Chapter 4

Management of the teaching workforce in Denmark

This chapter discusses the initial training, distribution, professional development, working conditions, and support for and leadership of the teaching workforce across the public Danish public school system. It also discusses the use of other staff to support student learning as well as the use of data, evaluation and assessment in schools to support improvements in student performance and attainment levels. It highlights the positive changes Denmark has implemented to strengthen initial teacher education and the availability of central funding for the competency development of in-service teachers. It identifies a desire for and instances of collaborative work at all levels of the system as well as a growing focus on pedagogy and goal-oriented teaching. But it also analyses the challenges in moving from a teaching to a learning focus. This includes, in particular, the potential to strengthen teacher professionalism and pedagogical school leadership. The chapter analyses the potential benefits of the new framework for the utilisation of teachers' working time for the organisation of teaching and learning in schools, but also discusses stakeholders' concerns about the new arrangements and challenges for adapting to this change. In addition, the chapter discusses the policy of inclusion of children with special educational needs in regular education. The chapter concludes in suggesting a number of policy recommendations to address these issues.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Context and features

Initial education and professional development of teachers

The current initial teacher education model in Denmark is based on a four-year professional bachelor's degree which was introduced in the early 2000s. As of 2015, there were 16 degree programmes for initial teacher education offered at seven university colleges across the country which may also develop a certain specialisation (e.g. in science education). Previous teacher education programmes involved a relatively detailed regulation of the content and structure of initial teacher education. This was especially the case following a reform introduced in 2006. Based on a four-year evaluation process by a mandated group of experts, however, a number of significant changes were again proposed in 2012 (Følgegruppen for ny læreruddannelse, 2012). These recommendations were followed up by a comprehensive reform of initial teacher education that same year. Changes to initial teacher education that were implemented in 2013 involved a significant deregulation process. A ministerial order describes competency profiles, that is the professional competencies expected of future teachers for each subject, as well as the overarching structure of initial teacher education. The precise organisation and content of individual degree programmes is left to university colleges themselves. In addition, this reform changed initial teacher education to be slightly less oriented towards teaching subjects and more towards general pedagogical content. The 2012 evaluation had concluded that pedagogical content had been somewhat neglected in favour of subject content. As a result, a system of modules with competency examinations focusing on subject didactics as well as subject content was introduced. On average, a teacher student is expected to graduate with teaching competencies in three main subjects, but it is possible to graduate with just two main subjects. The 2012 reform of initial teacher education also made special needs education and Danish as a second language obligatory for all teacher students.

While the priority for teacher education institutions used to be to produce enough candidates to fill all teacher positions in schools, the focus has recently shifted towards the quality of candidates. Entry into teacher education used to be strictly based on marks obtained in upper secondary education, but the dropout rates of students entering this programme used to be very high (as much as 41% in 2005 according to data from the Ministry of Higher Education and Science and Statistics Denmark) and needed to be reduced. As a result, admission requirements have become stricter and there are now specific requirements in terms of performance in upper secondary education. Entry is now a two-tier process. Those with the highest marks are granted direct admission, but anyone else wishing to enrol has to take an examination including an interview both of which are scored to determine entry. As initial impressions of the Ministry of Higher Education and Science suggest, the dropout rate has already been somewhat reduced with the introduction of these new admission requirements (15.6% among first year students and 36% among all teacher students in 2014 according to data from the Ministry of Higher Education and Science and Statistics Denmark).

Professional development for Danish teachers is not regulated by law and there is no minimum requirement. Decisions about teachers' participation in professional development rest fully with the school management, which may plan teachers' professional development activities in the context of school development priorities. Costs for participation in professional development are partially subsidised or covered by the government. Participation in professional development activities has only a limited direct effect on teachers' pay levels or career progression (e.g. promotion is not conditional upon having taken part in professional development activities, but teachers can receive a supplementary salary for some professional development activities). Professional development is primarily organised by the Danish School of Education, university colleges and municipalities. Specialised training institutions, teachers' associations and the Ministry for Children, Education and Gender Equality also offer in-service training activities. Regional committees for teacher in-service training have been established to align municipal and school training needs with the supply of programmes by professional development providers (OECD, 2014a; Shewbridge et al., 2011).

As part of the 2014 Folkeskole Reform, the Danish government has set 2020 as the year in which 95% of the subject-divided lessons should be given by teachers who have either obtained main subject qualifications from their initial teacher education within the subjects they teach, or who have obtained corresponding academic qualifications through continued professional development. Milestones on the way to the target have been set at 85% in 2016 and 90% in 2018. Experienced teachers can take courses at teacher education institutions and sit competency exams to obtain corresponding academic qualifications in the subjects they teach. This has resulted in schools examining what competencies they need and requires schools to sponsor teachers to take courses to fulfil the school's needs. The Danish government has allocated earmarked resources for municipalities to develop the competencies of teachers and school leaders. These available resources amount to DKK 1 billion. Other areas that municipalities should use the extra resources for besides the qualification in subjects teachers teach include the inclusion of students with special needs, classroom management, and other specialised areas such as ICT (Information and Communication Technologies). These changes in initial teacher education and professional development for experienced teachers are part of a move to professionalise teaching in Denmark.

Data from the OECD 2013 Teaching and Learning International Survey (TALIS) indicate that Danish teachers participate to a similar extent in professional development as teachers in other countries, but that they tend to spend less time on professional development overall than in other countries. 86.4% of lower secondary teachers reported having undertaken some professional development activities in the previous 12 months, only slightly below the TALIS average of 88.4%. While 72.9% of lower secondary teachers in Denmark reported having participated in courses or workshops over the past 12 months (TALIS average: 70.9%), they spent fewer days on average on such activities than teachers in other countries. On average across TALIS countries, teachers spent 8.5 days on courses and workshops. Teachers in Denmark spent only four days on these professional development activities. Also, only 10.2% of teachers in Denmark reported having taken part in a qualification programme during the last year, compared to 17.9% of teachers on average across TALIS countries. Observation visits to other schools were less common among teachers in Denmark (5.7%) than the average for all TALIS countries (19.0%), but those teachers in Denmark who did visit other schools spent more time on this activity (4.6 days on average) than the average across other countries (three days) (OECD, 2014b).

Teacher working conditions

The working conditions of teachers in the Folkeskole are determined in negotiations between teachers and municipalities through their respective stakeholder organisations, the Danish Union of Teachers and Local Government Denmark (KL/LGDK) (see Box 4.1 for an overview of teacher working time arrangements in Europe based on a 2015 Eurydice report). The agreement resulting from these negotiations used to define the annual number of working hours, which included teaching and preparation time and time for other tasks. Preparation time was fixed proportionally in relation to teaching time with a factor 1 to 1 and teachers had to teach the same amount of time irrespective of their subject and required preparation time (Eurydice, 2016). In 2013, national legislation (Act no. 409) revised the agreement that was then in place to give schools and school leaders greater flexibility in the management of their teaching workforce, while leaving teachers' total working hours unchanged (also see Chapters 1 and 2). Unlike previous agreements, the new regulations do not stipulate the amount of time to be used for different purposes, such as teaching and preparation. Decisions about the use of teachers' time and place of work now rest with the school leadership and teachers are expected to work differently.

Box 4.1. Organisation of teachers' working time in Europe, 2013/14

A 2015 Eurydice report provided an overview of the organisation of teachers' working time in Europe and teachers' contractual obligations in terms of their teaching time, availability at school, and their total working time.

In most countries, teachers' employment contracts specify the number of hours they are required to teach. In 35 systems, teaching time is contractually specified. Only five education systems – Estonia, Sweden, and the United Kingdom (England, Northern Ireland and Wales) – do not contractually specify a number of teaching hours, while two (Belgium and Italy) regulate only teaching time. The weekly total varies considerably among countries, ranging from a minimum of 14 hours in Croatia, Finland, Poland and Turkey, to a maximum of 28 hours in Germany.

As regards total working time and time of availability at school, three scenarios are possible. A country's regulations can specify: i) requirements pertaining to both (as is the case in 10 education systems); ii) requirements applicable to one or the other (the situation in the majority of countries); or iii) no requirements with regard to either (as in Belgium and Italy). The great majority of countries also centrally regulate the total working time of teachers, which averages 39 hours a week. On average, teaching time constitutes 44% of a teacher's total working time. In 18 education systems, teachers' obligatory time of availability at school is contractually specified either in addition to or instead of teachers' teaching time and/or working time. Nine education systems refer specifically to working time, teaching time and time available at school, while the remainder cite them in different combinations. Among those countries that regulate both total working time and obligatory availability at school, the gap between the two (in hours) varies greatly.

Source: European Commission/EACEA/Eurydice (2015), The Teaching Profession in Europe: Practices, Perceptions, and Policies, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:The_Teaching_Profession_in_Europe:_Practices,_Perceptions,_and_Policies.

With the 2014 Folkeskole reform, a longer school day was introduced. Teachers are, thus, on average expected to spend a higher proportion of their total working time teaching in the classroom and to be present for a greater amount of time at school. Under Act no. 409, on

average, teachers teach about two clock hours more per week within regular working hours (18.3 hours compared to 16.3 hours prior to the new working time arrangements). The new working time regulations came into force in the school year 2014/15. The 2014 Folkeskole reform in general has also affected expectations for teachers in terms of the organisation of their working time. The reform changed the length of the school day for students; provided for more lessons in Danish and mathematics, earlier foreign language learning, daily exercise and homework assistance while at school; and sought to promote greater collaboration between teachers and staff at school.

As reported for the OECD Education at a Glance, in 2013, the latest year for which comparable data are available and the year prior to the introduction of the new framework for the utilisation of working hours, the total statutory working time for primary and lower secondary education amounted to 1 680 hours over the school year. This was slightly higher than the OECD average of 1 600 hours for primary and 1 618 hours for lower secondary education. Net teaching time amounted to 662 hours per school year, which was less than in many other OECD countries (OECD average: 772 hours for primary and 694 hours for lower secondary education) (see Figure 4.1, OECD, 2015a). With the implementation of the 2014 Folkeskole reform, it is expected that teachers on average teach 80 hours more during a school year. A school year is usually 40 weeks in Denmark.

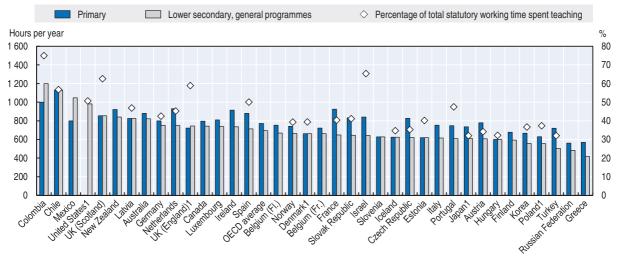


Figure 4.1. Number of teaching hours per year and share of working time spent teaching, 2013

1. Actual teaching time.

Note: Net statutory contact time in public institutions. Countries are ranked in descending order of the number of teaching hours per year in lower secondary education.

Source: OECD (2014a), Education at a Glance 2014: OECD Indicators, http://dx.doi.org/10.1787/eag-2014-en, Table D4.1.

The OECD TALIS 2013 provides some information about the ways in which lower secondary teachers distributed their weekly working time prior to the introduction of a new framework for the utilisation of working hours. Lower secondary teachers reported to spend on average 18.9 hours per week teaching, around the TALIS average of 19.3 hours, and 7.9 hours on individual planning or preparation (either at school or out of school), slightly more than the TALIS average of 7.1 hours (see Figure 4.2). The TALIS average, however, masks significant differences between countries. Looking at other Nordic countries, for example, Finnish lower secondary teachers reported to spend more of their weekly working time on teaching (20.6 hours per week) and less time on preparation (4.8 hours per week) than their

Teaching
Individual planning or preparation of lessons either at school or out of school
Team work and dialogue with colleagues within the school
Marking/correcting of student work
Student counselling (including student supervision, virtual counselling, career guidance and delinquency guidance)
Participation in school management
General administrative work (including communication, paperwork, and other clerical duties you undertake in your job as a teacher)

Communication and co-operation with parents or guardians

Engaging in extracurricular activities (e.g. sports and cultural activities after school)
All other tasks

Figure 4.2. **Distribution of teachers' working time, 2013**Average number of hours lower secondary teachers report having spent on different activities during the most recent complete calendar week

Note: A "complete" calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes hours worked during weekends, evenings or other off-classroom hours. The sum of hours spent on different tasks may not be equal to the number of total working hours because teachers were asked about these elements separately. It is also important to note that data presented represent the averages from all the teachers surveyed, including part-time teachers.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

Danish counterparts. In Norway and Sweden, lower secondary teachers reported to spend both, less working time on teaching and less working time on preparation than lower secondary teachers in Denmark (Norway: 15.0 and 6.5 hours per week respectively; Sweden: 17.6 and 6.7 hours per week respectively). The overall weekly working time reported by lower secondary teachers in Denmark was lower than in Sweden, but higher than in Norway and Finland (OECD, 2014b).

Considering the distribution of teachers' time on different tasks, since teachers in Denmark spent somewhat less time on teaching, they had more time available for preparation and other tasks. Following the 2014 Folkeskole reform and the introduction of a new arrangement for the utilisation of teachers' working time, teachers are expected to teach more hours. As a result, teachers experience less time for preparation and other tasks. Resources have overall been reprioritised from preparation and other tasks to teaching. This requires an adjustment from teachers to prepare for their lessons and work in another way (e.g. to a higher degree sharing teaching materials) to fulfil other tasks required of them by their school leadership.

Teacher appraisal, feedback and collaboration

There are no national requirements for teacher appraisal in Denmark. Teacher appraisal remains very much an internal school matter, is conducted on a voluntary basis and practices are defined locally, usually by the school with the possible influence of municipal

requirements and/or guidelines. According to the Folkeskole Act, the school principal is responsible for the school's quality of teaching as well as the overall administrative and pedagogical management of the school. As a result, the main responsibility for designing, introducing and organising teacher appraisal procedures within the school lies with the school principal. Actual teacher appraisal practices in Danish schools are poorly documented, but they seem to be based on a culture of school leaders showing confidence in their teachers. Appraisal seems to be taken as a school-teacher or teacher-teacher dialogue and procedures are defined in collaboration with teachers (Shewbridge et al., 2011).

The 2014 Folkeskole reform aims to enhance collaboration between colleagues in schools. During school visits, teachers consistently expressed interest in working with other teachers in their school, receiving feedback on their teaching from them and working together towards common goals. In the OECD review team's discussions with teachers in Danish schools, teachers also reported collaborating with other teachers of the same subject and year level around what they are going to teach and working on their unit or lesson plans together. This included sharing plans and resources and seeking consistency across classrooms. Teachers did not report that they spent collaborative time discussing individual students and their learning although they expressed an interest in doing so. They reported that following the changes to their working day, collaborative time has, however, been increasingly difficult to find. In several schools visited during the review, specialised teachers, sometimes called coaches or impact coaches, had less teaching responsibilities and more time devoted to working with individual teachers on their teaching practice. This practice was largely voluntary and teachers experiencing this type of work expressed very positive feelings regarding their experiences.

Other staff in schools

There are other types of staff working in schools to support students in a variety of ways, including early childhood development trained pedagogues, behaviour, contact and wellbeing counsellors (Adfærd-Kontakt-Trivsel, AKT), and teacher's aides or assistants.

The profession of pedagogues is comparable to pre-school teachers in other countries. Pedagogues are trained in supporting all stages of human development from birth to old age and can be specialised in early childhood education and care, leisure and youth education (Skolefritidsordning og Fritidshjem, SFO), or other areas of particular interest in the school system. Depending on the context in which they work, they might be compared to recreational instructors, play workers or social workers. In all of their work, pedagogues focus on the importance of play and children's and young people's comprehensive development, which includes their intellectual, social, emotional, neuromuscular, ethical, moral and aesthetic development (BUPL, 2016).

AKT counsellors have been employed in the Folkeskole since the late 1990s. These specialist teachers focus on social processes in schools and constitute a central resource in areas related to behaviour, psychology and wellbeing. They can support individual students in and outside of classrooms and work together with teachers in the classroom to help offer differentiated teaching according to students' needs. AKT counsellors can also initiate training in schools related to social issues, the development of social skills and inclusive communities, or general health education with a focus on social wellbeing and the prevention of bullying and violence at school. A further task may be to understand and resolve conflicts and bullying in schools. AKT counsellors receive specific training and preparation for their role. The amount of time that AKT counsellors can dedicate to their

role varies greatly between schools and municipalities. Schools can also employ other professionals, such as counsellors and psychologists (DCUM, 2016).

Teacher's assistants have less training and are often hired to support students with special needs within a school. The use of these differentiated types of staff varies greatly from school to school and municipality to municipality. This is likely a result of the autonomy that school principals have to staff their schools within the budget that the school has been allocated by the municipality. As the OECD TALIS 2013 indicates, there are overall 10.3 teachers to one pedagogical support staff in lower secondary education. This compares to a teacher-pedagogical support personnel ratio of 14.4 on average across TALIS countries, and 8.2 in Finland, 5.4 in Norway, and 7.1 in Sweden (OECD, 2014b).

School autonomy and school leadership

A hallmark of Denmark's education system is its decentralised nature that places a high degree of responsibility in resource decision-making at the local and school levels (also see Chapters 1 and 2). This is evident in the autonomy that school principals enjoy to manage their school budgets, including staffing. In visits with schools and with municipal officials, stakeholders described this autonomy. In some municipalities there are a minimum number of teachers required, based on the number of classes the municipality determines a school should have. Otherwise, however, the school principal can determine which types of and how many staff members are hired.

School principals in Denmark are seen as the management and extension of the local municipal government. Besides a teaching background, there is no formal education requirement to be eligible as a school leader in Denmark. School leaders are former teachers and may go on to take a diploma course, and then a master's degree, which are largely theoretical in nature. The Danish Association of School Leaders offers a three day course for newly appointed leaders. Several municipalities described how they worked with school leaders in a collaborative manner to support their on-the-job training in areas such as budgeting, school improvement planning and the monitoring and evaluation of school improvement initiatives. Municipalities are increasingly using management by means of objectives for their school principals. Results contracts, school principal agreements and other forms of contracting serve as a means to define the objectives for the individual school (and school principal), typically for a one- or two-year period. Consequently, monitoring and performance systems are used to continuously assess if the school is performing according to the set objectives. Even though these instruments are implemented as management tools as such, they are equally important to hold schools and school leaders accountable for performance (OECD, 2013b).

School self-evaluation and the use of data in schools

Schools in Denmark are often responsible for the completion of a biannual quality report to be submitted to the municipality to feed into the municipal quality report, but this depends on the municipality (also see Chapters 1 and 3). This report can become a stimulus for discussions between municipal education directors and school leaders. Schools have access to many forms of data, including student performance data, student wellbeing data and budget utilisation data and the development of a data warehouse by the Ministry for Children, Education and Gender Equality seeks to make the available data more easily accessible (also see Chapter 3). Most municipalities visited required schools to set improvement goals for school improvement plans based largely on their self-evaluation data

and their student performance data. Municipal officials reported that these school improvement plans were usually discussed with the education director of the municipality once a year, but one municipality reported them being the basis for the professional development plans for the school leaders within an area or the municipality. Another municipality reported that school leaders were encouraged to use their school improvement plans as the basis for school leaders working together collaboratively on areas of need. There is no comprehensive overview of the instruments used to perform internal assessment of schools, but schools are likely to rely on various self-evaluation activities, which may involve a wide range of different methods of data collection (OECD, 2013b).

Strengths

A number of changes to strengthen initial teacher education

In recent years, a number of changes were implemented to strengthen initial teacher education in Denmark. These changes are expected to have a beneficial impact on the selection of candidates entering teacher education, the expertise acquired by teacher students throughout their initial education, and eventually the quality of teaching and learning in schools. The application process to initial teacher education programmes has undergone some changes to identify students who potentially would have difficulty completing the programme and the Ministry of Higher Education and Science reported that this had already somewhat reduced the dropout rate in initial teacher education.

Starting in 2013, the Bachelor of Education programme moved to a competency-oriented and outcome-based degree with objectives for each teaching practice. Institutions have standard competency examinations, but have some autonomy to create their own programmes leading to these competencies among their graduates and to design courses for experienced teachers to upgrade their competencies. These changes towards an outcome-based programme for teachers in many ways parallels changes in the curriculum and Common Objectives used for instruction in Denmark's schools. Teachers entering the profession are, then, used to honing in on the evidence that they have learned and can demonstrate certain skills and knowledge.

According to the typology of different models of teacher education put forward by Musset (2010), these changes indicate a desire to develop a model of "professionalisation" of teaching. Starting to promote this change in initial teacher education is well aligned with the move towards enhancing teacher professionalism in the last several years.

The central level has made available targeted funding for the professional development of teachers

As part of the 2014 reform of the Folkeskole, Denmark has set itself the goal to ensure that every teacher has the competencies and qualifications for the subjects they teach by 2020. To reach this goal, many teachers need to upgrade their skills through courses and written exams. The Danish government has committed itself to financing these courses (although not the teacher release time for participation) with earmarked resources allocated directly to municipalities amounting to DKK 1 billion. Schools can access this funding through their municipality. It is the responsibility of school principals to identify the competencies required within their school and to assign teachers to take these courses to meet the ministry's goal by 2020.

Most municipalities that the OECD review team visited reported that they relied on school leaders to determine the needs and to arrange for teachers at their schools to take the necessary exams and/or courses. University colleges have developed screening procedures for experienced teachers to define their competencies which are as yet uncertified. School leaders interviewed by the OECD review team reported that this was very helpful to them in planning their staff's future professional needs in the area of competency certification.

The introduction of a goal to fully qualify teachers in the Folkeskole for the subjects they teach and to enhance their general competencies together with the provision of earmarked funding to achieve this goal seems to address a need within the Danish education system. As data from the OECD TALIS 2013 suggest, a large proportion of Danish lower secondary teachers had completed a teacher education programme (93.5%, TALIS average: 89.8%), but more than one in three teachers reported that their formal education had only included content, pedagogy and practice in some rather than all of the subjects they were teaching. If analysed by different subjects, 5.2% of lower secondary teachers currently teaching reading, writing and literature reported not having received any formal education or training or professional development in this subject (TALIS average: 5.7%). However, 10.7% of teachers reported a lack of initial training and professional development for the teaching of mathematics (TALIS average: 6.6%), 14.9% for the teaching of science (TALIS average: 5.7%), and 20.8% for the teaching of modern foreign languages (TALIS average: 10.5%) (OECD, 2014b).

There is a desire for and instances of collaborative work at the central, municipal and school levels

Representatives at all levels within the school system expressed their desire to build on collaborative work to foster the improvement of student achievement and wellbeing. This sentiment was strongest at the municipal level where education directors and their staff expressed such a desire in all visits conducted. There was a genuine attempt in more than one municipality to make school leader collaborative work the norm. Many school leaders and some municipal school education directors described their efforts to increase their knowledge of collaboration by visiting jurisdictions known for collaborative work and examining how this might better be incorporated within their own context. Visits to other countries, including in particular to Ontario, Canada, but also other contexts, such as New Zealand and the United States, were referenced with regularity.

At the school level, leaders and teachers recognised the value of having educators with expertise work directly with teachers with the aim of improving teaching practice. The most common practice was working with an expert teacher on supporting individual staff of the school. School leaders typically assigned fewer teaching hours to these individuals to accommodate the extra work load with their peers. Teachers expressed how much they valued this type of support and some thought feedback from these colleagues more valuable to their teaching than feedback from their school leaders. However, no studies have been completed to evaluate direct improvements in student achievement as a result of this type of collaborative work.

Emerging practices of collaboration, teamwork and peer learning were also identified in a previous OECD review on evaluation assessment in Denmark conducted in 2010 (Shewbridge et al., 2011). As Shewbridge et al. noted, "work in Danish schools is increasingly organised in a way that grants opportunities for teamwork. Schools more and more are structuring work around teams of teachers (e.g. class team, form team, section team, subject team) which share responsibility for organising their work". TALIS 2013 data provide further

evidence for some teacher co-operation in Danish schools, which seem to be more developed than in other TALIS countries: only 11.4% of lower secondary teachers reported to never jointly teach as a team in the same class (TALIS average: 41.9%) and only 6.8% reported to never engage in joint activities across different classes and age groups (TALIS average: 21.5%), for example. However, classroom observations among peers are still rather rare: 45.0% of lower secondary teachers reported to never observe other teachers' classes and provide feedback (TALIS average: 44.7%) (OECD, 2014b).

Changes to the school day and scheduling autonomy of teachers' working time for schools provide opportunities to improve student learning

The introduction of longer school days as part of the 2014 Folkeskole reform coupled with the new framework for the utilisation of teacher working hours (Act no. 409) that typically also requires teachers to be present for a longer time at school provides some potential opportunities for schools and students that may contribute to improve student learning. Greater teacher presence in schools may help students learn and facilitate greater collaboration between teachers and other staff. In several schools visited during the review visit, students reported a greater level of self-confidence and a feeling of being better prepared for class thanks to teachers being more available in schools to work with them on their homework, for example. The presence of teachers at school for a prescribed period of time each day also presents an opportunity for teachers to participate in collaborative activities with colleagues.

Changes to the way in which teachers' working time is organised and teachers distribute their time for different tasks and responsibilities also entail potential benefits if schools use their new autonomy in this respect well and if teachers adjust to the new realities (also see Chapter 2). The new framework for the utilisation of working hours (Act no. 409) also defines a yearly norm of working hours and gives school leaders the ability to assign teaching time and other duties within this timeframe to meet the needs of their school as they see fit as the working time arrangement no longer describe what teachers should do and when. This working time conception recognises that teachers' work entails a wide range of tasks beyond teaching. And it gives school leaders greater autonomy over the work schedules for all of their staff than was previously the case. School leaders now have the flexibility to organise their staff around the learning needs of their school's students and the competencies, strengths, weaknesses, and learning needs of their staff. Such an arrangement is also the case in the Flemish Community of Belgium, for example. Here, school leaders have considerable room to manage their teacher resources and to manage the teacher hours allocated to the school in the way they see fit. As a school resources review of the Flemish Community suggests, this autonomy gives school leaders the ability to select the optimal distribution of teacher resources across classes and students and across roles and tasks within the school, enabling schools to adapt the use of teacher hours to the schools' specific needs and the student characteristics of each school (Nusche et al., 2015).

The new autonomy gives school leaders a range of new possibilities. For instance, school leaders can assign less teaching time to their classroom teachers in favour of having them work with other teachers in their area of expertise. School leaders can also use their new autonomy in this regard to support beginning teachers in their school. In case a beginning teacher requires more preparation time, school leaders could make the decision to assign less teaching time and fewer classes to teach. As Jensen et al. (2012b) argued, it is likely to be inefficient to have teachers of different levels of effectiveness and levels of experience having

the same teaching responsibilities. Giving more experienced teachers more teaching hours or more students or classes to teach and reducing new teachers' teaching hours so they can focus on developing their teaching skills at the beginning of their careers could improve teaching and learning. School leaders can also give consideration to teachers who may be teaching diverse subjects and require slightly more preparation time or to teachers taking on a leadership role at the form level or across the school. Alternatively, school leaders may assign more teaching time to teachers who are teaching several classes where very similar materials are delivered and who require less preparation, or to teachers who are receiving support of an expert teacher or who are co-teaching with another teacher who, as a result, may also require less preparation time.

In sum, then, this autonomy to organise teachers' working time is one more tool (along with data, support from expert teachers, time to work together, etc.) that schools can utilise to meet the needs of their students. Schools (teachers and leaders) must have the ability, then, to identify the most urgent student learning needs, connect those to the most urgent professional learning needs of their staff and of their leadership (school and perhaps municipal education leaders) and plan opportunities to work together towards meeting those needs. The elements are in place for this type of a change process to occur.

Experts and consultants are available at the central, municipal and school levels

The Ministry for Children, Education and Gender Equality has created a corps of learning consultants. These are experts in teaching and learning available centrally to support schools and municipalities in their school and system improvement efforts, if needed. Consultants are drawn from the school sector (mostly from schools and municipalities) and, after a period of time in the corps, they return to their respective municipality or school. This adds significant capacity to the Danish school system: it is a source of additional support to schools and municipalities during their tenure and a source of capacity building across the system as learning consultants go back to their original job with the experience they have gained in their role as a learning consultant. The requirement for learning consultants to return to municipalities and/or schools also ensures that good education professionals do not leave municipalities, schools and classrooms. It is also positive that municipalities seem to recognise the value of such a central body of experts and seem to have developed high levels of trust towards central learning consultants. Further potential benefits of the learning consultant corps include the creation of networks and peerlearning among schools through work in groups of schools; the creation of a circle of learning and evidence that brings knowledge to schools and municipalities, but also from the local to the central level; and links between initial teacher education and school practice.

Several municipalities visited by the OECD review team indicated that they had their own teaching and learning consultants or experts among their municipal staff. These were available to support schools and their teachers in the improvement of teaching and, ultimately, of the learning of their students. At the school level, several teachers and school leaders reported the use of staff teacher experts to support the learning of teachers within a school staff in a variety of ways. These varied from co-teaching with the class teacher and debriefing on the experience to sharing resources and strategies in discussion format.

Together with the increased opportunities and funding for teachers to advance in their professional learning and to acquire the necessary competencies, these support initiatives provide multiple opportunities to enhance the teaching skills of the workforce as well as

opportunities for teacher to teacher collaboration around teaching strategies and individual teaching practices. Fullan et al. (2015) report that the combined power of capacity building of staff with collaborative inquiry yields great impact for improvements in student achievement.

Box 4.2. The introduction of a learning consultant corps to support municipalities and schools

The Danish Ministry for Children, Education and Gender Equality has introduced a national body of about 80 learning consultants in 2014 to provide support to municipalities and schools for quality development, to spread good practices, and to facilitate school networking and peer-learning. Both schools and municipalities can ask for the support of a learning consultant and schools can also work together in groups with a learning consultant. Learning consultants work in teams and analyse the challenges a school faces based on school data and information on student performance. They then develop a school development plan, a strategy for change management, and indicators for monitoring and evaluation. Learning consultants collaborate with a ministerial research centre to learn about the latest evidence and to feed into the knowledge available in the research centre. They also collaborate with teacher training institutions to develop links between theory and practice. Learning consultants have diverse backgrounds, from teaching and school leadership to local administration in a municipality. They receive training and capacity building for their role and meet on a monthly basis to learn about new methods and evidence and to reflect about their experiences and challenges. Learning consultants can work in different arrangements. For example, learning consultants can work for two days a week in their learning consultant role at the ministry and for three days a week in the field. Learning consultants are typically hired for two years after which they return to a school or municipality. This allows the ministry to adjust the number and profile of learning consultants depending on the demand and also helps spread knowledge more widely across the system. Some municipalities in Denmark, such as Copenhagen, have developed and implemented their own systems of learning consultants to facilitate leadership and specialist advice to schools from practitioners with high credibility.

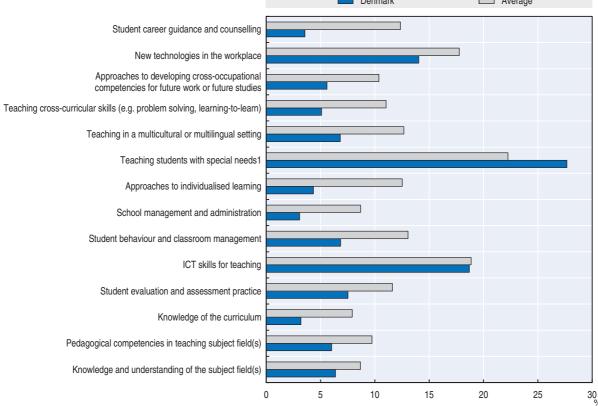
Source: Interview during the country review visit, http://uvm.dk/Uddannelser/Folkeskolen/Laeringskonsulenterne.

There are a number of initiatives to improve teaching and learning for students with special needs and bilingual students

Initial teacher education has been adapted to include courses on teaching students with special educational needs and bilingual students. These changes, which have been introduced in response to a growing number of bilingual students and to the mainstreaming initiatives of students with special educational needs embarked on in Denmark, have meant that, since 2012, all graduating teachers should have a broader and deeper understanding of working with these two types of learners. There are also special programmes on offer for teachers wishing to develop a higher level of expertise in the area of supporting students with special educational needs as well as opportunities to develop this competency in teachers who do not feel competent enough to support the special needs of different students.

These are welcome initiatives in the current context of inclusion and considering that many Danish teachers feel inadequately prepared to support students with special educational needs. In the TALIS report for 2013, 27.7% of practicing Danish teachers in lower secondary education reported a high need for professional development with regard

to supporting students with special needs in their classrooms. This proportion was above the TALIS average of 22.3%, and constitutes an increase since TALIS 2008 for which 24.6% of lower secondary teachers reported such a professional development need (OECD, 2014b). In all other areas of professional development represented in Figure 4.3, Danish teachers reported a less pronounced need for professional development than teachers on average across TALIS countries.



1. Special needs students are not well defined internationally but usually cover those for whom a special learning need has been formally identified because they are mentally, physically or emotionally disadvantaged. Often, special needs students will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education. "Gifted students" are not considered to have special needs under the definition used here and in other OECD work. Some teachers perceive all students as unique learners and thus having some special learning needs.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

School hiring practices have traditionally created a broad range of staff members who work with students in the school. Typically, school communities have a mix of social workers, psychologists, pedagogues and AKT counsellors who are specialists in behaviour, social inclusion and wellbeing. This gives school leaders the opportunity to support both teachers of students with special needs and the students themselves with specialists in their school. If not available in a school, many types of these specialists seem to be working at the municipal level in the form of local educational-psychological advisory services (PPRs). Schools can call upon these services to provide learning support and advice. In addition, there is a central resource that schools and municipalities can seek advice from. The

National Board of Social Services (Socialstyrelsen), a government agency under the Ministry of Social Affairs and the Interior, promotes new developments and initiatives in social services and supports local authorities in providing services to children, young people, socially marginalised groups and disabled people. A specialised knowledge and counselling organisation (Videns- og Specialrådgivningsorganisation, VISO) within this board provides advice to municipalities, institutions and citizens across the country in the area of special needs education and rare special needs free of charge. VISO provides advice about methods to organise pedagogical frameworks and to create an inclusive learning environment and can also contribute to the diagnosis of a child's behaviour and special needs. Examples for the areas of expertise include, autism, cerebral palsy and diffuse brain injuries, hearing loss, and self-harm. Typically, teachers and school leaders should in the first instance discuss their needs with their local educational-psychological advisory service (PPR), which should then decide if VISO should become involved. Support can be provided to the PPR, education staff, the local authorities and parents. Even though VISO provides advice and recommendations only, there were, however, reports that municipalities may be reluctant to engage with these services as they may be concerned about the financial costs of the measures VISO recommends. At the time of drafting the report, the Ministry for Children, Education and Gender Equality was, furthermore, planning to establish an outgoing consulting unit that supports better inclusion in day care, school and leisure time facilities and a Centre for Inclusive Education and Special Needs Education.

There is a growing focus on pedagogy and goal-oriented teaching and learning

The conditions are in place for school staff and school leaders to focus on pedagogy which alters student learning outcomes (Chapter 3). The 2014 Folkeskole reform focuses the curriculum on outcomes for students and national student assessments give teachers and school leaders the ability to monitor the learning outcomes of their students (at the school or class levels), and municipalities a tool for monitoring the quality of education in their schools. In the spring of 2015, the results of the first student wellbeing survey were released that gave students the chance to report on their wellbeing and their sense of belonging at school. This new survey provides a voice for direct student feedback to the institutions serving them. Competency screening, coursework and exams are available to strengthen the expertise levels of the teaching staff. And evidence points to a growing willingness to dialogue around pedagogical needs at the municipal (education directors and school leaders), school (school leaders and staff) and national levels (e.g. introduction of a corps of learning consultants, development of a website of educational resources, and initiatives to share research).

Stakeholders also share a widespread willingness to embrace the reform goal of focusing on outcomes or what is learned instead of the input or the teaching. There are several conditions in place that indicate progress in this area. There are standardised outcomes established in subject areas at year levels throughout the system in the form of Common Objectives. There is an increasing availability of data at the municipal, school and individual student levels to use for different actors when setting goals and monitoring progress toward the achievement of these goals. And in several school and municipality visits, the team heard of trips that principals and municipal leaders had made to various jurisdictions around the world to learn from the experiences of professionals further along with the use of such data to support instruction. Municipal leaders and school leaders also reported that these visits focused on using data to increase the efficient use of resources to support their improvement efforts.

Challenges

The recent reforms of the education system have increased demands on teachers in terms of their practice (instruction and assessment of student learning), their time in the classroom and in the school, and the range of student needs to be met in regular classrooms. This section addresses the challenges and opportunities created by each of these changes in turn.

There are challenges in moving from a teaching focus to a learning focus

The Danish school system has undergone several major changes in the past few years. One of the most fundamental changes is the introduction of a set of Common Objectives which focus on student learning. In addition, several years ago the Danish Ministry for Children, Education and Gender Equality developed a set of national student assessments that have the potential to give teachers data with which to influence the planning of their teaching based on the class of students and the individual students they are teaching (see Chapters 1 and 3). This focus on working with data on individual student learning and progress stands in contrast to a focus on what is taught or the teaching. This shift, although articulated by teachers, school principals and municipal leaders, is, however, still in its infancy in terms of implementation in classrooms, schools and municipalities across the country.

While teachers described a beginning understanding of the meaning of the Common Objectives at each year level in each subject, they expressed more difficulties in using the national test results effectively for their teaching and linking these results to targeted improvement strategies for individual students. Discussions with teachers and school leaders varied somewhat, but overall teachers and school leaders did not seem to use these data systematically in their schools. Teachers identified a need to come to an understanding of this new goal-oriented way of working with the curriculum and how it changes their way of teaching and assessing students. As data from the OECD TALIS 2013 suggest, teachers in Denmark are also still reluctant to administer and use their own assessments. Only 56.2% of lower secondary teachers reported to develop and administer their own assessment (TALIS average: 67.9%) (OECD, 2014b). Enhancing the focus on improving student learning across the school system also brings new demands at the level of municipal and school leadership. Houlberg et al. (2016) report that many municipalities are still reluctant to follow up on school performance and goal attainment despite the fact that school performance is now more transparent. Similarly, their report finds that there is a tendency among school leaders to "apply more informal leadership strategies based on relationships and dialogue rather than utilising evaluation, documentation and other forms of data" (Houlberg et al., 2016).

These impressions are again substantiated through data from international surveys and assessments. For the OECD Programme for International Student Assessment (PISA) 2012, almost half of 15-year-olds were in a school whose principal reported to never use student results to develop the school's educational goals or at most one to two times during the year (47.0%, compared to an OECD average of 31.7%). And only slightly more than half of 15-year-olds were in a school whose principal reported to use assessments of students to monitor the school's progress from year to year (56.8%, OECD average: 81.2%). Similarly, only 65.6% of students were in a school whose principal reported that their school had a written specification of the school's curriculum and educational goals (OECD average: 86.2%), and only 37.8% were in a school whose principal reported that their school had a written

specification of student performance standards (OECD average: 73.6%). These practices of having written specifications of the school's curriculum and educational goals and student performance standards are also substantially less common than in other Nordic countries (Finland: 94.1% and 75.3%, Norway: 96.7% and 73.0%, Sweden: 69.9% and 94.5% respectively). Concerning the use of assessment data at administrative levels, only 69.9% of students were in a school whose principal reported that achievement data was tracked over time by an administrative authority (OECD average: 72.1%) (OECD, 2013a).

Embedding a learning focus within practices at the classroom, school, local and central levels is a major cultural shift that will need to be implemented through a range of changes with regards to initial teacher education, professional development, performance management and leadership practices. The review team identified a number of challenges in these respects, as detailed below.

Targeting initial teacher education and professional development to the competency needs of schools and the education system and embedding professional learning in everyday practice

In terms of teacher initial and in-service education, establishing a learning focus means analysing evidence to identify student learning needs and recognising that these student learning needs indicate a teacher learning need (Katz and Dack, 2013).

While the 2014 Folkeskole reform sets a target for all teachers to have full qualifications in the subjects that they teach by 2020, there has been limited prognosis and forecasting in Denmark to determine the future competency needs of teachers. While this has occurred occasionally, there is no systematic approach to gap analysis or monitoring of needs over time (e.g. centrally within the Ministry for Children, Education and Gender Equality and the Ministry of Higher Education and Science). This means that there is no systematic knowledge on whether entry to initial teacher training is sufficiently geared to the needs of the system and no knowledge for institutions and authorities to formulate strategies for strengthening the recruitment into initial teacher education to meet the needs of the system.

There are also concerns about ensuring that teachers' continuing professional development responds well to learning needs in the system. Teacher professional development needs to be offered based on data and knowledge regarding learning needs of students. These data are needed at the classroom, school, municipal and system levels in order to plan against teacher expertise and qualifications. In order for this planning to happen, a systematic overview of the expertise of all groups of teachers needs to be in place. In Denmark, however, there are no systematic requirements for the professional development of teachers and in its visits to municipalities and schools the OECD review team did not hear about any systematic assessment at the local level of the gap between current specialisations of teachers and the need to meet qualification targets. Each of the municipalities visited had their own ideas for the development of offerings for their teachers, even if many were quite aware of the government's goals for the specialisation of teachers by the year 2020 and were encouraging and/or incentivising school leaders to develop these competencies among their school staff. Additional earmarked funding from the central government provides one source of support for teacher development and a tool for the central level to steer professional development (see above). However, stakeholders in schools and municipalities raised concerns that they lack support for the release of teachers in order for them to participate in learning opportunities. Teachers, the teacher union, the school leader association and municipal leaders perceived this as a serious barrier to using the funds for teacher development.

There are also concerns about professional development planning and use at the school level. Various school leaders had decided on a topic for their school-wide professional learning (e.g. "visible learning" based on the work of John Hattie [2012, 2009]) and schools were planning workshops that all teachers were to participate in. Challenges with this type of professional learning include a lack of differentiation based on teacher need, a lack of teacher ownership over their learning and often a lack of connection to the learning needs of students. More generally, as interviews during this and a previous OECD study as well as international data suggest, professional development is not always planned systematically at the school level, is not based on sound teacher evaluations and knowledge about teacher's development needs to better meet the needs of their students (more on this below), and lacks strong links with wider school development planning. A sizeable share of school leaders seems to not plan professional development with the school's needs and goals in mind. And at times, professional development may be more an individual teacher's choice (Shewbridge et al., 2011). For the OECD TALIS 2013, 27.4% of lower secondary school principals reported not to work on a professional development plan for the school (TALIS average: 20.9%) (OECD, 2014b). For the OECD PISA 2012, 38.2% of 15-year-olds were in a school whose principal reported to never or at most one to two times a year make sure that teachers' professional development activities are in accordance with the teaching goals of the school (OECD, 2013a).

Practices of ongoing learning and job-embedded practice that are connected to individual teachers' practices or problems within a school, some of the most powerful forms of professional learning, also seem to be in their infancy in Denmark. Research shows the most effective teacher learning activities help teachers to examine what they do in the classroom, what works for their students and why. Teachers learn best collecting, evaluating and acting on feedback to modify their teaching practices, working collaboratively with others to evaluate practice, and directly engaging and challenging tacit assumptions on teaching. Teachers also need to have opportunities to see evidence of the impact they are having over time. Integrating these opportunities for this form of learning into teaching is key to professional growth (Hattie, 2009; OECD, 2005; Timperley et al., 2007).

Enhancing teacher professionalism

Even if teachers' levels of self-efficacy as reported for the OECD TALIS 2013 are very high in Denmark (see Figure 4.4), there are several aspects of teacher professionalism which are still at the early stages of development as compared to other OECD countries. Considering the decentralised nature of education in Denmark, not all municipalities and schools may provide their teachers with the support they need to develop their practice.

Teaching standards: There does not appear to be a shared understanding of the standards of teacher practice. There is no discussion regarding excellent teaching within schools, municipalities or at the central level, and no benchmark to which teachers can self-assess or school or municipal leaders can assess against. This is different to many other OECD member countries. Clear, well-structured and widely supported teaching standards can be a powerful mechanism for developing the profession and for aligning the various elements involved in developing teachers' knowledge and skills. Teaching standards can guide the development of the teaching profession by clarifying expectations of what systems of initial teacher education and professional development should aim to achieve, offering a credible reference for making judgments about teacher competency, guiding teacher

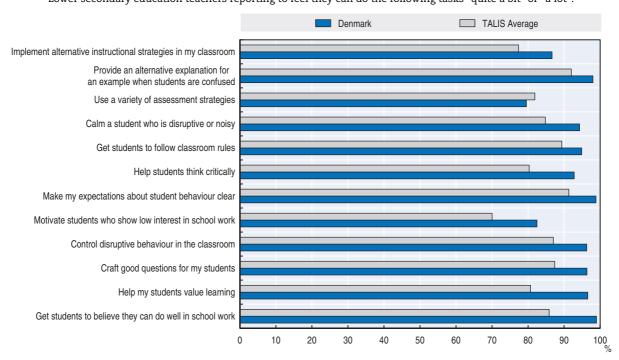


Figure 4.4. **Teachers' self-efficacy, 2013**Lower secondary education teachers reporting to feel they can do the following tasks "quite a bit" or "a lot":

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

professional development, and providing the basis for career advancement (OECD, 2013b; OECD, 2005). And teaching standards can strengthen horizontal accountability by clearly setting out and providing a reference for the professional practices that teachers should be able to meet (Hooge, 2016).

Induction and mentoring: As research indicates, new teachers are likely to struggle with issues such as classroom management and student discipline in the early years of their career. New teachers' experience in the first years of their career is a crucial influence on teachers' decisions to leave the profession and a difficult start to the career may also reduce new teachers' confidence and influence their long-term effectiveness. This may imply high costs for both individual teachers as well as schools and students who do not benefit from the fresh ideas and enthusiasm that new teachers can bring. New teachers, particularly those in disadvantaged school, should, therefore, benefit from additional support, e.g. through induction or mentoring opportunities (Jensen et al., 2012b; OECD, 2005). In Denmark, there is no formal and systematic induction of beginning teachers into the teaching profession. Instead, the availability of induction processes depends on local contexts and there appears to be a wide range of practices in this regard. Some municipalities and schools pay special attention to new or beginning teachers (e.g. through some informal mentoring by school staff and school leaders to having new teachers teach less and work with an experienced staff member for periods of time). And, as pointed out above, the new framework for the utilisation of teacher' working hours will provide more opportunities for school leaders to take the particular needs of new teachers in the organisation of working time in their school into account (e.g. new teachers could have less teaching hours and, therefore, more time to prepare). However, as yet, such practices appear to be the exception rather than the norm.

For the OECD TALIS 2013, 55.7% of lower secondary teachers' school principals reported that all new teachers had access to a formal induction programme (TALIS average: 43.6%) and 78.3% of lower secondary teachers' school principals reported that teachers had access to informal induction activities (TALIS average: 76.5%). However, only 26.6% of lower secondary teachers themselves reported having taken part in a formal induction programme (TALIS average: 48.6%), and 39.5% reported having taken part in informal induction activities (TALIS average: 44.0%). Only considering teachers with less than five years of experience or less, still only 39.9% of lower secondary teachers reported having taken part in a formal induction process (TALIS average: 51.9%). As far as mentoring is concerned, mentoring could be more widely established in Danish schools. For the OECD TALIS 2013, one in four teachers were in a school whose principal reported that there is no mentoring system for teachers in the school (Denmark and TALIS average: 25.8%), and only 4.2% of lower secondary teachers reported having a mentor assigned to support them (TALIS average: 12.8%). When asked about feedback and appraisal in their school, only 5.6% of lower secondary teachers reported having received feedback from their assigned mentor (TALIS average: 19.2%) (OECD, 2014b).

Teacher certification, probation, appraisal and feedback: In Denmark, there is neither a standard certification of new teachers that is based on a specific set of criteria nor a formal appraisal of a teacher's readiness to assume a teaching role. There is also no probationary period for newly qualified teachers in the Folkeskole, which would allow the system, municipalities and schools to identify those new teachers who struggle to perform well on the job or who find that teaching does not meet their expectations (Shewbridge et al., 2011). And while there are teacher appraisal practices at a local level, performance appraisal of practicing teachers in Denmark is not mandatory. Occasionally, municipalities require their school leaders to appraise their teaching staff, but no formal appraisal process appears to be occurring systematically. As a result, not all teachers in the Folkeskole receive appraisal on their practice and feedback on how to improve.

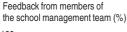
This was also the impression of a previous OECD review on evaluation and assessment in Denmark. As Shewbridge et al. (2011) pointed out, "there is no expectation that each teacher in the Folkeskole has his or her practice appraised and receives feedback for improvement. The existing teacher appraisal practices are the initiative of individual schools (in some cases in the context of municipality's requirements) and depend essentially on the endeavour of the school principal and the evaluation ethos created in the school". While emerging practices of joint planning and teamwork are evident in many Danish schools, the observation and evaluation of teaching and learning by managers or peers – followed by feedback, discussion and possibly coaching – is the exception rather than the rule. However, teachers during this and the previous review visit reported a desire to receive feedback from their school leaders to improve their teaching and the learning of their students and teachers conveyed their appreciation for the time school principals took to provide them with feedback.

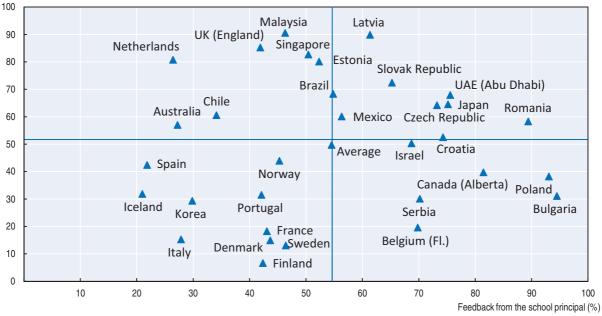
Data from the OECD TALIS 2013 similarly suggest that teachers could benefit more systematically from appraisal and feedback practices which are based on classroom observation and have strong links to teacher and school development to ultimately improve student learning. For TALIS 2013, 91.0% of Danish lower secondary teachers were in schools whose principal reported that teacher appraisal was conducted, but in the same report about one in four teachers reported never having received feedback in their current school (22.3% compared to a TALIS average of 12.5%). Only 43.7% of lower secondary teachers responded that they received feedback from their school principal, compared to 54.3% on average across

TALIS countries. In addition, the involvement of other members of school management teams in teacher appraisal is particularly low in Denmark, with only 14.9% of lower secondary teachers reporting that they received feedback from members of the management team, compared to 49.3% on average across TALIS countries (see Figure 4.5).

Figure 4.5. Teachers' feedback from principals and school management team, 2013

Lower secondary education teachers who report receiving feedback from members of the school management team and the school principal





Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

Also, if teacher appraisal takes place, it does not always seem to involve classroom observations and to not always have substantial impact on teaching practices: only 57.7% of lower secondary teachers reported that they had received feedback following a classroom observation (TALIS average: 78.8%), only 22.6% of lower secondary teachers agreed or strongly agreed that feedback is provided to teachers based on a thorough assessment of their teaching, and only 49.9% of lower secondary teachers reported that appraisal and feedback had a moderate or large impact on their teaching practices (TALIS average: 62.0%). As was already pointed out above, appraisal also seems to have weak links to professional development: only 40.5% of lower secondary teachers agreed or strongly agreed that a development or training plan is established to improve their work as a teacher (TALIS average: 59.1%) (OECD, 2014b).

A lack of systematic and effective teacher appraisal and feedback that involves classroom observations and has strong links to professional development raises the concern that underperformance of a teacher may not be detected and, therefore, may not be addressed, to the detriment of students (OECD, 2013b).

Strengthening pedagogical leadership focused on improving teaching and learning

School leadership is another area that should be further developed and strengthened in Denmark. As research has highlighted, pedagogical leadership in schools is essential for teaching and learning. This provides a strong rationale for implementing policies that ensure the effective management and development of the school leadership profession (Pont et al., 2008, Day et al., 2009, Louis et al., 2010).

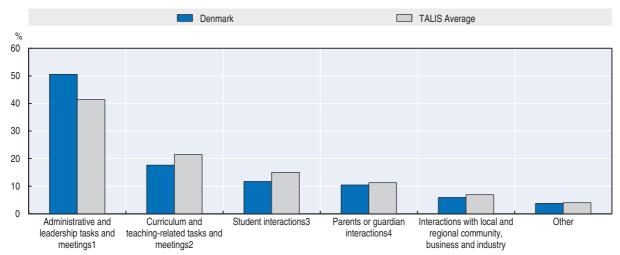
The management of the school leadership profession in Denmark reveals a number of deficits, which should be addressed to further develop pedagogical leadership. First, effective school leadership, like teaching, is not defined by a framework or descriptive profile that highlights school leaders' pedagogical role. As a result, there is no common understanding of effective leadership that could guide the management and development of the profession. This leads to a lack of clarity among school leaders in terms of expectations and on how to improve their leadership practice. This was, for instance, evident in the myriad of professional learning school leaders described. Second, school leaders are not required to undertake specific training for their function, even if they may participate in such training. The OECD TALIS 2013, however, suggests that participation in leadership training is very low: 44.6% of lower secondary principals reported to never have taken part in a school administration or principal preparation training or course (TALIS average: 15.2%), and only 3.3% who did take training, did so before taking up their position (TALIS average: 25.4%). Participation in ongoing professional development, nevertheless, seems more common: 89.3% of lower secondary principals reported having participated in some form of professional development in the 12 months prior to the survey (TALIS average: 90.5%) (OECD, 2014b). And, third, the review team's visit suggests that, while there are practices of school leader performance management at the level of municipalities, practices vary and not all school leaders benefit from sufficient support and feedback.

Representatives of the Danish Association of School Leaders expressed to the OECD review team that there was a great deal of focus on pedagogical leadership as well as a desire on the part of school leaders to carry out this work. The association also highlighted its own support initiatives they had developed for leaders in the form of a publication on classroom observation and feedback. However, school leaders felt that they were lacking training and experience to work in this manner and the review team gained the impression that school principals could devote more attention to their pedagogical leadership role. As pointed out above, there is still little evidence of critical school self-evaluation beyond professional dialogue and observation-based teacher appraisal practices, for example. Also according to data from the OECD TALIS 2013, school leaders in Denmark are still less active in pedagogical leadership than school leaders in other OECD countries. Danish school principals in lower secondary schools reported to spend half of their time on administrative and leadership tasks and meetings, and less than one-fifth of their time on curriculum and teaching-related tasks. They also reported to engage less in practices related to pedagogical leadership than principals in other countries, including classroom observations (see Figures 4.6 and 4.7) (OECD, 2014b). This raises concerns regarding the quality of school improvement efforts overall and specifically how effective leaders are at developing the competency of the teaching staff in individual schools.

The lack of strong leadership is also of concern considering the significant changes the Danish education system is undergoing with the implementation of the 2014 Folkeskole reform, the introduction of a new framework for the utilisation of teachers' working hours

Figure 4.6. Principals' working time, 2013

Average proportion of time lower secondary education principals report spending on the following activities:

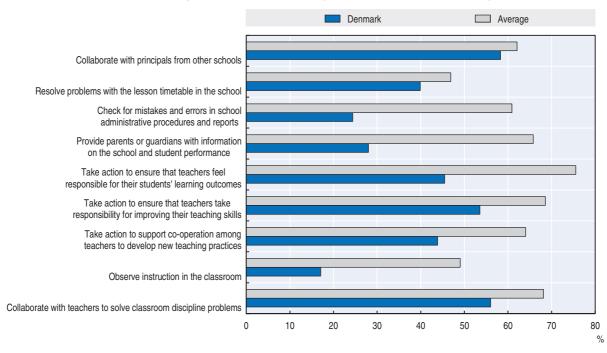


- 1. Including human resource/personnel issues, regulations, reports, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state, or national education officials.
- 2. Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.
- 3. Including counselling and conversations outside structured learning activities.
- 4. Including formal and informal interactions.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

Figure 4.7. Principals' leadership, 2013

Lower secondary education principals who report having engaged "often" or "very often" in the following leadership activities during the 12 months prior to the survey:



Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, http://dx.doi.org/10.1787/9789264196261-en.

(Act no. 409), and school consolidation in some municipalities. The legislative changes to working conditions for teachers have given school leaders much more latitude in assigning the tasks and the teaching load for individual teachers in their schools. Leaders have the opportunity to assign teaching based on the needs of the school, its student body, and its teachers. However, school leaders need the competencies and tools to make the most of this new autonomy. The effective scheduling of teachers' working time, distribution of tasks, the planning of a longer school day, the incorporation of more physical education and stronger links to the community all depend on strong school leadership. Furthermore, school leaders reported that the new arrangement had increased the potential for conflict among school leaders and their staff as each teacher's assignment is to be decided between the teacher and the school leader. More than one municipality visited reported bringing schools together under one school principal or leader in part as a way of consolidating without closing school buildings. Leaders in these larger, multi-campus schools expressed that they had little time to be in classrooms observing teachers and giving feedback as the administrative demands of the job changes.

Targeting support provided by the central learning consultants at schools and municipalities with different needs

The Ministry for Children, Education and Gender Equality has developed a plan of hiring experts in various aspects of pedagogy from across the country (see Box 4.1). This central group of consultants is currently available to municipalities and schools to advise on school improvement and professional development of the teaching staff and school leaders, for example. As elaborated above, this initiative has the potential to contribute to greater capacity at the local and school levels. However, this highly competent group of educators could be better targeted at certain defined problems within the school system, even if there is a group of learning consultants focussing on special needs education which is highly relevant in the current context of inclusion, for example.

From discussions and the background report prepared for this review (Houlberg et al., 2016), learning consultants should target support to lower performing schools, also in light of potential capacity constraints to respond to requests by a large number of municipalities and schools (at the time of the review, the learning consultant corps had employed around 80 learning consultants). Priority is, thus, given to low performing schools identified in quality reports as needing risk-based support which are guaranteed support. However, there is no clear or defined mandate to do so nor is there any consistent outreach to municipalities or schools which fall into this category. It is essentially up to municipalities and schools to seek support and advice. Interview partners from the unit in charge of this learning consultant corps within the Ministry for Children, Education and Gender Equality described reviewing data to identify low performing schools and indicated that it was their wish to contact these schools and offer support, but the criteria for low performing were unclear and there was no indication that, when contacted, a municipality or school had any obligation to engage with the consultant group. Also, as elaborated further in Chapter 3, there is room for the Danish school system to pay more attention to excellence and to the further improvement of schools that are already performing well. The learning consultant initiative could contribute to supporting excellence, but does not seem to have considered this dimension in its work yet.

Education systems that have implemented system leadership roles and structures could provide some ideas for how to further develop Denmark's learning consultant

initiative, to ensure it is well targeted to the needs of schools with different contexts and performance levels and embedded in broader improvement strategies. The London Challenge and City Challenge programmes in England, United Kingdom, and the Focused Intervention Partnership in Ontario, Canada, provide two interesting examples for targeted support for schools of different levels of performance as well as the use of consultants and school-to-school collaboration in broader improvement initiatives (see Box 4.3).

Box 4.3. London Challenge and City Challenge and Ontario Focused Intervention Partnership

London Challenge and City Challenge

In England, United Kingdom, the Department for Education and Skills introduced London Challenge, a programme to improve education in London. While the programme focused on supporting secondary schools in London between 2003 and 2008, it was expanded as City Challenge to work with primary schools and in two further geographical areas, Greater Manchester and the Black Country, between 2008 and 2011.

Building on the London Challenge experience, the City Challenge programme pursued three clear objectives: to reduce the number of underperforming schools; to increase the number of good and outstanding schools; and to improve educational outcomes for disadvantaged children. The programme included a number of elements: "Keys to Success" identified underperforming schools that would require most support; interventions targeted at satisfactory schools and others to support good schools in becoming outstanding; programmes designed to support schools in narrowing attainment gaps between disadvantaged pupils and their peers; providing schools with data about their intake, so-called "Families of Schools" data, and encouraging schools to work with other schools in their Family; capacity building work with local authorities; leadership strategies led by the National College for School Leadership, including the designation of National and Local Leaders of Education, and professional development programmes in teaching schools; and various local interventions in each area. The programme did not promote a single view of what schools needed to do to improve, but all interventions were based on local decisions involving key stakeholders, including school principals and local authority officials.

As Hutchings et al. (2012) highlighted in their evaluation of the programme, it was helpful that City Challenge had objectives relating to good and outstanding schools as well as to underperforming schools, as this reinforced the message that all schools need to work to improve. Strategies for school improvement provided different forms of support depending on school performance. Inadequate and underperforming schools benefited from support from experts. Satisfactory schools worked with two or three other schools with similar intakes, led by the principal of a school that was further along its school improvement journey (but not necessarily outstanding). And good and outstanding schools benefited from a wide range of opportunities to share practice and learn from other schools with outstanding practice in specific areas. They also benefited from supporting weaker schools.

Source: Baars, S. et al. (2014), Lessons from London Schools: Investigating the Success, http://centreforlondon.org/publication/lessons-london-schools; Kidson, M. and E. Norris (2014), Implementing the London Challenge, www.instituteforgovernment.org.uk/sites/default/files/publications/Implementing%20the%20London%20Challenge%20-%20final_0.pdf; Hutchings, M. et al. (2012), Evaluation of the City Challenge Programme, www.gov.uk/government/publications/evaluation-of-the-city-challenge-programme.

Ontario Focused Intervention Partnership (OFIP)

In Ontario (Canada), the Focused Intervention Program (OFIP) provides targeted support to primary schools that have "experienced particular difficulties in achieving continuous

Box 4.3. London Challenge and City Challenge and Ontario Focused Intervention Partnership (cont.)

improvement" since 2006/07. These schools are identified through results on provincial assessments of reading, writing, and mathematics in Years 3 and 6. In 2006/07, schools qualified for OFIP support if less than 34% of students reached provincial standards in Year 3 reading. In addition, since 2009/10, resources from the OFIP programme were extended to over 1 100 schools in which less than 75% of students met provincial standards in the Years 3 and 6 assessments. Once identified a capacity building approach is used to build upon the assets of the students, staff and community to meet the specific learning needs of students and increase student achievement. OFIP funds are used for professional development, additional student and professional learning resources, literacy and numeracy coaches, and teacher release time for collaboration and additional training. The improvement efforts in these schools were supported by the Ministry of Education through student achievement officers as well as learning supports from the school boards involved. From 2002/03 to 2010/11, the number of schools with fewer than 34% of students achieving at provincial standard in Year 3 reading was reduced by two-thirds (from 19% to 6%), showing significant success in reducing the number of primary schools in which students fail.

Source: Ontario Ministry of Education (2016a), Ontario Focused Intervention partnership for Elementary Schools, Capacity Building Series, http://learnteachlead.ca/projects/capacity-building-2/?pcat=2412.

Although a different process, differentiated and risk-based approaches to school evaluation may provide further inspiration for how support could be better targeted. For instance, Chile has been in the process of introducing external school evaluations since 2009 with the creation of an Education Quality Assurance Agency and a Superintendence of Education. The Education Quality Assurance Agency is responsible for the implementation of school evaluations that focus on pedagogical processes in schools. School evaluations follow a proportional approach focussing on low-performing schools. Schools are ranked on the basis of their performance in standardised national student assessments and in other indicators of education quality, including academic self-esteem and motivation; school climate; participation and citizenship education; habits for a healthy life; school attendance; grade repetition; gender equity; and graduation in a technical-professional field, taking the schools' socio-economic context into account. Based on these indicators, schools are classified in one of four categories (high, average, average-low and unsatisfactory). Schools classified as showing unsatisfactory performance are evaluated at least every two years and are obliged to seek public or private technical-pedagogical support from providers that are similar to Denmark's learning consultants. Schools classified as showing average-low performance are evaluated at least every four years, and schools classified as average at the Agency's discretion. Schools showing high performance receive so-called "learning visits" to identify and spread good practices (Santiago et al., forthcoming). School supervision in the Netherlands provides a further example (see Box 3.4 in Chapter 3).

There are concerns about the new organisation of teachers' working time

Considering the role of the quality of daily classroom instruction for student learning and achievement (e.g. Katz and Dack, 2013), and particularly so for students from a disadvantaged backgrounds, the effective use of teachers and other staff and the quality of their instruction in classrooms is essential. As highlighted above, the introduction of a new framework for the utilisation of teachers' working hours and the new autonomy for school

leaders to manage and distribute work among staff within their organisation entails the potential benefit to adjust the use of staff time to local needs. However, different stakeholders voiced also various concerns, even if they indicated support for the overall goals of the Folkeskole reform at the same time (also see Chapter 2).

Representatives of the teacher union and the school leader association expressed concerns that the expectation that all teachers would, on average, teach more classroom hours would, in fact, reduce the local autonomy of municipalities and schools. It was argued that if every teacher (on average) is to teach a certain number of hours, the local authority would have less flexibility to differentiate staffing and the use of time based on perceived student and teacher needs and circumstances. Accountability requirements have also increased, which gives a sense of a more rigorous monitoring of these working conditions and overall school improvement. The possibility for schools to adjust the scheduling of teachers is, furthermore, limited in small schools in rural areas, as interview partners pointed out during the review visit.

Teachers, school principals and representatives of the teacher union and school leader association also voiced concerns about a lack of clarity regarding the process of changing the organisation of working arrangements and working time within schools. Most teachers reported a lack of understanding regarding the flexibility school principals had to assign their teaching hours. And school principals and their member association reported a lack of knowledge examples of effective ways to use their new flexibility to allocate and manage their staffs' working and teaching time according to the needs of the student population. Some school principals did report that they used expert teachers to act in a coaching role with less experienced or less qualified teachers, thus giving them more teaching hours per week and then assigning fewer classes to newer teachers, but they also reported having no way to monitor the effectiveness of such organisation of the teaching workforce at the school.

In all of the schools visited, the review team was told by teachers that they felt they had less preparation time now and that they taught more than they used to. They reported that they were not allowed to take any preparation work or marking home with them as had been their practice and that this cut their preparedness for the lessons they were assigned to teach. As teachers saw it, their ability to collaborate with their peers had been hampered by the new working conditions making it more difficult to meet and plan together as same level or same subject teachers. And they apparently faced a lack of time to seek out and prepare for the needs of all students in their classrooms, especially those with special needs. While it was the government's intention that teachers should change their way of working, such a change in work organisation is likely to take more time.

There are concerns about the inclusion process and the quality of learning for students with special educational needs (SEN)

Following the national agreement to work towards inclusion (see Chapter 1), there have been significant changes to the funding models for how students with special educational needs (SEN) access education (also see Chapter 2). Prior to these changes, separate special needs schools were funded to provide classes to special needs students. While these separate special schools still exist at the level of municipalities and regions, municipalities provide schools with financial incentives for the increased integration of students into regular schools and classrooms. As such, the inclusion of students with special needs in regular schools and classrooms has become much more common over time.

Stakeholder groups interviewed by the OECD review team, however, expressed concerns regarding the inclusion process and the adequacy of support for special needs students in Denmark. The Disabled People's Organisation (DPOD) reported to the OECD review team that there was evidence showing that many students with dyslexia did not learn to read and write in the Folkeskole. An evaluation report of inclusion suggests that 70% of parents are worried that the needs of their children with special needs are not being met in the regular classroom. A small scale survey conducted by Autism Denmark among 200 parents of children with autism reports that over 30% of them were keeping their children with autism at home due to school refusal. There is also anecdotal evidence that suggests students are often shifted from one school to another and that students who had been integrated to a regular school were being taught in separate classes with little contact to regular students. Breaks were also organised separately in some schools visited as part of the review.

There are concerns if schools are prepared to ensure the successful inclusion of children with special needs. Both staff in regular and special education schools expressed a lack of relevant competencies to improve learning outcomes for special needs students. This was evident in discussions with teachers in every school visited by the team. As elaborated further in Chapter 3, for instance, teachers indicated that it was not clear to them how the national learning goals could be used and adapted for their students with special needs. A lack of competencies and preparedness is also evident in international survey data. As mentioned above, in the OECD TALIS 2013, Danish teachers reported a high level of need for professional development with respect to teaching special needs students (Figure 4.3), and the data show that they receive less training in this area than the average of OECD surveyed countries (25.3% of lower secondary teachers participated in training in this area in the twelve months prior to the survey, compared to 31.7% on average across TALIS countries). Also school leaders perceive a lack of competencies among their staff to meet the needs of children with special needs. For the OECD TALIS 2013, 40.5% of lower secondary teachers were in a school whose principal reported that a shortage of teachers with competencies in teaching students with special needs hindered the school to offer quality instruction (TALIS average: 48.0%). In addition, despite the availability of different specialist staff in schools and municipalities (e.g. AKT teachers and PPRs), 48.3% of lower secondary teachers were in a school whose principal reported that a shortage of support personnel hindered the school to offer quality instruction (TALIS average: 46.9%) (OECD, 2014b). Furthermore, school leaders and teachers stressed during school visits that parents and students are also not always ready to support the successful inclusion of children with special needs. Schools and municipalities may thus need greater support to make inclusion happen and to use available support services described above more effectively.

Further concerns that emerged during the review visit concerning the inclusion of students with special needs include the challenge related to maintaining a well-functioning separate special school system in a context of increasing inclusion. This entails the risk of losing sight of the ongoing needs of separate special schools and the performance and wellbeing of children in these schools (e.g. about the impact of the 2014 Folkeskole reform on special needs schools and how special needs schools can successfully implement the required changes; the particular challenge to get parents involved in special needs schools as a result of a lack of proximity), and a lack of attention to the need to ensure successful transitions of students with special needs across the education system, in particular from the Folkeskole to upper secondary education.

Policy recommendations

Develop a vision for teacher professionalism

Many changes to the education system in Denmark have left teachers struggling with what it means to be an excellent teacher. Teachers have been asked to teach towards outcomes, to meet the needs of students with special needs in regular classrooms, to work with expert teachers within their schools, to use data and evidence to plan instruction and they have had their working conditions redefined by legislation, not negotiation. Teachers by and large reported that they were struggling with some of these changes, but that they were working hard to implement all of them simultaneously. They generally voiced support for the changes in expectations around teaching and learning in the classroom and the school.

To support teachers, school leaders and municipal leaders in understanding and supporting the implementation of these changes, Denmark should consider developing a national teacher profile, vision or standards of practice. Such a national teacher profile would communicate the new expectations regarding teacher practice (e.g. collaboration and team work in schools, mentoring and peer feedback and observation, continuous professional development, reflective practice, and use of student assessment data, etc.). The expectations for teachers as laid out in such standards would put the conditions in place for many of the changes of the 2014 Folkeskole reform. They could aid those in the education sector to implement and monitor the effect of the reforms on teacher practice, and establish a foundation for teachers to explore their practice and for schools to develop their improvement initiatives. The professional standards would also set out teachers' required competencies in the use of evidence, data and assessments.

While initial teacher education already provides different competency profiles following the shift towards a competency-based teacher education, a national teacher profile would help to provide a framework to guide the development of the profession as whole. It could guide initial teacher education, teachers' ongoing professional development, teacher feedback and appraisal, and teachers' career advancement. In a decentralised system like Denmark, a national teacher profile could be particularly relevant to promote a shared vision and expectations. Teachers' work and expected knowledge and skills must reflect the student learning objectives that schools are aiming to achieve. The preparation of a profile of teacher competencies should, thus, be based on the Common Objectives, the objectives for student learning in Denmark. The profile should reflect the sophistication and complexity of what effective teachers are expected to know and be able to do; be informed by research and evidence; and benefit from the ownership and responsibility of the teaching profession (OECD, 2013b; Shewbridge, 2011). A national teacher profile should outline expectations for teachers to continually improve their teaching practice by knowing their students' individual learning needs, by increasing their professional knowledge around pedagogy, assessment and evaluation, and by using this knowledge to meet the learning needs of their students. The key is to communicate the expectation that teachers use opportunities to enhance their professional knowledge to improve their teaching practice to increase the learning outcomes for students. Denmark could investigate Ontario's College of Teachers Standards of Practice (Box 4.4).

Organise initial teacher education based on the competency needs of the system

As a starting point, a more systematic approach to gap analysis is recommended in order to understand the current demographics of teaching professionals including subject

Box 4.4. Ontario's College of Teachers Standards of Practice

Commitment to Students and Student Learning: Members are dedicated in their care and commitment to students. They treat students equitably and with respect and are sensitive to factors that influence individual student learning. Members facilitate the development of students as contributing citizens of Canadian society.

Professional Knowledge: Members strive to be current in their professional knowledge and recognise its relationship to practice. They understand and reflect on student development, learning theory, pedagogy, curriculum, ethics, educational research and related policies and legislation to inform professional judgment in practice.

Professional Practice: Members apply professional knowledge and experience to promote student learning. They use appropriate pedagogy, assessment and evaluation, resources and technology in planning for and responding to the needs of individual students and learning communities. Members refine their professional practice through ongoing inquiry, dialogue and reflection.

Leadership in Learning Communities: Members promote and participate in the creation of collaborative, safe and supportive learning communities. They recognise their shared responsibilities and their leadership roles in order to facilitate student success. Members maintain and uphold the principles of the ethical standards in these learning communities.

Ongoing Professional Learning: Members recognise that a commitment to ongoing professional learning is integral to effective practice and to student learning. Professional practice and self-directed learning are informed by experience, research, collaboration and knowledge.

Source: Ontario College of Teachers (n.d.), Standards of Practice, www.oct.ca/-/media/PDF/Standards%20Poster/standards_flyer_e.pdf.

specific education and additional qualifications, so that the content of teacher initial teacher education can be targeted to the needs of the system. In Ontario, Canada, the College of Teachers holds continuous data on teacher initial qualifications and additional qualifications earned throughout a teacher's career. Thanks to these data, the province can anticipate teacher qualification needs and gear admissions accordingly. Box 4.5 provides some other examples from Ontario for the identification of system teacher needs.

Box 4.5. Targeting entry to initial teacher education based on system needs

In Ontario, the Ontario College of Teachers (OCT) provides an annual report called Transitions to Teaching based on a survey conducted with its members. This report provides information to the education sector to describe demographic characteristics of the current workforce. The Ontario Ministry of Education also partners with OCT to collect information about registration in additional qualification courses. As a result, the province is more aware of how teachers are engaging in professional learning, how this might serve to meet system needs, and how to best allocate human and financial resources. For the 2014 report, see Ontario College of Teachers (2014).

The Higher Education Quality Council of Ontario (HEQCO) is an independent organisation that was established with a mandate to assist the government of Ontario (and the Minister of Training, Colleges and Universities in particular) through the provision of impartial research and policy advice for improving the accessibility, accountability, and quality of

Box 4.5. Targeting entry to initial teacher education based on system needs (cont.)

Ontario's colleges and universities. Reaching out to independent research organisations to conduct evaluations for identifying system needs is another possible approach to forecasting for future teacher recruitment needs.

Source: Ontario College of Teachers (2016), Transition to Teaching, www.oct.ca/becoming-a-teacher/transition-to-teaching; Higher Education Quality Council of Ontario (2016), HEQCO Website, www.heqco.ca/Pages/wel.aspx (accessed 4 February 2016).

An additional strategy could include a targeted recruitment of applicants who hold specialised post-secondary education degrees in such areas as science, technology, engineering, and mathematics. Incentives could include: subsidised professional learning; greater experience recognition on a salary grid; or signing bonuses for those teachers with specialised subject knowledge to increase retention rates in order to meet system needs (OECD, 2005).

Denmark should also consider monitoring the quality of initial teacher education, including the extent to which teacher education programmes prepare students for changing needs of schools, such as greater diversity in classrooms. Norway provides an example for monitoring the quality of teacher education as part of a wider monitoring framework of an initiative to raise the status and quality of the teaching profession (GNIST). The monitoring system was implemented in 2008 and contains five target areas (recruitment, quality in education, quality in teaching, quality in school leadership, improved status for the profession) with 23 indicators to monitor improvement. The basic approach is to make use of existing information available nationally, but to highlight this information in a coherent set of indicators. At the same time, the monitoring framework for GNIST has used some first-hand research, e.g. via the administration of surveys to teacher educators, school principals and teachers on their perception of quality in education (OECD, 2013b; Nusche et al., 2011).

Improve the planning of teacher professional learning and strengthen job-embedded learning in schools

While it is important to determine future recruitment and qualification needs, it is also essential to address the professional learning needs of the current workforce. Ontario has had much success with system improvement through the implementation of ministry-funded initiatives. Targeted initiatives are focused on professional learning for increasing the effectiveness of instruction. The Ministry of Education of Ontario allocates human and financial resources to support professional learning in areas that target system needs in literacy and numeracy. Many of these initiatives also support the use of collaborative teacher inquiry with the intention of moving away from system-wide professional development towards professional learning that is both job-embedded and focused on being more responsive to local needs (Ontario Ministry of Education, 2007a, 2010, 2014a, 2014b, 2014c, 2015).

Findings from Darling-Hammond (2000) "indicate that measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and mathematics, both before and after controlling for student poverty and language status." However, in Denmark, there have been limited studies that document a link between teacher subject specialisation and student outcomes. One study conducted by Calmar Andersen and Winter (2011) found no significant association between supplementary education to

teachers and students' educational performance, however, they did find that it has a positive effect on students' wellbeing. They also found that collaboration and ongoing discussion among teachers about teaching and learning tended to be accompanied by higher student performance and wellbeing. This study provides support for job-embedded professional learning as one effective approach to responding to system needs.

National teacher and school leader profiles (see above and below) would help set clear expectations in this regard, both for teachers and their school leaders, and help gear school level planning processes to focus on this type of teacher learning and development. For teachers, it would communicate that teaches should continuously assess, review and improve their practices and build on peer observation, demonstration and feedback. For school leaders, it would communicate that it is one of their core responsibilities to help their staff develop in this way. Municipalities should set incentives and hold their school leaders accountable, and so should school leaders for their teachers. The national corps of learning consultants could support municipalities and schools to focus on this kind of learning.

Schools should also pay greater attention to the development of professional learning communities (within schools or across schools) and opportunities for mentoring to support job-embedded learning and development. Education systems such as Japan, Shanghai and Singapore use professional learning communities as a key vehicle for teacher growth and development, for example. Teachers work together to set learning goals, research and try new approaches, observe others, receive feedback, and assess evidence of impact in the school. Such groups tend to have strong leadership to guide others through the continuous improvement process (Jensen et al., 2012a). Professional learning communities could also help develop teachers' capacities for using assessment and data in a non-threatening environment.

As far as structured professional development is concerned, schools should make greater use of student assessment data and information from teacher appraisal to identify teacher development needs and goals. Stronger links between teacher appraisal and feedback, teacher professional development and school development will also depend on the extent to which Denmark is successful in strengthening the school leadership profession (more on this below).

Provide opportunities for teachers and school leaders to collaborate Teachers

Teachers in Denmark are familiarising themselves with the Common Objectives that they teach towards and working to implement this outcome-based curriculum. Currently, they need more opportunities to work with other teachers at their level and in their subjects to come to a shared understanding of the meaning of the objectives, to understand how the national tests reflect the attainment of the objectives in each subject at each level and to explore and test teaching strategies to improve student competency overall. Why engage teachers as collaborative learners? Earl (2010) found that through collaborative inquiry, teachers integrate new knowledge and understanding of student learning and classroom instruction into their existing knowledge of professional practice. For those involved in inquiry, the process can serve to expand and refine their personal knowledge base about what it means to be a teacher (Earl, 2010). Collaboration enables learning from close observations of knowledge exchange and teaching exchanges and helps to build up trust and social capital in schools that enables the unlearning of old assumptions and habits, the development of new understandings and practices, and the possibility to solve collective

action problems (Burns and Cerna, 2016). Opportunities for collaborative learning, then, have the potential to set teachers on a course of continuous improvement of their teaching practice related to the needs of the students in their classes and schools.

Hattie (2015) dispels the myth that one simple intervention can be defined and structured from near the top of the political system, but that rather a system focus on learning and an understanding of the type of teaching that supports student learning is required. Fullan et al. (2015) describe this work as building the professional capacity of teachers and define it as "human capacity (the quality of the individual), social capacity (the quality of the group) and decisional capital (the development of expertise and professional judgment of individuals and groups to make more and more effective decisions over time)". In order to engage in this type of work, teachers need time, the commitment of their school leaders to the process and to themselves engaging in the process, and the belief of their municipal leaders that this work will make the difference to student learning.

Providing more opportunities for this type of work (see Box 4.6 for teacher collaboration practices in Ontario, Canada) can be accomplished in many ways. As is done in Ontario, Canada, timetabling in schools can have teacher collaborative groups free from teaching duties at the same time for a period of time each week. This time can, then, be dedicated to collaborative inquiry and can be facilitated by teacher subject experts from the teaching staff. School leaders have the flexibility to assign teaching responsibilities so that this time is available. A school leader may decide that a particular group of teachers needs more time to focus on teaching and learning within their level and subjects and schedule slightly less teaching time to make a period for continued collaboration among those teachers over time. This would need to be based on the school improvement plan, as developed from the evidence of learning within the school. A group of teachers may also require expertise both in content (subject) and pedagogy (teaching strategies, etc.). In some schools this can be provided by staff teacher expertise, municipal consultants (if available) or also the ministry's corps of learning consultants. To facilitate greater collaboration and new working practices among teachers in Denmark, it will be key to support school leaders in the organisation and scheduling of time for staff and the differentiation of the workloads for teachers to perform specialised functions on top of regular classroom teaching roles. This could include training and the development of templates and examples for timetabling and scheduling.

England in the United Kingdom provides some examples for initiatives that use teacher collaboration and peer networks to engage teachers in research and to promote evidence-informed professionalism. Funding for school based research consortia and Networked Learning Communities were two successive, early national initiatives that had some success in building a networked infrastructure for the support of teacher use of research. Teaching Schools constitute a concept in more recent initiatives seeking to achieve similar momentum within a more self-directing system. The National Teacher Union's "Teacher2Teacher" programme provides a further interesting initiative (see Box 4.7) (Cordingley, 2016).

Schools and municipalities should also pay particular attention to collaboration between teachers and pedagogues to make the most of this additional resource. In kindergarten classrooms across Ontario, Canada, a team teaching model is supported where one classroom teacher and one early childhood educator (whose education and skills are quite similar to pedagogues) work together to provide a nurturing environment to support the unique needs of each student. Early childhood educators have training in observing,

Box 4.6. Types of teacher collaboration in schools in Ontario, Canada

- 1. Co-teaching classes this process involves a pair of teachers to a small group of teachers co-planning a lesson, co-teaching that lesson with assigned roles and co-reflecting on the student learning outcomes of the learning experience, including naming evidence of the impact on student learning.
- 2. Teaching Learning Critical Pathway a process of inquiry involving the gathering of data, its analysis to determine area of greatest need, identifying relevant curriculum, reviewing current practice, determine assessments to be used to monitor student learning, planning a teaching block of time (approximately six weeks), sharing evidence of student learning with other teachers, developing and administering a culminating task, engaging in teacher moderation of student work from the task and reflect on what has been learned, what the next steps are in teacher learning (see Teaching-Learning Critical Pathway, 2008).
- 3. Moderation of student work is a process that involves educators in a collaborative discussion of student work based on common assessment criteria.
- 4. Deconstructing curriculum examining curriculum expectations in order to understand what is written as it might be translated into what students learn.
- 5. Examining the student learning journey deconstructing a curriculum concept from when a child enters schools through many grades or levels to understand what a student is expected to learn at each level of the system.
- 6. Monitoring marker students pick a small number of students in a class, at a year level or in a school and share their assessment results with others in the school. Document the use of teaching strategies against the outcomes of learning for these students.
- 7. Review assessment data (data walls) making more public the achievement data of marker students in a class, a grade or a school.
- 8. Teacher collaborative inquiry cycle plan, act, observe and reflect on teaching practice and learning outcomes of students.
- 9. Share and explore pedagogical documentation of student learning.

Source: Ontario Ministry of Education (2007b, 2008a, 2008b, 2010, 2013b, 2014a, 2014c, 2015), LearnTeachLead, http://learnteachlead.ca/.

Box 4.7. The "Teacher2Teacher" programme to support teacher collaboration and networks to engage in research and to foster evidence-informed professionalism in England, United Kingdom

At the beginning of the 21st century, the National Union of Teachers (NUT), the biggest English professional association at the time, developed a professionally-driven approach to build the capacity of teachers by engaging in and with research through networks involving both peers and researchers. The NUT's "Teacher2Teacher" programme involved pairs of teachers working together over a sustained period to develop and evaluate emerging practice based on intense working with leading edge researchers over 24 hours. The topics for "Teacher2Teacher" programmes arose from requests for NUT members, the views of NUT policy officers about system level issues causing teachers concern and the views if their substantial body of members who were also school leaders. Leading edge researchers were identified and recruited on the basis of their research publications and after considerable desk research and consultation across NUT's extensive network of researchers.

Box 4.7. The "Teacher2Teacher" programme to support teacher collaboration and networks to engage in research and to foster evidence-informed professionalism in England, United Kingdom (cont.)

During the initial 24-hour residential workshops teachers were immersed in illustrations of new approaches, in experimenting with tools and resources that nest them in classroom practices and in planning to experiment with them, over three cycles of experimentation and reflection that spanned roughly 12 weeks. During the initial residential, the teachers learned about the evidence about collaborative coaching and built structured, formal Learning Agreements. The objective was to shape their expectations of how they would work, the evidence they would collect about how their learning connected with student learning and the ways teachers would support each other's, sometimes quite different, projects. After approximately 12 weeks the teachers came together for another intense workshop focused on analysing how each other's experiments had worked, exploring together changes in student learning and work, photographs and videos of lessons, lesson plans and changes in their thinking and understanding. This reflection and analysis was facilitated by the original specialists. The final stage of the programme involved the teachers planning how to translate their own learning into learning experiences for their colleagues, role-playing the initial stages and considering how they would be able to i) continue their own learning as part of the process of supporting others and ii) how they would know their own and their colleagues' learning had been successful.

Some of these teachers went on to write up their learning experiences and others used this embedded form of engagement with and in research as a springboard for embarking on more explicit research for doctorate and master's degree programmes. NUT itself then established a series of scholarship projects focused on key NUT priorities such as Thinking Skills and improving the quality of talk which enabled teachers to progress to a more formal mode of engagement with and in research and several other "graduates" of these programmes subsequently supported and promoted teacher engagement in and with research by, for example, and serving as members of teacher research groups including the National Teacher Research Panel. During the first 10 years, NUT ran these programmes for between 8 and 12 different groups of teachers and focused on a wide range of different priorities. It is still continuing over a decade since it started, in this instance in relation to development education.

Source: Cordingley, P. (2016), "Knowledge and research use in local capacity building", in Governing Education in a Complex World, http://dx.doi.org/10.1787/9789264255364-9-en.

planning and supporting early learning that promotes each child's physical, cognitive, language, emotional, social and creative development and wellbeing; and teachers have training in elementary curriculum, assessment, evaluation and reporting, and child development (Ontario Ministry of Education, 2012). The OECD notes that many schools in Denmark are also using this model to support early learners with "integrated school start" programmes (OECD, 2006). While it may not always be possible to fund this team teaching model, the skills and expertise of pedagogues may be leveraged more explicitly in scheduling at the school level. The Danish government describes that activity lessons "may be planned and executed by teachers, other pedagogical staff or staff with other types of qualifications" (Danish Ministry of Children and Education, 2012). Activity lessons could be play-based, inquiry-based, or serve to support/supplement academic learning such as independent practice time with opportunities for homework assistance. Activities that focus on physical and mental health and wellbeing should also be encouraged. The structure could potentially include a model where teams of teachers could supervise students while others take time to

co-plan and collaborate. Again, the Danish government notes that "schools must take advantage of whatever formation and grouping of classes best fit the different types of activities. The activity lessons could be planned across classes and form levels".

School leaders

The power of collaborative inquiry for school leaders is the opportunity to reflect on, investigate aspects of and improve their practice. In terms of teacher collaborative inquiry, research indicates that school leaders learning visibly and publicly alongside their staff in school is likely to have beneficial effects on teaching practice and enhanced student achievement (Katz and Dack, 2013). These are compelling reasons for school leaders to engage in collaborative inquiry, among themselves in networks, but also with the staff of their schools.

Recent research highlights the importance of school leader groups engaging in their own collaborative inquiry. Kasl and Yorks (2010) demonstrate the difference between traditional inquiry questions posed by school leaders to teachers, and questions focused on school leaders' own individual learning. For example, a traditional inquiry question posed by principals might be more likely to highlight what teachers will do: "How can we improve the way that teachers use technology in the classroom?" In contrast, the question posed by the same group with a focus on their own learning would be, "How can we improve our ability as administrators to influence the way that teachers use technology in the classroom?" The difference between the two questions "may seem minor", but, in fact, "points to a radical distinction". The first implies that administrators are "taking action on the system", while the second suggests "that the change they seek is in themselves" (Kasl and Yorks, 2010). According to City et al. (2009), it is important that school leaders individually develop their own theory of action, but it is equally important that they shape their inquiry so it "relates concretely to the work of teachers and students in the classroom" (City et al., 2009). Powerful connections to the school's professional community are formed when a principal's inquiry is parallel to and in support of teacher and student learning and inquiry (Katz, 2013).

What applies to school leaders working with teachers also applies to municipal education leaders regarding participating with groups of school leaders in their collaborative inquiries around their practice. These same municipal leaders could capitalise on the networking opportunities they have established in order to conduct their own collaborative inquiries based on their practice with school leaders and schools. The same principles apply and the same benefits can accrue.

It is recommended that municipal education leaders provide time and facilitation for school leader learning teams to come together and collaborate concerning the issues of school organisation, differentiated staffing and scheduling. The first phase of this collaboration may need to be support for school leaders in identifying within their data what student needs are evident and need addressing. School leaders then need an opportunity to work in teams with leaders with similar school needs to share strategies and problem solve regarding the needs identified. Over the course of a school year the work would need to focus on monitoring strategies to gauge effectiveness of addressing the needs identified. Performance management processes that involve peer-evaluators and school self-evaluations that involve critical friends can also provide opportunities for school leaders to learn from each other as long as school leaders are prepared and trained for such roles (OECD, 2013b).

The London Challenge and City Challenge initiatives in England, United Kingdom, provide a concrete example for encouraging school to school and school leader collaboration

and learning (Box 4.4). The various activities and interventions of these initiatives were built around a belief that school-to-school collaboration has a central role to play in school improvement; the recognition of the importance of school leadership; and a belief in the usefulness of data-rich approaches to tackling issues and sharing learning. As an evaluation of the City Challenge programme by Hutchings et al. (2012) suggests, arrangements that enabled school leaders and teachers to share effective practice proved to be extremely beneficial. These included conferences at which practice was shared; a stronger school supporting a weaker one; groups of three schools led by the principal of a more successful school; "Families of Schools" which had similar intakes; hub schools or knowledge centres; and the Improving and Outstanding Teacher Programmes. Both principals and teachers argued that they learned most effectively from seeing good practice or hearing about it from those who had undertaken it. The most effective strategies to improve teaching and learning took place in schools, and involved observing excellent teaching; opportunities to reflect with colleagues; and coaching in the teacher's own classroom. This sector-led approach to school improvement was of benefit not only to the recipient schools but also to home schools since the partnership relationships created an enhanced environment for reflection on school effectiveness. However, as Baars et al. (2014) suggest, school-to-school support requires careful management. In particular, local and national leaders of education as consultant leaders needed very careful selection, training and quality assurance, as there is no guarantee that a good principal will make for a good consultant leader. Box 4.8 provides further specific examples for ways to encourage and facilitate collaboration between school leaders and schools in the Flemish Community of Belgium and New Zealand.

Box 4.8. Networks for schools and school leaders

Flemish Community of Belgium

In 1999, the authorities of the Flemish Community of Belgium launched a policy to encourage school collaboration through the establishment of "school associations" (scholengemeenschappen) in secondary education. From 2003, school associations were also introduced in the primary sector. School associations are collaborative partnerships between schools in the same geographical area. On average, school associations comprise between 6 and 12 schools. In 2010, the vast majority of schools (96.7%) belonged to a school community, and most of the schools that have not joined a school community provided special needs education. The key goal of this initiative is to strengthen schools' organisational and leadership capacities through increased co-operation. In secondary education, the policy also aims to improve the co-operation of schools in the supply of study options, career guidance and efficient use of resources. Joining a school association is voluntary, but the Flemish Ministry of Education and Training provides incentives for schools to join an association by attributing resources to the association, and granting more organisational flexibility in the case of secondary schools. School associations receive a package of points for the management and support staff in their schools, which are then redistributed among the individual schools in the community based on a repartition system agreed between the schools forming the community. In elementary education, some of these points may be used to appoint a co-ordinating director of the school community, and in secondary education, the school community can retain up to 10% of the points to ensure its own functioning.

Source: Nusche, D. et al. (2015), OECD Reviews of School Resources: Flemish Community of Belgium 2015, http://dx.doi.org/10.1787/9789264247598-en.

Box 4.8. Networks for schools and school leaders (cont.)

New Zealand

New Zealand has initiated "Learning and Change Networks" to establish a web of knowledge-sharing networks among schools, families, teachers, leaders, communities, professional providers and the Ministry of Education. Network participants work collaboratively to accelerate student achievement in Years 1 to 8 and to address equity issues. Learning and Change Networks address three big agenda items - schooling improvement, blended learning and digital technologies, and cultural responsiveness holistically instead of creating projects that deal with those agendas separately. Design work on the strategy commenced in October 2011 and five pilot networks representing 55 schools (kura) were established. The strategy went live in October 2012 with 57 networks established involving 373 schools (kura) (approximately 15% of New Zealand schools [kura]), with an average of 6 to 7 schools per network. There is a particular focus on priority groups traditionally under-served by the system - Māori, Pasifika, those from lower socioeconomic groups, and those with special education needs - along with their families (whānau), teachers, school and community leaders. As some of the distinctive features, Learning and Change Networks put an explicit and prominent focus on an applied theory of making professional learning communities and networks work so as to achieve outcomes that individual schools and teachers cannot readily do by themselves and on a sophisticated set of leadership and management arrangements that puts the onus on action and change on the networks and their members, while embedding these in regional and national structures of support. A central role is given to evaluation, generating learning evidence at school, network, regional and system levels and a strong connection to international experience and networks. Learning and Change Networks also recognise the importance of engaging learners, their parents, families (whānau) and communities in powerful learning-focused partnerships.

Source: OECD (2015b), Schooling Redesigned: Towards Innovative Learning Systems, http://dx.doi.org/10.1787/9789264245914-en.

Support the development of effective teaching through systematic formal and informal teacher feedback and appraisal

The effective monitoring and appraisal of teaching is central to the continuous improvement of schools. It can be a key lever to increase the focus on teaching quality and continuous professional learning for teachers, in line with a widespread recognition of the impact of teaching performance on student learning outcomes. It can help teachers develop their competencies by recognising strengths on which they can build and identifying weaknesses to be addressed by suitable professional development (OECD, 2013b). While there are local appraisal practices in Denmark, there is significant potential to further develop formal teacher appraisal systems and informal teacher feedback in schools and municipalities. This is a recommendation that should be developed concurrently with recommendations on teacher and school leader collaboration as just described and on the development of pedagogical school leadership as elaborated further below.

Formal appraisal and feedback

It is recommended that Denmark strengthen formal teacher performance appraisal focused on the continuous improvement of teaching practice. Teacher appraisal would serve both as a form of developmental feedback for teachers and as a mechanism for feedback for

schools, municipalities and potentially the Ministry for Children, Education and Gender Equality on the effective use of targeted funds for teacher development. In a previous OECD review of evaluation and assessment in Denmark, Shewbridge et al. (2011) provided some directions for how this could be accomplished. As Shewbridge et al. suggested, developmental appraisal could be a school-internal process carried out by line managers, senior peers, and the school principal (or members of the management group). It could draw on the professional teaching standards that Denmark once these have been developed, but also take school-based indicators and criteria as well as school objectives and contexts into account. It can be low-key and low-cost, and include self-appraisal, peer appraisal, classroom observation, and structured conversations and regular feedback by the school principal and experienced peers. It could be organised once a year for each teacher, or less frequently depending on the previous assessment by the teacher. The main outcome would be specific feedback on teaching performance as well as on the overall contribution to the school which would lead to a plan for professional development. Such a system would need to go hand in hand with a shift in school culture towards continuous improvement based on student learning. Guidelines for schools could be provided as part of a practical toolkit for all aspects of school evaluation (Chapter 3).

A large degree of local autonomy to develop and implement formal teacher appraisal can help generate trust, commitment and professionalism and encourage collaborative practices (OECD, 2013b). At the same time, as pointed out in the sections on challenges, there are concerns about the lack of systematic teacher appraisal practices at the local level. Teachers in Denmark are entirely dependent on local capacity and willingness to benefit from appraisal and feedback to improve their practice. In order to guarantee the systematic and coherent application of developmental evaluation across Danish schools, it would, therefore, be important to undertake the external validation of the respective school processes. Municipalities have a key role to play in ensuring that schools develop effective developmental appraisal processes (e.g. by auditing school-level processes, holding school leadership accountable, and documenting practices in biannual quality reports) (Shewbridge et al., 2011). The development of a national sample programme of external reviews of schools through the Ministry for Children, Education and Gender Equality could be a further instrument of external validation (see Chapter 3). The new corps of learning consultants can provide a further source of support to municipalities and schools for the development of effective formal internal teacher appraisal. Municipalities and schools should also be encouraged to co-operate and disseminate good practice through networks and partnerships to build capacity across the system (OECD, 2013b).

An alternative approach entails the introduction of stronger national parameters and regulations that suggest a range of tools and guidelines for implementation of formal teacher appraisal. To give an example from another school system, the province of Ontario, Canada, has developed a Teacher Performance Appraisal System based on the "Standards of Practice for the Teaching Profession" (Box 4.5). Under this legislated requirement school boards are responsible for having the principal of each school complete two performance appraisals for each new teacher during the first year of employment. One formal performance appraisal is required for each experienced teacher the first year they enter the board and once each five years thereafter. The ministry provides many resources for boards and principals as they plan this support for teacher development. The requirements and the resources and supports are available at the ministry's website (www.edu.gov.on.ca/eng/teacher/appraise.html). Concurrent with this appraisal system and linked to it Ontario teachers complete an annual

learning plan (ALP) each year which includes the teacher's professional growth objectives, proposed action plan, and timelines for achieving those objectives. This is linked to a teacher's performance appraisal in years where formal appraisals occur.

Support for new teachers

As noted in the challenges section, support for beginning teachers varies considerably across the Danish education system. Most often reported was that these teachers' needs were taken into consideration by the school leader. This support often involved varying their teaching assignments somewhat along with appointing expert teachers in the school to work with new teachers to support their development. These relationships between new and expert or highly experienced teachers could be a significant source of feedback for new teachers if there is time for observing the new teacher while they are teaching or co-planning and co-teaching lessons with the new teacher. Feedback and plans for professional learning can be part of the reflection process.

In Ontario, the "New Teacher Induction Program" (NTIP) is both required by legislation and supported financially by the Ontario Ministry of Education. It provides a variety of supports for new teachers, including: orientation for all new teachers by the school and school board; mentoring for new teachers by experienced teachers; on-the-job training in areas such as classroom management; communication with parents; and other activities aligned with current ministry initiatives. For more information, see the ministry's website (www.edu.gov.on.ca/eng/teacher/induction.html).

Informal teacher feedback

When a culture of learning and continuous improvement is established in a school, a group of schools or a municipality there are many ways for teachers to receive informal feedback aimed at improving their teaching practice. School leaders would often be engaged in classrooms in the school giving feedback to teachers on observations made. If teachers are engaged in a series of co-planned, co-taught lessons they critique their own teaching, the lesson they planned and provide feedback to their co-teacher on their teaching. If a teacher is assigned to work part of the time with an expert or coach on staff they would receive continuous feedback for improvement throughout these lessons. Most collaborative teacher activities mentioned earlier in this chapter include an element of feedback to teachers and quite often teacher self-assessment of their practice. Setting an expectation of continuous improvement through standards of practice for the profession would help put the conditions in place that encourage teachers to reflect on their practice. Strengthening pedagogical leadership in schools, which should include improving school leaders' skills for classroom observation, feedback and coaching, and encouraging the further distribution of leadership and teacher leadership would also help establish informal feedback in schools, including from teachers' peers.

Develop the school leadership profession and provide systematic support for school leaders and their deputies

As research has established, school leaders' actions and practices are an important contributor to student learning, directly after the impact of the teacher's actions in the classroom. Considering the small size of the school leadership profession, measures that target this group can, furthermore constitute highly cost-effective measures for improving teaching and learning in schools (Pont et al., 2008; Day et al., 2009; Louis et al., 2010).

In Denmark's decentralised education system, school leadership plays a particularly important role. School principals and their deputies have a broad range of responsibilities for the effective functioning of their schools. School leaders are responsible for all aspects of the school budget, school staffing (including administrative and care taking staffing), maintenance and operation of the school facility, parent and community outreach and consultation, teacher professional learning, teacher performance appraisal and feedback, and pedagogical leadership. The changes the Danish school system is currently undergoing as a result of initiatives like the 2014 Folkeskole reform, the introduction of a new framework for the utilisation of teachers' working time, and the inclusion of children with special needs, among others, further increase the importance of school leadership. A number of the policy options just described to develop the teaching profession (e.g. the planning of teacher professional learning, teacher collaboration and teacher feedback and appraisal) depend to a great extent on effective leadership.

Denmark should, therefore, pay particular attention to the development and management of its school leadership profession, from recruitment and initial training to professional development and evaluation/performance management. This includes both the Ministry for Children, Education and Gender Equality and the individual municipalities as the employers of school leaders. A few education systems have developed comprehensive school leadership development strategies that could inspire new initiatives in Denmark (see Box 4.9). Both municipalities and schools should be supported to develop school leaders' skills and practices, for instance through the Ministry of Children, Education and Gender Equality (and its learning consultant corps), LGDK, or others. Denmark's school leader association should be thoroughly involved in the process of developing the profession.

Box 4.9. Comprehensive school leadership development strategies

New Zealand

New Zealand has invested considerably in developing school leadership competencies across its education system. New Zealand's school leadership improvement efforts include a research-based model of effective pedagogical leadership, the Kiwi Leadership for Principals framework; the Educational Leadership Practices survey, a formative tool to help school principals analyse their leadership in schools; and a Professional Leadership Plan offering professional development opportunities for school principals at different stages of their career.

Source: OECD (2013b), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, http://dx.doi.org/10.1787/9789264190658-en; New Zealand Ministry of Education (2016), Educational Leaders, www.educationalleaders.govt.nz (accessed 4 February 2016).

Ontario, Canada

The province of Ontario, Canada, has identified successful school and system leadership as a core element of its efforts to achieve the province's three core educational goals: i) high levels of student achievement; ii) reduced gaps in student achievement; and iii) increased public confidence in publicly funded education. To this end, Ontario has developed and implemented a comprehensive school and system leadership strategy, the Ontario Leadership Strategy (OLS), to support student achievement and wellbeing by attracting and developing skilled and passionate school and system leaders. As part of this strategy, several tools and support mechanisms (e.g. The Ontario Leadership Framework 2012, and Core Leadership Capacities) have been developed to streamline and focus efforts to support

Box 4.9. Comprehensive school leadership development strategies (cont.)

school principals and vice-principals, to refine leadership skills and to put advanced leadership concepts and practices to work on a daily basis to meet educational targets and achieve concrete results. A province-wide Principal/Vice-Principal Performance Appraisal (PPA) system focused on goals that promote student achievement and wellbeing constitutes a key component of the OLS. It is designed to support the strategy's two overarching goals: i) to attract competent people to school leadership roles; and ii) to develop the best possible instructional leaders.

Source: OECD (2013b), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, http://dx.doi.org/10.1787/9789264190658-en; Institute for Educational Leadership (2013), The Ontario Leadership Framework 2012, A School and System Leader's Guide to Putting Ontario's Leadership Framework into Action, http://iel.immix.ca/storage/6/1345688999/Final_User_Guide_EN.pdf; Ontario Ministry of Education (2016b), Leadership development, www.edu.gov.on.ca/eng/policyfunding/leadership/index.html (accessed 4 February 2016).

The first step in the further development of the profession should be the creation of a framework to guide the work of school leaders (both formal school leaders and informal teacher leaders) (see Box 4.10 for examples). Such a framework, which should be collaboratively developed with the school leaders' association, would serve to:

- Facilitate a shared vision of leadership in schools.
- Promote a common language that fosters an understanding of leadership and what it means to be a school leader.
- Identify the practices, actions, and traits or personal characteristics that describe effective leadership.
- Guide the design and implementation of professional learning and development for school leaders.
- Aid in the recruitment, development, selection and retention of school leaders.

Box 4.10. Professional school leadership standards

Chile

In Chile, different sets of school leadership standards provide guidance for school leaders about the role they should fulfil. In a shift from the traditionally administrative and managerial role of school leaders, all of these frameworks and standards emphasise school leaders' role as pedagogical leaders. A first set of standards, the Good School Leadership Framework (Marco para la Buena Dirección) published in 2005 was updated with a new set of standards in 2015 (Marco para la Buena Dirección y el Liderazgo Escolar). The new school leadership standards have been designed to support school leaders in their self-reflection, self-evaluation and professional development; to establish a common language around school leadership that facilitates reflection of school leadership within the school community; to guide the initial preparation and professional development of school leaders; to provide a reference for the recruitment and evaluation of school leaders; to facilitate the identification of effective school leaders and to spread good practices; and to promote shared expectations about school leadership and provide a reference for professional learning. They are not prescriptive, but should be a common reference for adaptation to local contexts. To reflect the contextual nature of school leadership, the standards distinguish conceptually between practices and competencies, and describe

Box 4.10. Professional school leadership standards (cont.)

practices, personal resources, competencies and knowledge that form the basis of successful school leadership. Practices entail five dimensions: i) constructing and implementing a shared strategic vision; ii) developing professional competencies; iii) leading processes of teaching and learning; iv) managing the school climate and the participation of the school community; and v) developing and managing the school. Personal resources comprise three areas: i) ethical values; ii) behavioural and technical competencies; and iii) professional knowledge.

Source: Santiago, P. et al. (forthcoming), OECD Reviews of School Resources: Chile, OECD Publishing, Paris.

Victoria, Australia

The state of Victoria, Australia, has developed a Developmental Learning Framework for School Leaders, as a fundamental element of its 2006 Learning to Lead Effective Schools strategy. The framework is intended to strengthen the leadership skills of school principals and teachers. It can be used in various ways, e.g. for self-assessment, performance and development reviews, school leader selection, coaching and mentoring and leadership induction and planning. The Victoria leadership framework breaks new ground in being applicable to leadership throughout the school at all levels in the school, showing where a teacher or school leader is located on a leadership continuum and what they need to know and be able to do in order to improve. As such, the Victoria framework is based on the core belief that leadership is learnable. The framework describes development within five leadership domains: i) technical; ii) human; iii) educational; iv) symbolic; and v) cultural. Within each of these leadership domains, the framework lays out typically five progressive levels of competency and related capabilities. It defines what effective leadership looks like in practice at each of the different stages of development and growth and provides a clear direction about what it means to develop as a leader.

Source: OECD (2013b), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, http://dx.doi.org/10.1787/9789264190658-en; Department of Education Victoria (2007), The Developmental Learning Framework for School Leaders, www.education.vic.gov.au/Documents/school/principals/profdev/developmentallearn.pdf.

New Zealand

New Zealand has developed a Kiwi Leadership for Principals (KLP) model that provides a statement of the expectations of school principals. Built on a core conceptualisation of educational leadership and stressing the need of building effective relationships as well as school leaders' attention to their particular contexts, KLP defines Leading Change and Problem-Solving as the two key leadership areas for school principals. The KLP model, further, identifies four areas of practice (culture; pedagogy; system; partnerships and networks) to reach these two objectives. Four educational leadership qualities underpin school leaders' ability to lead their schools: manaakitanga (leading with moral purpose), pono (having self-belief), ako (being a learner), and awhinatanga (guiding and supporting). In alignment with this leadership framework, two sets of professional standards for primary and secondary school principals provide a baseline for assessing satisfactory performance within each area of practice (culture; pedagogy; system; partnerships and networks). New Zealand has been in the process of developing two further parts of the overall leadership strategy: Kiwi Leadership for Senior and Middle Leaders and Leadership for Māori-medium Leaders.

Source: OECD (2013b), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, http://dx.doi.org/10.1787/9789264190658-en; New Zealand Ministry of Education (2008), Kiwi Leadership for Principals, Principals as Educational Leaders, www.educationalleaders.govt.nz/content/download/45029/377177/file/Kiwi%20Leadership%20for%20Principals%20(2008).pdf.

Considering the importance of pedagogical leadership for teaching and learning, the framework should have a clear focus on competencies related to this leadership style, but also recognise that successful school leadership is always context-dependent (OECD, 2013b, Pont et al., 2008). Once it has been developed, a Danish leadership framework could serve as a basis for continued collaboration among school leaders, as a reference point for school leadership consultants, as a catalyst for the development of personal learning objectives with a learning plan for individual school leaders and a basis for reflection and introspection on the part of individual school leaders.

Denmark should also consider developing a more strategic approach to the training of school leaders. The ministry's plan to introduce a national programme for the training of principals and the provision of funding for the training of school leaders as part of the 2014 Folkeskole reform point into the right direction. Although the research evidence on the impact of training and development on school leaders is limited, the effective preparation and ongoing training of school leaders is essential to enable school leaders to be successful in such a challenging role. Research suggests that leadership development should ideally be a continuum and be available at and targeted to the different stages of a school leaders' career. This is not yet the case in Denmark. Training should ideally begin with teachers and continue for beginning as well as long-standing school principals. Taster courses can help identify and prepare future school leaders. As just highlighted, opportunities for collaboration, coaching and mentoring between school leaders can also provide useful support and enable school leaders to gain new expertise (Pont et al., 2008). England, United Kingdom, provides an example for a more strategic approach at school leadership development that targets school leaders at different stages of their career. The Department for Education introduced new National Professional Qualifications for head teachers, senior school leaders and middle leaders. In addition, the department provides funding for targeted programmes that seek to develop excellent middle and senior leaders that work in challenging schools. The Teaching Leaders charity works to improve the quality of subject and year-group leaders of schools in disadvantaged communities. The Future Leaders charity seeks to develop the leadership skills of teachers who want to work as head teachers in disadvantaged communities. A Talented Leaders programme seeks to recruit outstanding school leaders for areas that face recruitment challenges. These programmes act as a pipeline for young, aspiring school heads who want to gain leadership responsibility, and are keen to do so in those schools that need them the most.4

The wide range of tasks and responsibilities that school leaders are often expected to fulfil bear a risk of placing too high expectation on school leaders (Pont et al., 2008). School leaders interviewed by the OECD review team in Denmark expressed concerns that some of the management aspects of their diverse roles within their school limited their ability to focus on student learning and teacher practice affecting student learning. This is similar to other countries in which school leaders hold a large degree of autonomy for the management of their school. In such contexts, it is especially important that school leaders have the support they need from their employer as well as distributed leadership structures. During the review visit, some municipalities reported that support for some of the more managerial roles was being co-ordinated at the municipal level so that school leaders had more time to concentrate on the teaching and learning environment and practice in their schools as expected of them in the 2014 Folkeskole reform. The aim of these changes was to still allow flexibility at the school level to meet the particular needs of the learning community while at the same time removing some tasks from the role of the

school leader. Such approaches could be useful to enable school leaders to focus on their pedagogical leadership role and should be shared between municipalities. As Shewbridge et al. (2011) already pointed out, the concept of shared leadership also needs to be more firmly embedded in schools, to support existing principals and allow them to concentrate on their pedagogical role.

Further developing school leader performance management in municipalities is another area for possible policy development. While the evidence base on school leader appraisal is still rather limited, effective performance management can ensure that school leaders themselves receive external feedback and targeted support to improve practice. Individual appraisal constitutes a tool to set clear expectations and to hold principals accountable for their performance (OECD, 2013b; Radinger, 2014). The Danish Ministry for Children, Education and Gender Equality could consider providing further support and materials for municipalities on how to organise school leader appraisal effectively that does not add to school leaders' workload and stress levels, but that is a meaningful exercise. These materials could form part of a comprehensive national toolkit for school evaluation suggested in Chapter 3, which does not necessarily preclude the possibility that municipalities might elect to use their own alternative approaches, or perhaps adapt and customise the national approach to suit their own circumstances. Municipalities could be encouraged to work together to ensure sufficient capacity to implement good appraisal processes, to learn from each other and to share best practices.

Support effective teaching and learning for all students in a context of inclusion

As the inclusion of students with special educational needs is becoming the norm in Denmark, one recommended strategy in supporting effective learning in diverse classrooms is for regular school to partner with centres of excellence in working with children of differing exceptionalities. These organisations would likely be able to highlight effective inclusive practices and resources for teachers to maximise the learning and development for students with special educational needs. Both municipal and regional special schools can play a key role in this process by taking on a new function of supporting both students with special needs being educated inclusively in regular schools and teachers providing inclusive education in these schools. Drawing on the experience and expertise of teachers from special needs schools is also important when planning transitions from special schools into the regular school system. This would involve leveraging support and information provided by staff who has previously worked with the student.

Turning special schools into methodological centres providing support to mainstream schools, however, is a highly complex process of institutional change. The process requires serious adaptive capacities from special needs professionals and schools and it can be implemented only slowly and gradually through pilot development projects based on voluntary participation and through spreading successful practices. The example of countries, such as Germany, where the number of special schools is high, and the growing demand for mainstream placements has led to rethink the role of special schools' staff, might be relevant for Denmark. In Germany an increasing number of special schools' teachers are spending part of their working time in mainstream schools not only directly supporting children but also providing consultancy to class teachers (NESSE, 2012). The process of transforming the function of special schools could also draw on Denmark's participation in the work of the European Agency for Special Needs and Inclusive Education which collected a significant amount of experience and examples of good practice in the

field of turning schools into institutions that are capable of providing genuine inclusive education. Expertise in services like VISO (Videns- og Specialrådgivningsorganisation – Specialised Knowledge and Counselling Organisation) and municipal PPRs (Pædagogisk Psykologisk Rådgivning – Local Educational-Psychological Advisory Services) also has a key role to play in facilitating the inclusion process in regular schools and these services should be easily accessible to municipalities and schools. Learning from other sectors of the education sector with long-standing experience of inclusion, like early childhood education and care, as well as channels for schools and municipalities to share promising practices and knowledge could constitute further mechanisms to support inclusion.

Professional learning for educators is an essential and ongoing next step. Professional learning around how to adapt Common Objectives and learning goals for students with special needs is one area to focus on in Denmark (also see Chapter 3). In diverse classrooms, it is particularly important that teachers use multiple methods and pathways to achieve learning goals, because no single method will be able to reach all students. An example from Ontario, Canada, may serve well to highlight success with inclusionary practices for students with special education needs. In 1998, Ontario legislation (Reg. 181) was enacted to ensure that "the first consideration regarding the placement of an 'exceptional pupil' be placement in a regular classroom with appropriate supports, when such placement meets the student's needs and is in accordance with parents' wishes". Today, classrooms in Ontario are filled with students with diverse learning needs. A universal design for learning (UDL) approach is one that reflects a belief that teaching strategies, instructional resources, tools, and accommodations that are used to support students with special needs, may also be beneficial for all learners (Ontario Ministry of Education, 2013a).

The synthesis of available evidence and research and practice in Denmark regarding successful inclusive practices and goal-oriented teaching for students with SEN, for example through a thematic review carried out by the Ministry for Children, Education and Gender Equality or the Danish Evaluation Institute (EVA) could be a further element to support inclusion (see Chapter 3).

Notes

- 1. Denmark reported actual teaching time, that is the annual average number of hours that full-time teachers teach a group or a class of students, including overtime, while most OECD countries reported statutory teaching time.
- 2. According to TALIS 2013, 36.3% of lower secondary teachers reported that their education had only included content of some of the subjects they were teaching (TALIS average: 22.6%). Similarly, 35.3% of lower secondary teachers reported that their education had included pedagogy for some of the subjects they were teaching (TALIS average: 22.7%) and practice in some of the subjects they were teaching (TALIS average: 22.0%) (OECD, 2014b).
- 3. While the number of student hours per year is regulated, municipalities are free to decide to have a longer school year and less vacation. The schedules are decided at the school level with a high degree of variation.
- 4. For further information see www.gov.uk/government-policy-teaching-and-school-leadership/2010-to-2015-government-policy-teaching-and-school-leadership. The website of the Teaching Leaders charity can be accessed here www.teachingleaders.org.uk; the website of the Future Leaders trust is available here www.future-leaders.org.uk.

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