift away from small, autonomous, group-based kindergartens towards larger kindergartens with a clearer hierarchy and formal rules which are incorporated into the ownership organisation. Not all kindergartens have made this change, but the trend is clear. Large units are better able to facilitate specialist expertise, large development projects, administrative streamlining and more proactive competition management. On the other hand it could lead to less professional autonomy for teachers, and some are asking whether children do better in small units. The latter point is difficult to answer, although some research has concluded that medium-sized units are the most beneficial. Which organisational structure is best will also vary according to local circumstances.

Under this trend autonomy shifts upwards from each teacher. Whether it moves upwards to the professional community of which everyone is part or to a small pedagogical leadership team in each kindergarten seems to vary. Some of the autonomy is likely to move up even further to the owners. In some cases headteachers become involved in the owners' pedagogical leadership team, although there are also signs of pedagogical hierarchisation. Yet there are still a number of small, independent units where the teachers work as a traditional group organisation.

Teachers do not dominate these emerging organisational structures as conspicuously as they do in traditional structures. Teachers do not have a dominant presence at an ownership level, and in some kindergartens they are not involved at this level in any way.

One result of this trend is increasing routinisation. It would appear that routinisation in kindergartens has assumed a soft form in the sense that routines can relatively easily be set aside, and often they can be overridden by professional considerations. Routinisation can be an appropriate measure to ensure that unskilled workers know what is expected of them, and it can facilitate co-operation and co-ordination. But there are also problematic aspects to it. Over time it can result in a stagnating organisation that is more difficult to change. Tasks that are routinised can also disappear from the teachers' jurisdiction because there is no longer a need to exercise complex judgement.

Large organisations also tend to have more formalised planning systems. Kindergartens have long been told to plan ahead. There is little research into these planning processes, however, and it can be difficult to reconcile formal planning with the typical working methods used by kindergartens. Isolated studies suggest that in some cases planning becomes rather symbolic and ritual, while in other instances it may serve to moderate and partly regulate. But essentially the research is insufficient.

There is much to suggest that kindergartens are assuming a more hierarchical form. Although not all owners intervene to the same degree, and despite the fact that many of those who tend to place emphasis on mobilising their headteachers in networks and joint pedagogical leadership teams, owners increasingly represent a hierarchical level above that of the kindergarten itself on many issues. Headteachers seem to serve more as hierarchical leaders who do not delegate or involve others in all matters. Pedagogical leaders also appear to be given increased leadership responsibilities (see next section about leadership). The working methods adopted by kindergartens are likely to define how specific the division of labour amongst those working with a group of children can be. Division of labour requires the work in question to be divisible into smaller parts that can then be distributed across various staff members. Horizontal specialisation has not been explored to any significant extent but appears to be linked to size and especially to base configurations. Insofar as there are changes underway in this area, it would appear that the trend is to move slowly towards such subject specialisation.

Organisational structures across the sector as a whole are becoming more diverse, and it looks as if this is true for the internal organisation of children into groups as well. Having multiple departments remains the most common format, but both base configurations and other alternatives are being trialled. The new statutory teacher-to-child ratios will probably intensify such organisational variations because the ratios are not clearly aligned with each other or with the physical buildings in which kindergartens are housed. There are likely to be variations in how good kindergartens are at practical and resource-related management, something which is key to professional autonomy. But again, there is little research.

The general picture is that the kindergarten sector has established management structures with a great deal of responsibility and considerable capacity for action. This is especially true for large kindergarten owners and for headteachers. Headteachers assume complex and growing leadership responsibilities. Personnel management and interaction with the wider world are examples of this, while pedagogical leadership is demanding and administrative routines time-consuming. There are strong indications that headteachers are becoming overburdened. Some headteachers work in close-knit networks of headteachers within their ownership organisation, while others have an assistant head.

They operate in rather different contexts: some within a strong ownership organisation, others with considerable autonomy vis-à-vis the owners – some in a vulnerable competitive situation, others not. Again, the disparities are widening. Yet they are all taking on more responsibility as leaders of an organisation with a growing proportion of qualified kindergarten teachers. This makes them knowledge managers. They are assigned development responsibility for pedagogical matters, which requires them to have the capacity and expertise to practise this type of leadership.

Pedagogical leaders fill an equivocal leadership role. This role is more contentious because of the ambiguous division of labour with other personnel and because pedagogical leaders seem to be given greater responsibilities which divert their time away from working with children. Much is left to assistants and skilled workers, including work with children with special needs. It is also a leadership role under pressure from a range of expectations, and the current teacher-to-child ratio begs the question of whether the role of the pedagogical leader is changing.

The relationship between leaders and staff varies depending on the leadership level in question. Pedagogical leaders combine their leadership responsibilities with a close working relationship with assistants and skilled workers in a way that can hardly be described as strictly hierarchical. There are differences between owners as to how they practise hierarchical management. Headteachers come across as unambiguous, they are conscious of their own authority, and they describe their role as managerial.

One particular challenge when it comes to leadership is that leadership responsibilities have become very extensive, and we need to discuss how the responsibilities should be distributed. A more specialised leadership structure raises questions about how pedagogical considerations are balanced up against other parameters and how hierarchical the leadership processes should be. One important question is how leadership responsibilities should be distributed between headteacher and owner and between headteacher and pedagogical leaders, especially as the supervisor role is being redefined by the teacherto-child ratio. How much organisational variation should there be in the sector? Should there be more division of labour? What is the best way of organising the groups of children?

1.2.5 Relationship with parents

Parents' right to participation in kindergarten is laid down in law, but what characterises the relationships that develop? There is much to suggest that parents have high expectations for their children to receive good pedagogical provision. Parents expect the adults to give their children care and security, while giving the children the opportunity to play and acquire social skills is the most important factor. At the same time it would appear that knowledge and expertise are becoming increasingly important. The relationship with parents is largely formalised and routinised, and communication with parents does not only take place in face-to-face encounters in various settings but also digitally. It must be assumed that digital tools will have an impact on the co-operation between kindergarten and parents, although we do not yet know how.

Despite there being little research in this field, the studies that have been carried out suggest that such co-operation is complex and exists in various forms. It may involve mutual partnerships and co-operation, but we do not know enough about kindergarten-parent relationships at an individual level. The relationship can also be impacted by the fact that the teachers have power and use that power in various ways. Studies have found that the co-operation with parents does not always give all parents the same level of influence and that some practices may involve imbalances of power. There are also other aspects to the relationship. There is no doubt that parents have acquired consumer power. This is clear from the number of user surveys, parents' surveys and enquiries made to the National Parents' Committee for Kindergartens.

Some of the studies do not describe the relationship but state that it is seen as challenging and unsatisfactory. Both parents and kindergarten staff find parent participation and parent co-operation challenging. For teachers, parent co-operation involves having those difficult conversations. Parents are not a homogeneous group, and the teachers must consider different co-operation strategies in order to develop the partnership.

Parent co-operation seems to be challenging. What role should digital resources play? How can the ascendancy of both parents and teachers be reduced, and how can a form of co-operation that accommodates the diversity that exists amongst parents be enabled? Which forms of co-operation are different parents capable of and interested in?

1.2.6 Governance – minimum standards, co-ordination and capacity-building

ECEC was for quite some time subject to limited public governance. This has changed, and the right to access good kindergarten provision is now on the statute books. The sector is allocated considerable resources. In the context of increasing public governance, one fundamental strategy has been to develop the kindergarten teaching profession and safeguard its jurisdiction. Within a broadly defined civic mandate, trust has thus been placed in the kindergarten teaching profession to give children adequate provision. The government has been setting minimum standards and regulated kindergarten teacher training since the 1970s, and since 1996 Norway has also had a framework plan for kindergartens. Yet much has been left up to the teachers themselves. We can call this the grass roots autonomy model. The model is clearly in flux.

Government policy today involves increased governance of kindergarten provision and of professional practice. This is partly evident in the latest, more detailed Framework Plan. However, public governance is increasing especially due to the far-reaching introduction of capacity-building initiatives such as skills development, digital resources, networks, templates and guidance notes. One key task for researchers is to look in more detail at which pedagogical methods are being prescribed by these initiatives. Such capacity-building initiatives also require owners and municipal kindergarten authorities to be able to absorb the voluminous material that the initiatives generate such as guidance notes, information and templates. The extent to which they are capable of this will probably vary, and smaller institutions often have to co-operate in order to keep up to date.

Public governance points unequivocally to greater co-ordination, especially with schools. This is reflected at the Ministry of Education and Research and the Directorate for Education and Training in the way these areas are integrated in the two organisations: they do not have separate departments for schools and kindergartens. Co-ordination with immigration issues, child protection, the NAV and particularly schools is also incorporated in various national objectives. This ambition to co-ordinate is not reflected in municipal governance structures, however. Co-ordination processes adopted at a central government level do not have an equivalent at a local government level, where municipalities do not have the legal authority to co-ordinate private kindergartens with municipal schools or with other kindergartens except when the private providers themselves feel they benefit from such co-ordination. The one exception is the local authority's statutory inspection duties in order to ensure minimum standards and the new legal provision on the transition between kindergarten and school. This conflict between growing ambitions and the limited legal powers of local authorities will probably intensify as some private owners establish their own pedagogical development programmes. Local authorities also have an overall responsibility towards the local community which they are not legally permitted to exercise when it comes to private providers, except to invite them to co-operate on a voluntary basis and in relation to inspections. This conflict, too, will probably amplify as some private providers develop their own pedagogical programmes. It is also a question of whether all local authorities have the necessary capacity and expertise, although inter-municipal partnerships could compensate for this.

There is also conflict surrounding inspections. Local authorities have a duty to ensure that kindergartens maintain minimum professional standards. It is difficult to get an idea of how detailed these inspections can be. The level of detail is likely to vary. Although inspections have become more systematic with time, we must ask whether they can obtain adequate legitimacy all the while the local authority is

both the inspector and the owner of some of the kindergartens that compete with the private providers. Many local authorities inspect private kindergarten organisations which offer increasingly co-ordinated provision and which have far greater financial and administrative resources than do some local authorities. The biggest private owners in particular have "grown too big" for local authorities to inspect. The inspection system - as well as the local authority's relationship with private providers in general - was established at a time when private organisations were small and informally affiliated to municipal kindergartens. Today many kindergartens are part of a bigger organisation, and responsibility rests with the owner. This leads to a disparity between the local authority and the size of some of the private providers it has to deal with. Inspections could be reassigned to the county administration, but the local authority's other obligations to the sector can not. In that sense there is a conflict between the capacity of most local authorities and the capacity of the private kindergartens they are tasked with inspecting and which they should be able to advise.

There is disparity when it comes to funding, too. Local authorities partly fund their own competitors, and the way funding is calculated seems to generate dispute and conflict between private and municipal actors. Municipal funding would have been less problematic if private kindergartens were run on commission by the local authority, but that is not the case today. The role of private providers remains undefined in relation the local authority's responsibility for this part of the welfare sector, unlike other parts of the sector.

In a professional perspective it is also important to ask whether and how kindergarten teachers constitute a collective political entity in relation to the public administration and policy design. Existing research shows that activism has been and continues to be prevalent at both local and government levels (Børhaug and Lotsberg 2016; Greve 1995).

1.2.7 De-academised training

On the back of the analyses presented in the report we can highlight certain tendencies, raise certain questions or suggest certain hypotheses surrounding kindergarten teacher training as a learning arena for the profession. Teacher training programmes should ensure that kindergarten teachers graduate with the professional qualifications that the job demands, and they have a particular responsibility for defining the knowledge base for professional practice.

The premise for this analysis was that it is possible to verify kindergarten teachers' eligibility for the profession by examining two issues. Do teacher training programmes cover everything that is required in order to work in a kindergarten, and do they give students both the theoretical and academic skills and the practical experience and insights needed to adequately practise the profession?

There are two particular issues that come to light in respect of the academic versus the practical aspects. One is the areas of knowledge³ acting as an integrative structure for professional knowledge. The second concerns the relationship between teacher training as a university-level professional training programme and kindergartens as arenas for professional practice.

The attempt to curb the kind of fragmentation that characterised pre-school teacher training in the past by creating cross-disciplinary areas of knowledge does not appear to have been successful. It has left the training programmes facing considerable challenges of an academic, organisational and cultural nature. Based on available research and evaluations of kindergarten teacher training in Norway, the areas of knowledge often give the impression of being multi-disciplinary rather than cross-disciplinary. Subjects are being retained as the different areas of knowledge are often split into subject-based sub-topics. This is especially true for assessment, which can be seen as fundamental to giving direction to the students' learning and attainment. One particular challenge seems to be that the scope of the subjects within the different areas of knowledge is limited, so that students gain limited awareness of and insight into each subject. This is a problem in itself, since the strength of the integrated approach is largely reliant on the strength of the subject components being integrated. The teacher training model challenges the lecturers to develop a common nomenclature and a shared vision for the programmes, but their approach is firmly linked to their academic identity.

This highlights the need for professional fora where shared visions can be discussed and developed.

This structure with different areas of knowledge defines and constrains cross-disciplinary and multi-disciplinary projects on teacher training programmes. In the past it was possible to integrate the different subjects according to the theme of the project and pedagogical focus in line with what we previously in this report described as practical synthesis. The teacher training model determines how the subjects should be integrated based on a general evaluation of how they correlate, and the model appears to be theory-based. Within at least some of the areas of knowledge this is a problematic project in respect of the idiosyncrasies of each subject and the fact that the model should accommodate every subject. The areas of knowledge appear to diverge academically. This makes it difficult to establish strong, integrated academic units. There is a need to clarify what integration, multidisciplinarity and professional orientation in the training model entail.

The role of pedagogy of the teacher training model seems to be beset by conflict over the contents of the areas of knowledge and over how to ensure that the subjects are comprehensive and integrative. The role of the different subjects on the teacher training programmes is also unclear and with little genuine legitimacy despite being granted considerable legitimacy in regulations and national guidelines. Pedagogy as an academic discipline in teacher training has been weakened, and the professional orientation of the model is largely confined to subjects and areas of knowledge. Subjects have been given a clearer didactic profile, but the relationship between subject didactics, didactics involving the various areas of knowledge and general early childhood didactics remains ill-defined. In order to strengthen the kindergarten teaching profession, training programmes should focus more clearly on the learning areas set out in the Framework Plan and then especially on their overarching values by basing professional practice on care, play, learning and formative development⁴. This requires a conceptual clarification of the very core of professional practice.

³ The current kindergarten teacher training model is not composed of subjects but of cross-disciplinary "areas of knowledge".

⁴ Based on the concept of Bildung.

As regards the relationship between training and kindergarten practice, there are examples from both evaluations and research of several interesting projects and initiatives. Kindergarten teachers acting as mentors to students are increasingly seen as teacher trainers, and that is also how they view themselves. There are growing calls from kindergartens for teacher training providers to prioritise content. Projects where training providers and practitioners seek to establish equitable and complementary partnerships help strengthen teacher training in general. What the different parties can bring to the table must be unambiguously and mutually accepted. A common understanding and a shared nomenclature are also important in order to create a holistic training programme. One particular challenge is that there are differences between the various training establishments in terms of how much genuine influence they allow the practitioners. To strengthen the kindergarten teaching profession it would be desirable for the various partnerships to be developed further and for mentors to have a genuine say in how teachers are trained.

Research into teacher training appears to focus on subjects rather than areas of knowledge. This could be proof of a disconnect between the areas of knowledge as an academic construct and the subjects' scientific basis. Notable in the research is a theory-to-practice approach whereby teacher training researchers conduct field studies in order to reinforce practices. This way teacher training programmes also make a contribution to R&D which could enhance kindergarten practices. Less common are projects taking a practice-to-theory approach where the researchers use descriptive-analytical studies to critically define and analyse kindergarten practices. Such studies can help highlight and further develop the kindergarten teaching profession.

Since kindergarten teacher training in its current format is relatively new there is fairly little research. This is particularly true when it comes to cumulative research. Longitudinal studies to monitor kindergarten teachers as they progress from training to professional practice are therefore needed. Evaluations and research surrounding kindergarten teacher training do not give us clear answers as to whether the training covers everything it needs to cover, although it is true that there are studies highlighting areas that the training does not sufficiently cover. The evaluation committee points to pedagogical leadership, diversity, the youngest children, children with special needs, multilingual children, relevant digital skills and Sami language and culture. Little is known about how the training uses the complexities of professional practice as a starting point for designing academic content that qualifies the students for pedagogical work with children. More research and development is needed.

According to the Student Survey, kindergarten student teachers are less satisfied with the way their course is organised than are many other students, although they feel that their training is relevant to the profession they will be practising. Kindergarten student teachers appear to graduate from their studies relatively well prepared for managing groups of children but with more limited team and staff management skills. Staff management has for some time posed a challenge for newly qualified kindergarten teachers, and it does not seem as if the new training model has solved the problem. In order to strengthen the kindergarten teaching profession in terms of managing a complex workplace with colleagues from different training backgrounds, the research we have identified calls for more emphasis on relationship skills, team management and supervision skills.

One challenge facing kindergarten teacher training concerns the quality of the student intake and the relatively lax admission criteria. This begs the question of whether some of the students are finding it difficult to acquire academic knowledge and therefore do not have the robust knowledge base required for the profession. This will continue to be a challenge in the further development of the kindergarten teaching profession.

1.2.8 Professional skills development

The legitimacy of a profession depends on continuous development. Professional development is both an individual and a collective responsibility, and in a professional perspective kindergarten teachers – individually and collectively – are central to the process (Smeby & Mausethagen, 2017, p. 12). Professional development can take many different forms with regard to who is developing, what is being developed and the nature of the development programme. It is fair to say that there is no lack of professional development programmes and providers in this particular field. The question is rather which form they take and who is setting the agenda. There is a wide range of programmes, and it may be apt to ask whether the provision should be systematised and aggregated considering the large number of initiatives that now exist.

As for the content, i.e. the material that is being developed, there is considerable thematic diversity which is hard to systematise. In respect of the further development of the kindergarten teaching profession, it may therefore be wise to consider whether it is possible to produce a systematised, aggregated and up-to-date catalogue of qualified development programmes.

There are numerous providers at a transnational level, including organisations such as the OECD and EU-funded research projects. The OECD makes systematic recommendations on how early childhood learning can be developed. At a transnational level the development of the profession can involve both knowledge development through international research networks and recommendations on education policy regarding how practices can and should be developed. However, we have limited empirical knowledge of how systematic professional development at this level works, who is contributing, what kind of information is provided in the innovation processes, and the extent to which kindergarten teachers have any influence over the development and innovation processes. With regard to the further development of the kindergarten teaching profession, a critical evaluation of which transnational requirements and recommendations to include in the development initiatives should therefore be carried out. A critical evaluation should also be conducted of whether – and if so, how – transnational initiatives and recommendations should be included in a national portfolio of professional development measures.

At a national level, the Directorate for Education and Training is a key player that develops resources to help kindergarten teachers convert research-based knowledge into practical use, e.g. when it comes to the implementation of the Framework Plan, collective reflection amongst staff, development work and quality development. Follow-up evaluations and surveys provide the directorate with information about which methods are particular conducive to development. The focus areas and resources of the national centres suggest that the Directorate for Education and Training gives priority to languages and science. Future development should therefore consider including themes that better support children's all-round development.

The directorate appears to exert considerable influence over professional development in the kindergarten teaching profession, but there is insufficient empirical data on who is behind the resources and on the knowledge on which they are based. In respect of future professional development, the Directorate for Education and Training should make it clear who is behind the proposed development measures and which knowledge they are founded on.

The national focus areas are implemented through the national centres, which play a key role in professional development in kindergartens. Kindergartens draw on the services of the national centres to varying degrees. The Norwegian Centre for Reading Education and Research, the Norwegian Centre for Mathematics Education and the Norwegian National Centre for Food, Health and Physical Activity are the most popular (Naper et al., 2017 pp. 73–77). We need to know more about what determines the uptake of such programmes and which genuine changes are made to pedagogical practices in kindergartens as a result of the programmes.

The directorate is not the only entity that contributes to professional development. Trade unions initiate and contribute resources for research projects, they publish research results online, and they offer tools to help with skills development and practice development. There are also consultants producing pedagogical programmes. These programmes often offer standardised models for various aspects of the pedagogical work kindergarten teachers are obliged to do (Borgund & Børhaug, 2016; Børhaug, 2016a, 2018a). It would also have been beneficial to know who is behind these development initiatives and which knowledge they are based on.

Both external research communities and those associated with teacher training programmes produce knowledge through national and international research networks, through in-house R&D projects and through research programmes and

projects initiated and supported by interest groups. It has been pointed out that education research in general has considerable impact on policy design and practice at a national and regional level in relation to both kindergartens and schools (Research Council of Norway, 2018). It would be useful to obtain more systematic knowledge about research capacity at kindergarten teacher training institutions and about the extent to which teacher trainers and other national researchers participate in international research projects and how this research impacts on domestic policy design and practice. Although there has been an increase in EC education research in recent years, there still seems to be a need to improve the frameworks for practice-driven research and to strengthen research communities in this field.

Practice-led research can be research where kindergarten teachers have significant influence over or participate in the research (Union of Education Norway, 2012a). Kindergarten teachers should ideally be participants in knowledge development, research partnerships, professional networks and kindergarten-based development projects. Genuine participation in innovation projects requires expertise, including an understanding of research processes, and such expertise should be acquired as early as the training stage.

Local adaptation is one aspect of professional development that must be continually adjusted in order to become part of our individual and collective competencies (Plum, 2017). Competition between multiple actors will demand a professional recipient platform capable of evaluating and confronting the knowledge base they adopt and then co-ordinating the services they offer. Who fills this role, and what kind of expertise does it require? Havnes (2018) points out that the effort to professionalise kindergarten teaching has prompted two opposing perspectives: an organisational approach involving governance (management hierarchy) and an academic approach emphasising knowledge (knowledge hierarchy). Professional development is therefore seen as important in order to promote a more equitable partnership. To be heard by the research sector, it requires a different kind of academic background than does pedagogical collaboration in kindergarten. It is necessary to ascertain which kind of expertise such a partnership would require and who should be tasked with overseeing professional

development in kindergartens. The final report by the evaluation committee on kindergarten teacher training recommends enrolling more kindergarten teachers for master degrees. The aim is for their expertise to be applied in and retained by kindergartens (Bjerkestrand et al., 2017b). One argument in favour of expanding the master programmes is that it can make teachers better equipped to deal with the research-based development of kindergarten practices. The working group appointed by the National Council for Teacher Education has expressed concern that the master programmes currently being offered to kindergarten teachers are of insufficient scope and volume (I. Lund et al., 2017).

The role of kindergartens in professional development must not be reduced to simply receiving, interpreting and implementing external requirements and recommendations. More knowledge is needed about how professional development takes place at a local level and how the teachers themselves contribute to professional development processes. The research review shows that professional development at this level takes place through professional networks, development projects, courses, guidance and knowledge sharing with colleagues (Ministry of Education and Research 2018. The need to reflect on own practices in various settings - both individually and collectively - is highlighted by several studies as key to raising process quality in pedagogical practice (Eik & Steinnes, 2017; Evertsen et al., 2015; Fimreite & Fossøy, 2018; Gotvassli & Vannebo, 2016b; Kvistad, Nissen & Schei, 2013; Sunnevåg, 2012). Tholin and Moser (2017) advise the profession to take a *critical* look at itself to ensure that its work is based on knowledge and analytical reflection. Placing greater emphasis on the teacher as a producer of researchbased knowledge will also help boost the profession's standing and improve the quality of their work with the children.

Evaluations of the government's skills strategy have found that networks play an important part in professional development (Granrusten, 2016; Haugset, Osmundsen, et al.,2016; Haugum et al., 2017; Naper et al., 2018; Rambøll, 2017) and in the implementation of the Framework Plan (Ljunggren et al., 2017). We have some knowledge of how professional development takes place in networks linked to kindergarten-based skills development, but we need more data on other forms of kindergarten-based initiatives than those that have already been documented (Naper et al., 2018).

Planned development projects are predominantly initiated and managed by headteachers. These projects seek to implement the contents and tasks described in the Framework Plan, but they also address values and pedagogical practices associated with kindergartens (Fagerholt et al., 2018, p. 40). There are also development projects aimed at leadership and co-operation (Børhaug & Lotsberg, 2016; Fagerholt et al., 2018).

The research-based knowledge that forms the basis for professional development is expanding, which could lead to more rigid control of professional practice. Fora for facilitating co-operation with owners, parents and external parties (other kindergarten teachers and teacher trainers) must be established to prevent that from happening. Organisational resources must be bolstered so that the parties can come together in professional networks to share, interpret, translate and develop knowledge linked to practice.

We know little about which forms such collaboration should take. Borgund and Børhaug (2016) have found that much of the material issued by the Directorate for Education and Training is not particularly standardised and regulatory, rather it is designed to build capacity locally. However, it does appear to involved concrete, directly appliable recipes and instructions. Kindergartens look to be asking for concrete tools (Børhaug, 2016a; Gotvassli & Vannebo, 2016a; Ljunggren et al., 2017). Concepts such as evidence-based practice and best practice can also be seen to indicate a tendency to define unambiguous, directly implementable methodologies. Ljunggren et al. (2017) state that considering the make-up of staff and the inadequate frameworks for professional development, this could involve simplifying and rationalising the work in a hectic workplace. To gain a better understanding of the kindergarten teaching role we need more information about the reasons why these tools are wanted and not least about how they are being used by teachers in their work with the children.

The research review found that the way kindergartens are organised gives teachers limited scope for engaging in professional development themselves. Some of the issues identified as possible reasons for this are high levels of sickness absence (9.2%) (PBL, 2018a), strict organisational frameworks and competition between parallel projects and initiatives (Naper et al., 2018, p. 47) as well as insufficient time for collective reflection, developing a professional nomenclature, critical reflection and guidance (Eik, Steinnes & Ødegård, 2016; Haugum et al., 2017). It has been pointed out that the leadership practised by the headteacher is crucial to successful kindergarten-based skills development (Naper et al., 2018, p. 46), and it should therefore be given particular emphasis in skills development initiatives aimed at headteachers.

1.3 A need for knowledge about the kindergarten teaching role

The summary of the research review offered in the above sections shows that there is a great need for more knowledge in a number of areas. The expert panel believes that more ECEC research is needed in order to build a knowledge base for further developing the kindergarten teaching profession.

1.3.1 Broader range of research into ECEC

Most of the research in the field comprises small qualitative studies with relatively few informants, yet with considerable variation in terms of methodology. ECEC research has long been inclined towards small qualitative studies (White Paper 24, 2013). Few studies are part of larger research projects. However, some large-scale Norwegian research projects have been launched in recent years along with international projects in which Norway is a participant (see White Paper 19, 2016, pp. 14 and 15). The GoBaN project is Norway's largest ECEC research project. It is a longitudinal study which monitors some 1,200 children and their kindergartens over a period of four years from the age of two until they start school. There is scope for extending the study to also cover their school years⁵. The project is due to be completed 1 March 2019. The project "Keeping an eye on the children – kindergarten quality for children under the age of 3" looks at various aspects of care-giving, play and learning in the lives of the youngest

⁵ The GoBaN project investigates how Norwegian children are impacted by kindergarten, what characterises a good kindergarten, and which particular factors affect children's well-being and development. The project is funded by the Research Council of Norway's FINNUT programme. Read more at https://goban.no/

children. The project is working closely with GoBaN. Such projects are the exception, however. Small projects still have a role to play, but it is also important to initiate larger projects. Broader research into ECEC is required, to include studies which are part of longer-term research projects and which can enrich the existing knowledge base. Furthermore, we need both qualitative and quantitative research to meet the need for knowledge in the sector. Equally important is context-sensitive, qualitative research and quantitative research that enables us to generalise and identify trends and correlations.

1.3.2 Thematic areas

There is still a need for research in certain areas, and certain themes in particular should be given priority.

Task comprehension

We need more research on how kindergarten teachers interpret the values described in governing documentation and in the objectives of the Kindergarten Act. The tension between taking a holistic approach to learning and developing kindergartens as a learning arena with a stronger subject focus clearly demonstrates that we need more knowledge about the concept of learning and what kindergarten teachers take it to mean. We also need more research on how key aspects of professional practice such as care-giving and play are interpreted and given content in the discourse on holistic pedagogy. This is necessary in order to clarify which general perspectives kindergarten teachers should base their work on. We also know little about how the learning areas in the Framework Plan are interpreted in light of the holistic pedagogical approach. There are indications that we need more research on teachers' approach to didactics, which requires teachers to place emphasis on a holistic approach to learning in the different learning areas.

Pedagogical work with children

The analysis of the teachers' practical work with the children demonstrates that more research is needed into care-giving and relationship-building – a kinder-garten teacher's main area of responsibility. In particular, we need to find out more about how teachers engage in relationship-building with the group of children as a whole. The information we have on care-giving and relationship-building mostly concerns relationships with individual children and is less focused on the group as a whole and the impact

of group affiliation on the children's play and conditions for learning. We do not know enough about how kindergarten teachers support peer relations and the children's appreciation of each other's intentions and feelings, how teachers encourage the children to co-operate and explore shared topics together, and how teachers promote inclusivity. Topics such as bullying, special needs education and diversity issues surrounding gender, social, cultural and religious differences are key in this respect.

If we are to ensure early intervention and adapted kindergarten provision for all children according to their individual circumstances, we need research that tells us something about adaptation for vulnerable groups. Knowledge about preventive measures, early intervention and special needs measures are important in this respect. In other words, we need to highlight the kindergarten's obligations in this process.

Play is a key aspect of the profession's responsibilities as stipulated in governing documents, both for its educational value and its inherent value. To ensure that the children are able to play and to develop play as a core aspect of professional practice, we need more research on how kindergarten teachers facilitate play and not least how they respond to the children's play and playful modes of interaction. Research looking at how play is part of a holistic learning discourse will also make way for multi-disciplinary research projects. We need more research on the teachers' didactic decisions and intentions when play takes place during both planned and unplanned activities.

We have generally speaking little information about how the holistic approach is accommodated in the different learning areas. We need more research into which part of their knowledge teachers base their decisions on and how their professional expertise translates in ways that spark curiosity and reflection in the children. We have identified a need for more knowledge in relation to planning, documentation and evaluation and how these activities help ensure coherence and intended practice. Such research would enable us to investigate didactics aimed at learning-driven group structures in which content is created as a result of the children's participation and communication. *Knowledge base and professional judgement* Kindergarten teachers rely on different forms of knowledge to manage the numerous different activities in kindergarten. Different knowledge forms are (in principle) involved in every activity, but they may be linked to each other in different ways and with different emphases.

Studies on kindergarten teachers' knowledge base and professional judgement use different methodologies, and most take a socio-cultural approach. Some studies adopt a philosophical and post-humanist perspective and represent a field of ECEC research that has grown in recent years. Generally speaking, we do not know enough about what kind of knowledge teachers draw on when exercising judgement or what kind of knowledge they base their decisions on. Professional judgement is crucial in order to prevent practices from becoming arbitrary. It gives intention and direction to the pedagogical process, and we need to know more about how it is exercised, alternatively why it is not exercised. We also know little about how kindergarten teachers develop their knowledge of the children, except that such knowledge is of course acquired through day-to-day contact over time. Although studies show that teachers use observation, research, documentation and assessment to gain an insight into the children and groups of children, we still know little about how these strategies are applied.

Kindergarten organisation and leadership

As mentioned previously, there are signs that kindergartens are evolving gradually from small, independent group-based organisations into more hierarchical and formal organisations incorporated into ownership organisations with often considerable resources. This makes it all the more important to obtain more knowledge about these ownership organisations – both municipal and private. Which parameters does the ownership organisation set, and which professional perspectives prevail?

Topics ripe for research include the impact of formal and hierarchical structures – and eventually also digital elements – on the children, the relationship with parents and professional practice. The evolving structures may well limit individual autonomy, but they also generate new opportunities for collegial solidarity and development. What does collegial solidarity entail? It is especially important to further investigate different ways of grouping the children. Which organisational forms are being developed, and how do they work for different groups of children? Which pedagogical processes are made easier or more difficult with the different organisational formats? Is the holistic pedagogical approach better suited to some organisational formats than others?

An organisation is not defined merely by its formal structure. It is also shaped by cultures and power structures that can sometimes be informal. It is surprising that there has barely been any systematic research carried out in this area. What characterises organisational cultures in kindergartens? Are there cultural tensions? Many aspects of the relationships between teachers, other staff and other professions and agencies can benefit from being studied as cultural processes.

Larger organisational units will also change the conditions for change and development. It will become increasingly impractical to view change as something which is exclusively linked to individuals and groups. The reason for this is that in large organisations change often takes place amongst senior management – or it is of a hierarchical and formal nature – and it has long-term effects.

The relationship between kindergartens and the outside world is an important research task. Relations with the wider world have changed as kindergartens have evolved to become a key component of the welfare state. This is one of the main tasks of the management team, but we must assume that the relationship can also be embedded in the organisational structure in various ways and with various priorities. Especially competition and the complexities of professional development in wider society mean that adjustment and strategic planning are vital. Reforms promoting interaction and co-ordination across the public sector are common and seek to prevent narrow silos. Such co-ordination processes are likely to be extended to kindergartens, and one important research question is how kindergartens are preparing to participate in these processes.

The changes described above will also lead to further expansion of leadership responsibilities. It will become increasingly meaningless to think of leadership as the preserve of headteachers and, to some extent, pedagogical leaders. The kindergarten sector is likely to develop more complex leadership structures in which management functions are filled, distributed and co-ordinated in different ways in different organisations. The roles of pedagogical leader, headteacher, the headteacher's management team and middle managers linking the owner with the kindergarten can be filled in a variety of ways. A key task for researchers will be to investigate how such management structures come into being and how they prioritise and position different roles in different ways and with different pedagogical consequences.

Parent co-operation

We need more information about parent participation and about what equity and mutuality entail in the formal and informal partnership between kindergarten and parents. One key factor in this respect is how parents participate in making joint decisions and what it means to both parties to enter into a mutual partnership. We know little about how parents are involved in planning, documentation and evaluation in order to develop the kindergarten's evaluation culture (Eik & Steinnes, 2017). The Framework Plan states that there should be systematic evaluation based on conversations with the children and their parents, amongst other things (Directorate for Education and Training, 2017, p. 37). We need research on how kindergarten teachers take on board the views of parents when evaluating and developing the kindergarten. We also need more knowledge about how observation and documentation are used to inform and evaluate kindergarten-parent co-operation. Growing use of digital tools in kindergarten has an impact on the relationship with parents, and we need to find out more about it. Parents often have a range of needs and wishes for their children in kindergarten. We need more knowledge about which strategies are adopted by teachers when working with parents/carers with different needs.

Governance - minimum standards, co-ordination or capacity-building?

As suggested above, one major challenge is to understand what happens to kindergarten teachers' professional practice when the kindergarten sector becomes the centre of political and public attention. Kindergarten teachers are not left to their own devices. Political intervention is increasing, and teachers are facing demands for efficiency and co-ordination with other agencies and professions working with children, especially schools. It is important to conduct research into these change processes and the various response strategies employed by kindergarten teachers. What does it mean that kindergarten should be an integral part of a child's education? How are local authorities preparing for it? What are the consequences for kindergarten teachers of different organisational approaches? Will the boundaries of jurisdiction shift? Will conflicts arise? Who will set the agenda and who will have it conferred upon them as a result of such closer co-operation?

ECEC policy development raises the question of which position and which agenda are held by the teachers themselves. It relates to how they are able to influence the agenda in the sector but also how governance structures are established at various levels and which values, professional perspectives and interests are being institutionalised by these structures.

The governance format is important because it assigns different roles to kindergarten teachers as employees in general and leaders in particular. Governance by objectives, minimum standards, capacity-building and hierarchical standardisation all constitute different forms of governance, and it is important to look at how prevalent they will become and how they are implemented.

There is a significant private element in the kindergarten sector, yet political ambitions and pressure to co-ordinate are growing. One particular challenge concerns how private providers can be included in these ambitions while also retaining their independence with room for innovation and alternative practices. This challenge is also an important research task.

Kindergarten teacher training

The biggest change in the new kindergarten teacher training model has been the introduction of *areas of knowledge* and the idea that pedagogy should maintain an academic core across these areas, particularly in relation to professional orientation and progression. The idea was for the model to better reflect kindergarten practices than did the previous preschool teacher training model. Yet evaluations of the kindergarten teacher training model (Bjerkestrand et al., 2017b; Finne, Mordal & Stene, 2014; Finne, Mordal & Ullern, 2017) raise doubts about whether it meets the intention of creating an integrated and profession-orientated training programme. The programme structure is academically ambitious and organisationally demanding, and it transcends scientific boundaries and traditions.

There is reason to ask whether the ambitions for the teacher training reform can be realised with the resources available, both academically and organisationally. The current teacher training model poses significant challenges, especially in relation to the development of new subject constellations, logistics involving internal co-ordination in and between the areas of knowledge and the idea of a unique ECEC didactic method. In a professional perspective professional knowledge must primarily build on the duties and structures that exist in the field of practice. For that reason it would be pertinent to commission research that both highlights and critiques the premise and structure on which the teacher training model is based.

The ambition for teacher training is to create a coherent and comprehensive training programme by integrating subjects and strengthening its focus on the practice field. The programme must also be research-based. This is difficult both academically and organisationally because there is a multitude of academic levels: individual subjects, constellations of individual subjects in the areas of knowledge, the integration of subjects and learning areas in the Framework Plan, and collective professional expertise based on an overarching pedagogical approach to working with children. This model also poses challenges in terms of methodologies and subject didactics since the subjects should be geared towards the pedagogical work taking place in kindergarten. Exploring how these elements are brought together in the kindergarten teacher training model is a vital research task. We need to perform a critical assessment of whether the teacher training model, with the areas of knowledge as its underlying structure, is suited to developing a professional kindergarten teaching role. For example, how does the subject structure strengthen or weaken the holistic approach to children's learning and development?

While all other subjects have been assigned a distinct function within a given area of knowledge, pedagogy is meant to be included as a component in each area of knowledge. Pedagogy should also have an integrative effect and create coherence and progression across the programme. This is a new role for pedagogy, as it is expected to be both the core subject on the programme and a supplement to each area of knowledge. We need to investigate and evaluate the role of pedagogy in the kindergarten teacher training model as one of multiple components in the areas of knowledge and its separate role as an academic subject and an instrument for practice and professional development.

Considerable work has gone into developing the partnership between kindergarten teacher training establishments and the field of practice. There is now greater awareness of kindergarten as an arena for teacher training and of placement mentors as teacher trainers. Several projects and initiatives are seeking to develop equitable partnerships between the two parties. The potential for professional development in the kindergarten teacher training model could be significant if these projects and institutional co-operation are given a boost. It will therefore be important to investigate these collaborative relationships and what they add to the training model.

The relationship between academic and practical knowledge is central to the role of the kindergarten teaching profession. The current teacher training model appears to have reinforced its practical approach, according to various evaluations and research projects. Theoretical and academic knowledge may have been weakened. There is reason to ask whether the limited scope and depth of the individual subjects give the candidates the requisite skills to complete a master programme. Could improved opportunities for in-depth study and a degree of specialisation strengthen the academic aspect of the training while also laying the foundations for broad, practice-led professional expertise? We need to analyse the scope for boosting research on teacher training programmes and consequently also their academic approach. This applies to research on both individual subjects and on combinations of subjects (i.e. areas of knowledge or other cross/multi-disciplinary constellations).

Professional skills development

The legitimacy of a profession depends on its continuing to develop. Professional development is both an individual and a collective responsibility, and in a professional perspective kindergarten teachers - individually and collectively - are central to the process (Smeby & Mausethagen, 2017, p. 12). Various professional development initiatives are implemented at various levels. In particular, we have pointed out how transnational actors have an impact at national and local levels, something which makes it pertinent to conduct systematic studies into the nature of the innovation processes in transnational networks and organisations, who runs them, and what kind of knowledge the various actors contribute to the processes. We know little about the extent to which kindergarten teachers are exerting influence over development and innovation processes at this level.

Professional development at a national level has an impact on teachers' self-determination in a variety of ways. Many professional development initiatives are instigated by the government and other external entities, but some large kindergartens also develop their own concepts. The tools, programmes and concepts offered to kindergartens vary greatly, and we need more information about which conditions and intentions underpin their development and which knowledge they base themselves on.

Kindergarten teachers participate in professional development in different ways, both collectively and in the form of in-service training and continuing education. There is a great need for information about the outcomes of the various development initiatives.

The government's strategy for raising competence in the sector has systematised kindergarten-based skills development, and more rigid control of the initiatives has prompted a need for more research into how kindergarten teachers are working with experts and research communities when it comes to this form of professional development. We also need information about which skills kindergarten teachers need in order to be part of such collaborations.

1.3.3 Practice-led and practice-based research

Practice-led research is research carried out in or close to the field of practice. It is research into practice and research that is relevant to practice. In

2009 M. Alvestad et al. (2009) published an article on the state of and challenges facing Norwegian ECEC research. They emphasised the need for more practice-led research in which kindergartens were actively involved in the research. There is, however, a great deal of practice-based research closely linked to kindergarten practice taking place among teacher training providers (Ministry of Education and Research 2018. One example is research projects originating from R&D projects carried out by teacher training providers. There are also research projects in which practising kindergarten teachers participate in research alongside researchers at universities, local authorities and other enterprises. The degree of control exercised by the research communities can determine the format for the research partnerships and the outcomes of the professional development and research.

The expert panel feels it is important that knowledge is developed in dialogue with the field of practice (Ministry of Education and Research 2018). Teacher Training 2025, the national strategy for quality and co-operation in teacher education (Ministry of Education and Research, 2017b), states that R&D is key to quality development in kindergarten teacher training and kindergartens. It stresses that R&D is necessary in order to develop a research-based kindergarten teacher training model and ensure robust knowledge about and for kindergartens. R&D programmes working closely with the field of practice emphasise the need for close co-operation between teacher training providers and the field of practice. At the same time, working closely with the practice field poses dilemmas with regard to proximity and distance in the research. Distance is necessary in order to emphasise that the role of the researcher differs from that of the kindergarten teacher.

Viewing the field of practice from a critical distance is also important. We therefore need research communities that can observe kindergartens from a more distant position. Not all research should take place on and around the teacher training programmes. An optimal research partnership develops in dialogue with the field of practice, teacher training providers and other professional research communities that can take a critical and analytical view on the field of practice. Such practice-led research may be scientifically solid while also embracing themes relevant to practice. For kindergarten teachers to play an active role in developing the profession's research base and actively contribute their ECEC insights to the knowledge-producing communities, they must be equipped with the skills to do so. Developing a master programme will be important in this regard, therefore.

1.3.4 Research communities and research expertise

Kindergarten teacher training providers need to possess research expertise in order to conduct practice-led research in line with the needs we described previously. One key question, therefore, is whether they possess the adequate expertise. A 2013 report by the Nordic Institute for Studies in Innovation, Research and Education (NIFU) found that there is inadequate research taking place at teacher training institutions and that some of the research has methodological weaknesses (Gunnes & Rørstad, 2015). The report also states that there were significant variations in terms of framework conditions, research expertise, publication, international co-operation and practice orientation. There were also differences with regard to the researchers' level of success with the Research Council of Norway's education research programmes (Ministry of Education and Research, 2017b, p. 19). R&D expertise in ECEC research has been strengthened in the years since 2013 thanks to research activity on the teacher training programmes, the Research Council of Norway's PRAKUT (2010-2014) and FINNUT programmes and graduate research schools. Boosting scientific expertise on teacher training programmes will continue to be an important task, and external quality assurance is crucial.

ECEC research is described as fragmented and dominated by numerous small research communities (White Paper 19, 2016; White Paper 24, 2013), although increased investment in ECEC research has led to greater variation in terms of methodology and theory and a positive trend when it comes to volume, quality and relevance (Ministry of Education and Research, 2017b, p. 19). The number of researchers involved in ECEC research has risen. Yet there is still a long way to go. The NIFU evaluation report from 2015 looked at trends in ECEC research (Gunnes, Hovdhaugen & Olsen, 2017). ECEC research accounted for 11% of all education research in 2013 compared with 13% two years previously. In 2013 there were 44 research institutes involved in ECEC research, most of them institutions for pedagogical research or teacher

training providers. The report shows that the number of ECEC researchers rose from 292 in 2009 to 482 in 2013. Research expertise has also increased. The number of ECEC researchers holding professorships more than doubled in the period 2009 to 2013 from 19 to 43. The proportion of female ECEC researchers is considerably greater than amongst education researchers as a whole (77% versus 61%), and the proportion holding professorships is 5 percentage points lower than amongst all education researchers. The proportion of ECEC researchers holding PhDs is also significantly lower. An extensive evaluation of education research was carried out in 2016 under the auspices of the Research Council of Norway (UTDE-VAL) (Research Council of Norway, 2018). It concluded that Norway has several research communities of a high standard but that there are inconsistencies when it comes to quality. Sixteen educational institutions took part in the evaluation, including ECEC researchers (see pp. 16–17 of the report). The report calls for closer co-operation between research institutes and relevant users of the research, and it emphasises the importance of conducting practice-driven research.

Another key question is how to feed the research results back to the field of practice. A survey of comparative education studies in the Nordic region looked at initiatives to link research-based knowledge and practice in the five countries (Wollscheid, 2015). The survey found that we do not know much about the extent to which and how the various initiatives are taken up by individual kindergartens (and schools). As for the number and range of so-called brokerage agencies (institutions that link researchbased knowledge and practice and communicate and disseminate research-based knowledge), Denmark stands out followed by Norway and Sweden. A number of initiatives have been launched in Norway, but we know relatively little about their uptake or how kindergartens use research-based knowledge. Norway's ten national centres are examples of such brokerage agencies, but schools appear to be using them more widely than do kindergartens (Wollscheid, 2015, pp. 44-46).

The evaluation committee on kindergarten teacher training has pointed out that the NOKUT evaluation in 2010 was important to the training programmes in terms of boosting ECEC research at the educational institutions and ensuring skills development amongst their staff. The research profile of the teacher training programmes has been reinforced by means of additional research grants, an updated researchbased syllabus, the introduction of a bachelor thesis, new associate professorships and research groups and skills development programmes through the NAFOL graduate research school (Bjerkestrand et al., 2017b). The evaluation committee states that there is extensive research taking place at all teacher training institutions. There are numerous profession-orientated research projects with different research fields and scope. Apart from the work carried out by the evaluation committee, we are not aware of any new evaluations looking only at ECEC research communities and their research expertise. We therefore know little about quality differences in ECEC research at present. The expert panel therefore takes the view that we need to evaluate existing research expertise and capacity at the ECEC training institutions in more detail.

1.3.5 A multidisciplinary platform

The expert panel believes ECEC research needs to be founded on both pedagogy and other disciplines. There are several arguments in favour of a multidisciplinary approach. One is that kindergarten teachers are expected to draw on a wide range of researchbased knowledge to promote the children's well-being and all-round development. Multidisciplinary research can generate new knowledge about the multidisciplinary and complex nature of the pedagogical work taking place in kindergartens.

Another is that it can help enhance the teacher training model's integrated areas of knowledge, which are meant to reflect the learning areas in kindergarten and thus create coherence and consistency. Organising subjects into areas of knowledge is intended to prevent fragmentation into numerous small subjects (Bjerkestrand et al., 2017b, p. 33). Multidisciplinary research can help realise these ambitions for integration. The evaluation committee concludes that the introduction of areas of knowledge have not resulted in many new research projects that reflect the content of the training (Bjerkestrand et al., 2017b).

A third argument stems from the expert panel's research review, which shows that there is insufficient research into the different learning areas (Ministry of Education and Research 2018). We need more multidisciplinary research if kindergartens are to fulfil the intention spelled out in the Framework Plan of seeing the learning areas in context, i.e. they should play a central role in all activities in kindergarten and be addressed by way of a holistic approach to learning. We know little about how kindergarten teachers approach the learning areas and how the learning areas and their integration are addressed in the interaction with the children.

The report "An evaluation of education research 2015" (Gunnes et al., 2017) looked at the skills profiles of ECEC researchers and found the prevailing area of expertise to be pedagogy, including subject didactics. 40% had a pedagogical background. A total of 57% of ECEC researchers had a background in the social sciences, 23% in the humanities and 11% in other subjects. It is necessary to establish research partnerships between pedagogy and subject didactics in order to develop kindergarten as an arena for play, learning and formative development and not least in order to bolster innovation in ECEC research. There is a need to develop cross-disciplinary knowledge communities in which kindergarten teacher trainers work together to take collective responsibility for coherence and consistency in both research and training.

1.3.6 Comparative research

The results of a systematic survey of comparative studies into kindergarten and primary education in the Nordic region show that there is limited comparative research being carried out into kindergartens. What little there is has been carried out at a policy level and not on topics concerning pedagogical work with children (Wollscheid, 2015). This is a weakness when it comes to ECEC research.

The report evaluating education research in Norway (UTDEVAL) (Research Council of Norway, 2018) concludes that researchers should participate more in long-term international research collaborations. The report also points to the need for strengthening national and international strategic partnerships between researchers and users.

The cross-disciplinary research project "Care, Curriculum Quality Analysis and Impact Review of European Early Childhood Education and Care" (2014–2016)⁶ (Sylva, Ereky-Stevens & Aricescu, 2015) is an example of how partnership projects with other countries and comparative research can generate knowledge that offers an insight into early childhood pedagogy in other countries.

The project investigates which curricula, pedagogies and other quality factors play a part in children's development, learning and well-being. It looks at differences between the countries, and several methodologies have been applied to perform comparative analyses. One key finding from the study is that there is a broad consensus that a holistic pedagogical approach is a quality criterion in early childhood pedagogy. The report demonstrates that a holistic approach to learning is a value being promoted not only in Norway and the Nordics but also as a desired practice and a sign of quality in a European context.

1.4 Key decisions and recommendations

Above we have drawn a picture of one of the most important professions in the welfare state. Kindergarten teachers, who help give practically every Norwegian child a good start in life and a platform for further development, play a key role in Norwegian society. The kindergarten sector attracts considerable support and interest. This is a marked change from the marginal role it played only some decades ago.

In the further development of kindergarten teaching as a profession it is impossible to avoid a range of tensions and balancing acts between different values and considerations, even though there are also development goals that appear to be uncontroversial such as the need for more practice-based research. In light of these conflicts and balancing acts we will conclude by discussing professional practice amongst future kindergarten teachers: how they should perform their pedagogical work with the children and which frameworks can best support them in their work. In some areas it may be that good professional practice gravitates towards one side in this field of tension rather than the other. We may wish to emphasise and prioritise particular practices. In other areas good professional practice could be more about taking the centre ground in these tensions. Professional practice means exercising complex, professional judgement in a field of tension between different considerations where there are no clear-cut answers. Sometimes we have to make binary decisions, other times we need to balance different considerations.

The following discussion about key decisions and recommendations is based on the characteristics of kindergarten teaching as a profession presented above and will largely follow the same thematic structure. The practice that is described and the framework that surrounds it have many strong attributes and qualities, but there are also aspects that can be problematised from the professional perspective outlined above. Our focus at this point is especially on the latter. Nordic and international ECEC literature has been consulted where the expert panel believes it can shed light on alternative professional development pathways. However, we have not had the capacity to conduct a complete review of all relevant international research.

This section begins with a discussion on kindergarten teaching practices in a pedagogical field of tensions, where there are numerous different considerations to be made. Certain aspects of the holistic and integrated pedagogical approach can be strengthened and developed further in order to better accommodate the values, goals and contents set out in the Framework Plan. In terms of key decisions and recommendations on pedagogical work with children, we have chosen to highlight a few priority areas that can help ensure more focused and intended practice. Good professional practice also demands a set of favourable framework conditions. We will be presenting these key decisions and recommendations in the separate categories of management and governance; kindergarten teacher training; and professional development.

1.4.1 Professional kindergarten teaching practice in a fields of tension

The documentation we have examined on kindergarten teachers' pedagogical work with children shows that teachers are navigating a in their professional practice. These mean that teachers must continually make decisions as they shape their own practice. As

⁶ The European study "Care, Curriculum Quality Analysis and Impact Review of European Early Childhood Education and Care" includes an analysis of curricula in 11 European countries.

we have mentioned above, certain considerations weight more heavily than others in some cases, such as a collective focus being displaced by an individual focus, for example. Good professional practice when dealing with these conflicting interests is in the expert panel's opinion about being conscious of them and always being able to exercise judgement and consider how to emphasise different elements without becoming one-sided. In the first section we will explain what this entails. The expert panel also finds that holistic pedagogy has broad backing, albeit based on varying terminology. Such pedagogy should therefore remain the backbone of pedagogical practice. Yet holistic pedagogy is in itself an ambiguous quantity, and it must be further developed and clarified. We will address this in the next section. Finally, some research has found that holistic pedagogy can be overly inclined towards flexibility and immediacy. This is not to say that the holistic approach should be rejected, but the expert panel takes the view that it should be strengthened and given new elements to make it more systematic. We do not have all the answers to how to achieve this, but we can point to certain elements and ask that further investigations be carried out, both into the elements that make up the holistic approach in general and how to strengthen the new systematic elements.

Professional considerations in a pedagogical field of tension

One big challenge for kindergarten teachers is dealing with and navigating fundamental tensions and making informed decisions for the benefit of the children's well-being and all-round development. This means that they must exercise professional judgement as to what is the right thing to do in a given situation and why it is important. Kindergarten teachers apply a multifaceted set of skills when deciding which decisions and positions to take, which in turn impacts the values that underpin their pedagogical actions. The purpose of highlighting some of the tensions that teachers have to deal with is not to propose a correct or true pedagogical practice. Rather it is to stress how kindergarten teachers, when working with the children, must take responsibility for navigating the various tensions-Good professional practice means navigating a range of tensions We will list the most important.

Planning and spontaneity

Pedagogical work in kindergartens takes place in the form of planned content or content that has occurred spontaneously. The content should be geared towards the objectives of the Framework Plan and could take the form of activities of a long or short duration. Children learn and create meaning on the basis of planned content, of what they are interested in and of the kindergarten's objectives. Planned pedagogical work means that the teacher has planned and organised the activities in advance. The planning could be based on something the children and the teacher are interested in, but the aim of the activity is to give the children an opportunity to gain new experience while interacting with others according to their own abilities and in light of the objectives of the Framework Plan. When a pedagogical process occurs spontaneously it may be as a response to the children's initiative and input in everyday activities and activities instigated by the children. For example, the teacher may observe the children's play, pick up on what is happening and follow it up on the basis of each child's or the group of children's interests and potential. The Framework Plan requires pedagogical processes to be planned and structured in a way that prevents arbitrary practices and creates consistency, continuity and progression in the content (Directorate for Education and Training, 2017, p. 37). The teachers thus find themselves in a position where they have to address tensions: they have to plan the pedagogical process and be structured while also ensuring that their practices are flexible and allow for spontaneous input from the children.

Children's participation and the contents of the Framework Plan

The children's right to participate and give direction to the content and the teacher's responsibility for implementing the objectives of the Framework Plan can be seen as two conflicting perspectives. On the one hand the teacher must bring the children together in an activity that furthers the children's learning and formative development while encouraging curiosity and inspiring the children through the teacher's knowledge of the subject. On the other, the content should also come from the children and their spontaneous contributions. The big challenge is to encourage the children's interests and play while at the same time generating enthusiasm for the content in question. The teacher is therefore constantly dealing with situations where they have to negotiate between pre-determined and unforeseen content, between going along with the children's focus and interests there and then and planned activities. This balancing act helps define the unique nature of pedagogical and didactic practice, and good professional practice is the ability to consciously position our own practice in thisfield of tension .

Subject-specific and integrated practice

Combining the learning areas with care-giving, play, learning and formative development results in a series of tensionsin terms of how the subject content should be incorporated and followed up on in the holistic integration process. The learning areas must be incorporated in the holistic and integrated approach in line with the need to see the different components in context. But they must also be incorporated into the potential that lies in planned, spontaneous and everyday routine situations. Two obverse scenarios are where the work on the learning areas is seen as a practice where on the one hand the learning areas control the integration, while on the other they are more subordinated to the holistic approach to learning. We can envisage that the pedagogical and didactic processes are assigned different meanings and different focus in the two scenarios in that the various components are weighted differently. We can discern yet another tensionin the somewhat dualist wording used in the Education Act where kindergartens shall " ..., in collaboration and close understanding with the home, safeguard the children's need for care and play, and promote learning and formation as a basis for an all-round development" (Ministry of Education and Research, 2005, Section 1). On the one hand kindergarten teachers must meet the children's need for play and care, while on the other they are expected to promote learning and formative development which in turn contribute to all-round development. How to combine this in every situation is key to a kindergarten teacher's professionality.

Here and now and tomorrow

There is a tensionbetween an approach that focuses on what is happening here and now (*care and play*) and one that looks towards the children's future (*promote learning and formation as a basis for an all-round development*). The two approaches can be linked to views on children and childhood if they are taken to extremes. One approach can be interpreted as a child-focused approach in which childhood has inherent value and where well-being, friendships and play are important. The other falls into a learning-driven tradition focusing on learning outcomes and preparing for school in a more formalised and structured format. A holistic approach to learning seeks to accommodate both by promoting a learning trajectory designed to prepare the children to deal with both contemporary and future situations. Kindergarten teachers are tasked with creating the right conditions for all-round development which impacts the children both here and now and in the future. Play then becomes one of multiple arenas for learning whereby a tensionemerges between play as a tool for learning something tangible and play as an activity, which is important in itself.

Play having intrinsic value and play as a value for learning

The Framework Plan describes two perspectives on play: play having intrinsic value and play as an arena for learning, development and social and linguistic interaction (Directorate for Education and Training, 2017, p. 20). The two perspectives serve to create a tensionin terms of how kindergarten teachers should approach the children's play in practice. On the one hand they must respect the inherent value of the children's spontaneous and self-initiated play and make room for it in kindergarten without assigning it a particular objective. On the other hand the teachers must evaluate the play and use it as a platform for learning and development. According to this interpretation, play has value because it realises pedagogical intentions and objectives.

As well as learning, the children gain social and linguistic experience by playing, and the teacher has a responsibility for ensuring that all children are able to take part in the potential that play has to offer. This means that the teacher also has a specific idea about what the children should experience when they play and that they can use play for a particular purpose. Play content can show the teacher what the children are interested in. The content can also identify challenges surrounding the children's learning and development and be used as a starting point for planned learning activities. Kindergarten teachers must monitor the interaction between the children as they play. They must constantly consider whether to structure the play activities so that all the children are happy and have a positive experience playing with other children.

Teachers are responsible for ensuring that every child participates in the pedagogical activities that are necessary for the child to benefit from inclusive and equal provision (Directorate for Education and Training, 2017, p. 40). This also exposes a tensionbetween how mainstream provision and special needs provision are organised. On the one hand the organisation of special needs provision could limit participation in mainstream activities. On the other the special needs arrangements can help the child participate in social interaction with other children. The teachers must accommodate all of these different aspects and values.

Individual children and the group of children

Professional practice in kindergarten teaching involves caring for both individual children and for the group of children as a whole, i.e. the teachers must juggle different pedagogies focusing both on the collective and on the individual. Kindergarten teachers are always surrounded by several children at any one time and need to switch between different positions (Bae, 2018, p. 157). They are moving in a complex context of interaction. Kindergarten teachers must constantly strike a balance between meeting the need of individual children to be seen and heard and supporting collective values and encouraging group attachment. Taking a predominantly individual approach could restrict the children's experience of democracy. Once attention is focused on one child, the children's participation could be reduced to individual freedom of choice and self-determination. This could potentially result in a practice which suggests that satisfying one's own needs is more important than consideration for others and a sense of duty to the collective. Children should one day become democratic citizens who show consideration for their fellow humans. Yet they must also be allowed to be individuals whose voices must be heard. Striking a balance between meeting the needs of individual children and helping the children become part of society appears to be one of the trickiest tasks for kindergarten teachers. They must accommodate the perspectives both of individual children and of the group of children in the pedagogical process without allowing the collective focus to compromise each child's need for care, play, security and well-being and without allowing the individual focus to compromise the collective focus.

Professional care-giving and private care-giving Kindergarten teachers are obliged to give professional care. They cannot choose whom to give care to in kindergarten. The concept of care-giving is a long-standing tradition in the kindergarten sector

long-standing tradition in the kindergarten sector, and there are clear guidelines on how the youngest children should be treated in the education system. Particular aspects of the teachers' relational competencies are being challenged, especially since care-giving has considerable impact on learning and formative development. Care is an element in kindergarten content and is linked to the children's sense of security, belonging and well-being and to developing compassion and empathy for others (Directorate for Education and Training, 2017, p. 14). Professional care-giving is rooted in the values set out in the Framework Plan and differs from the private care we give to our own children. This creates a tensionin the administration of care, and kindergarten teachers must shape their own practices to resolve thistension.

1.4.2 Developing a holistic and integrated pedagogical practice

The reason for promoting a holistic and integrated pedagogical practice is that care, play, learning and formative development are important components in pedagogical processes involving children. According to the Framework Plan, these components must be reflected in content and working methods throughout the day. A holistic and integrated pedagogical practice contains learning situations that the children encounter in kindergarten, in other words the pedagogical learning environment created and structured by the teacher and designed to promote the children's well-being and all-round development.

The expert groupdefines good professional practice as early childhood pedagogy where care, play, learning and formative development are seen in context. This pedagogical practice should be maintained because young children, who are developing and learning, need a pedagogical learning environment that preserves the comprehensiveness that *educare* offers That is to say, holistic and integrated pedagogical practice should not be replaced by something else. On the contrary, the panel believes this practice should be improved further. In our view this also means that systemic elements, but also the holistic pedagogical practice in general, must be discussed. General pedagogical practice is ambiguous in more ways than one as demonstrated in chapter 1.1.1

EC pedagogy thus continually accommodates the correlation between care, play, learning and formative development and is applied in everyday activities and in activities initiated by both the teachers and the children. We have seen how teachers identify and exploit holistic learning opportunities during both planned and unplanned activities and how they exercise varying degrees of control in terms of who instigates an activity and who appears to be in control of the activity or situation. EC pedagogy is not subject-specific; practices take an integrative approach whereby multiple actions are combined. There is emphasis on ensuring that play and learning activities are based on the children's interests and experience, and practices appear to be mostly open and flexible and not specifically aimed at the goals and contents set out in the Framework Plan. Pedagogical processes seem to focus on the here-and-now whereby their justification is assigned to themes contained in the Framework Plan after the activity has ended. In practice, child participation tends to be somewhat superficial, and there is no deeper reflection on what participation means. There is less emphasis on collective processes as a central prerequisite for learning. The children appear to enjoy considerable freedom during play. It is the expert panel's view that holistic pedagogical practice should be supplemented with certain structural elements that can strengthen and develop it further, making it slightly more intended, systematic and focused.

We will now propose a number of priority areas that can be developed further to make holistic and integrated pedagogical practice more intended and in line with the values, goals and contents of the Framework Plan. When calling for pedagogical practice to be more intended, focused and systematic, it does not mean that spontaneity should be rejected in favour of planning and predictability or that learning activities should be subject-specific and run exclusively by adults. It is more that the holistic and integrated approach – which is ever present as a key component – should increasingly be linked to other intentions and objectives associated with pedagogical processes.

Early childhood didactics: intentions

Early childhood didactics focuses on the teacher as a learning agent responsible for ensuring that the pedagogical learning environment is conducive to the children's well-being and all-round development. This is about the teacher's didactic professionality. They must be conscious of the fact that they are part of a holistic and integrated practice and perform actions that are intentional. This means that their actions – rooted in the Framework Plan – must be focused in respect of what the children should participate in and experience in various situations. In order to carry out activities in a holistic, integrated and focused manner, the teacher must therefore make it clear what the purpose of the pedagogical process is and what it is intended to produce.

Combining planned pedagogical practices and the wishes and needs of individual children and the group of children – bearing in mind the participation aspect – means that the teacher must deal effectively with different situations even though he or she may not know immediately what is the right or wrong course of action. The ethics of this relationship focus attention on the unique nature of every situation and require the ethical aspects to be assessed on a case-by-case basis. The teacher's professional knowledge base is key to preventing professional judgement from resulting in arbitrary practices. In other words, it helps eliminate random practices and gives the pedagogical process intention and direction.

Inclusion and participation

Didactics in Norwegian and Nordic EC pedagogy is based on values such as democracy and solidarity. These values promote and enable learning and formative development in that the children participate and contribute (Broström, Lafton & Letnes, 2014; Dahlberg, Moss & Pence, 2002; Pramling & Samuelsson, 2011). It means that the children must be given the opportunity to actively participate in the kindergarten community. Planned and structured pedagogical content is not an insurmountable antithesis to participation. The children can be given additional opportunities for participation during unplanned activities or so-called free play. However, if there is little adult input it can lead to arbitrary practices. Which of the children get a genuine opportunity to exert influence could become arbitrary. If the teacher does not have a clear purpose for the activity, the content can become ambiguous and

the situation unpredictable. For the youngest children in particular this can undermine their sense of security and attachment. If the children are given extensive freedom, it can lead to exclusion and recurring practices where children get stuck in a rigid pattern. This can prevent the children from enjoying varied experiences and in the worst case scenario lead to exclusion and create a breeding ground for bullying. On the other hand, excessive control and management can cause the pedagogical process to become routinised and rule-bound and restrict the children's experience of democracy and freedom of expression.

Good professional practice acknowledges that planning and structure are prerequisites for participation and for the children's experience of democracy in that the teacher has created content that children and adults can work on together (Pettersvold, 2018). Planning and structure can boost social participation amongst the children provided that the relationship between the adults and children and the content they are sharing are based on mutual recognition. Inclusion is enhanced when all children are allowed to participate according to their abilities. Planning and structure provide a basis for spontaneity and flexibility when the teacher listens to the children's input, links the inputs of different children and lets them have a say in the further planning. Inclusion and participation can be supported by pedagogical documentation which is based on a holistic approach to learning and which views children as co-creators of knowledge (Dahlberg et al., 2002; Eidevald, Engdahl, Frankenberg, Lenz Taguchi & Palmer, 2018; Kolle, Larsen & Ulla, 2017; Rinaldi, 2009).

Development and age differentiation

Holistic and integrated pedagogy provides a basis for children's all-round development. As almost all Norwegian children attend kindergarten, this means that the teacher's didactic intentions must also consider how children of different ages learn and how the teacher can best support their development. One-year-olds have different needs to older children. They are in a vulnerable phase of their lives in which they need security in the form of both physical and emotional care. The pedagogical learning environment must acknowledge the age differences within the group of children. Consequently, the content relating to the key components of care, play, learning

and formative development must be clarified and concretised. It is crucial to make it clear how the concepts should be interpreted according to age and stage of development. As such, holistic and integrated pedagogy is progression-based. The research that has been reviewed makes little mention of the concept of development and of the link between learning and development. This is in spite of the fact that the Framework Plan links development to care, play, learning and formative development. Kindergarten has become an important arena for bonding and for developing good physical and mental health. Good professional practice promotes life skills and good health, and when developing EC pedagogy to ensure good practice for the future we must work systematically to strengthen the quality of relationships and to clarify what it means to offer children of different ages good relationships with adults and other children in kindergarten.

Group focus

Group focus means that the teacher sees the collective as a key prerequisite for learning. A perspective on learning which holds that learning takes place through communication, participation and interaction in a group emphasises how children can act as resources for each other and how the teacher draws on the children's resources, supports peer relationships, links the children's inputs to each other and encourages the children to work together to create shared content. The diversity of the group of children and the children's intercultural and relational competencies become crucial to learning when the teacher creates frameworks for learning situations in the group. The relationships between the children and the way they treat others in terms of values such as respect, compassion, equality and solidarity influence and inspire the learning process and help give the children new experiences through co-operation.

The research favours greater group focus while highlighting the impact of positive group affiliation on the children's well-being and emotional and social development. When children participate in a group they develop their ability to form relationships, co-operate and negotiate (EVA, 2017; Sheridan, Williams & Samuelsson, 2014). Group affiliation and co-operating with other children are seen as especially important for vulnerable groups because they help enable the children to acquire social and emotional skills that prevent problems later in life and are beneficial to their mental health (Cefai, Bartolo, Cavioni & Downes, 2018; White Paper 19, 2016; OECD, 2018).

Learning-driven group configuration

A learning-driven group configuration is designed to facilitate the children's play and learning potential. Activities and groups are organised according to the children's interests, and learning content is created on the basis of communication and interaction between children and adults (Sheridan et al., 2014). This approach to organising groups of children maintains a clearer link to the objectives set out in the Framework Plan than do free play and activity-based approaches. Sheridan et al. (2014) assert that a free play approach – which is often adopted in large groups in which the children form their own groupings - makes teachers more concerned with intervening in situations that may occur than involving themselves in the children's learning. With an activity-driven approach in which the teacher has planned the activities it is primarily the teacher who organises the groups according to which rooms they have been assigned. This way of organising the group can empower the children to participate by helping to choose the activities (Seland, 2018). In the case of free play and activity-based configuration, teachers tend to reflect retrospectively on how the activities have helped meet the objectives of the Framework Plan. The learning-driven approach, meanwhile, is more intentional as the teachers look at what the children should be able to experience and learn and then create situations and activities that give the children new opportunities to gain experience and develop new knowledge (Sheridan et al., 2014, p. 394). Good professional practice relates to the teacher's ability to organise groups that can promote conditions for learning within the framework of a holistic and integrated pedagogical practice.

Exploratory pedagogy

Kindergarten teachers can use the group of children as a point of reference when analysing and reflecting on content and activities and thus create exploratory projects together with the children. Exploratory pedagogy is clearly leaning towards a holistic and integrative pedagogical practice and towards the values described in the Education Act and its associated regulations (Ministry of Education and Research, 2005, Section 1, Directorate for Education and Training, 2017, p. 22). For kindergarten teachers,

engaging in exploratory projects is nothing new. Such projects have played a key part in the pedagogical tradition and have their roots in Fröbel's philosophy where the activities form a greater whole around a theme. ECEC literature offers numerous examples of themed and project-based work with children (see for example: Fønnebø & Jernberg, 2018; Moser & Pettersvold, 2008). Further development of the exploratory element does not just mean that the themes being explored are seen as affirmation of the learning areas after the activities have ended. Project work as a continuation of themed projects strengthens the exploratory approach (T.T. Jansen, 2008). The teacher plays a key role in creating hypotheses and problems which are based on the children's input and which can encourage curiosity, reflection and a desire to explore, giving the pedagogical project possible trajectories for further development. It is not sufficient, therefore, to only listen to the children's input. We must also link their input and individual actions to a holistic theme that creates meaning for the children. The use of exploratory processes and project work is supported by the Reggio Emilia approach to pedagogy, partly because it represents a dynamic learning process followed up by pedagogical documentation (Moss, 2016a; Rinaldi, 2009). Results from the international CARE project (Slot, Cadima, Salminen, Pastori & Lerkkanen, 2016) also show that exploratory pedagogy is highly beneficial and that exploratory activities achieve a higher quality score than so-called academic and school-orientated activities.

Bearing in mind that mutual participation is a core element in didactics in which the main didactic elements are shared focus, the teacher's familiarity with the content, relationships, communication and good judgement (Sheridan & Williams, 2018a), the learning areas and subject didactic decisions play a key role when teachers seek to establish how they can make the content interesting to the children according to their age and stage of development. The significance of the content and the fact that children and adults come together to share something in mutual interaction are described as quality factors in the relationship between children and adults (Doverborg, Pramling & Pramling Samuelsson, 2013; EVA, 2017; Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010). When the learning areas are combined with care and play and the learning content is shared and explored, the function of the learning

areas is extended to improving the quality of the relationship. Another effect is that it helps to build group affiliation.

International research and the so-called EPPSE study carried out in the UK use the term sustained shared thinking to describe a pedagogical approach in which the teacher's actions support the children's learning and broaden their thinking (Siraj-Blatchford, 2009; Sylva et al., 2010). The study found that sustained shared thinking helps boost cognitive and social skills and that this form of thinking typically takes place during child-initiated activities where the teacher expands the activity in a way the requires both parties to contribute in order to solve a problem, elucidate a concept or develop a story. The research review shows that there are challenges surrounding cognitively challenging conversations. Kindergarten teachers rarely appear to bring additional children into the conversation or encourage them to develop and explore a topic or problem together (Gjems, 2010, 2013, 2018). If exploratory pedagogy is to strengthen the holistic approach to learning, it must take into account the children's level of maturity and age and enable the youngest children to explore their surroundings together with others through physical presence and the creation of meaning. Young children's physical presence requires the teacher to be physically and emotionally present, close to the children and conscious of what attracts their interest through eye movement and motion. Wayfaring is a term used to describe how exploratory learning processes can take place when the teacher moves with the children and picks up on what they are communicating and creating in a given location (Myrstad, 2018). Thus, exploratory pedagogy is given the added importance of interaction with both people and environment in the pedagogical learning environment (N. Sandvik et al., 2016).

Play focus

Play focus requires the teacher to be physically and attentively present while the children play, to be aware of what is happening, and to be able to evaluate their own role and involvement in the children's play. Play focus centres around how children create meaning and play processes and how the teacher can support them while their play, whether it involves helping them to connect with other children during play or arousing their interest in content that can give them varied and enriching

experiences. Supporting the children during play does not necessarily mean that the teacher should assume full control of the process. Play can be controlled to varying degrees by both the teacher and the children. If the teacher initiates a play activity, they are in control of it, although the children can sometimes take control of the situation even if the play was initiated by the teacher. If it is the children who have instigated the play activity, the teacher can take charge by pushing the play in a certain direction if they feel it is necessary or to add something that can expand the activity, for instance. The teacher may also assume control over the play in order to nudge the activity in the direction of a structured learning situation. The point is that due to their presence the teacher is able to gain an overview of the situation and assess how various supportive actions can give the children positive and enriching experiences. Supportive actions can also involve stepping back and allowing the children to create and develop the content of their play without any other objectives than what the play means there and then.

Research (EVA, 2017) stresses that teachers play a key role in children's play. A Dutch study found that the physical presence of the teacher has an impact on how the youngest children engage in play and that mutual communication and shared focus have a positive effect on the activity the children are involved in. When the teacher is close at hand while the children play they can find ways in which to help the children move on when challenges arise. This increases the intensity and duration of the play activity (Singer, Nederend, Penninx, Tajik & Boom, 2014). Nilsson, Ferholt and Lecusay (2017) argue that learning and development are the result of play and exploration. Rather than focusing on play as an instrument for learning, the focus is instead on activities that are conducive to play and exploration in a way that promotes co-operation between adults and children towards a common goal.

Concepts such as play-based learning and guided play represent an integrated view of learning and appear to be in use worldwide (Sylva et al., 2015). Play-based learning is considered important to children's development in both Norway and Sweden (Björklund & Pramling Samuelsson, 2018; Lenes, Braak & Størksen, 2015). A Swedish knowledge summary of preschool (kindergarten) teaching shows that the play-based approach represents a practice whose aim is not to disseminate knowledge but to promote learning based on everyday activities in kindergarten. Kindergarten teachers are tasked with creating conditions for varied learning which is important both right here and now and in the future (Sheridan & Williams, 2018b).

Literature occasionally presents play and learning as categories and opposites. If we instead view play and learning as processes in which play is but one of many domains where children learn and gain experience, then we will be better able to turn our attention to the valuable exploratory and creative aspects of children's learning processes (N. Sandvik, 2016, p. 171). Viewing play and learning as processes can make us more aware of what happens when the teacher observes and responds to the children's play.

The physical learning environment

The way the physical environment is laid out is the result of a holistic and integrated pedagogical approach because it sets concrete parameters for the children's well-being and all-round development. The teacher must organise the physical environment in a way that can realise their pedagogical intentions based on the interaction between the physical environment and the children. In a kindergarten the organisation of time and space will often be based on specific activities, be it a single activity or multiple activities. It is important for the teacher to be conscious of how the organisation of time and space also involves varying degrees of adult control and facilitates child participation (Seland, 2009). The didactic intention must be about how to organise time and space in accordance with the children's stage of development, age, interests and needs. As a result, the design of the physical environment also ties in with the care-giving aspect (Aslanian, 2017). It is especially important to be conscious of how environment and materials impact the children's activities, such as their actions, and how the physical learning environment protects and challenges different children (Nordin-Hultman, 2004). Such organisation focuses attention on the qualities of the building design, the layout, the outfitting, the play materials and the aesthetic design. There are examples of how the physical environment poses a challenge to good professional practice. For instance, it can be difficult to find available rooms suitable for play in small groups (K.O. Kristensen & Greve, 2018). Another issue is that different organisational configurations can

provide varying degrees of access to equipment and toys. Bjørnestad and Os (2018) find that many kindergartens do not have enough materials suitable for play and learning and that toys and other materials are not sufficiently accessible to the children.

Documentation and evaluation

Documentation and evaluation help provide structure to the process and uncover the relationship between the pedagogical learning environment and the children's well-being and all-round development. The primary aim is therefore not to evaluate individual children. It is not about ticking boxes on a form; box-ticking on its own does not constitute an evaluation. The evaluation takes place when the teachers reflect critically on their practice and on how it can help develop the pedagogical process further. Pedagogical documentation can help create good evaluation practices. The pedagogical documentation should provide a starting point for systematic pedagogical and critical reflection, which in turn provides a basis for making adjustments and developing practice. Written notes and documentation of practice are key when working systematically with evaluation. They enable the children to be seen, evaluated and supported (Eik & Steinnes, 2017). This emphasises the need to systematise the evaluation process. It is particularly important in the case of vulnerable children.

Our view that pedagogical documentation can boost evaluation practices and make the holistic and integrated pedagogical process more systematic is supported by the Danish pedagogical curriculum (Ministry for Children and Social Affairs, 2018, pp. 50–51):

"The kindergarten head is also responsible for ensuring ongoing pedagogical documentation of the connection between the pedagogical learning environment and the children's well-being, learning, personal and formative development, and the pedagogical documentation should form part of the evaluation. The headteacher is thus responsible for ensuring that an up-to-date written account is kept of the children's well-being, learning, personal and formative development as well as the pedagogical environment in which they are rooted (Ministry for Children and Social Affairs, 2018, p. 50)". A good evaluation practice means that the children assume an active role in the evaluation process (Eik & Steinnes, 2017). Pedagogical documentation can identify pedagogical processes so that opinions and knowledge of a given content can be shared with the children (and adults) and used to create new insights and connections (Eidevald et al., 2018; Eik & Steinnes, 2017; T. T. Jansen, 2008; Kolle et al., 2017; Lenz Taguchi & Palmer, 2017; Åberg & Lenz Taguchi, 2006). The way children play and create meaning digitally can allow for varied methods of communication during the pedagogical documentation process (Lafton, 2014). It is important to develop an evaluation practice which embraces multiple forms of communication in light of the fact that children communicate and learn in processes involving multiple senses. Didactic development is needed in this respect. Future evaluation practices must be developed on the premise that multimodal interaction and digital communication methods can enrich didactic and professional practice.

Structure, control and flexibility as core concepts of didactics

When didactics is linked to educare and the holistic approach to learning, didactic is defined as "intentional and reflected care, education and teaching focusing on children's well-being, learning, personal and formative development" (p. 27). This didactic does not prescribe explicit principles and methods. Instead it encourages open learning trajectories in which potential for learning occurs in the situation in guestion and is shaped by the context. To a teacher, EC didactics means balancing between structure, control and flexibility (Lillemyr & Søbstad, 2011). According to T.T. Jansen (2014), this can result in a practice that listens and is able to improvise in the didactic process. Kindergarten teachers must continually evaluate which situations and inputs from the children should form the basis for planning learning activities.

Shifting between structure, control and flexibility in didactic practice means that the teacher assumes different roles with different didactic intentions when interacting with the children. For instance, the teacher may be intending to introduce the children to new knowledge or to pick up on the children's interests and instil enthusiasm for a particular content. Kindergarten teachers must know what defines the different roles as this can help make their choice of roles more intentional in the situation they are facing (Vangsnes & Økland, 2018). It can help teachers plan, execute and evaluate their own professional practice. Good professional practice means switching between different positions and being conscious of how different roles create good conditions for learning.

A clearer relationship between didactics and pedagogy involving children

In order to prevent the holistic and integrated pedagogical approach from becoming arbitrary and superficial, it is necessary to be aware of the relationship between didactics and pedagogy.

The Swedish knowledge summary of preschool teaching shows that awareness of the relationship between didactics and pedagogy has increased in that the concept of teaching is used to explain how holistic EC pedagogy relates to the concept of didactics⁷. Norwegian kindergarten teachers appear to object to the term *teaching*, however (Sæbbe & Pramling Samuelsson, 2017). Yet the Danish curriculum, which explicitly relates pedagogy to didactics, offers support for the idea that holistic and integrated pedagogy can be made even more intended:

When establishing a pedagogical learning environment in kindergarten the pedagogical team and the management must continually assess how practices can be framed, organised and facilitated to give the children the best possible opportunity to learn and develop [...] When the pedagogical staff establish pedagogical learning environments they must also make pedagogical-didactic considerations in order to create a pedagogical learning environment that supports the children's physical, social, emotional and cognitive learning and development" (Ministry for Children and Social Affairs, 2018, p. 22).

⁷ In Sweden it has been necessary to discuss EC pedagogy on the basis of didactics. Following a change in the law in 2010 where the Swedish education act was extended to also cover preschools, the term *teaching* was incorporated in the legislation that covers both schools and kindergartens. The implication for preschools was that they had to interpret and define what teaching means in a kindergarten context. Teaching is described as being "communicative, interactive and relational and should be seen in a civic context. Teaching requires didactic knowledge and centres around what preschool teachers want the children to be able to develop knowledge of in a learning context and how goals, contents and activities relate to each other and to the children" (Sheridan, S & Williams, P., 2018b, pp. 7–8).

The relationship is explained by the fact that pedagogy is about sustaining a pedagogical learning environment throughout the day, but in order to do so one must make didactic considerations and decisions on what to focus on and how to link content to objectives, activities and the children's learning processes. When strengthening the kindergarten teaching role in terms of the pedagogical work with children, practices must be developed on the basis that care-giving, play, learning and formative development are integrated elements in a didactic process linked to pedagogical leadership.

1.4.3 Kindergarten organisation and management

It is unlikely that the trend towards larger kindergartens incorporated into the ownership organisation can be stopped. To ensure variation and local adaptation, there should ideally still be room for small units and small owners. However, small units are vulnerable because the organisational environment is more demanding than before. They may not have sufficient capacity to be able to develop and respond to rapid change. Capacity would then have to be obtained elsewhere such as through partnership agreements with the local authority, for instance. It is therefore worth looking into whether it should be the local authority's responsibility to establish partnership agreements with private kindergartens where needed.

Yet how big the units and ownership organisations should be remains a fundamental question. Do we want to see few but large units, especially in regard to the ownership organisations? If private owners become very large, they may gain influence and a have standardising effect which may not be desirable, especially locally, and which will undermine market dynamics. It is not uncommon to regulate the size of private operators in a market.

Hierarchisation in the form of a clearer hierarchy within individual kindergartens has been an intended development in many respects. There has been a desire for unambiguous leadership that takes responsibility. Many factors are pointing towards further hierarchisation, and both larger units and their incorporation into large ownership organisations play a role here. Unambiguous leadership is conducive to co-ordination, change, control and follow-up and to being able to take action to correct unacceptable practices. Yet if the hierarchy expands too far with numerous different levels, it can lead to greater distance between the managerial and the operative professional roles, and the autonomy of the latter can become severely curtailed. This is unlikely to be a welcome development in a professional perspective. The hierarchical structure is also defined by legislation to an extent. The law implies that ownership also means responsibility, which defines the owner as a hierarchical level. We are also seeing many owners operate a joint management of all the kindergartens they run.

The headteacher is also defined in law as a hierarchical level. The teacher-to-child ratio has led to guestions about the organisation and hierarchy at the level below the headteacher. The legal clause on pedagogical leaders is strictly speaking a provision on qualifications rather than a requirement to employ pedagogical leaders. The regulations imposing a teacher-to-child ratio, on the other hand, are clear that kindergartens must employ pedagogical leaders. The regulations define how many supervisors there should be for each child over and under the age of 3 respectively. However, when viewing the teacher-tochild ratio in light of the provisions set out in the Framework Plan, the ratio is not merely a ratio. It is also stipulates that a pedagogical leader should lead and be responsible for a defined group of children as well as assistants, skilled workers and others working with the children. Such clarification of who is responsible for which children is an important principle.

When the role of the pedagogical leader is redefined by affiliating it to a group of children, it shows that there is little regulation of the organisational structure at the level above the pedagogical leader. Yet with the ratio that has been imposed - one which is likely to narrow further - the group of children affiliated to each pedagogical leader will often be smaller than has been the case in many kindergarten departments. It may make sense to group children and pedagogical leaders together in some form of teams. It should be up to the owner and headteacher to define these teams, but the expert panel is of the opinion that such team leaders - unless the team leader is not one of the pedagogical leaders – must also be required to hold a kindergarten teaching qualification. If kindergartens employ more qualified teachers than is stipulated by the teacher-to-child ratio, these teachers must also meet the qualifications requirement.

The teacher-to-child ratio can hardly be said to be generous. It allows little leeway for splitting the children into further groups. There appears to be a broad consensus that the ratio should be reduced further. The importance of staffing levels and qualified personnel is one of the structural quality factors frequently referred to in international research. According to Slot, research largely concludes that staff density is important and that good staffing levels contribute to better process quality (OECD, 2018, p. 11; Slot, 2018, pp. 26 and 35). Slot (2018) also points out that staff qualifications systematically contribute to process quality and children's development (pp. 46–47). The correlations are clearly contingent upon a number of other factors as well, especially when looking at the effects on children's development. However, it seems reasonable to conclude that there are numerous benefits to be had from employing enough and qualified personnel.

The long-term goal should be for kindergarten teachers to be in the majority as recommended by Urban et al. (Urban et al., 2011, p. 27). In the long term the aim should be to utilise the skills of childcare and youth workers in order to draw the maximum benefit from them in kindergartens. Another goal should be that the teacher-to-child ratio and core staff ratio should be applied for most of the day.

The teacher-to-child ratio will work in conjunction with the core staff ratio. The processes affected by the two ratios are insufficiently co-ordinated, which makes organisation difficult. In the event of future adjustments of the teacher-to-child ratio it would make sense to co-ordinate the two ratios. Many kindergartens are based in buildings designed for departments that are much larger than the group sizes defined by the new ratios, and it is therefore important to allow kindergartens to organise the level below the headteacher to suit local circumstances.

There are already variations in how the groups of children are organised, and the teacher-to-child and core staff ratios may result in additional organisational formats. Trying out new configurations could be a good thing. However, new organisational formats must respect the children's need for consistency in their contact with the adults. It must also be made clear who has the actual day-to-day responsibility for individual children and the groups of children. International research describes group sizes as one of the most important structural quality factors along with staffing and staff competencies. Slot points out that research broadly concludes that group size is important and that smaller groups mean better process quality (OECD, 2018, p. 11; Slot, 2018, pp. 26 and 35). The correlations are clearly contingent upon a number of other factors as well, especially when looking at the effects on children's development. However, it seems reasonable to infer that there are numerous benefits to be had from reducing group sizes.

If a separate management team is installed at the level above the pedagogical leader, it would result in a structure with four separate levels, including that of the owner. If differentiation is introduced at headteacher level, e.g. in the form of an administrator or development manager answering to the headteacher, and an intermediate level is introduced between the owner and groups of kindergartens as is sometimes the case with big owners, it will result in multiple levels across which to distribute professional autonomy.

The way a kindergarten is organised also has an impact on career paths for the teachers. Larger and more complex organisations often lead to more specialisation, both vertically and horizontally, and consequently to more differentiated roles. The tendency towards increased hierarchy, as pointed out above, will generate career ladders. In the part of the sector with large ownership organisations the ownership level is fast becoming a level with career opportunities for teachers. The proportion of teachers working at this level varies, however. Further career opportunities will emerge if management structures were to develop so that headteachers have the support of an administrator and possibly also a development manager. Similarly, it is possible to expand the horizontal division of labour between specialist staff. However, one key question is whether such a system with specialist teachers would be welcome. It could easily lead to a conflict with the holistic pedagogical tradition, the children's need for stable relationships and the fact that the responsibility for individual children and groups of children must be clearly defined. Horizontal specialisation is difficult because professional practice can only be divided and distributed across different roles up to a certain point.

The subject specialist should not displace the generalist, who holds overall responsibility for a smaller group of children together with assistants and skilled workers. Specialist staff can be pedagogical leaders whose role involves giving advice to others and who serve as a resource for their colleagues, or they can serve in staff functions in larger kindergartens or ownership organisations while also providing support to pedagogical leaders. Such support roles, which can be enlisted on a project basis when required, can also be filled by generalists and highly experienced and qualified kindergarten teachers. This form of subject specialisation is desirable but should not lead to a practice that undermines the children's need for consistency in terms of adult relations and overall responsibilities. Such support functions come at a cost. If 50 children were to justify creating a 50% advisory position, it would require a modest outlay. Nonetheless, it has to be funded. New career paths are one consequence of kindergartens getting bigger and the demand for specialisation increasing. It is important that this does not result in a fragmentation of responsibilities and provisions.

The development of new career paths must not go too far either vertically or horizontally. Yet managerial professional roles at ownership level – which will become increasingly important in the years ahead – should also be offered to teachers. Pedagogical leadership in ECEC will increasingly move to this level. Kindergarten teachers who pursue continuing education, especially at master level, should be rewarded financially for doing so and could also be given different job titles. Titles such as *barnehagelektor* and *barnehagelærer med opprykk* may sound a little alien, but they suggest the kind of changes that could be made.

Routinisation, like specialisation, is an ambiguous concept. It ensures quality and frees up capacity. It also helps simplify co-ordination and clarify responsibilities. It also has its disadvantages: it can hamper flexibility and make change more difficult. Routinisation can lead to processes being simplified and standardised with the result that having a professional background is no longer necessary. Yet routines are often of such a character that both their application and the choice of routines mean professional judgement is required. A tendency towards predefined standardisation of pedagogical work processes appears to stand in contrast to the holistic, child-centred approach that characterises Norwegian ECEC.

Professionality must also be expected from the owners - and from the local authority for that matter (see below). It would be inconsistent to only demand it from the kindergartens. The law defines the owner as having overall responsibility for their kindergarten. Many owners acknowledge this responsibility and are involved in many aspects of the kindergarten operation, including pedagogical issues (Børhaug and Lotsberg, 2016). Headteachers without a supportive owner are becoming isolated in an increasingly complex world, especially in relation to professional development. Owners should therefore have the necessary ECEC expertise and capacity to fulfil their duties. If an owner is unable to do so for whatever reason, the local authority alone or in partnership with other local authorities should assume responsibility for putting support structures in place. We must expect digital solutions to become more ubiquitous in the kindergarten sector. This, too, will be difficult for small kindergartens with small owners to keep up with. If we want small and independent operators to remain part of the sector, they must also be supported when it comes to digitalisation.

There is no doubt that kindergartens are expected to become learning organisations to a greater extent than today. This also has organisational implications. It requires headteachers to be relieved of practical administrative duties, including aspects of HR, in order to free up capacity. It also requires them to acquire professional and analytical-methodical skills to enable them to perform systematic evaluations and draw up plans for change. It is therefore time that kindergarten leaders – headteachers in the first instance – be compelled to hold master degrees. The master programme could be based on the training programme for headteachers (*Styrerutdanningen*), but other profiles may also be valuable.

Norwegian kindergartens are owned by a number of different operators, and this broad spectrum, which extends far beyond local authorities, is a strength. It encourages variation and innovation in a field where there are few tried and tested solutions to problems. Should we enable knowledge sharing and access to new solutions and approaches so that innovation and new ideas can be disseminated to the different actors? One could argue that this should be a criterion for receiving public subsidies, but on the other hand such sharing would be at odds with the idea of competition and kindergartens' need to promote themselves.

As mentioned previously, Norwegian kindergartens have in many ways developed the unambiguous leadership that public policy has aimed for. Headteachers take responsibility both internally and, to a significant extent, when dealing with the outside world. There is much to suggest that headteachers are overburdened and that the role raises expectations that are greater than any one person can deliver.

Large organisations often develop support and staff functions for line managers, which in this case would be the owner, headteacher and pedagogical leader. Establishing such functions could become relevant in the ECEC sector, at least to some extent. It would then be up to the ownership organisation to organise these functions. Many of them have already done so. It would appear that such leadership structures distinguish between pedagogical and administrative tasks. However, the two are closely linked, and the choice between unitary and split leadership comes with considerable consequences. At kindergarten level, split leadership could mean that an administrative manager and pedagogical manager have equal status and are responsible for their respective fields. Large ownership organisations may have a split leadership at ownership level with a pedagogical and an administrative department of equal status. In the long term split leadership could create tension between administrative and pedagogical considerations because pedagogical activity must often be initiated or supported by the administration. Unitary leadership implies that the headteacher holds overall pedagogical and administrative responsibility but that much of the administrative work is delegated to an administrator. If the leadership team includes a development manager, parts of the pedagogical responsibilities will be delegated to that role. The headteacher then ensures that pedagogical and administrative considerations are integrated, and the various pedagogical departments at ownership level communicate with the same leadership team in every kindergarten rather than with different teams. The headteacher's unitary leadership responsibilities are a reflection of the responsibilities assigned to the role in law. Pedagogical responsibilities must be co-ordinated with administrative responsibilities. A unitary leadership model would ensure such co-ordination. The ultimate design of such a leadership structure must be adapted to local circumstances and the owner's overall strategy.

If the leadership structure is to be expanded beyond the headteacher, it would in many cases mean that leadership functions are shifted to the level above the individual kindergartens. In some cases the headteacher would also move up to that level (i.e. one headteacher is in charge of more than one kindergarten). S. Mordal (2014, p. 25) writes that research shows this will lead to more formalisation and more rules, better administrative arrangements, better co-operation between units that previously were in competition, and better strategic focus. The level above each kindergarten will probably become increasingly important in Norway, too, and it will be organised by the owners, probably in different ways. The challenge will then be that independent kindergartens are not part of this development, with the managerial and pedagogical resources this entails. The expert panel takes the view that every kindergarten needs its own leadership team.

How large should the leadership team be? It is difficult to determine an objective measure. On the one hand efficiency considerations mean that costs should be kept down. On the other, too small a leadership team could have significant negative consequences. Bearing in mind that there is co-ordination between school and kindergarten in other areas and the fact that they share many parallel leadership challenges, it seems reasonable to conclude that a kindergarten needs a leadership team of the same size as a similarly sized school.

Leadership structures that extend beyond the headteacher alone do in some cases appear to involve reduced capacity at the top, while tasks are increasingly being delegated downwards to the pedagogical leaders. It is important to see the entire leadership, and the pedagogical leaders, in context when developing new leadership structures. It is also important to consider local factors, something which will lead to variations in how leadership teams are designed. The expert panel should still like to point out that the law clearly states that overall responsibility for the kindergarten rests with the headteacher. It is also reasonable to assume that a kindergarten must be viewed as an integrated unit and that the headteacher must be based in, be familiar with and retain responsibility for the kindergarten. In light of the fact that headteachers are expected to engage in systematic development work in an increasingly complex enterprise, it is important that hey hold a master degree. Master qualifications will also be important for leaders of larger, more complex and more formal organisational systems. The CoRe project highlighted how competence should not just be demanded from personnel; the system also needs to be competent. The organisation and its management systems must be structured in such a way as to enable systematic evaluation and development of its activities (Urban et al., 2011, p. 21). As far as Norway is concerned, this will usually mean that the kindergarten leadership's capacity for development must be strengthened.

It would appear that the relationship between headteachers and pedagogical leaders often involves division of labour and delegation. Team leadership does not appear to play an important role at kindergarten level. On the contrary, the headteacher and pedagogical leader have their separate areas of responsibility, and tasks that were previously the duty of the headteacher are now being delegated to the pedagogical leader. It is necessary to boost skills levels in this leadership role.

1.4.4 Public governance and professional practice

Public governance in the kindergarten sector has developed over time, and it was an important change when responsibility for the sector was assigned to the Ministry of Education and Research and after local councils were obliged by law to offer kindergarten places to all children from the age of 1. Since around 2000 ECEC policy has increasingly focused on quality as an objective. This is reflected in several white papers (White Paper 27 (1999–2000) and White Paper 16 (2006-2007) (S. Mordal, 2014, p. 20). Quality as a policy goal was proposed and promoted by the OECD (Urban et al., 2011, p. 20). Quality objectives are frequently set out in skills strategies and in the principle of kindergartens as learning organisations but also in capacity-building initiatives such as guidelines, templates and other resources, especially those issued by the Directorate for Education and Training. Central governance of quality in ECEC does not only take the form of formal regulations, in other words.

Neither the Directorate for Education and Training nor the Ministry of Education and Research has dedicated kindergarten departments. Both co-organise kindergartens with schools. This should not come as a surprise in light of the political ambition of seeing school and ECEC as a whole. It should be added that it is necessary to assess how ECEC expertise is applied as a basis for policy analyses and recommendations in this rather new central organisational structure. EC pedagogy is different, and it is important that the central administration possesses the necessary expertise on ECEC. The co-ordination of kindergarten and school has been institutionalised due to the new organisational structure in the central administration.

The recently revised Framework Plan for Kindergartens (Directorate for Education and Training, 2017) plays a particularly important role in the central governance regime. The ambition for the new Framework Plan was to make it clearer and more binding. It has been designed as a statute, that is as a regulation and a regulatory curriculum. This means that its wording and internal consistencys must be observed in greater detail than was the case with past Framework Plans. The wording used in at least some of the learning areas is fairly general, and it is unclear what constitutes objectives, main contents, progression and good working methods. There is evidently a need to develop subject didactics in the different learning areas, and projects should be initiated to that effect. Many of the more specific elements that we may wish to strengthen will be key in this respect. The learning areas should be integrated in the holistic pedagogical tradition that exists in Norwegian ECEC (see the more detailed discussion on this topic above).

Because the Framework Plan is more regulatory than previously, it should impose stricter criteria for internal structures and cohesion. The tradition of preparing school curricula with general elements which are then incorporated into guidelines for the pedagogical process and into the subjects is also reflected in the Framework Plan, which starts with chapters on values, roles and responsibilities and the purpose and contents of kindergartens. Chapters 4 to 9 are more specific. If the contents of the general sections are not reflected in Chapters 4 to 9, it will lead to conflict between the different sections. The expert panel asks whether the holistic pedagogical approach is adequately embedded in the more specific chapters in the plan. It is worth considering whether the points listed on page 43 should be strengthened so that the holistic pedagogical approach is more clearly embedded in the plan at this level as well. The heading in Chapter 7 should also be reconsidered because it signals that the chapter will go on to describe what pedagogical practices in kindergarten entail, even though it is difficult to see how Chapter 7 constitutes a comprehensive summary of these practices.

In the Norwegian and Nordic tradition there have been close links between the authorities and the professions, and the role of the professions is developed and safeguarded in partnership with the authorities. One key question surrounds the role of kindergarten teachers as actors in national governance processes when governance begins to shift more towards pedagogical content and quality. Are they participants, a protest group or recipients of policy? One especially important question in this respect concerns their professional skills and resources as a national body of professionals, which must be distinguished from the trade union element. If kindergarten teachers are to participate in developing national policy, they must be given professional authority.

Another question is whether governance structures have been established locally to follow up on the government's ambitions for quality and co-ordination. These ambitions are difficult to implement at a local level, both in terms of keeping up to date with them and when it comes to assessing them and adapting them for use locally. The average kindergarten would need assistance, which is often provided by the owner. The question is how small kindergartens with an owner with insufficient capacity and professional expertise can keep up with developments. As mentioned above, it may be necessary to look at whether such kindergartens can enter into partnership agreements with the local authority in order to obtain the support that they need.

Local councils generally have very different starting points for their role as the local ECEC authority if their responsibilities extend beyond ensuring that there are enough places and overseeing minimum standards. The trend in the years since 2005 towards quality development and co-ordination has created

tension in the local authority's role in the ECEC sector. This tension is likely to increase rather than decrease. Firstly, there is growing tension between the government's ambitions for professional development and quality and local authorities' capacity to assist kindergartens locally, because many authorities have limited capacity and expertise to follow it up. Secondly, local authorities act as both advisors and inspectors of private kindergartens, which again involves a conflict. One the one hand, some of these private providers are so large and resourceful that it is not certain that smaller local authorities can maintain a meaningful governance role. On the other hand, many local authorities are both inspectors and competitors of private kindergartens, something which undermines the legitimacy of their inspections. Thirdly, local authorities have varying and limited organisational and legal means of involving private providers in joint quality development and in the co-ordination of kindergarten, school and early intervention that the government's ambitions require. There is tension between this increasing need for co-ordination on the one hand and the private owners' responsibility for and investment in quality development in their kindergartens on the other. This is especially true for the largest owners.

International research also addresses such co-ordination. The authors of a report on skills requirements in the kindergarten sector produced for the European Commission stress that competence should extend not only to personnel but also to the system itself. They point explicitly to how multi-agency co-operation on policies directed towards children, such as between school, kindergarten and other support structures for children, should be part of a competent system (Urban et al., 2011, p. 21). They emphasise that the authorities' responsibilities are not limited to just ensuring minimum legal requirements; they must also include quality development and be subject to democratic governance (p. 23). They call this "systems of evaluation, monitoring and quality improvement" (pp. 25–27), and they highlight the participatory and dialogic aspects of such systems and believe that standardised instruments are too restrictive. They warn against split systems, which they believe will lead to fragmented provision (pp. 22, 46). The need for such local co-ordination and locally adapted welfare services is one key reason for Norwegian local authorities being generalists. Both the Local Government Act and other legislation such as the

Public Health Act assign such general responsibilities to local authorities. If a local authority is to assume this responsibility, it must have the required professional and organisational capacity, including ECEC expertise. It may be necessary to strengthen inter-municipal co-operation. Such co-ordination and collaboration on quality development is probably working well in many places on a voluntary basis, but it is not a certainty that it will continue to do so. Local authorities therefore need the law to help ensure such co-ordination. A dedicated enquiry is necessary to establish how this can be resolved legally and organisationally. In this respect it may be worth looking at whether it is possible to refine the provisions on the responsibilities of the local authority and those of the owner. The same goes for the provisions concerning co-operation on the transition from kindergarten to school, which already require the parties to work together.

Increased municipal responsibility may conflict with the desire to make room for alternative provision from private operators. Yet more than anything, strengthening municipal responsibility for co-ordination, which tends to be common practice in Norwegian welfare policy, comes into conflict with the big private kindergarten owners who spend considerable resources on their own quality development and pedagogical profile and programmes. The longer they spend developing these initiatives, the more difficult they will find it to adapt them to the growing number of local authorities they are having to deal with, all of which may have their own initiatives and co-ordination structures. To put a slightly tabloid slant on it, the biggest private providers have grown too big for municipal scrutiny and for a potentially reinforced municipal responsibility for co-ordination and quality development.

It is therefore worth looking more closely at whether responsibility for inspections could be shifted to the county authorities. Another thing that should be examined is whether it is possible to strengthen local authorities' capacity for co-ordination and joint quality development, yet in a way that protects private owners' considerable investment in quality development.

1.4.5 Kindergarten teacher training

Kindergarten teacher training has become more practice-driven with a weaker academic approach to

the teaching role and to children's development. The expert panel supports the evaluation committee's view that profession-orientation is about more than just practice-orientation. In a professional perspective the relationship between academic and practical knowledge is key. Moves to strengthen teacher training should include further development of both theoretical perspectives and practical work. Integrating the various subject components is a key aspect of training for the profession. Similarly, EC pedagogy is based on a holistic pedagogical approach in which pedagogical content, play, learning and care are seen in context. This integration must be made clear in the regulations on kindergarten teacher training. Neither the regulations nor the national guidelines on kindergarten teacher training make plain the need to integrate care-giving, play, learning and formative development in the pedagogical process. It should be made explicit that a holistic approach to pedagogy must be a shared and binding element in EC pedagogy. There is a need for a conceptual clarification of the core of professional kindergarten teaching practice and to reinforce the effort to develop shared theoretical perspectives across the training programmes and in professional practice.

On that basis we would suggest a number of measures that can help strengthen kindergarten teacher training both academically and practically. The expert panel cannot and will not propose a particular model or structure but believes that teacher training needs to be subjected to critical analysis. This analysis should emphasise both academic and practical knowledge. It is important to take into account the strengths and weaknesses of the academic staff on the teacher training programmes as well as organisational and cultural considerations. The main emphasis should be on academic content, on the structure of the training and on the structure that exists between training and the field of practice. Based on the analyses that have been performed, we have listed the issues that we believe need to be evaluated in the sections below. There is a significant degree of concurrence between these suggestions and the recommendations made by the evaluation committee.

The basic structure and areas of knowledge should be examined with a critical eye

This topic was not part of the evaluation committee's mandate. Our analysis of the evaluation committee's

assessment and other relevant research found that there are problems of both an organisational and an academic nature, and the subject specialists' role as scientists and researchers is not given due consideration. The predetermined integration of subjects (in the areas of knowledge) represents a break with a tradition in which cross-disciplinary and multi-disciplinary projects have long played a key role. Nor is it clear how the structure supports the basic structure of kindergarten practice with its integration of pedagogical content in play, care-giving, learning and formative development. The expert panel is open to the relatively dramatic option of returning to the subject structure of the old preschool teacher training model. Other alternatives are also possible. However, it appears necessary to ensure more flexibility for multidisciplinarity and better subject integration.

Increased funding is required

Kindergarten teacher training is a varied programme of study in terms of subject content and includes an unusually wide range of scientific subjects. The need to integrate subjects - and subjects and pedagogy - is great. It is also logistically, organisationally and academically challenging. It requires funding that is commensurate with the level of responsibility that the profession holds. Despite the major and far-reaching changes made to kindergarten teacher training since 2013, the level of funding made available by the Ministry of Education and Research does not suggest equity with the teacher training programmes for primary and secondary school (Greve et al., 2014b, p. 99). Although it is true that funding was provided for accompanying research when the new Framework Plan for Kindergarten Teacher Education was introduced in 2013, subsequent data shows that kindergarten teacher training was given lower priority than primary and lower secondary teacher training. The funding for the current kindergarten teacher training programmes therefore requires action. In recent years training providers have called for the three-year programme to be moved to a higher funding category at the ministry. This means a funding increase which is commensurate with the level of responsibility the profession has for the youngest children in society and with the importance of ECEC to both individuals and society as a whole. There is tough competition for resources for teacher training, but kindergarten teacher training is lagging behind.

Pedagogy must be strengthened

Evaluations and relevant research are unequivocal in their assessment of the need to boost the role of pedagogy. This involves several dimensions. It involves both the subject structure and the relationship between the subjects and how academic staff are organised. The structure with areas of knowledge and the role of pedagogy inside this structure has been detrimental to the subject of pedagogy. However, the subject also needs to "take a look at itself" in light of multiple perspectives such as the positioning of pedagogy in kindergarten teacher training, its emphasis on theory, knowledge of children's development and an international outlook. Key concepts such as care-giving, play, learning and formative development should be explored both theoretically and practically. It would also be desirable to strengthen EC pedagogy research based on theory, to develop a broader spectrum of methodological approaches, and to strengthen quantitative and comparative studies.

The work to further develop the relationship and interaction between teacher training and the field of practice should be strengthened

The students' practice placements are an important part of the relationship, but the relationship should also be about how the field of practice can help shape the training and how the training programmes can help develop kindergarten practices further. This could involve the development and strengthening of partnership agreements in which training, research and development and skills development all play a part in both contexts. More specifically it could involve projects on training kindergartens, job sharing and shadowing programmes for teacher trainers.

Qualification for master studies

The kindergarten teacher training programme should also qualify the candidates for further study at master and PhD levels. This requires a strengthening of scientific expertise on the teacher training programmes. Theory and academic knowledge on the programmes should also be strengthened with particular emphasis on analysing kindergarten as a civic and pedagogical arena.

Student quality

The enrolment criteria are not strict. The process of helping students with particularly limited prior

knowledge is very difficult. Language skills are highly important. Candidates should be required to have a grade 3 in Norwegian as a minimum.

1.4.6 Professional skills development

Our mandate asked us to discuss the development of kindergarten teaching as a profession. Above we have pointed out that this requires development in professional practice, changes to the training model and governance formats, professional integrity when dealing with external demands from parents and others, and a management and organisational structure that is conducive to professional development. This is what professional development is about in a broader sense. A narrower definition is that professional development is also a question of pedagogical and organisational innovation, new ideas and improvements, i.e. new skills.

As we have shown above, there are numerous actors both in and outside kindergartens driving such professional development. This diversity must be considered a benefit. Yet could it be that some of these actors should be given a more prominent role to play? Scientific research is essential in a professional perspective, and developing ECEC research is therefore a priority. It should be affiliated to the teacher training institutions in particular, but as their research traditions are relatively recent, it must be assumed that they would benefit from co-operating with other research communities, at least in some subject areas. The way in which these research communities are structured and the manner in which they ensure academic robustness will continue to have an impact for a long time. Because this is of the utmost importance it is discussed separately above in the section on future research. Both the kindergarten teacher training institutions and the authorities have a responsibility in this respect, and it will be important to develop long-term research programmes.

On the other hand, it is also important that kindergarten teachers themselves play a leading role in developing the profession's knowledge and working methods. It is important that they participate in research projects but even more important that there is continuing development taking place in every kindergarten. It would also appear that many kindergartens are already involved in development projects, but what constitutes development and change and what is merely the implementation of changes imposed externally is difficult to say. One important task is to promote and strengthen such kindergartenbased development projects. The owners and the authorities are responsible for allowing that to happen. As discussed above, it is important to develop the headteachers' expertise. This is one of the main arguments for requiring headteachers to hold master degrees as a general rule. It is also the reason behind the suggestion to develop teams or staff functions capable of undertaking such development. Large organisations are of course better equipped to draw on resources from multiple kindergartens and establish their support functions centrally. In a professional perspective it is important that teachers are – and are capable of being – participants in this process.

Which form should this new profession-focused knowledge take? There appears to be a degree of polarisation between what some call manuals and specific standards on the one hand and general professional skills development on the other. These are two polar opposites, and professional development will often take place somewhere in between the two. Both are necessary. In some areas, including when intervening in difficult situations, it may be useful to establish defined procedures and fixed formats. On the other hand, it is also important to build capacity for general problem-solving and evaluation locally. This may require more general professional development and reflection around the impact of new knowledge about 0-1-year-olds on professional practice, for instance.

Disseminating profession-orientated development and new skills is another key issue. One-off training days are of fairly limited value. Innovation is needed in terms of communication platforms, and that is already happening. Digital platforms will probably come to play an increasingly important role. The innovation taking place is largely driven by public funding, and the sector could benefit from knowledge sharing and mutual learning. It would therefore make sense for all actors in possession of new knowledge, working methods or experience of public funding to share new insights and experiences.

1.5 Concluding summary

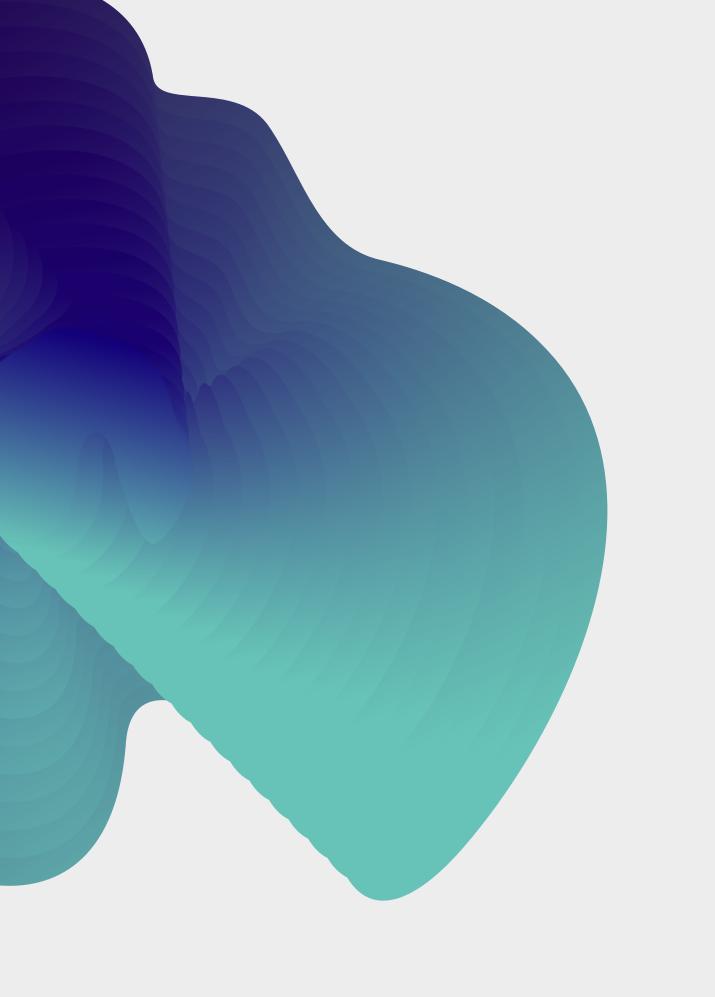
The expert panel has reviewed and analysed extensive research documentation on kindergarten

teaching as a profession and discussed how the profession can be developed further. We have adopted theoretical perspectives when discussing the role of kindergarten teachers and considered the various positions held by teachers when they practise their profession.

In terms of working with children we have identified a number of areas that can help make holistic pedagogical practice more systematic in light of the values, objectives and contents of the Framework Plan. Holistic pedagogy is based on a particular perspective on learning which differs from that adopted in schools and which is both planned and designed while also leaving room for spontaneity. Professional practice takes place in a field of tension which requires the teacher to constantly exercise professional judgement on how play, learning and care-giving can be consolidated to create good conditions for learning for the children. At the same time kindergarten teachers must manage, balance and concretise a set of values.

In order to deal with the complexities of practice and ensure good professional practice, the teacher must be able to apply different forms of knowledge during all activities that take place over the course of the day – activities which are interlinked in different ways and with different focal points. In other words, kindergarten teachers need robust professional knowledge

in order to be able to analyse different situations. They must bring to mind their knowledge and adapt it to new situations and different relationships to enable them to respond in an appropriate manner. If pedagogical practice is to be performed with a holistic and sustainable pedagogical approach, the teachers must be given frameworks that grant them the necessary level of autonomy and which ensure that professional practice can be developed further. We have highlighted a set of framework conditions in the areas of leadership and governance, kindergarten teacher training and professional development, and we have identified key decisions and made certain recommendations that we believe will strengthen the kindergarten teaching role and result in good professional practice.



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