

OECD Reviews of Evaluation and Assessment in Education

NORWAY

Deborah Nusche, Lorna Earl, William Maxwell and Claire Shewbridge





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September 2011



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Foreword

This report for Norway forms part of the OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes (see Annex A for further details). The purpose of the Review is to explore how systems of evaluation and assessment can be used to improve the quality, equity and efficiency of school education. The Review looks at the various components of assessment and evaluation frameworks that countries use with the objective of improving student outcomes. These include student assessment, teacher appraisal, school evaluation and system evaluation.

Norway was one of the countries which opted to participate in the country review strand and host a visit by an external review team. Members of the review team were Deborah Nusche (OECD Secretariat), co-ordinator of the Review; Lorna Earl (Director, Aporia Consulting Ltd.; formerly Associate Professor and Head of the International Centre for Educational Change at the Ontario Institute for Studies in Education, University of Toronto, Canada); William Maxwell (Her Majesty's Senior Chief Inspector of Education in Scotland; United Kingdom); and Claire Shewbridge (OECD Secretariat). This publication is the report from the review team. It provides, from an international perspective, an independent analysis of major issues facing the evaluation and assessment framework in Norway, current policy initiatives, and possible future approaches. The report serves three purposes: (1) Provide insights and advice to the Norwegian education authorities; (2) Help other OECD countries understand the Norwegian approach; and (3) Provide input for the final comparative report of the project.

Norway's involvement in the OECD Review was co-ordinated by Ms. Vivi Bjelke, Senior Adviser, Department of Assessment, Norwegian Directorate for Education and Training. An important part of Norway's involvement was the preparation of a comprehensive and informative Country Background Report (CBR) on evaluation and assessment policy, published by the Norwegian Directorate for Education and Training in 2011. The review team is very grateful to the authors of the CBR, and to all those who assisted them for providing an informative document. The CBR is an important output from the OECD activity in its own right as well as an important source for the review team. Unless indicated otherwise, the data for this report are taken from the Norwegian Country Background Report. The CBR follows guidelines prepared by the OECD Secretariat and provides extensive information, analysis and discussion in regard to the evaluation and assessment framework and the views of key stakeholders. In this sense, the CBR and this report complement each other and, for a more comprehensive view of evaluation and assessment in Norway, should be read in conjunction.

The review visit to Norway took place on 8-15 December 2010 and covered visits to Oslo, As, Trondheim and Malvik. The itinerary is provided in Annex B. The visit was designed by the OECD in collaboration with the Norwegian authorities. The biographies of the members of the review team are provided in Annex C.

During the review visit, the team held discussions with a wide range of national, regional and local authorities; officials from the Ministry of Education and Research; relevant agencies outside the Ministry which deal with evaluation and assessment issues; teacher unions; parents' organisations; representatives of schools; students' organisations; and researchers with an interest in evaluation and assessment issues. The team also visited a range of schools, interacting with school management, teachers and students. The intention was to provide a broad cross-section of information and opinions on evaluation and assessment policies and how their effectiveness can be improved.

The review team wishes to record its grateful appreciation to the many people who gave time from their busy schedules to inform the review team of their views, experiences and knowledge. The meetings were open and provided a wealth of insights. Special words of appreciation are due to the National Co-ordinator, Ms. Vivi Bjelke from the Norwegian Directorate for Education and Training, for sharing her expertise and responding to the many questions of the review team. The courtesy and hospitality extended to us throughout our stay in Norway made our task as a review team as pleasant and enjoyable as it was stimulating and challenging.

The review team is also grateful to colleagues at the OECD, especially to Stefanie Dufaux for preparing the statistical annex to this report (Annex D) and to Heike-Daniela Herzog for editorial support.

This report is organised in six chapters. Chapter 1 provides the national context, with information on the Norwegian compulsory education system and recent developments. Chapter 2 looks at the overall evaluation and assessment framework and analyses how the different components of the framework play together and can be made more coherent to effectively improve student learning. Then Chapters 3 to 6 present each of the components of the evaluation and assessment framework – student assessment, teacher appraisal, school evaluation and system evaluation – in more depth, presenting strengths, challenges and policy recommendations.

The policy recommendations attempt to build on and strengthen reforms that are already underway in Norway, and the strong commitment to further improvement that was evident among those we met. The suggestions should take into account the difficulties that face any visiting group, no matter how well briefed, in grasping the complexity of the Norwegian education system and fully understanding all the issues.

Of course, this report is the responsibility of the review team. While we benefited greatly from the Norwegian CBR and other documents, as well as the many discussions with a wide range of Norwegian personnel, any errors or misinterpretations in this report are our responsibility.

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Acronyms and abbreviations

CBR Country background report

ICT Information and communication technologies

IDP Individual development plan

IEA International Association for the Evaluation of Educational Achievement

KS Kommunesektorens interesse- og arbeidsgiverorganisasjon (Norwegian Association

of Local and Regional Authorities)

NELVU Nettverk for elev- og lærlingvurdering (Network for Student and Apprentice

Assessment)

NKVS Nasjonalt kvalitetsvurderingssystem (National Quality Assessment System)

OECD Organisation for Economic Co-operation and Development

PIRLS Progress in International Reading Literacy Study

PISA **Programme for International Student Assessment**

PPT Pedagogisk-psykologisk tjeneste (Pedagogical-psychological services)

SSB Statistisk sentralbyrå (Statistics Norway)

TALIS Teaching and Learning International Survey

TIMSS Trends in International Mathematics and Science Study

Vq1 Videregående opplæring årstrinn 1 (Upper secondary education level 1)

Videregående opplæring årstrinn 2 (Upper secondary education level 2) Vg2

Videregående opplæring årstrinn 3 (Upper secondary education level 3) Vg3

Executive summary

Norway has a well-established tradition of decentralisation and school autonomy, with a strong sense of individual schools being "owned" by their local communities and accountable to them rather than the national authorities. This decentralisation is especially marked in the case of primary and lower secondary education, where, with the exception of a small private sector, schools are run by the 430 municipalities. Many of these, especially in rural areas, are very small and responsible for just a few schools each. In this decentralised context, evaluation and assessment are essential to monitor the quality of education nationally and provide feedback for improvement to school owners and schools.

The Norwegian authorities have set up a national quality assessment system (NKVS) for the education sector in 2004. NKVS provides access to a range of data and tools intended to help schools, school owners and education authorities evaluate their performance and inform strategies for improvement. The system initially included mandatory national student assessments, user surveys and a web-based School Portal, and was later complemented by additional tools and guidance to support evaluation at the local level. Taken together, the different elements of NKVS have the potential to provide the sector with a powerful toolkit to support a decentralised system of evaluation and assessment. Norway deserves credit for the initiative to create a multi-faceted evaluation and assessment framework that provides monitoring information at different levels and aims to achieve both accountability and improvement purposes. To further strengthen Norway's approach to evaluation and assessment, top priorities are to:

Clarify learning goals and quality criteria to guide assessment and evaluation

For evaluation and assessment to be effective in improving quality across the whole education system, it is essential that all schools and school owners have a clear understanding of the level of performance that can be achieved by the most successful schools, and are able to accurately evaluate how their performance stands in comparison. This requires the development of a clear set of reference points for common orientation across Norway to help local actors evaluate the quality of processes and outcomes. There is room to develop clearer expectations and criteria for student performance in different subjects and year levels and to clarify key aspects of quality in teaching practices and school organisation.

The Ministry of Education and Research and the Directorate for Education and Training should engage with key stakeholders to (1) refine and expand national competence goals and provide clearer guidance concerning expected learning progressions and criteria for assessment in different subjects, (2) develop an evidence-based statement or profile of what teachers are expected to know and be able to do, as a reference framework to guide teacher appraisal, professional development and career progression, and (3) establish an agreed framework of process quality indicators for school evaluation that can help schools review and improve core elements of their practice such as teaching and learning, curriculum management, assessment approaches, and management and leadership.

Complete the evaluation and assessment framework and make it coherent

The establishment of NKVS and its various elements provide Norway with a strong basis to develop a comprehensive national framework for evaluation and assessment. However, the distinct purposes of the various tools and data sources established through NKVS have not been well communicated and there is little understanding of NKVS as a coherent system. It is now important to increase clarity in the communication about the evaluation and assessment framework, take stock of the work accomplished so far and enhance coherence between the different elements of evaluation and assessment. To this end, it would be helpful to develop a strategic plan or framework that clearly maps all the existing elements of evaluation and assessment in Norway, including those that are currently not perceived as part of NKVS.

In particular, teacher appraisal is an important element of a comprehensive evaluation and assessment framework that is currently not well integrated into NKVS. Teacher appraisal and feedback can be powerful levers to increase teacher effectiveness and achieve better student learning outcomes. To complete the evaluation and assessment framework, the appraisal of teaching practices should be integrated into NKVS, and be linked to both teacher professional development and school evaluation and improvement.

The national authorities should emphasise that the evaluation and assessment framework includes both formative and summative elements, and school-internal as well as external components. For each of the key components of evaluation and assessment, the framework or strategic plan could provide links to the relevant reference standards, and point to existing tools and professional learning opportunities. To make the system coherent, it is important that learning goals are placed at the centre of the framework and that all other elements align to work towards these goals.

Further strengthen competencies for evaluation and assessment among teachers, school leaders and school owners

The successful implementation of an evaluation and assessment framework crucially depends on whether professionals in counties, municipalities and schools have the understanding and competencies to collect, analyse and interpret evaluative information with a view to improve practices. Embedding an evaluation culture in schools and municipalities across Norway is a large culture shift that requires further investment in professional learning opportunities, targeted to the needs of different stakeholder groups.

• **Teachers**, responsible for student assessment, need to further strengthen their competencies to (1) interpret and follow up on student assessment results obtained from national tests and mapping tests, (2) develop valid and reliable assessment tools to meet their own specific local needs, and (3) enhance formative assessment practice, especially giving feedback and engaging students. To focus the professional learning offer regarding assessment, it would be helpful to define a set of teacher competencies related to assessment that can be integrated in overall teaching standards (see above).

- School leaders, responsible for both teacher appraisal and school self-evaluation, need to develop their skills to operate effective feedback, coaching and appraisal arrangements for their staff and to use data in a purposeful way for whole-school evaluation and improvement. The national training programme for new school leaders is a promising step in this direction. The provision of leadership training could be expanded to differentiate offers for a wider range of school staff including middle and deputy leaders, beginning leaders and experienced leaders. It is also important to ensure that school leaders receive adequate appraisal and feedback from their employers.
- School owners, responsible for external evaluation of individual schools and monitoring of their local education systems, need to develop the capacity to understand and make decisions based on evaluative information from their schools. In many parts of Norway, it is unrealistic to expect that individual school owners would be able to develop robust local quality assurance systems on their own and follow up with schools accordingly. It is likely to make more sense to build larger scale "shared service" approaches, which offer school improvement services, including external evaluation, coaching and consultancy, to groups of schools and school owners across a region. The County Governors could play a key role in promoting and supporting strategic partnerships between school owners and key sources of support.

Chapter 1

School education in Norway

While Norway's results in the OECD's Programme for International Student Assessment (PISA) are at or above the OECD average depending on the subject, these outcomes are not considered satisfactory given Norway's high levels of spending on education. There are also indications that the quality of education provided varies between municipalities with otherwise similar characteristics. The first publication of PISA results in 2000 was described by stakeholders in Norway as a "PISA shock", which has helped focus attention on the monitoring of quality in education. Over the past ten years, there has been a strong focus on building up national tools and procedures to monitor quality at different levels of the system with a view to improve practices and raise performance. This national agenda is coupled with efforts to build up capacity at all levels and support networking among schools and school owners to strengthen collective learning. This approach reflects Norway's well-established tradition of local autonomy, with individual schools being "owned" by municipalities and counties and accountable to them rather than more distant national bodies.

This chapter provides background information that will help readers not familiar with the Norwegian education system understand the context in which evaluation and assessment takes place. The chapter provides a brief overview of the current national demographic, political and economic context as well as a description of the key features of the Norwegian education system.

National context

Demographic context

Norway has 4.9 million inhabitants, with about one million living in the three main cities of Oslo, Bergen and Trondheim. The country's population density is one of the lowest in Europe, with just 13 inhabitants per km² (compared to 128 in Denmark with a roughly similar population). While Norway is a demographically rather homogenous country, there are two forms of the Norwegian language (*nynorsk* and *bokmal*) that are both official languages. There is also a Sami minority population of around 20 000 individuals with its own language and culture. Immigration to Norway has increased rapidly in recent years. In 2009, 10.6% of Norway's population had an immigrant background (including those born in Norway to immigrant parents), with the largest groups coming from Poland, Pakistan, Sweden, Iraq, Somalia and Germany (Taguma *et al.*, 2009).

Political context

Norway is a Constitutional Monarchy with a parliamentary form of government. It is a unitary state subdivided into 19 counties and 430 municipalities. The electoral system is based on proportional representation. Both the Labour Party and the Conservative Party have played leading roles in the multi-party system. The current government is a coalition formed by the Labour Party, the Socialist Left Party and the Centre Party. Similarly to other Nordic countries, there are a number of features that have a positive impact on the political culture and governance of the public sector in Norway. These include a high level of education of the population, powerful traditions of consultation and participation in the public policy process and a strong concern for equity as an important value in the Norwegian society (Clark *et al.*, 2005). Norway is not a member of the European Union but has traditionally close ties with the EU and its member countries.

Economic context

The impact of the global financial crisis has been less severe in Norway than in most other OECD countries. The recession in Norway was relatively short lived and the rise in unemployment – though significant by Norwegian standards – remained moderate (OECD, 2010). Prior to the crisis, Norway had been experiencing one of its strongest periods of economic growth, with average annual growth over 4% and very low unemployment in the years between 2003 and 2008. A distinctive feature of the Norwegian labour market is its high degree of salary compression, with relatively little differentiation of salary levels across different levels of educational qualifications. The female labour force participation in Norway is among the highest in the OECD. Like other Nordic countries, Norway continues to operate a comprehensive welfare system and has high levels of public social expenditure.

Main features of the school system

Structure

Levels of education

The Norwegian school system is organised in three levels:

- **Pre-primary education (typical ages 1-6).** Pre-primary education is provided in public and private day-care centres. The national government sets goals and provides earmarked funding for the day-care sector and the municipalities are responsible for operating and supervising institutions. While participation is voluntary, in 2008, 75% of 1- to 2-year-olds and 96% of 3- to 5-year-olds attended pre-primary institutions (Eurydice, 2010). The day-care centres are financed by a mix of public grants and parental fees.
- Compulsory education (typical ages 6-16). Students begin their school education in the year of their sixth birthday. Compulsory education is provided in single-structure comprehensive schools. It lasts for ten years and comprises two levels: the primary level from Years 1-7 and the lower secondary level from Years 8-10.
- Upper secondary education (typical ages 16-19). Upper secondary education comprises three or four years and is organised into 12 educational programmes (three general programmes and nine vocational programmes). Participation is voluntary and free of charge. In 2008, 91% of students aged 16 to 18 participated in upper secondary programmes.

Private schools

While the number of private schools has risen in the last decade, the sector remains very small compared to other OECD countries. In 2009/10, only 2.5% of compulsory school students and 5% of upper secondary school students were enrolled in private schools. Private schools applying for accreditation must generally be based on a religious affiliation or an acknowledged pedagogical philosophy. Accredited private schools receive state funding of 85% of what operating expenses would cost at a state school.

Distribution of responsibilities

Norway has a long-standing and well-established tradition of school autonomy, with a strong feeling of individual schools being "owned" by their local communities and accountable to them rather than more distant national bodies. This decentralisation is especially marked in the case of primary and lower secondary education, where, with the exception of a small private sector, schools are run by the 430 municipalities. Many of these, particularly in the more rural areas, are very small and are only responsible for a handful of schools each. In the case of upper secondary education the schools are run by the 19 counties with the only exception being Oslo, the largest local authority, which runs both primary and both levels of secondary schools. Private schools are "owned" by the school's board.

The Parliament (*Storting*) and the government define overall goals for education, adopt the legal framework and determine structures and organisation. The Ministry of Education and Research formulates national education policy including acts, regulations and curricula. Within this framework, the school owners (counties, municipalities and private providers) are responsible for implementing education activities, organising and operating school services, allocating resources and ensuring quality improvement and development of their schools.

Municipalities may have two or three administrative levels. "Two-level" municipalities have a flat organisational structure where school principals report directly to the chief municipal executive. In "three-level" municipalities, principals report to a separate municipal education officer. Municipalities typically delegate a range of tasks including budget allocation, recruitment of staff and development of pedagogical plans to the school level.

At the central level, the Ministry of Education and Research is supported by the Directorate for Education and Training. The Directorate was established in 2004 as the executive agency of the Ministry. It is responsible for supervising quality and governance of primary and secondary education. It ensures the implementation of acts and regulations and assists the different levels of the school system in the implementation of national education policy. The Directorate has operational responsibility for curriculum development, educational research, the National Quality Assessment System (NKVS) and ICT in education (Eurydice, 2010).

At the regional level, the state is represented by County Governors. The County Governors' offices ensure the link between the central education authorities (the Ministry and the Directorate) on the one hand and the municipalities and counties on the other. The County Governors' role is mainly one of supervision, inspection and reporting. They ensure implementation of the national education policy at the regional level, process complaints and appeals relating to the acts and regulations, and hold responsibility for inspecting public schools.

Funding

The counties and municipalities are responsible for funding a range of basic services including education. School education is financed by the counties' and municipalities' budgets which consist of both local tax revenues and central state transfers. The transfers from the state are determined by the *Storting* and administered by the County Governors each year. The state grants are untargeted, which means that county/municipal authorities have considerable autonomy in allocating resources across different sectors and activities. The block grant is allocated in a way to ensure equalisation of differences in income and expenses between municipalities. At the same time, the state also provides earmarked funding for a few areas in education including mother tongue teaching and teaching of Norwegian as a second language (Eurydice, 2010).

While funding formulas vary, it is common for counties and municipalities to allocate a lump sum funding to schools based on factors such as the number of pupils, geographical location and the schools' internal organisation. The largest part of school funding is tied up as salary resources (Norwegian Directorate for Education and Training, 2007). Municipalities are obliged to provide education to all resident pupils in the school nearest to their homes, but there are no incentives for municipalities to cater for non-resident pupils as there is no financial compensation provided in the central

government grant scheme (OECD, 2010). Municipalities can form bilateral agreements for financial compensation but this does not happen frequently (OECD, 2010).

National curriculum and goals for education

Curriculum

The National Curriculum for Knowledge Promotion was introduced in 2006. Compared to earlier versions, this curriculum focuses more strongly on basic skills and outcome-based learning. It covers the entire school system from primary through to upper secondary education and includes four key elements as outlined below.

- The core curriculum provides overarching objectives for primary and secondary schooling and describes the underlying values, culture and knowledge that education should build on.
- The Quality Framework defines and explains the responsibilities of school owners in ensuring quality education.
- The subject curricula set student competency goals for Years 2, 4, 7 and 10 of compulsory schooling and for each year of upper secondary education (Vg1, Vg2 and Vg3). Five basic skills are integrated into the competence aims of each subject: reading literacy, verbal expression, written expression, numeracy and digital/computer literacy.
- The framework for the distribution of teaching hours and subjects provides the minimum numbers of teaching hours for individual subjects. While school owners can choose to provide more teaching hours in particular subjects, this must be done with separate funding (Norwegian Ministry of Education and Research, 2010).

School owners are responsible for the adaptation and implementation of the curriculum at the local level. They may establish local subject curricula to guide their schools' programmes and work plans. The task of specifying goals for each year is often delegated to the school principals. It is the responsibility of schools to determine the content, organisation and methods of teaching.

National objectives for education

In its report to the Parliament on Quality in Education (St.meld.nr.31, 2007/08), the Ministry of Education and Research has set objectives for the quality of primary and secondary education and training. The objectives are intended to guide activities across the school sector and provide clear signals concerning the priority areas in primary and secondary education. They also provide indicators that allow measuring the progress at the municipal and system level in achieving these objectives. School owners are encouraged to prepare specific local goals in line with these national objectives (Norwegian Ministry of Education and Research, 2010). The three core objectives refer to basic skills development, completion of upper secondary education and inclusion:

1. All students leaving compulsory school should be able to master the basic skills that will enable them to participate in further education and working life.

- 2. All students and apprentices who are able to do so should complete upper secondary education with a certificate of competence that permits further studies or entry into working life.
- 3. All students and apprentices should be included and experience a sense of mastery.

Principles of equity and inclusion

Norway has a highly inclusive education system. The overall objective of education policy is to ensure equal education opportunities for all students irrespective of gender, ethnicity, geographic location and socio-economic background (Eurydice, 2010). Education in the public school system and higher education is free of charge. It should be noted, however, that early childhood education and care is not free. Like other Nordic countries, Norway has a comprehensive, untracked school system from pre-primary through to upper secondary education. Schools are not allowed to select their students based on academic ability and year repetition is non-existent in Norway (OECD, 2011). In 2008, a new mission statement for compulsory schooling was adopted which underlines the value of Norway's cultural traditions and cultural diversity.

The Education Act stipulates that teaching must be adapted in a way that it will be inclusive for all students and that individual needs are responded to within the mainstream classroom. At the same time, students who do not achieve satisfactory learning outcomes have a right to special teaching arrangements. It is the responsibility of school owners to ensure that all students receive equal and adapted teaching in individual or group settings. At the municipal and county level, pedagogical-psychological support services (PPT) assist schools with the adaptation of teaching to students with special educational needs. This local system is complemented by Statped, a national network of 13 special pedagogical competence centres led by the Directorate for Education and Training.

Main trends and concerns

A sustained focus on raising overall performance

In the latest round of the OECD's Programme for International Student Assessment (PISA) in 2009, the performance of Norwegian 15-year-old students was at the OECD average in mathematics and science and just above the average in reading. Overall, Norwegian results in PISA have been relatively stable over the past decade. While there had been a decline of Norwegian results between 2000 and 2006, this trend was reversed in 2009 with results very similar to those achieved in 2000 (Kjærnsli and Roe, 2011).

While, overall, Norway's results are at or above the OECD average depending on the subject, these outcomes are not considered satisfactory given that Norway's annual expense per student is about 45% above the OECD average (OECD, 2010). There is a concern that resources invested in education may not be producing adequate results in terms of student learning outcomes. The first publication of PISA results in 2000 was described by stakeholders in Norway as a "PISA shock", which has helped focus attention on the monitoring of quality in education. Over the past ten years, there has been a strong focus on building up national tools and procedures to monitor quality at different levels of the system with a view to improve practices and raise performance.

A need to further focus attention on the needs of particular student groups

Compared to the OECD average, Norway achieves a relatively high level of equity among students from different socio-economic backgrounds. The strength of the relationship between socio-economic background and reading performance has not changed significantly between 2000 and 2009 and remains below OECD average. As in other Nordic countries, variations in student performance can mostly be found within schools. The between-school variation of performance in Norway is low by international comparison, which indicates that the specific school a student attends has only a modest impact on how the student performs.

The spread of student performance results in 2009 has decreased in all subject areas compared to previous assessments. Compared to 2000, a larger proportion of students perform at an average level. While some progress has been made in reducing the proportion of low-performing students, there were also fewer top performers. The relatively small proportion of top performers has raised concerns about whether the Norwegian education system adequately caters to its most talented and gifted students.

There are also concerns about the consistently low performance of certain student groups. In particular, there is a large performance gap between students with and without an immigrant background. This gap is above the OECD average and has remained stable since 2000. First-generation immigrant students are at least twice as likely to perform among the bottom quarter of students when compared to students without an immigrant background. There is also a large gender gap in reading performance, with the advantage of girls over boys being above the OECD average.

The drop out of students in upper secondary education has been another area of heightened attention in recent years. At 21%, the drop-out rate of students beyond age 16 is above the OECD average (18%) and is twice the rate of other Nordic countries (OECD, 2010).

A concern to reduce performance variations between municipalities

Results from national assessments and other studies indicate that there are important differences in education quality across municipalities. Norwegian research has revealed that there are large differences in students' performance in national tests across different schools in municipalities with otherwise similar characteristics (Bonesrønning and Iversen, 2010, in Norwegian Ministry of Education and Research, 2010). These variations may be linked to the fact that there are very large differences in resources and capacity among the 430 Norwegian municipalities. Some municipalities are very small and do not have staff with specific qualifications in education. While there are certainly examples of small municipalities providing excellent school services, on average it is the small municipalities that face greater challenges in recruiting qualified school staff and providing adequate support for school quality development (Norwegian Ministry of Education and Research, 2010).

A need to strengthen qualifications and capacities of practitioners

As mentioned above, results from international and national studies show that there is a high variation of performance among students within schools. This points to a further need to strengthen the capacity of teachers to respond adequately to the needs of all students within the comprehensive school. National research has shown that many Norwegian teachers are not qualified in the subject they teach and that there are gaps in teachers' knowledge in important areas of pedagogy (Norwegian Ministry of Education and Research, 2010). According to the Ministry, the admission quality of candidates for teacher education has been relatively poor in recent years and there are insufficient numbers of adequately qualified candidates for teacher education (Norwegian Ministry of Education and Research, 2010).

Main policy developments

Over the past decade, the Norwegian education authorities have shown strong political will to raise performance and increase equity in education by strengthening local autonomy and accountability while at the same investing into capacity development of key stakeholders. The main policy developments can be described as follows:

- A greater focus on outcomes: The 2006 Knowledge Promotion curriculum puts greater emphasis on clearly defining the expected outcomes of teaching and learning. Within this outcomes-based curriculum framework, the school owners and schools are given a large amount of freedom in defining local curricular content and teaching programmes (Chapter 2).
- Increasing responsibility for school owners: In addition to granting school owners a high level of curricular autonomy, legislation has also given them greater freedom to make their own decisions regarding organisational and funding aspects of schooling. A 2003 amendment to the Education Act repealed central regulations concerning class size and distribution. In the same year, the responsibility to negotiate teacher salaries with the teaching unions was transferred from the state to the Association of Local and Regional Authorities. In recent years, the agreements regulating salaries and working hours for teachers have become somewhat more flexible giving the local level a greater say in determining local conditions (Chapter 4).
- Greater demands for local accountability: The increasing responsibility at the local level was coupled with greater demands for accountability. Most notably, since 2009, school owners are required to prepare annual status reports describing the state of their local education systems. Moreover, in 2006, the Directorate for Education and Training together with the County Governors launched the first co-ordinated joint national inspections of school owners, which complement the inspections undertaken separately by individual County Governors (Chapters 2, 5, 6).
- A new national education programme for principals: The high level of autonomy at the school level requires strong and effective school leadership. To build up the capacity of new school leaders, a national principal education programme was introduced in 2009. It is currently provided by six institutions and the Directorate for Education has set common competence requirements for all providers. The programme is initially targeted at principals who are new to the position but it will later be extended to more experienced principals as well. The education can be undertaken part-time over one-and-a-half to two years depending on the provider. In the years 2009/10 and 2010/11, 621 principals have already participated in the programme. The programme focuses on supporting principals in becoming "educational leaders" capable of leading the core processes of teaching and learning in the school (Chapters 4 and 5).

- Enhancing the competencies of the teacher workforce: A range of measures were introduced in recent years to raise the status, capacity and performance of the teaching profession. Minimum requirements for admission to teacher training were introduced in 2005. A major partnership (called GNIST) between the government and key stakeholders was launched in 2008 with the aim to raise the status of the teaching profession. Initial teacher education was re-organised in 2010 with a key focus on enhancing academic in-depth work, didactics and practical training. In the same year, a new agreement was established to systematically introduce mentoring and induction for newly employed teachers. Several strategies for enhanced continuing professional development were also developed (Chapter 4).
- A national system for evaluation and assessment: Since the late 1980s, there has been an increased interest and awareness at the national level regarding evaluation and assessment in education, which was further reinforced by the first publication of PISA results in 2000 (Norwegian Directorate for Education and Training, 2011). In a relatively short period of time, elements of stronger evaluation and assessment policies were introduced at all levels of the education system. In 2004, the national authorities launched a national quality assessment system (NKVS) initially including the development of national tests, user surveys and a web-based School Portal, and later complemented by additional tools and guidance to support evaluation at the local level. The features and development of this evaluation and assessment framework will be described in more detail below.

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Chapter 2

The evaluation and assessment framework

The Norwegian authorities have set up a national quality assessment system (NKVS) for the education sector in 2004. NKVS provides a range of tools and data intended to help schools, school owners and education authorities evaluate their performance and inform strategies for improvement. In less than a decade, Norway has come far in developing a national framework for evaluation and assessment while at the same time leaving considerable freedom to schools and school owners in implementing local approaches. However, NKVS lacks a clear policy document or strategic plan outlining the different elements of evaluation and assessment and the linkages between them. Also, the specific criteria to evaluate quality in education are not stated explicitly, which leads to great variability in the nature and rigour of judgments made at the local level to assess students, appraise teachers and evaluate schools. As the Norwegian approach to evaluation and assessment strongly relies on the capacities of actors at all levels, the professional development needs are large and currently only partly met.

This chapter looks at the overall framework for evaluation and assessment in Norway, *i.e.* its various components such as student assessment, teacher appraisal, school evaluation and system evaluation, the coherence of the whole as well as the articulation between the different components. Following this overview, the succeeding chapters (3-6) will analyse the issues relevant to each individual component in more depth.

This report differentiates between the terms "assessment", "appraisal" and "evaluation". The term "assessment" is used to refer to judgments on individual student performance and achievement of learning goals. It covers classroom-based assessments as well as large-scale, external tests and examinations. The term "appraisal" is used to refer to judgments on the performance of school-level professionals, *i.e.* teachers and school leaders. Finally, the term "evaluation" is used to refer to judgments on the effectiveness of schools, school systems and policies. This includes school inspections, school self-evaluations, evaluation of municipalities, system evaluation and targeted programme evaluations.

Context and features

The national quality assessment system (NKVS)

The Norwegian authorities have set up a national quality assessment system (NKVS) for the education sector in 2004. NKVS provides access to a range of data intended to help schools, school owners and education authorities evaluate their performance and inform strategies for improvement. With the establishment and development of NKVS, policy makers aimed to move policy attention away from inputs and processes to focus more on the outcomes of education. The Directorate for Education and Training, created in 2004, holds responsibility for implementing NKVS at the national level.

The first elements of NKVS were national tests at key stages of education, a range of user surveys and a web-based School Portal. After a change of government, these elements were complemented by a number of tools to be used exclusively at the local and school level. The new tools included diagnostic "mapping tests" as well as the "point-of-view analysis" and "organisational analysis" tools to assist schools in their self-review. A Template tool was also developed to help school owners prepare status reports on the state of their local school systems. Table 2.1 describes the key tools that were developed to support evaluation and assessment activities in Norway since the establishment of NKVS in 2004. According to the Norwegian Directorate for Education and Training (2011), however, "there is no uniform interpretation in the sector as to which elements are incorporated in the NKVS".

Table 2.1 Key tools for evaluation and assessment developed since the establishment of NKVS

Key tools	Description	Use of results by	Purpose
National tests	Mandatory for Years 5, 8 and 9. Assessments of students' basic skills in reading, mathematics and English.	National authorities School owners Schools	At the national level, results are used to inform education policy and allocation of resources towards municipalities with special challenges. At the local level, results inform school evaluation and improvement.
User surveys	Pupil Surveys are mandatory in Years 7, 10 and Vg1. Schools can also administer them in other years. Parent Surveys and Teacher Surveys are voluntary.	National authorities School owners Schools	Results are used at all levels to analyse and develop the learning environment. Results may also be used for research purposes.
Mapping tests	Available for Years 1, 2, 3 and Vg1. Assessments of basic skills in reading and mathematics. Some are mandatory and some are voluntary.	School owners Schools	Identify pupils who need extra help and adapted teaching at an early stage in their schooling.
Point-of-view analysis tool	Available for schools to structure a systematic review of their teaching practice and results.	Schools	Inform school self-evaluation and improvement.
Organisational analysis tool	Available for schools to review the school as a workplace for its staff and identify aspects that may impact teaching and learning quality.	Schools	Inform school self-evaluation and improvement.
Template to prepare local status reports	Available for school owners to assist them in the preparation of their annual status reports. The Template tool includes data for both mandatory and suggested indicators	School owners	Assist school owners in the requirement to complete annual status reports and strengthen education system monitoring at the local level.
School Portal	A web-based information tool presenting information from the national tests and the user surveys, and basic school data about enrolment, resources and completion rates. Comprises an open part and a password-protected part where schools and school owners can access their own data.	General public National authorities School owners Schools	Provide all stakeholders with access to key information on basic education at the national and local (school owner) level. Provide school owners and schools with specific information concerning their own results to inform school evaluation and improvement.

Source: Adapted from Norwegian Directorate for Education and Training (2011).

Key components of evaluation and assessment

The tools described above have considerably enriched and added on to the traditional approaches used for evaluation and assessment in Norway. This section attempts to give a more comprehensive overview of the essential components of evaluation and assessment in Norway, including those that are not considered part of the national quality assessment system (NKVS). In a nutshell, the Norwegian approach to evaluation and assessment can be described as consisting of the following four components:

Student assessment: Norway's approach to student assessment is based on a mix of teacher-based classroom assessments and central examinations. Teachers hold the key responsibility for student assessment (both formative and summative) at all levels of the school system. In Years 1-7, the purpose of classroom assessments is mostly diagnostic and formative and there are no marks assigned to students. In Years 8-10 and upper secondary education, there is greater focus on summative classroom assessment that counts towards students' overall achievement marks. Teachers may use information from the mapping tests (Years 1, 2, 3 and Vg1) and national tests (Years 4, 8 and 9) to identify basic skills areas requiring particular attention in teaching and learning. At the end of compulsory education and in upper secondary education, students are sampled to sit a limited number of centrally given written examinations and locally given oral examinations. While there are examinations in most subjects, each individual

- student takes only two examinations in Year 10 and five or six examinations in upper secondary education. The marks from examinations are entered on students' school leaving certificates separately from overall achievement marks.
- **Teacher appraisal:** The national regulations state that teacher appraisal must be implemented but the processes for appraisal are not regulated by law and there are no national performance criteria or reference standards to guide the process. As the employing authorities for teachers, the school owners are free to establish their own frameworks for teacher appraisal. Many school owners delegate human resource issues including teacher appraisal to the school leaders. Each school defines its own procedures, following municipality requirements or guidelines where they exist. The most common source of feedback for teachers in Norway is an annual employee dialogue with the school leader. This performance review typically takes the form of a conversation between the school leader and the individual teacher in which issues related to teachers' responsibilities, working conditions and professional development are discussed.
- **School evaluation:** School self-evaluation is the primary method of delivering school evaluation and improvement in Norway. There is a statutory requirement for schools to undertake self-evaluation, using the data provided to them through the School Portal (see Table 2.1). The Directorate for Education and Training has developed school analysis tools for schools to help them review their practice. The school owners are required to implement a quality framework and ensure that their schools have self-evaluation processes in place. While practices vary, school owners typically operate an approach whereby they monitor results, require schools to submit annual plans and occasionally visit schools to conduct a "quality dialogue" and check compliance of school policies with regulations. There are no national systematic inspections or external reviews of individual schools.
- **System evaluation:** The Directorate for Education and Training has the major responsibility for monitoring the quality of the school system in Norway. The Directorate is responsible for NKVS and monitors quality via a range of statistical indicators and commissioned research studies. The key indicators to measure education system performance are the results from international assessments, the national tests (Years 4, 8 and 9), students' final assessments (Year 10 and Vg1, Vg2, Vg3) and the Pupil Survey (Years 7, 10 and Vg1). The major vehicles for reporting results from the national monitoring system are the Directorate for Education and Training's annual summative report on education in Norway (the Education Mirror) and the web-based School Portal (Skoleporten). The 18 County Governors are responsible for the regular inspection of school owners to ensure that they comply with legislation. Since 2006, there has also been a co-ordinated national inspection focused on school owners' systems to assess school compliance with the Education Act.

Strengths

There is strong political will to create a national framework for evaluation and assessment

In less than a decade since 2004, Norway has come far in developing a framework for evaluation and assessment. With the launch of the national quality assessment system (NKVS), the central authorities clearly communicated evaluation and assessment as a priority. They also communicated the need to build a multi-faceted system for evaluation and assessment rather than a number of isolated individual elements. The basic premise that evaluation and assessment are key to improving school quality has been clearly sustained through a change of government and has gathered momentum over the last years. The creation of the Directorate for Education and Training in 2004 gave prominence and coherence to the national monitoring system. The Directorate has been actively pushing a strong quality improvement agenda, establishing requirements for evaluation and assessment, as well as providing support for the sector. The national authorities have demonstrated their willingness to commit sustained funding to support the different elements of NKVS. There is also growing support at the local and school level for establishing and embedding an evaluation culture across the education sector.

Competence goals provide a basis for evaluation and assessment

In parallel to the introduction of the national quality assessment system, work was undertaken to clarify the expected learning outcomes for the education system. The Knowledge Promotion reform in 2006 introduced a new outcomes-based curriculum covering the entire school system from Year 1 through to upper secondary education. The subject curricula define competence goals in all subjects for key stages of education (Years 2, 4, 7, 10 and each year of upper secondary education) as well as goals for basic skills that should be embedded in all subjects. Within these binding goals for student achievement, the school owners and schools are given a large degree of autonomy to develop local curricula and approaches for evaluation and assessment. At the same time, greater demands were placed on school owners to monitor the quality of their schools and there are some emerging elements of external accountability for schools and school owners (Chapter 5).

Enhanced regulations aim to clarify responsibilities for evaluation and assessment

Progress has been made since 2004 in clarifying regulations and requirements for evaluation and assessment at different levels. The legal and policy requirements have been strengthened in particular regarding school evaluation and student assessment, with the intention to ensure more consistent practices across Norway. School owners have the legal responsibility to develop local quality systems and this responsibility was strengthened in 2009 by a requirement to prepare an annual status report on the situation of their schools. School leaders and teachers are responsible for classroom assessment and their role in this respect was enhanced by new regulations clarifying the objectives of continuous assessment. In particular, the new regulations make it mandatory for schools to provide formative assessment to all students and to document their formative assessment practice. The revision of regulations came along with guidance materials for school owners, school leaders and teachers. Work was also undertaken to present the regulations in a more accessible and user-friendly way by ensuring that updated versions of all regulations are available and easy to find on the Directorate's website.

A range of tools support decentralised self-evaluation

A positive development of NKVS has been the development of a whole package of tools to support schools and school owners in their evaluation and assessment work. The development of national tests, mapping tests and user surveys provide the sector with key tools to measure student performance and well-being at different stages and for different purposes. The provision of "organisational" and "point-of-view" analysis tools helps schools in reviewing their practices. There are also tools and guidelines to help schools interpret results from national assessments and document their assessment practice. To support school owners in their evaluation processes, a Template tool for municipal status reports is available online. Taken together, these elements have the potential to provide the sector with a very powerful and comprehensive toolkit to support a decentralised system of self-evaluation and support.

The development of the School Portal has been instrumental in ensuring access for school owners and schools to monitoring information and analyses of their results. The School Portal is a web-based information tool presenting key education monitoring information including learning outcomes, learning environments, resources and basic school data. The Portal has an open part accessible to the general public and a passwordprotected part where schools and school owners can access more detailed information and benchmark themselves against the national average. This approach holds promise for encouraging a more systematic and well-integrated way of using analyses of data in the process of self-evaluation and improvement planning.

Local ownership and networking contribute to building collective responsibility for evaluation and assessment

Policy making in Norway is characterised by a high level of respect for local ownership and this is evident in the development of the national evaluation and assessment framework as well. School owners and schools have a high degree of autonomy regarding school policies, curriculum development and evaluation and assessment. There is a shared understanding that democratic decision-making and buy-in from those concerned by evaluation and assessment policy are essential for successful implementation. It appears that the national focus on evaluation and assessment has been well accepted at the local level. There is strong willingness in many municipalities and schools to build on the national evaluation and assessment agenda by adapting it to local needs and specificities. Many of the schools and school owners visited by the OECD review team had developed their own matrices, strategies and criteria for student assessment, teacher appraisal and school evaluation.

In such a decentralised system, it is essential that different actors co-operate to share and spread good practice and thereby facilitate system learning and improvement. Networking is a common form of organisation among municipalities in Norway and there are a range of good examples where networks and partnerships have been established between different actors as a means to take collective responsibility for quality evaluation and improvement. Networks can be a powerful organisational tool embedding reform in the interactions of different stakeholders, sharing and dispersing responsibility and building capacity through the production of new knowledge and mutual learning that can feed back into policy and practice (Katz et al., 2009; Chapman and Aspin, 2003). In Norway, there are many examples of localised collaboration initiatives launched and developed by small clusters of municipalities. In addition, there are also larger regional or national partnerships that are supported by the Association of Local and Regional Authorities (KS) or the Directorate for Education and Training. A range of examples are provided below.

- Municipal networks for efficiency and improvement: In 2002, the Association of Local and Regional Authorities (KS), the Ministry of Labour and Government Administration and the Ministry of Local Government and Regional Development have set up "municipal networks for efficiency and improvement" that offer quality monitoring tools for municipal use and provide a platform for municipalities to share experience, compare data and evaluate different ways of service delivery in different sectors (Norwegian Directorate for Education and Training, 2011). For the education sector, an agreement has been established between KS and the Directorate for Education and Training to allow the networks to use results from the user surveys that are part of NKVS. The networks bring together municipal staff and school leaders to discuss school evaluation and assessment issues and engage in benchmarking exercises. Each network meets four or five times and then the opportunity is offered to another group of municipalities.
- Regional groups working on external school evaluation: The national school improvement project Knowledge Promotion – From Word to Deed (2006-2010) was launched by the Directorate for Education and Training to strengthen the sector's ability to evaluate its own results and plan improvement in line with the objectives in the Knowledge Promotion reform. One of the outcomes of the project was the establishment of 11 regional groups to continue to work on external school evaluation. These groups received training in the programme's methodology for external school evaluation and have begun to establish local systems for external school evaluation.
- Guidance Corps for school improvement: The Directorate has also recently established a "Guidance Corps" of exemplary school leaders who make themselves available to intervene in municipalities that have been targeted as needing help with capacity development (amongst others the municipalities from the "K-40" project). The "K-40 project" is a voluntary support offered to municipalities by the Directorate and seems to be a welcome initiative – of the 40 municipalities contacted, 31 decided to participate.
- Collaboration of teacher education institutions and schools: An important recent development is the organisation of teacher education into five regions. This regionalisation of teacher education is intended to enhance the co-operation of teacher training institutions among each other and to develop partnerships between teacher training colleges, universities and schools. Every teacher training institution is required to participate and set up partnerships with local schools. While the Directorate for Education and Training has set up the infrastructure for this co-operation, it is now up to the participating institutions to take it further.

The evaluation and assessment system is seeking continuous improvement

The national quality assessment system aims to establish a balance between accountability and improvement purposes and has shown its capacity to develop and adapt procedures striving to meet both purposes adequately. When NKVS was introduced, there was a strong focus on accountability and control but the system has been complemented relatively quickly by additional steps to provide guidance, tools and training so as to increase the usefulness of information provided to professionals (Box 2.1).

Box 2.1 Evolution of the national quality assessment system (NKVS)

Two broad phases can be described in the development of NKVS.

In the phase of its inception, the key focus of NKVS was to make actors at all levels of the education system more accountable for achieving results. According to the Norwegian Directorate for Education and Training (2011), accountability was "an important principle that underpinned the development of the system." The first elements of NKVS were the national tests and the School Portal, later complemented by the Pupil Survey. The original intention behind national tests was to publish the results of individual schools so as to hold schools accountable and thereby drive them to improve practices and outcomes. The first publication of test results received high attention in the press and was met with widespread criticism among stakeholders. There were concerns about the quality and scope of the assessments as well as the unintended consequences of the publication of results, such as school rankings and curriculum narrowing. The National Student Union supported a boycott of the tests and it was decided to suspend their administration for one year.

In a second phase, from 2005 onwards NKVS was maintained but the system evolved to focus strongly on school self-evaluation and improvement by providing a range of tools to be used exclusively at the local and school level. The new tools included the diagnostic mapping tests as well as the "point-of-view" and "organisational" analysis tools for schools to use in their self-review. After a one-year time out, the national assessments were re-introduced in 2007 following pilot testing and intensive work to strengthen their validity and reliability. The administration date of tests was moved to the beginning of the school year so as to emphasise their formative function and avoid the use of results to evaluate teachers. The Directorate also prepared guidelines to support teachers in using the test results to inform teaching and learning strategies. At the same time, the accountability focus was shifted more to the level of school owners, through the introduction of status reports and national inspections.

Source: Norwegian Directorate for Education and Training (2011).

Following initial resistance to national assessments and the publication of results, the Norwegian education system has become alert to the potential dangers of going too strongly into the direction of accountability. There has been a lot of focus in recent years to shift the focus of NKVS and complement the more control-oriented features by a number of elements intended to be used exclusively for the local development work of schools. While the gradual changes and adaptations of the system have brought challenges in terms of communicating a clear and consistent vision for the evaluation and assessment framework (more on this below), these developments have demonstrated that the system is capable to learn from experience and adapt to emerging needs.

Within the national agencies, there is a high degree of self-awareness and reflection about the implementation and impact of initiatives. National reports such as the Education Mirror (see Chapter 6) and the Country Background Report for this OECD review (see Foreword) cite many critical evaluation studies and report in a balanced way about both strengths and challenges. The Directorate for Education and Training itself has recently created a department on internal governance to enhance continuous reflection about the uptake and impact of new quality initiatives. The department has launched an annual report in 2010 to evaluate the different instruments and initiatives developed by the Directorate. To develop its own human resources, the Directorate has introduced a professional development programme to build leadership among its staff and help them work effectively in an environment of political pressure and tensions between centrally developed processes and local expectations. Training is also organised internally to enhance effective goal-setting and strategy development within the Directorate.

Challenges

There is room to clarify reference points and criteria for quality in evaluation and assessment

The interpretation of evaluation and assessment results depends on the reference points and criteria that are used to determine the quality of the outcome or process. In Norway, the specific criteria to evaluate the quality of educational processes and outcomes are not stated explicitly. The development of some commonality and comparability of quality and performance standards across the education system is a clear challenge for the Norwegian evaluation and assessment framework. Currently, there is great variability in the nature and rigour of the kinds of judgments made at the local level to assess students, appraise teachers and evaluate schools. Many schools and school owners are coming to their own judgements in isolation with the consequent danger that they might be out-of-line and perhaps too limited in expectation in comparison with standards being applied in the best performing municipalities and schools.

The Knowledge Promotion curriculum aims to provide clear competence goals to guide local teaching and learning. However, these goals are only defined for certain years of education and it is expected that the intermediary and more specific goals are defined at the local and school level. Experience from several Norwegian projects indicates that many teachers find it difficult to translate the national competence aims into concrete lesson plans and objectives (Norwegian Directorate for Education and Training, 2011). Even for the years of education where competence goals are available, there are no national assessment criteria clarifying the level of performance required for a particular mark and there does not seem to be a shared understanding of what constitutes adequate, good and excellent performance in different subject areas. This raises concerns about a lack of consistency and fairness in the grading of students, which may impact their access to study opportunities at a higher level. There are also concerns that teachers cannot make adequate judgements for formative assessment if the objectives and criteria for learning are not clear (Chapter 3).

Similarly, teacher appraisal and school evaluation have developed in a very "bottom-up" manner with a minimum of external guidance on the quality standards or performance levels that should apply. At the national level, there is no clear and concise statement or profile of what teachers are expected to know and be able to do. No uniform performance criteria or reference frameworks are available against which teachers could be appraised. Some of the larger municipalities have developed their own professional standards for teachers, but they appear to be a minority. For school evaluation (both internal and external), there is also a lack of consistent quality criteria or reference standards to evaluate school outcomes and progress. Hence, there is large variation regarding the ways in which judgments about quality are being made when appraising teachers or evaluating school performance (Chapters 4 and 5).

The evaluation and assessment framework needs to be completed and made coherent

Norway deserves credit for the initiative to create a comprehensive and balanced framework for evaluation and assessment that provides monitoring information at the different levels from the classroom to the system level. Currently, however, the existing framework (NKVS) is not perceived as a coherent whole and it does not visibly connect all the different elements. There is no policy document providing an overview of all the different elements that form part of NKVS and the links between them. As a result, at the frontline of delivery in municipalities and schools the different initiatives are still perceived as a set of rather separate projects rather than a comprehensive framework.

According to an evaluation of NKVS, among stakeholders there is no clear understanding of the whole system for evaluation and assessment (Allerup *et al.*, 2009). The evaluation showed that the key elements of NKVS were understood to be the national tests, user surveys, inspections and international tests. This reflects that the more accountability-oriented elements of the evaluation and assessment framework are receiving greater attention than the support and guidance tools developed by the Directorate for local use and analysis. Even though the proposal for the creation of the Directorate had clearly stated that "quality assessment should primarily be a tool to be used by teachers, schools and students in their quality development work", the improvement function of NKVS has been less well communicated. For example, there are no indications that the focus on formative assessment has been presented as being part and parcel of NKVS.

Further work needs to be done to communicate the different elements of evaluation and assessment as a coherent framework and make sure that each element receives adequate attention. Some key components of a comprehensive evaluation and assessment framework are currently still underdeveloped:

- Teacher appraisal is not considered to be part of NKVS. Procedures to appraise teachers are entirely determined at the local level and there are no national guidelines or criteria on how to appraise teacher performance and classroom practices (Chapter 4).
- School self-evaluation is also still at an early stage of development and the approaches and competencies to implement school self-evaluation vary across schools. Despite efforts to promote self-evaluation, results from TALIS indicate that in 2009 a quarter of Norwegian teachers were in schools that had never conducted a school self-evaluation in the past five years (Chapter 5).
- External evaluation of individual schools is the responsibility of school owners and varies considerably across Norway. Many smaller municipalities lack the

capacity to develop robust local quality assurance systems, monitor schools effectively and follow up with schools accordingly (Chapters 5 and 6).

The OECD team also noted some areas where linkages and complementarities within the evaluation and assessment should be developed or strengthened more systematically:

- Student assessment in primary schools and in secondary schools: Assessment approaches and philosophies differ between primary and secondary schools, with the risk that the type of feedback and reporting that students and their parents receive is not consistent and coherent across the student's educational trajectory (Chapter 3).
- National assessments and classroom assessment practice: The national elements for student assessment are not necessarily well connected to classroom practice and the criteria teachers use for their own assessments. It is not clear how the results from national assessments feed back into teaching and assessment practice in the classroom (Chapter 3).
- Teacher appraisal, teacher professional development and school development: There is no guarantee that school leaders conduct systematic appraisals of their teachers' classroom practices and that these are followed up with adequate professional development. Teacher appraisal and professional development could also be better articulated with school development priorities (Chapter 4).
- Teacher appraisal and school evaluation: As self-evaluation processes vary a lot between schools, they do not necessarily review and evaluate teacher effectiveness and whether teacher appraisal processes are adequate. Also, in the Template for municipal quality reports, no attention is paid to teacher appraisal and there is no guarantee that municipal evaluation of schools will address teacher appraisal processes (Chapters 4 and 5).
- School evaluation and school improvement: School self-evaluation and external evaluation do not systematically focus on improving the core business of teaching and learning. While there are encouraging developments of schools collecting and analysing data, there is little tradition of responding to data in a strategic and systematic way to evaluate and improve the school as a whole (Chapter 5).
- Municipal and national evaluation processes: The County Governors have responsibility for conducting local and national inspections of public school owners, but there are great differences in how inspections are carried out by the County Governors' offices and it is not clear to what extent the Directorate systematically monitors and follows up on major outcome measures in the national monitoring of municipalities (Chapter 6).

There are variations in capacity for implementing the evaluation and assessment framework

As the organisation of education is highly decentralised in Norway, there are variations in the implementation of national policy for evaluation and assessment at the local level. This has both advantages and drawbacks. The diversity of approaches to evaluation and assessment allows for local innovation and thereby system evolution and the large degree of autonomy given to the local and school level may generate trust, commitment and professionalism. At the same time, there are concerns about those

school owners and schools that have little capacity or commitment to developing quality frameworks.

According to the Education Act, municipalities must have personnel in their administration who have qualifications in education. However, depending on the size and organisation of municipalities, this is not always the case (Norwegian Ministry of Education and Research, 2010). There is little information nationally regarding the qualifications of municipal education staff, but it seems a clear challenge for smaller municipalities in Norway to recruit staff with specific expertise in education. According to the Norwegian Directorate for Education and Training (2011), many municipalities have actually "downsized their educational expertise in recent years" (p. 22).

In several parts of Norway, especially in the smaller and more rural municipalities, it seems unrealistic to expect that individual school owners would be able to acquire and sustain the expert capacity to design effective curricula and mount a comprehensive school evaluation and improvement system on their own. Despite the fact that many municipalities are very small and losing population, there have been few mergers of municipalities. While the government provides financial incentives to support the merger of small municipalities, such mergers remain voluntary and are not an explicit government policy (OECD, 2010). According to the Norwegian Association of Local and Regional Authorities, many municipalities face challenges in local curriculum development and spend a lot of time in setting goals and developing curricula. The *Report to the Storting* No. 31 on *Quality in School* indicates that that the Knowledge Promotion reform may have placed too high demands on the local level in terms of developing local curricula and assessment policies.

Capacity challenges are also evident at the school level. While there are certainly examples of school leaders exemplifying strong leadership for quality evaluation and improvement, there are challenges in building up the capacity of Norway's full cohort of school leaders. Results from TALIS indicate that school leaders in Norway have traditionally focused more on an administrative role rather than systematically leading teaching and learning processes, giving feedback to teachers and implementing whole-school evaluation processes (Chapter 5). Teachers, in turn, also vary in their capacity to implement multi-faceted assessment approaches, make consistent judgements of student performance and provide effective feedback to students and parents (Chapter 3).

At all levels of the education system, there is room to strengthen the capacity in using evaluation and assessment data in a purposeful, strategic and systematic way to direct changes in schools and classrooms. According to the Norwegian Directorate for Education and Training, (2011) "there is not much of a system for processing the information in ways that provide greater insight and create interest between the professional groups and politicians in each municipality" (p. 22). The use of data is often ad hoc at the particular point of time that test results are received by the schools, but there is not yet much sense of using data in a holistic way, pulling together data from different sources to inform strategies at the school and classroom level (Chapter 5).

Policy recommendations

Clarify learning goals and quality criteria to guide assessment and evaluation

For evaluation and assessment to be effective in improving quality across the whole education system it is essential that all schools and school owners have a clear understanding of the level of performance that can be achieved by the most successful schools, and are able to accurately evaluate how their performance stands in comparison. This requires the development of a clear set of reference points for common orientation across Norway to help local actors evaluate the quality of processes and outcomes. There is room to develop clearer expectations and criteria for student performance at different year levels and to clarify key aspects of quality in teaching practices and school organisation. The Ministry of Education and Research and the Directorate for Education and Training should engage with key stakeholders to:

- Refine and expand the national competence goals that are provided in subject curricula and provide clearer guidance concerning expected learning progressions and criteria for assessment in different subjects. At the same time, it is important to provide guidance and strengthen local capacity to translate national competence goals into local curricula, teaching programmes and assessment approaches. Collaboration among teachers, schools and school owners should be enhanced so as to ensure moderation processes and enhance consistency in terms of expected student performance (Chapter 3).
- Develop an evidence-based statement or profile of what teachers are expected to know and be able to do as a reference framework to guide teacher appraisal, professional development and career progression. The teaching standards should contain quality criteria for professional teaching practice and should be applied in individual performance appraisals. For the teaching standards to be relevant and "owned" by the profession, it is essential that the teaching profession takes the lead in developing and taking responsibility for them (Chapter 4).
- Establish a national programme to develop an agreed framework of process quality indicators for school evaluation, which could then be made widely available to schools and school owners to use in their own evaluative processes. One way of taking forward the development of a clearer set of national quality standards would be to develop a national sample programme of external reviews of schools. Such a programme could both develop and refine the quality indicators required while also building capacity and skills for more rigorous selfevaluation within the municipalities and the schools involved (Chapter 5).

To be effective in driving up quality, indicators of quality need to be clear and coherent – at the national level, in school processes and classroom practice. Therefore it is important that the teaching standards and quality indicators for school evaluation are aligned with the national curriculum and the competence goals. They should be framed in the context of the overall objectives for schooling. School processes and competency descriptions for school professionals should reflect the learning goals that the school system is aiming to achieve.

To this end, it is also important to make the goals for high quality education outcomes and processes as specific as possible. For student assessment, this should involve the development of exemplars illustrating different levels of student performance and

mastery. For teacher appraisal, it means that the system not only needs to define levels of performance to achieve but also to develop qualitative criteria for teaching practice, describing, for example, what excellent assessment practice looks like. For whole-school evaluation activities, it would be helpful to provide examples of a high quality curriculum or assessment criteria for actual subjects and subject areas. Such examples and illustrations would give professionals resources to draw from while leaving freedom for the local level to design their own assessment and evaluation approaches.

Complete the evaluation and assessment framework and strengthen coherence between its components

The establishment of NKVS and its various elements provides Norway with a strong basis to develop a comprehensive national framework for evaluation and assessment. However, as described above, there is a need to communicate more clearly that the different elements of evaluation and assessment are not isolated but form a coherent whole. Some elements and the linkages between them are still underdeveloped. To go further, it would be important to develop a strategic plan or framework document that sets out to complete the evaluation and assessment framework and to strengthen coherence between its different elements.

Provide an overview or "mapping" of the different elements of evaluation and assessment

This should involve the development of an overview of all the different elements that constitute the Norwegian approach to evaluation and assessment. This overview should be comprehensive and provide a mapping of all the key aspects of evaluation and assessment, including those that are currently not perceived as being part of NKVS. The framework should cover the key elements of evaluation and assessment - student assessment, teacher appraisal, school evaluation and system evaluation. It should emphasise that a comprehensive framework includes both formative and summative elements, and school-internal as well as external components. For each of the key components of the evaluation and assessment framework, the national authorities could describe and provide links to the relevant reference standards (see above) and existing tools to support implementation.

Strengthen key components of evaluation and assessment that are still underdeveloped

Starting from the mapping document (see above), the Directorate together with key stakeholders should work to identify the components that are still underdeveloped in the current framework. As discussed above, teacher appraisal and school evaluation require particular attention in order to complete the evaluation and assessment framework. As many studies indicate that classroom teaching is the most important school-level factor impacting on student outcomes (OECD, 2005; Pont et al., 2008), it is essential that the appraisal of teaching practices becomes an integral part of the evaluation and assessment framework. The main focus should be on developmental teaching appraisal that focuses on classroom practices, is internal to the school and is systematically followed up with teacher professional development opportunities to improve teaching practices (Chapter 4).

Ensure that the different elements of evaluation and assessment are appropriately interlinked

The process of developing a strategic plan for evaluation and assessment should also provide an opportunity to rethink the links between different evaluation components. For example, there is room to reinforce articulations between teacher appraisal, teacher professional development and school evaluation. This implies that school evaluation should comprise the monitoring of teaching and learning quality and possibly involve the external validation of school-based processes for teacher appraisal, holding the school leader accountable as necessary. To make the system coherent, it is important that the learning goals to be achieved are placed at the centre of the framework and that all other evaluation and assessment activities align to work towards these goals.

Continue to build capacity and partnerships to support implementation

Building a comprehensive framework for evaluation and assessment is an important culture shift in Norway that takes time and requires a high degree of professional learning at different levels of the system. Norway has already taken various steps to increase the offer of professional development at different levels, through including a focus on student assessment in pre-service training for teachers (Chapter 3) and providing continuing professional development offers for teachers, school leaders and school owners (Chapters 3, 4, 5). These steps are commendable and need to be sustained to further reduce variations in the quality and effectiveness of practices at the local and school level.

The international research literature has consistently shown that professional development is an essential component of successful school development and teacher growth, well being, and success (Day, 1999). It has confirmed that where teachers are able to reflect, access new ideas, experiment and share experiences within school cultures, and where leaders encourage appropriate levels of challenge and support, there is greater potential for school and classroom improvement. Improving schools are able to invest in the development of their staff, and create opportunities for teachers to collaborate and to share best practice (Muijs and Lindsay, 2005).

Target capacity building to the different needs of stakeholder groups

As the Norwegian education system is highly decentralised and relies on the evaluation and assessment capacities of diverse actors, it is important that capacity building responds to the diverse needs of different stakeholders including school owners, school principals and teachers. For school owners, an area of particular importance is to develop the capacity to understand, interpret and make decisions based on evaluative information from their schools. Conversely, for school leaders and teachers, it means developing the capacity to collect and analyse information for self-improvement and to report on student learning to school owners, students and their parents in effective ways without oversimplifying the complex issues involved in student learning. Exemplars of good practice in data analysis, reporting and communication should be provided nationally to make sure some minimum requirements in reporting are met.

Build on existing initiatives and practice-based expertise to support professional

In an upcoming book, Timperley (2011) describes the difference between professional development and professional learning. Over time, the term "professional development" has taken on connotations of delivery of some kind of information to teachers in order to influence their practice whereas "professional learning" implies an internal process in which individuals create professional knowledge through interaction with this information in a way that challenges previous assumptions and creates new meanings. In Norway, there is little tradition of large-scale delivery of professional development, but teachers and educational leaders in Norway have engaged in professional learning through many different activities and networks, and they have developed a variety of evaluation and assessment approaches at the local level.

Norway is well-positioned to establish a coherent framework for professional learning that builds on the various existing initiatives to create a wide range of sites for professional learning. To make the existing offer of learning opportunities and networks more transparent and accessible to schools, it would be important to take stock of what already exists and map the various types of evaluation and assessment expertise in Norway. The mapping should include existing networks, projects and knowledge centres across the country. This inventory can help provide an overview of the existing resources, both in terms of human expertise and available tools and materials. It can also be useful in identifying gaps in the support offer. An overview of available learning resources should be included in or linked to the overall strategic plan for evaluation and assessment (see above).

There is also room for the system to benefit to a higher degree from practice-based expertise and from the many innovative practices that have already been developed at the local level. The national agencies could play a greater role in disseminating and sharing effective practice across schools and municipalities. School owners should be encouraged to collect examples of good practice from their schools. The national authorities, together with the Association of Local and Regional Authorities and universities, could provide guidance on how to select good examples, facilitate quality assurance of such examples, and feed evidence back to the system. One very appropriate way to learn more about effective assessment and evaluation already happening in Norway would be to conduct national thematic inspections of a sample of schools on issues such as quality teaching, effective assessment practice or effective use of data.

Strengthen regional support offers

The County Governors, in collaboration with the regional offices of the Directorate, are well placed to take a more proactive role in bringing together national initiatives and local practice. To ensure that schools in small municipalities have access to adequate external support, the County Governors could promote and support strategic partnerships between school owners and other key sources of support including the universities and university colleges. Rather than expecting each school owner to develop school improvement services on their own, Norway should consider building "shared school improvement services" offering regional support to a larger group of school owners (Chapter 5). In this approach, particular attention should be given to connecting stronger and weaker municipalities.

Even though there are good examples of school clusters working together on evaluation and assessment (and other topics), more could be done in systematically supporting partnerships of schools. To bridge the gap between compulsory and upper secondary education, it would be especially important build clusters of several primary feeder schools around an upper secondary school. This could help increase the flow of information and consistency of support for individual students through their education trajectory.

Focus in particular on building the capacity of school leadership

Capacity for evaluation and assessment needs to be built in a connected way at different levels of the education system. School leaders can play an important role in connecting the classroom, school and system level in the pursuit of improving student learning (Hopkins, 2008). Given the key role of school leadership in Norway's decentralised education context, it is difficult to envisage either effective teacher appraisal or productive school self-evaluation without strong leadership capacity (Chapters 4 and 5). Hence, the recruitment, development and support for school leaders is of key importance to effective evaluation and assessment cultures at school. Research internationally has shown that school leadership focused on goal-setting, assessment, appraisal and evaluation can positively influence teacher performance and learning environments (Pont et al., 2008).

Many principals are still inexperienced in providing educational leadership as their role has traditionally been conceived more as an administrative one. Hence, there is a need to build the credibility and authority of school leaders as educational leaders so that they can operate effective feedback, coaching and appraisal arrangements for their staff and effectively lead whole-school evaluation processes. This can primarily be achieved by redefining school leadership as educational leadership, and ensuring that the whole cohort of school leaders receives adequate training in "leadership for learning". The establishment of the national training programme for school leaders is a very promising step in this direction (Chapter 1). Going further, it could be helpful to consider developing training offers that are targeted to different stages of a school leaders' career such as aspiring leader (teachers with leadership ambitions), middle or deputy leader, beginning leader, experienced leader and system leader (Pont et al., 2008).

Alongside extension of access to the national development programme, other elements of a national strategy might include:

- Support for regional leadership programmes, drawing on the approaches and expertise developed through the national programme, run by municipalities individually or collectively;
- Refined statements of the core competences expected of school leaders with recruitment directly targeted on these competences;
- Support for school owners on how to undertake effective performance review of school leaders against the competences and provide additional support for those school leaders who would benefit from it:
- Greater access for school leaders to participate in external reviews and development work with other schools in their areas or elsewhere; and

 broad dissemination to school leaders of the resources and skills for whole-school self-evaluation, including the direct evaluation and improvement of instructional practice.

In broad terms, the "culture" of school leadership needs to be shifted significantly. It needs to shift so that, across Norway, school leaders grasp the autonomy afforded to them to provide effective "leadership for learning", maximise the extent to which front-line teaching practice is being continuously improved, and thereby secure the best quality outcomes for all learners.

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Chapter 3

Student assessment

Norway is developing a balanced approach to student assessment based on a mix of teacher-based classroom assessments and central examinations. Assessment as a means to improve teaching and learning has gained increasing prominence in both policy and practice, and teachers hold the key responsibility for both formative and summative student assessment. The Directorate for Education and Training has launched a range of measures intended to clarify the rules and regulations regarding assessment, increase assessment competence, promote more relevant and fairer assessment of student work and improve the system documenting assessment. However, nationally set expectations for performance are quite broad and the assessment system lacks clear criteria and exemplars illustrating different levels of performance. There are indications that schools and teachers vary considerably in their assessment, grading and reporting practices, which raises concerns about the consistency and fairness of teacher-based assessment. There is also a need for the national authorities to be more explicit about the distinct purposes of different assessment approaches and to invest further in professional learning on effective assessment practice.

This chapter focuses on approaches to student assessment within the Norwegian evaluation and assessment framework. Student assessment refers to processes in which evidence of learning is collected in a planned and systematic way in order to make a judgment about student learning (EPPI, 2002). This chapter looks at both summative assessment (assessment of learning) and formative assessment (assessment for learning) of students.

Context and features

Assessment of student performance in Norway is complex and multi-faceted. In keeping with the Norwegian focus on local responsibility and local action, much of the assessment is done by teachers in schools, through both formative and summative assessment, including routine classroom assessment and examinations at the end of lower and upper secondary education. Students have a legislative right to assessment (both formative and summative), and to dialogue about their progress (both in subjects and in order and conduct) continuously during their education. The Directorate for Education and Training provides guidance and support for assessment to school owners and schools in a variety of ways.

At the same time, other stakeholders are also interested in how Norwegian students are doing. There are a range of processes for collecting information about student progress, with some designed to provide information both for schools and education authorities at different levels. There are three types of nationally-designed student assessments that complement teacher-based classroom assessment in Norway:

- Mapping tests are available for Years 1-3 of compulsory school and the first year of upper secondary school (Vg1). They are assessments of basic skills in reading and mathematics and form part of an early intervention strategy to provide students, teachers, schools and school owners with diagnostic information to identify and support students needing additional help. The results from mapping tests are intended for local use and will not be registered nationally.
- National Basic Skills Tests in Years 5, 8 and 9 of compulsory school are assessments of how students apply basic skills in reading, mathematics and English. The key purpose of the national tests is to provide education authorities with information about school outcomes so as to inform education policy (Chapter 6). A secondary purpose is to give students and schools information to form the basis for improvement and development work during the school year.
- Examinations are summative assessments given to students at the end of compulsory education (Year 10) and in upper secondary education (Vg1, Vg2 and Vg3). A sample of students is drawn to sit a limited number of local oral/practical examinations and central written examinations in a range of subject areas. Examination marks are provided on students' school leaving certificates separately from teacher-based overall achievement marks. The primary purpose of examinations is to certify individual student achievement, but the results also form part of the national assessment system (Chapter 6).

More detailed information about these assessments will be provided further below. In addition to the national assessment system, a number of school owners have developed their own assessments in order to respond to local needs. In particular, the City authorities of Oslo have implemented a well developed performance management system that

complements national outcome measures with local tests in areas such as science and ICT competence at the end of Year 4 and Vg1.

Assessment in primary schools

With the exception of the national test and mapping tests, assessment in primary education (Years 1-7) is the domain of the classroom teacher and is intended to promote student learning and give a continuous description of students' competence. There are no marks assigned in primary schools. Assessment at this level is intended to be largely formative and ongoing, with a view to providing adapted teaching and feedback to students. Teachers may use a variety of methods to understand their students' learning (e.g. observation, assignments, tests). There is also a focus on developing student selfassessment. Teachers are expected to maintain documentation of their formative assessment of the students and once each term, the teacher meets with each student and his/her parents for a discussion of the student's progress. Formative assessment is intended to promote student learning through feedback from teachers and others, advice about ways to improve and opportunities for students to assess their own work and progress.

Assessment in lower secondary schools

The same regulations for formative assessment apply at all levels of schooling, from primary through to upper secondary education. Teachers of lower secondary education (Years 8-10) are thus also expected to engage in formative assessment and to maintain documentation of their formative assessment of the students. Teachers have regular dialogue about progress with students to give them the opportunity to adjust their education to attain the goals. The parents may be included in this dialogue.

Summative assessment also occurs throughout this level of schooling to certify competence of the student (especially at the end of Year 10) and is done using a blend of teacher-assigned overall achievement marks and examinations. Students receive marks in all subjects throughout Years 8 to 10. Overall achievement marks (on a scale from 1-6, using only whole numbers) in subjects are determined by classroom teachers, based on teachers' judgement about the students' competence in the subject. Students are also given an overall achievement mark for order and conduct at the end of Year 10. These marks are entered on students' school leaving certificates.

Students in Year 10 are sampled randomly to sit a centrally given written examination in one subject (Norwegian, mathematics or English) and a locally given oral examination in one subject. The written examinations are scored by an external examiner without knowledge of the students. The local oral examinations are created from tasks that are proposed by subject teachers locally, and are conducted by the subject teacher and a teacher from another school, who serves as an external examiner. The marks from the exams (both written and oral) are also entered on students' school leaving certificate. On the school-leaving certificate of compulsory education, there will generally be achievement marks in 16 subjects and examination marks in two of these subjects.

Assessment in upper secondary schools

Like in lower secondary education, upper secondary teachers are expected to engage in both formative assessment to promote student learning and summative assessment to establish an overall achievement mark for the subject, which is entered on students' school leaving certificates.

All students in upper secondary sit a limited number of examinations. In the first year of upper secondary, 20% of all students are sampled to participate in a central examination or a local oral examination in one subject. In the second year of upper secondary education, all students who are qualifying for higher education participate in one central written examination or a local oral examination in one subject. Students in the vocational programme participate in an interdisciplinary practical exam in one subject and 20% are selected for a central examination or a local oral examination in a common core subject. In the third year of upper secondary education, all students qualifying for higher education sit for a central examination in Norwegian (or Sami, if first language) and all students are selected for a central written examination in two subjects and for a local oral examination in one subject.

Examinations are held in most subjects each year. While the examination in Norwegian in Vg3 is compulsory for all students, the examinations in the other subjects are only taken by a sample of students. The subject curriculum determines whether a student may be selected for an examination in the subject. Students cannot influence in which subjects they take their examinations. The subject curricula also define the type of examination and whether the examination will be set locally or centrally. All written examinations can be administered electronically. Results of the examinations are entered on students' school leaving certificates. At the end of an upper secondary programme qualifying for higher education, a student's school leaving certificate will contain just over 20 overall achievement marks and five or six examination marks.

The design and role of mapping tests

Mapping tests in basic skills have been developed nationally in reading for Years 1, 2 and 3 and in arithmetic for Years 2 and 3. The reading mapping tests are compulsory at all levels and arithmetic is compulsory in Year 2 and voluntary in Year 3. There are also mapping tests in the first Year of upper secondary education (Vg1) that are compulsory for reading and mathematics and voluntary for English. Results from mapping tests are not registered at a national level, although a 20% sample of papers are collected to do some national analyses and to set the benchmark for the lowest 20% who will need extra follow-up and adapted teaching.

The mapping tests are administered at the school level. They are intended to uncover both individuals and groups within schools who have low skills and need extra help and adaptation. The aim is to assess how students use basic skills in reading and numeracy across the subjects, not to test students in the subjects of Norwegian and mathematics. The tests are not developed to diagnose specific difficulties, but a national benchmark identifies the lowest 20% of students. The Directorate for Education and Training has produced guidance material that can be used to support the follow-up work in schools. These tests are used locally by school owners and schools for local planning and individual results are shared with students and their parents.

The Directorate for Education and Training has begun to develop additional mapping tests in some basic skills areas and some subjects, to provide more information on student basic skills and competence in subjects for formative and summative use. It is also intending to render some of the mapping tests more flexible by allowing teachers to choose the time when they implement the tests or to use the tests only with certain groups of students.

The design and role of national tests

National tests in reading (Norwegian), mathematics and English are administered in the autumn term to all students¹ in Year 5, 8 and 9 (only reading and mathematics in Year 9). Like the mapping tests, the national tests in reading and mathematics are basic skills tests. They are intended to provide information about proficiency in reading in Norwegian and mathematics skills across all subjects, but they are not designed to provide specific diagnostic information in the subjects. The tests in English are related to the subject English, but only to selected parts of the curriculum, where reading is a central focus. Since 2009, the national tests in reading English and mathematics are administered electronically. The assessment format is mostly multiple-choice but also contains short answer formats. The mathematics test, for example, has 65% multiple-choice items (4 options - 1 correct and 3 distracters - designed to detect common errors) and 35% constructed response (Raylo, 2010).

The national tests are intended to provide information about student performance in accordance with the basic skills objectives of the curriculum. The results are reported as distributions on different levels, connected to particular expectations of mastery. Information from the tests is intended to inform national policy and provide data to school owners and schools for their own development work. The national results are available to the public, and schools and school owners can access their own results in relation to the national average. Guidance from the Directorate provides support to teachers to follow up on the results from the tests. The tests are not equated so the results cannot be used to describe changes over time.

Strengths

Norway is developing a balanced approach to assessment with teacher judgement playing a key role

Norway has engaged in developing a balanced approach to student assessment with a range of different internal and external assessment formats aiming to provide a broad picture of student learning. Although it is relatively new, the Norwegian assessment system has not fallen into the trap of expecting one kind of assessment to serve all purposes.

Teacher-based classroom assessments (both summative and formative) are of high importance at all levels of schooling, with the school professionals holding full autonomy in determining the criteria for internal assessment (Eurydice, 2008; Annex D). In primary education, teacher-based assessment is mostly diagnostic and formative, whereas in the higher grades of education there is greater focus on summative assessment that counts towards students' overall achievement marks. Teachers are seen as the key experts not only in instructing but also in assessing their students. The practice of placing a strong emphasis on teacher-based assessment has a range of advantages. Teachers have multiple opportunities to observe students over time and performing a variety of tasks, including team work, oral performance and extended projects, and in this sense their observations have higher validity than a one-off examination would have. As teacher-based assessment takes place on multiple occasions, it is also likely to reduce the risk of student assessment anxiety. Teachers' assessments in the classroom are supported and complemented by the use of mapping tests and national tests at key stages in primary and secondary education. These assessments do not have direct consequences for students and teachers but may be used by schools and teachers as they deem appropriate for diagnostic, formative or summative purposes.

At the end of compulsory education (Year 10) and in upper secondary education, central examinations play an important role in student assessment. The examinations involve school-external examiners and are intended to provide an element of external quality assurance in student assessment. The external examiners scoring the written tests are practicing teachers recommended to the County Governor by their principals. They participate in a yearly comprehensive seminar that intends to professionalise their grading and contribute to a common understanding of assessment criteria. Teachers' participation in these seminars not only contributes to increase the reliability of examination results but also provides valuable professional development that can help teachers improve their own assessment practice in the classroom. The oral examinations are implemented by the subject teacher together with a teacher from another school. This moderated grading process also provides teachers with opportunities to exchange views about grading decisions and performance criteria. The central authorities monitor and evaluate the central examinations each year - this includes an academic evaluation of the examination itself as well as questionnaires to students, teachers and examiners.

Taken together, classroom assessment, national testing and selection for central and oral examinations cover a broad base of purposes, subjects and forms of assessment that are fit for different purposes and are intended to provide professionals with the information and the tools that they need for high quality education in schools and classrooms.

A set of professional learning opportunities aim to build assessment capacity across the system

As assessment has become a central part of the Norwegian educational landscape, a range of approaches to professional development and learning have been emerging. Some of these have been initiated and supported by the Directorate, some involve universities and colleges, and some are local to municipalities and even to schools (working individually and in networks).

New measures have been introduced to improve the focus on assessment competencies in initial teacher training. The framework plan for the new initial teacher training structure (launched in 2010) provides guidelines regarding the development of teachers' assessment competencies. In particular, it requires that assessment for learning should be one of the competences that teachers are expected to have acquired upon graduation (more on this below). The Directorate has funded (until 2011) the Norwegian Network for Student and Apprentice Assessment (NELVU), a network of teacher training institutions that aims to build capacity regarding student assessment within schools and university colleges. To this end, each teacher training institution has been forming assessment experts within the institution to work with faculty on this particular topic. The focus has been on all aspects of assessment literacy including the use of national test results, assessment for learning and different classroom assessment approaches. NELVU further aimed to stimulate research and development regarding assessment and has been co-operating with experts internationally, such as the Assessment Reform Group in England.

Student assessment is also being highlighted as a key topic for the continuing professional development of school professionals and school owners. Since 2005, the Directorate for Education and Training has included student assessment as one of the annual priorities for continuing professional development of teachers, school leaders and trainers of in-service training providers. In 2007, the Directorate launched a whole package of measures at the national level aiming to clarify the rules and regulations regarding assessment, increase assessment competence, promote a more relevant and fairer assessment of student work and improve the system documenting assessment. Since then, three major professional development programmes have been implemented that contribute to building effective assessment cultures in schools.

- The Better Assessment Practices project (2007-2009) was part of the initial package of assessment-related measures launched in 2007. This national project included writing the amendments to the regulation on student assessment and a national pilot project on the characteristics of competence attainment. It also supported a range of local projects to improve assessment practice in Norwegian schools. One of the initiatives focused on exploring the use of criteria (developed by the Directorate or teachers themselves) to assess student achievement in relation to subject achievement goals.
- As a follow-up to the Better Assessment Practices project, the Assessment for Learning programme (2010-2014) was implemented to support school projects and networks focusing particularly on formative assessment (more on this below).
- The school development programme Knowledge Promotion From Word to Deed (2006-2010) was developed to help schools in implementing the Knowledge Promotion curriculum through engaging input from external assistance in reviewing their practice (Chapter 5). Ten of the 100 projects developed as part of this programme focused on student assessment.

In developing training opportunities for school owners, the national agencies have focused mainly on ensuring that school owners know the rules and regulations of assessment and are aware of how they can use the results from student assessment in their "quality dialogue" with schools (Chapter 5). For school leaders and teachers, training provision focuses equally on knowledge of the rules and regulations, but also on how to create an effective assessment culture and practice.

As outlined above, professional development also takes place around teachers' marking of central examinations and in moderated grading of oral examinations. This provides teachers with a chance to reflect on assessment in their subject, both on topics and criteria. Some school owners further support moderated marking processes. In 2010, the municipality of Oslo launched a pilot study in lower secondary education, where they invited all schools to implement a mock exam. The municipality invited 60 teachers from 35 schools to come together to mark the examinations in a moderated marking process in collaboration with expert teachers (who had been part of the national marking process). This provided an opportunity for teachers from Oslo schools to engage in discussion about the meaning of marking criteria in relation to examples of student work.

There also is a wide range of local initiatives. In the municipality of Halden, for example, all schools are involved in a classroom assessment project with the local university, with a focus on the structure of lessons, assessment of students and use of assessment data. The City of Oslo employs two "assessment advisors" that schools can invite to provide help regarding assessment. Among the focus area of this approach are

the development of learning goals and criteria, peer-and self-assessment and adapted teaching. Many schools in different municipalities are also involved in courses provided by the local teacher training colleges or are organising meetings of teachers within and across schools, sometimes with experts, to discuss and learn about assessment.

Formative assessment is a priority on the national agenda

Formative assessment or "assessment for learning" has gained increasing prominence in both policy and practice in Norway, as it has in many countries around the world. In their landmark paper, *Inside the Black Box: Raising Standards through Classroom Assessment*, Black and Wiliam (1998) examined hundreds of studies to advance an argument that certain kinds of classroom assessment by teachers and students in their own classrooms provide extremely effective ways to improve educational achievement.

The history of assessment in Norway is consistent with the new focus on formative assessment. Continuous assessment that takes place in classrooms and is based on teacher judgement has long been the core of the approach to student assessment in Norway. Especially in primary education, students do not receive marks and assessment is intended as a mechanism to provide feedback, promote learning and form the basis for adapted education, rather than a means for certification or selection. From the point of view of formative assessment, Norway's relatively low-key focus on student grades is a positive element. In their review of the literature on formative assessment, Black and Wiliam (1998) found that grading in schools tends to be overemphasised while learning is underemphasised.

In recent years, the national regulations concerning student assessment have been strengthened, including those for formative assessment. A statutory requirement has been introduced for schools to implement assessment for learning. To support teachers in fulfilling the requirements for formative assessment, the Directorate has created a website on assessment for learning providing a range of materials and tools including questions for reflection, films, assessment tools and literature, and also examples of different ways to document formative assessment practice. The new regulations in the Education Act are founded on four key principles for effective formative assessment, namely that pupils learn best when they:

- 1. Understand what they are supposed to learn and what is expected of them;
- 2. Receive feedback that informs them about the quality of their work or performance;
- 3. Receive advice on how they can improve;
- 4. Are involved in their own learning activities for example through assessing their own work and development (Norwegian Directorate for Education and Training, 2011a).

At the same time, there has been a developing awareness that teachers have not traditionally received training in formative assessment, either in initial teacher education or as practicing teachers and that there was very little expertise available nationally for school leaders to draw on to provide support. To address this, the Ministry of Education and Research and the Directorate for Education and Training in Norway identified formative assessment as a priority area for education policy and professional development.

In particular, the Directorate has launched the Assessment for Learning programme (2010-2014) to support school owners, schools and training establishments in developing an assessment culture and practice where student learning is the main focus. One hundred and fifty compulsory schools from 50 different municipalities were involved in the project in 2010, and in 2011 the programme will also include upper secondary schools and training establishments from all counties in Norway. The programme is organised in learning networks at the local and regional level, where practitioners can exchange experience and create spaces for common reflection on effective practice. While the Directorate provides key guidelines and principles on effective formative assessment, it is up to the school owners and schools to design the concrete content of activities. This reflects the Norwegian emphasis on ensuring that schools are involved and take responsibility for their own development. Participating municipalities and counties choose some of their schools and training establishments and employ a formative assessment contact person who will assist in running the project locally. These contact persons attend Assessment for Learning workshops run by the Directorate. The programme also provides online resources including tools and videos on how to enact effective formative assessment in the classroom.

As mentioned above, there is also a focus on assessment for learning in the reformed teacher education implemented in 2010. Assessment for learning should be covered as part of the subject of didactics and be embedded into the different subjects in teacher education. It is also one of the competences that graduating teachers are expected to have at the end of their teacher education.

There is a focus on student voice and participation in assessment

There is considerable research about the importance of student voice in their own education and learning (Fielding, 2001). In assessment and evaluation, students can participate in their learning in a variety of ways. Most notably, formative assessment includes (1) students being involved in their own learning by assessing their own work and development, and (2) focused engagement between student and teacher as they work together to adjust teaching and learning. Involving students is deeply embedded within the Norwegian view of democracy and the way that teachers interact with students in schools. The new regulations on assessment state that student self-assessment is an integral part of formative assessment that students are expected to participate actively in the assessment of their own work, competence and progress.

The Norwegian assessment system honours the contribution of students to their own learning and respects their perspective. Students are involved in discussions about their learning (with and without their parents) and ongoing dialogue about learning between students and teachers is a statutory requirement within the Education Act. The purpose of such dialogue is to provide opportunities for discussing student progress towards the curriculum goals and to allow teachers to adjust teaching to help students attain the goals (Norwegian Directorate for Education and Training, 2011b). Members of the national student union are well organised and involved in seminars and the public debate regarding assessment and evaluation.

Challenges

The competence goals are not perceived as specific enough to guide teaching and assessment

One of the pervasive points of discussion in the meetings of the OECD review team with education stakeholders was the absence of clear statements of learning goals and expectations that could guide teaching and assessment practices and bring more consistency to education in Norway. The localised nature of Norwegian education means that the agreed national competence outcomes for student performance are quite broad and there are no descriptions of expected learning progress through the curriculum. The subject curricula define competence aims at key stages of education (Years 2, 4, 7 and 10 and each year of upper secondary education), but the intermediate learning goals and the more specific teaching content, methods and grading criteria are expected to be developed a the local level.

While the Directorate for Education and Training also provides curriculum guidelines, experience from several Norwegian projects indicates that many teachers find it difficult to translate these competence aims into concrete lesson plans, objectives and assessment activities (Norwegian Directorate for Education and Training, 2011b). The broad competence goals have the advantage of giving teachers ownership in establishing their teaching programme, but there seems to be a need for more structure for a substantial number of teachers. Many stakeholders interviewed by the OECD review team referred to the need for clearer learning goals or standards to provide a comprehensive picture of what students should know and be able to do, which can serve as visible reference points for students, teachers, school leaders, policy makers and test developers. The learning goals should be specific enough to enable the establishment of an interdependent relationship among curriculum, instruction and assessment (Allington and Cunningham, 2002).

Reference points and criteria for assessment need further clarification

The OECD review team formed the view that teachers' classroom-based assessment would benefit from clearer rubrics that detail assessment criteria. In their reports for the Better Assessment Practices project, school owners expressed concerns about the lack of standards concerning the competencies required for a particular mark and the potentially resulting unfairness in teacher grading of students (Norwegian Directorate for Education and Training, 2011b). There seems to be little shared understanding regarding what constitutes adequate, good and excellent performance in different subject areas. There was recognition that developing criteria for student work was difficult but necessary to ensure that assessment and grading is valid, reliable and transparent (for a note on terminology, see Box 3.1).

Box 3.1 Terminology: validity, reliability and transparency in assessment

Validity, reliability and transparency are basic principles that underpin all kinds of assessment.

- Validity relates to the appropriateness of the inferences, uses, and consequences that come from assessment. A highly valid assessment ensures that all relevant aspects of a student's achievement are actually measured in the assessment.
- Reliability is concerned with the extent to which an assessment is consistent in measuring what it sets out to measure. A highly reliable assessment ensures that the result (e.g. the final grade) is accurate and not influenced by the particular assessor or assessment occasion.
- Transparency involves ensuring that information is available about what learning is expected, what criteria will be used to judge student learning, and what rules are being applied when decisions are made about the learning.

The interpretation of any kind of measurement depends on the reference points that are used to determine the quality of the work. There are three kinds of reference points for considering a student's performance:

- Norm-referenced (performance in relation to a defined group);
- Criteria- or outcome-referenced (performance in relation to established standards or criteria); and
- Self-referenced (change in performance over time).

In Norway (as in many other places), these specific criteria or expected outcomes of learning progress are not stated or visible for widespread use. The national test results are presented as a distribution of scores, without a clear reference point for deciding what constitutes acceptable or good performance, except in relation to others in the distribution. The mapping tests use a cut-off score to determine the lowest 20% of performers. Teachers in their classroom assessments tend to use their own personal reference points, based on their experience and school-based expectations. Their reference points are generally a mixture of norm-referenced (in relation to other students), content-referenced (in relation to what I taught) and self-referenced (in relation to growth of the student) and are quite different across different teachers (and sometimes for different students in the class).

There are concerns about consistency and fairness of student assessment, reporting and grading

Assessment approaches differ between primary and secondary education which creates a risk that the type of feedback and reporting that students and their parents receive is not consistent across the student's educational trajectory. In primary school, the focus is very much on boosting students' motivation and self-esteem using praise rather than challenging students to keep continuously improving. There are no clear rules on how teachers should communicate to students and parents and reporting practices are highly variable. While there is a student-parent-teacher dialogue each semester, there may not be any written feedback to parents regarding their children's performance and progress. Many schools have of course found their own ways of

reporting using means such as portfolios or report cards. But parents interviewed by the OECD review team indicated that there was insufficient information provided to students and parents regarding the progress and identified needs for improvement of their children. As a result, at the end of primary education, students may not have a good understanding of their strengths and difficulties or of learning strategies that they can apply to improve continuously. The transition from primary to secondary education can be challenging for students in terms of assessment, as they first receive number marks in Year 8.

There are concerns in regard to the equivalence and reliability of student grades in lower and upper secondary schools across Norway. Differences in grading practices are of particular relevance in upper secondary education where teacher-based grades count towards students' school-leaving certificates, which influence students' access to higher education and the labour market. Norwegian research indicates that there are large variations in the ways teachers set overall achievement marks (Gravaas *et al.*, 2008; Prøitz and Spord Borgen, 2010, in Norwegian Directorate for Education and Training, 2011b). As mentioned above, there are no national grading criteria to guide teachers in setting overall achievement marks and there is no guarantee that teachers engage in discussion or moderation within or across schools to design grading criteria and set overall achievement marks. Representatives from the national student union noted that it is not entirely clear to students what actually counts for their overall achievement marks. For example, there are variations in the degree to which teachers also consider effort and attitude in their grading (Prøitz and Spord Borgen, 2010, in Norwegian Directorate for Education and Training, 2011b).

External assessments implemented via the central examinations complement teacher-based assessment and can contribute to ensuring fairness, consistency and impartiality in assessment. However, some of the stakeholders interviewed by the OECD team voiced concerns regarding the examination system in upper secondary education. The fact that students are randomly sampled for examinations does not seem to offer equal opportunities for all students to show their best performance. Sample-based examinations are more appropriate for education system monitoring (see Chapter 6) than for individual student assessments. The examination format was also criticised by some teachers. In some subjects, students have 48 hours to prepare an examination and in most subjects they are allowed to bring any aides that they wish. According to some teachers, this system may favour those students who have learning resources and parental support at home over others. Representatives of the national student union raised concerns about the fact that examination marks have equal value as a whole year's classroom work.

The purpose and optimal use of national assessments need to be clarified further

Although there are many sources of evidence of student achievement, there is a possibility that the national assessments could become more "high stakes" than others and shift the balance that is currently in place. The communication around the purposes of large-scale assessments in Norway has not always been sufficiently clear and there are some risks that they are expected to fulfil too many purposes at once. The purpose of national testing has shifted somewhat since its original introduction in 2004, moving from an approach focused on accountability towards one more focused on improvement. Although the Norwegian system in recent years has intentionally worked to ensure that they are not used for teacher appraisal, there was considerable interest in using the results

from the national tests in the classroom and several stakeholders mentioned the possibilities of other uses of the tests as well (e.g., using the data to judge school quality,parents using the national test results to select schools).

The results of individual schools are published in the media

While results from the national tests are intended to be used for monitoring purposes at the school, school owner and national level, there is a risk that they are also used as a proxy for school quality (see Chapter 5). Individual school results are not published on the open part of the School Portal website, but they have been published by the media every year. As explained in Chapter 5, this considerably raises the stakes of the national tests for schools. Even if there are no sanctions attached to low performance, schools are likely to work to avoid the public stigma of poor results, which may have unintended consequences for classroom teaching and assessment (Corbett and Wilson, 1991; Madaus, 1988; McDonnell and Choisser, 1997). Teachers may be tempted to narrow the curriculum to best prepare their students for national tests and use similar assessment formats in the classroom (i.e. multiple choice and short answer formats), to the detriment of richer, more performance-based approaches to assessment.

A lack of clarity regarding the pedagogical use of national test results

There is also a lack of clarity around the extent to which the national tests and mapping tests are intended for use by teachers for pedagogical purposes. Some of the teachers and school leaders the OECD review team spoke to indicated that they would like to use the national tests and the mapping tests to help them decide what they should be focusing on in their improvement plans to support their students. An evaluation of NKVS indicated that many teachers would appreciate if the tests provided more information about the students so that they can be effectively used for pedagogical practice (Allerup et al., 2009).

In fact, the national tests as they exist allow the actors at various levels to get a gross measure of the relative position of schools and municipalities in relation to some fundamental skills in reading, writing and maths. But they do not provide a broad coverage of valued educational outcomes and are certainly not fulsome indicators of school quality. Because the national tests and the mapping tests are not specifically linked to the subject curricula, it is not possible for teachers and school leaders to use them to identify particular areas of strength or weakness that students have in their subject or to point the way towards specific interventions based on the data. Instead, they provide some initial clues about areas that need attention and schools need to investigate more fully, with other assessments needed to determine where to target their interventions.

There is limited systematic attention to assessment of complex competencies

In their current format, the national tests and mapping tests give a limited measure of the degree to which students are developing key 21st century competencies including teamwork, creativity and higher-order thinking abilities such as the capacity to find and organise information to solve problems, to frame and conduct investigations, to analyse and synthesise data, and to apply learning to new situation (CCSSO, 2009). The national tests and the mapping tests concentrate on basic skills and are done by students individually in a finite period of time. They are not performance-based, i.e. students are not assessed on open-ended or "authentic" performances, such as oral communication tasks, demonstrating reasoning processes, collaborative problem-solving and so on. While the curriculum is competency-based, the national assessment system focuses very much on basic skills and provides few incentives for teachers to assess more complex competencies.

Assessment of more complex skills and higher order thinking is largely expected to happen in classroom assessment that is directed by teachers in schools, where they can use in-depth methods that are important for knowing whether students can apply their knowledge to solve complex problems, communicate their understanding, think critically and reflect on their performance. While the examinations in Year 10 and upper secondary school include more performance-based tasks, it was not obvious to the OECD review team that teachers in their classroom assessment were actively and systematically engaged in this kind of assessment.

Formative assessment needs to be more firmly embedded in regular teaching practice

The issue of clarity of purpose is equally challenging in classroom assessment. Classroom assessment based on teacher judgement has long been the primary form of assessment in Norway. This makes focusing on assessment *for* learning (formative assessment) both easier and harder. It is easier because teachers are already very comfortable with making assessment decisions and see assessment as an important professional responsibility. It is more difficult because assessment for learning requires a major shift in mindset for teachers, as well as changes in assessment practices.

Researchers of the Learning How to Learn project in England found that teachers who were beginning to implement assessment for learning in classrooms often used surface techniques rather than assessment based on a deep understanding of the principles of formative assessment (James, 2006). These researchers found that formative assessment was being interpreted as having routine assessments throughout a course to track students' progress, without using the assessment to identify misunderstandings, misconceptions or missing elements of student learning, and change instruction and provide detailed feedback. In essence, these mini-assessments were mostly used as practice for a final summative assessment (James, 2006).

In Norway, the OECD review team also encountered a view of formative assessment as somehow "including" a range of small summative tests counting towards a final achievement mark. Teachers' classroom assessments were frequently used to track students' progress and provide practice for a final summative assessment (e.g. exam, oral exam, teacher-designed test). Similarly, self-assessment was often understood in a framework of self-marking, not reflection on learning. The conflation of the two purposes brings a risk that the national attention to formative assessment is being accepted by teachers as just another name for what they already do. It may reinforce the use of routine assessments in schools as preparation for more summative assessments.

This illustrates a common misunderstanding and misinterpretation of the meaning and intentions behind formative assessment. Continuous classroom assessment, done by teachers on a regular basis, can include both summative (assessment of learning) and formative assessment (assessment for learning). But these labels represent fundamentally different purposes. Formative assessment is the process of identifying aspects of learning as it is developing, using whatever informal and formal processes best help that identification, so that learning itself can be enhanced. Summative assessment, on the

other hand, is used to confirm what students know and can do, to demonstrate whether they have achieved the curriculum outcomes, and, occasionally, to show how they are placed in relation to others (WNCP, 2006).

Assessment for learning requires a fundamental shift in thinking about how teachers and students interact and use the assessment experiences to promote learning, independent of the requirement to accredit performance. Assessment is considered as formative only if it shapes subsequent learning (Black and Wiliam, 1998; Wiliam, 2006). Even though there has been a focus nationally and in some municipalities on approaches like setting learning goals, making criteria, involving students, feedback and self- and peer-assessment, very few of the teachers interviewed by the OECD review team talked about systematically using assessment to differentiate instruction or change teaching practices.

Giving feedback and fostering student reflection are areas requiring particular attention

Within the broad challenge of embedding formative assessment more firmly in regular classroom teaching, feedback is an area that needs particular investigation. Results from the Pupil Survey in 2009 indicated that students do not receive sufficient feedback as to where they stand in relation to learning goals and how they can improve (Norwegian Directorate for Education and Training, 2011b). Several studies and stakeholder contributions also indicate that students often do not receive adequate academic challenge and that teachers may be relatively indulgent in that they provide generous praise but little critical academic response to students (Norwegian Ministry of Education and Research, 2010; NLL, 2010). Results from TALIS indicated that Norwegian teachers applied structuring teaching practices to a lesser degree than most other countries – this includes stating learning objectives, summarising previous lessons and checking if academic content has been understood (OECD, 2009).

There is also room to further foster student reflection and self-assessment in Norway. The OECD review team heard that routine conversations with students (and their parents) are a fundamental part of assessment and reporting. There is already a strong cultural commitment to engaging students in decisions about their own learning. What seemed absent was a focus on regular attention and support for students to engage in understanding and extending their own learning by intentionally identifying criteria with students, helping them to see what "good" work looks like and providing descriptive and constructive feedback to move their thinking and learning forward.

Policy recommendations

Norway has a strong tradition for teacher-based classroom assessment and has introduced several measures to strengthen both classroom assessment and external assessments of students over recent years. In a relatively short period of time, Norway has taken major steps to move towards a balanced assessment system with a range of different approaches to assessment designed to serve different purposes. The preceding discussion of strengths and challenges suggests a number of potential future directions for policy makers to consider. These include:

Develop clearer and more visible learning goals and criteria to guide student assessment:

- Reinforce consistency and fairness in assessment, reporting and grading;
- Strengthen coherence and clarity about purposes and uses of different assessments;
- Continue to support formative assessment in schools, with particular focus on feedback and student engagement;
- Further support focused professional learning on effective student assessment.

Develop clearer and more visible learning goals and criteria to guide student assessment

The above analysis points to a need for clearer external reference points in terms of expected levels of student performance at different levels of education. While it is important to keep the curriculum open so as to allow for teachers' professional judgements in the classroom, there is room in Norway to provide clearer and more visible guidance concerning valued learning outcomes, expected learning progressions and criteria for assessment in different subjects at different stages. Such guidance can help teachers make accurate judgements about student performance and progress, which is essential to make decisions about how to adapt teaching to students' needs.

Having national standards (or expectations or benchmarks or competence goals) for what should be taught and learned in schools has been debated and tried to varying extents in many countries over the last quarter century. Standards are intended to provide consistency and coherence, especially in contexts where there is wide variation in curriculum, content and assessment. Although it may appear straightforward to create statements of expected learning and levels of proficiency, experiences in different education systems have shown that it is not an easy task to identify clear and agreed standards and criteria. The products of these debates take on different forms and complexity depending on the national context and the rationale for having establishing national reference points. In Norway, the national authorities have engaged in discussions with stakeholders and researchers about potential ways to further refine learning outcomes, indicators and criteria to help municipalities and schools focus on quality improvement.

Since the Norwegian education system is built on local control of schools, it is important to consider the range of possibilities and the risks associated with establishing national standards. The different models developed in other OECD countries can provide some inspiration. In the United States, for example, where there is no common national curriculum, the national standards are seen as a way to bring coherence across the different states and districts. In each state, the standards are accompanied by a sophisticated system of large-scale standards-based assessments to measure student achievement against the standards. In New Zealand, quite the contrary, national standards are essentially a set of learning progressions that complement the National Curriculum to help teachers make "Overall Teacher Judgements" based on a range of assessment evidence that they collect over time, but – importantly – there are no full-cohort national assessments (see Box 3.2). The New Zealand strategy aims to build teacher capacity and provide teachers with an extensive test bank they can draw on to make their own professional judgements about student performance and progress against the standards.

Box 3.2 The development of standards in the United States and New Zealand

In the United States, national standards have emerged from a desire to encourage commonality across a vast and diverse country, with dramatic variations in culture and education, often associated with racial/ethnic and socioeconomic groups (Barton, 2009). The debate in the United States has spawned a number of national initiatives and legislated assessment systems. Since there is no national curriculum and different states design the curricula that is implemented in schools, national standards have been seen as a way to bring some coherence across the states and districts, with states and a number of national groups creating a range of standards, including content standards, performance, and opportunity-to-learn standards. In all states, these standards are accompanied by a sophisticated system of large-scale assessments to measure student achievement towards the standards. The standards-based system in the United States is still developing, with a history of starts and stops, many disparate opinions and little consensus about the form and the purposes for national standards (Barton, 2009).

New Zealand has taken a very different approach to standards. There is a national curriculum in New Zealand but no large-scale national assessment system. The curriculum is implemented in individual schools that are self-managed and responsible for both curriculum implementation and for assessment. They have developed national standards (in reading writing and mathematics), linked to the national curriculum, to provide a nationally consistent means for considering, explaining, and responding to students' progress and achievement in Years 1-8 (New Zealand Ministry of Education, 2010). These standards describe expected student achievement to provide reference points, or signposts that will enable students to meet the demands of the New Zealand Curriculum and help teachers to make judgments about their students' progress so that the students and their teachers, parents, and families can agree on the next learning goals. Teachers make an "overall teacher judgment" (OTJ) about student learning, by drawing on and applying the evidence gathered up to a particular point in time. They use the national standards and engage in moderation (a process of teachers sharing their expectations and understanding of standards with each other) in order to improve the consistency of their decisions about student learning. They will also be using the national standards and "self-review tools" developed by the Ministry to establish school-wide targets for school improvement, based on evidence from their own students and use these targets for continuous improvement in schools (New Zealand Ministry of Education, 2009)

Sources: Barton (2009); New Zealand Ministry of Education (2009).

The challenge in Norway is to decide what kinds of reference points are most useful, given the variation among schools and school owners. The Knowledge Promotion curriculum is still relatively recent and there is room to further build on and deepen it by creating more specific learning objectives and learning progressions that describe the way that students typically move through learning in each subject area. This would provide teachers (as well as parents and other stakeholders) with concrete images of what to expect in student learning, with direct links to the curriculum. Learning progressions can provide a picture from beginning learning to expertise, and enable students, parents, teachers, and the public to see student progress over time. In that way, assessments based on the progression can also be used to measure growth in student performance. Teachers can use these learning progressions or roadmaps to identify the set of skills and bodies of enabling knowledge that students must master en route to becoming competent in the complex and multi-faceted outcomes that make up the curriculum.

To assist teachers in their practical assessment work against competence goals, the Directorate should also engage with stakeholder groups to facilitate the development of scoring rubrics listing criteria for rating different aspects of performance and exemplars illustrating student performance at different levels of achievement. Clear scoring rubrics can make teachers assessment transparent and fair and encourage students' meta-cognitive reflection on their own learning. They can be used to define what constitutes excellent work and can enable teachers to clarify clear assessment criteria and quality definitions. For example, the Ministry of Education in Newfoundland and Labrador, Canada, disseminates rubrics with specific guidelines and criteria for evaluating student work. The rubrics describe levels of quality for each of the criteria, usually on a point scale (OECD, 2005). Such scoring rubrics and exemplars of student performance should be provided as voluntary resources that teachers can use as signposts and support in their assessment.

While clearer national guidelines are necessary to ensure teachers know the goals to reach for different year levels, teachers also need to develop skills to create their own specific objectives and criteria for each course unit and lesson. Teachers should also be encouraged to share and co-construct assessment criteria with students so that they understand different levels of quality work. Such common work on criteria can promote both student learning and reflective teaching practice (Andrade, 2005; Jonsson and Svingby, 2007). It can help facilitate peer- and self-assessment and teacher feedback. As students gain understanding of the criteria they will learn to connect their performance with preparation and strengthen an internally oriented sense of self-efficacy (Stiggins, 2005). Locally developed criteria should be aligned with the overall national learning goals.

As part of the Better Assessment Practices project (see above), the Directorate has already begun to work with 77 schools from all counties on developing and applying criteria for goal achievement. The aim of this initiative was to explore whether criteria developed in different ways can give a more subject-related and fair assessment of students' competencies in the different subjects. The evaluation of the project indicates that a majority of teachers found the use of criteria helpful to clarify learning objectives for students and to help teachers make more objective judgements. Teachers also welcomed the professional development related to assessment and the use of criteria. The evaluation of the project points out that it is important to develop national assessment criteria that provide a common reference for all teachers while at the same time leaving schools the freedom to develop their own criteria for their specific purposes. The work conducted as part of this project provides an excellent basis for the Directorate to initiate further work to engage teachers in the development and use of assessment criteria.

Reinforce consistency and fairness in assessment, reporting and grading

It appears from Norway's Country Background Report for this review (Norwegian Directorate for Education and Training (2011b) and from the interviews conducted with stakeholders by the OECD review team that there are variations in the capacities of teachers to make professional judgements about student performance and progress. Schools seem to vary greatly in the ways they choose to deliver the curriculum, assess students in the classroom and report results to parents. While this may allow schools to respond well to local priorities, it raises concerns about equivalence of educational opportunities and fairness in grading. To address such concerns while leaving space for the professional judgement of teachers, Norway should consider supporting research on effective classroom assessment, encourage better moderation processes at all levels of schooling, enhance reporting processes and review the examination system in upper secondary education.

Support research on effective classroom assessment

To ensure consistent student assessment, the Norwegian assessment framework should be based on sound theoretical foundations of learning and guide teachers in deciding what to assess, how to assess and how to use the information. A sustained focus on research regarding effective assessment can help build the national knowledge base to support the assessment agenda. More practice-based evidence is necessary to understand what works in terms of classroom assessment for Norwegian students. Research that gets into Norwegian classrooms can help identify current strengths of classroom assessment, as well as gaps that should be addressed by professional development offers. Norway could consider conducting a joint national inspection on student assessment including on how teachers and schools collect and use assessment data. In New Zealand, the Education Review Office, responsible for the review of individual schools and for national thematic reviews, has conducted a thematic inspection on this topic, which forms very useful evidence to inform future assessment policies (New Zealand Education Review Office, 2007a; 2007b; 2007c).

Encourage moderation processes at all levels of schooling

Moderation processes are also key to increase reliability of teacher-based assessment. There is considerable evidence that involving teachers in moderation is a powerful process not only for enhancing consistency but also for enabling teachers to deeply understand the standards and to develop stronger curriculum and instruction. Moderated assessment and scoring processes are strong professional learning experiences that can drive instructional improvements, as teachers become more skilled at their own assessment practices and their development of curriculum to teach the curriculum (CCSSO, 2009). Norway already has a tradition of having moderation of oral exams in secondary schools done by teachers from other schools. Such moderation practices should be expanded and encouraged for different types of assessments at all levels of schooling. However, examinations form only a small part of student assessment for certification. Most of the grades on students' school-leaving certificates are based on their overall achievement over the years. It is therefore important to ensure the reliability of these teacher-based grades. Moderation process within and across schools when teachers are assessing student work should become regular practice.

Ensure adequate reporting to students and parents

Good reporting and communication strategies are necessary to ensure consistency in assessment between different levels and to reach out to parents. In primary schools where there are no number marks or standard report cards, it is especially important to ensure accurate reporting and communication with students and parents. Good reporting is essential for involving parents in supporting their children's learning and in focussing resources, both at school and at home, on essential learning targets (Guskey and Marzano, 2001; Nusche et al., 2011a). Hence, reporting needs to be clear and easy to understand, especially in primary education when parents and teachers can have the greatest impact on a child's learning (Nusche et al., 2011a). Effective reporting is also important to ease student transitions when they are changing schools or moving to a higher level of education. Norway could consider introducing a template for reporting in primary education and guidance materials that teachers can use to report student performance against the national curriculum. The use of individual development plans in Sweden can provide some inspiration (Box 3.3)

Box 3.3 Individual development plans in Sweden

In Sweden, it is obligatory for schools to use individual development plans (IDPs) that include an assessment of the student's current performance in relation to learning goals set in the curriculum and syllabi as well as steps that students should take to reach those goals. Whether the IDPs include additional information such as order and conduct is up to the school leader. The written IDP is to include the student's and the guardian's input from the regular development talks. For students who are experiencing difficulty, schools are required to document plans as to how they will help students achieve goals. While being a useful tool for reporting, the IDPs are also used as a key tool for formative assessment throughout the year, where both teachers and students are focused on identifying and adapting individual learning goals, and developing strategies to address any shortcomings. Moreover, they form an important basis for studentteacher dialogue and are used as a tool to develop students' own self-assessment skills.

Source: Nusche et al. (2011b).

Review whether the national examination system ensures fairness in student assessment

In upper secondary education, particular attention needs to be paid to ensure that assessment and grading are reliable and fair. Summative assessment at this level is used to record students' achievements for certification and signals student competencies to the labour market and further education institutions. Assessment in upper secondary education can thus be a key factor influencing the students' career opportunities (Dufaux, 2011). As other OECD countries, Norway uses a mix of teacher-based assessments and final examinations to measure student achievement in upper secondary education. The examination system is intended to provide an element of external quality assurance and increase the reliability and fairness of student assessment at this level.

As the upper secondary level is a study period characterised by increased pathway differentiation, it makes sense to give students a degree of choice in the subject areas they would like to be examined in. In Norway, however, students are randomly selected for examinations in particular subjects and may be examined in a subject that is neither one of the core subjects (Norwegian, mathematics and English) nor a subject of particular relevance for their career plans. Such sample-based assessment appears more adequate for national monitoring purposes than for individual student certification. Since the primary aim of the examinations is individual student certification, it is essential that all students receive a fair opportunity to show their best performance.

To ensure the credibility of examinations at the upper secondary level and strengthen the signalling value of school-leaving certificates to external stakeholders, Norway should investigate into the adequacy and fairness of the current assessment system in upper secondary education. This should clarify if and in how far the random sampling of students to participate in high stakes examinations reduces equal opportunities in assessment. Another important element is to analyse what types of aides students use in examinations and the ways in which such support is influenced by parental background.

Strengthen clarity in the communication about purposes and uses of national assessments

In close collaboration with researchers and stakeholder groups, the national authorities in Norway are actively moving towards developing an evaluation and assessment framework for education. In terms of assessment, the intention is to have a coherent and comprehensive student assessment system that aligns curriculum, instruction and assessment around key learning goals, includes a range of assessment approaches nationally, regionally and locally and provides opportunities for capacity building at all levels. Norway already has the beginning of a multi-faceted assessment system in which different assessments formats are used for different purposes. However, the large-scale assessment system is still developing and the focus on assessment for learning in schools is just beginning. As the system matures, there is always a danger that a focus on accountability will disrupt efforts for improvement, especially if high stakes consequences are attached to the results.

Because national testing is a relatively new phenomenon in Norway, it is important to be clear about its purposes, to develop the tests over time to be able to accommodate the purposes that are reasonable, point out inappropriate uses and provide guidance for the way in which the tests can be used. The assessment system requires research evidence on the extent to which the interpretations of the test results are appropriate, meaningful, and useful (Messick, 1989). The role of the national tests should be clearly fixed and the tests should be continually developed, reviewed and validated to ensure that they are fit for purpose. Validation is a long-term process of accumulating, interpreting, refining and communicating multiple sources of evidence about appropriate interpretation and use of test information (Shewbridge et al., 2011). It is important to clarify publicly the kinds of decisions the tests can provide evidence for and what decisions require other kinds of information.

The national authorities should continue to be clear in their communication that raw national test results are not fulsome measures of student achievement or progress, and even less so of teacher or school quality. As they have found out in other countries, it is not appropriate to try to serve multiple purposes with a single assessment. It is important, instead, to develop a comprehensive assessment system that is clear about what the various forms and approaches can do and ensures that they are used appropriately and effectively for their intended purpose. Norway has set out to develop such a system but needs to stay alert that the balance does not shift to give undue attention to one or two measures at the expense of other sources of evidence on student learning and progress.

Particular attention should be paid to ensuring that the breadth of curriculum and learning goals is maintained in student assessment by ensuring that all subject areas and objectives are given certain forms of attention. As the national tests results are published by the media, teachers are likely to devote more time to what is measured in them. To prevent teachers from teaching to the tests and thereby narrowing the curriculum, multiple measures of student achievement should be used to determine the quality of school and student performance. It is important that other validated assessment resources are available to teachers to complement national tests and mapping tests that measure students' learning not just in basic skills but in all subjects and objectives, and in different formats including performance-based assessments and that teachers are trained in how to use them.

Continue to support formative assessment in schools, with particular focus on feedback and student engagement

Formative assessment or assessment for learning has gained increasing prominence in both policy and practice in Norway, as it has in many countries around the world. The Ministry of Education and Research and the Directorate for Education and Training in Norway identified formative assessment as a priority area for education policy and professional development. There are indications that that this national focus is also translating into local and school-level initiatives with greater attention being paid to the development of criteria, provision of feedback and engaging students in their own assessment.

Because formative assessment requires a large shift in teachers regular classroom assessment practices, the professional development needs are large and so far only partially met. The above analysis indicated that in order to help teachers gain deep understanding of the purposes and practice of formative assessment, three areas should be given priority attention in professional development: (1) embedding formative assessment in the regular teaching practices (2) giving specific and detailed feedback and (3) creating conditions for students to develop self-monitoring skills and habits.

Embedding formative assessment in regular teaching practices

While there is increased focus on developing criteria, regular checking of student progress and involvement of students in their assessment, formative assessment needs to become still further embedded in the daily classroom interactions. There is strong evidence that short-cycle formative assessment – the daily interactions between and among students and teachers – has the most direct and measurable impact on student achievement (Looney, 2011 in Nusche *et al.*, 2011b). In short-cycle interactions, formative assessment is part of the classroom culture, and is seen as an integrated part of the teaching and learning process. Teachers systematically incorporate formative assessment methods in their course planning – for example, in how they intend to develop classroom discussions and design activities to reveal student knowledge and understanding. These interactions encompass effective questioning to uncover student misconceptions and identify patterns in student responses, feedback on student performance and guidance on how to close learning gaps, and student engagement in self-and peer-assessment (Nusche *et al.*, 2011b).

Giving effective feedback

Because Norwegian teachers are deeply responsible for teaching and assessment, feedback is an area that could form a primary focus for professional learning. It is already a key element of the Better Assessment Practices project and it is an area that has the potential to show immediate and visible results in student learning. The Directorate could use "feedback for learning" as an intensive and widespread national professional learning focus, with resources, pre-service and in-service sessions, forums, conferences, etc., as well as incentives to municipalities and counties to participate and to share.

Feedback is what makes assessment formative (Harlen and James, 1997), because it provides students with the information necessary to support and improve learning. It is a process of communication to keep learning "on target" and close the gap between current and desired performance (Swaffield, 2008). Feedback is generally considered "a good thing", but Hattie and Timperley (2007), in their comprehensive review of recent studies,

point out that the impact of feedback can be positive or negative. It is not the presence or absence of feedback that makes the difference, but its nature and quality (Swaffield, 2008). Studies show that feedback which does not provide students with specific guidance on how to improve, or that is "ego-involving", even in the form of praise, may have a negative impact on learning (Köller 2001; Mischo and Rheinberg, 1995). In other instances, feedback that is overly reliant on extrinsic rewards, and largely oriented towards effort and motivation may be counter-productive as it reinforces performance goals rather than learning goals (Pryor and Torrance, 1998). Feedback is effective for students if it reveals what they understand and misunderstand, provides specific directions and strategies for improvement, and assists students in their understanding of the goals of learning. It is not effective if students are de-motivated so that they abandon the goal or reject the feedback and deny that a gap exists (Swaffield, 2008).

Fostering student reflection and self-assessment

When students are involved in reflecting on their own learning they are learning how to learn and practicing the skills of being critical thinkers, making sense of information, relating new information it to prior knowledge, and using it to construct new learning. This is the regulatory process in meta-cognition. It occurs when students personally monitor what they are learning and use the feedback from this monitoring to make adjustments, adaptations, and even major changes in what they understand.

While schools in Norway have strong democratic traditions and regularly involve students in decisions about their own learning, there needs to be still greater focus on working with students to identify criteria for evaluating student work and ensuring they are challenged to keep improving. Students can only monitor their own learning when they understand the goal and can assess what they need to do in order to reach it (Sadler, 1989). They must be taught how to assess where they are in relation to the desired learning outcome, have access to and learn to apply criteria of high quality learning, and see models and practice that teach them to apply their new learning, thereby acquiring the skills and the habits of mind to become their own best assessors. In order to focus on reflection and self-assessment, teachers should use classroom assessment to guide students in setting goals and monitoring their progress towards them; work with them to develop clear criteria; help them use exemplars and models of good practice; and guide them in questioning their own thinking and living with the ambiguity inherent in learning.

As mentioned above, assessment schemes and purposes, as well as the specification of what will be assessed and against which criteria the judgement will be made, must be transparent to students (Ross et al., 1999). As students internalise the criteria for evaluating their work, they are better able to connect their performance with their preparation, and develop an internally oriented sense of self-efficacy (Stiggins, 2005). Teachers can use classroom assessment as the vehicle for helping students develop, practice, and become comfortable with reflection and with critical analysis of their own learning (Earl and Katz, 2008).

Sustain and enhance focused professional learning on student assessment

Norway has taken major steps in including a focus on effective student assessment in initial training and professional development for teachers, as well as in learning opportunities for school leaders and school owners (see above). In particular, the Directorate for Education and Training has funded (until 2011) the development of further expertise within universities and university colleges via the Norwegian Network for Student and Apprentice Assessment (see above). These steps are commendable and it is of utmost importance to sustain them.

It is clear from the work that has already begun in universities and through the Better Assessment Practices project, and from our interviews with stakeholders that there is willingness at all levels to focus on assessment. There are indications that Norwegian teachers value professional development on student assessment and that there is demand for additional opportunities to build assessment competencies. In the OECD's TALIS 2009 survey, 21.9% of Norwegian teachers indicated that they had "high professional development needs" in the area of student assessment practices (5th highest figure across 23 participating countries, against a TALIS average of 15.7%). The Union of Education Norway in their submission to the background report for this OECD review suggested that "the best way to ensure the most uniform support for assessment and support for learning is to strengthen the teachers' assessment competence and the schools' assessment culture" (Norwegian Directorate for Education and Training, 2011b).

School professionals not only need to strengthen their capacity to use, interpret and follow up on results obtained from national tests and mapping tests, but also to develop valid and reliable assessment tools to meet their own specific local needs. This concerns in particular the subjects other than reading, mathematics and English where there are no national tests or mapping tests available, and those subjects where there are no central examinations. Schools should also learn to develop assessment strategies and materials particularly in areas where school results are problematic and where more information is needed on sub-groups of students. Professional learning opportunities should also be targeted in particular at the smaller municipalities and schools, and those facing challenges in improving results.

To focus the offer of professional learning opportunities for teachers, the Ministry of Education and Research and the Directorate for Education and Training should consider engaging universities and stakeholders in a process to define a set of teacher competencies related to assessment that can be integrated in overall teaching standards (Chapter 4). This set of assessment competencies should be comprehensive, including competencies in different assessment practices, in interpreting assessment data and in self-assessing professional development needs (Nusche et al., 2011a). It could help to set targets for professional development programmes and for national teaching standards to be used by teacher trainers. It could further be used in the development of induction and mentoring programmes for newly-employed teachers. In developing professional learning programmes, the Directorate and the universities should draw on research concerning effective professional development and provide a mix of learning setting to maximise outcomes (see Box 3.4).

Box 3.4 Recent research on effective professional learning

In recent years, there have been questions about the effectiveness and quality of many professional development processes and whether there is a school culture that supports and values teachers' professional learning (General Teaching Council, 2007). There has also been considerable investigation into the kind of professional learning that is most effective in deepening and enhancing teachers' practices (Cordingley et al., 2003; Timperley et al., 2008).

The General Teaching Council (2007) in England described their results from a study of professional development that improves teachers' attitudes, knowledge and skills; impacts positively on students' learning, confidence, attitudes and achievements; enhances teachers' motivation and morale; and all in all, is central to school improvement. Their findings provide convincing evidence that good professional development maintains a clear focus on students' learning and is grounded in what is known about effective adult learning. This includes:

- Sustained access to coaching and mentoring, for getting support with knowledge and/or
- Opportunities to see good practice in action, both in classrooms and in adult learning environments;
- A range of opportunities for observation and feedback as part of collaborative and collegial working practices; and
- Sustained, structured and cumulative opportunities for practising and evaluating what has been learnt.

Sources: General Teaching Council (2007); Cordingley et al. (2003); Timperley et al. (2008).

Notes

- 1. Special needs students can be exempted from the tests.
- There is a plan to add sample tests of writing as a basic skill (8th grade) and the 2. subjects social science and natural science (10th grade) in 2012.

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Chapter 4

Teacher appraisal

Teachers in Norway benefit from extensive professional autonomy, but they have few opportunities to receive external feedback on their teaching practice. The national regulations state that teacher appraisal must be implemented but the processes for appraisal are not regulated by law and there are no national performance criteria or reference standards to guide the process. Teacher appraisal is not considered to be part of the national quality assessment system (NKVS). As the employing authorities for teachers, school owners are free to establish their own frameworks for teacher appraisal but few of them have systematic frameworks in place to appraise the quality of teachers' practice. This limits the possibilities for teachers to receive professional feedback from their employer and a validation of their work by an external entity. The most common source of feedback for teachers in Norway is an annual employee dialogue, which normally takes the form of a conversation with the school leader. There is no guarantee that all teachers have their teaching practice observed and receive feedback for professional development. Without a clear link to professional development, the impact of teacher appraisal on performance will be relatively limited. The absence of career opportunities and recognition for effective teachers is likely to further undermine the role of teacher appraisal in incentivising high performance.

This chapter looks at approaches to teacher appraisal within the Norwegian evaluation and assessment framework. Teacher appraisal refers to the evaluation of individual teachers to make a judgement about their performance. Teacher appraisal typically has two major purposes. First, it seeks to improve teachers' own practice by identifying strengths and weaknesses for further professional development – the improvement function. Second, it is aimed at ensuring that teachers perform at their best to enhance student learning – the accountability function (Santiago and Benavides, 2009). The analysis of teacher appraisal has to be seen within the particular national context: for an overview of key features of the teaching profession in Norway, see Box 4.1.

Context and features

Teacher appraisal procedures

Teacher appraisal in Norway is not regulated by law and it is not considered to be part of the national quality assessment system (NKVS). The national requirements state that teacher appraisals must be implemented but there is little guidance provided at the central level on how to evaluate individual teachers. No national performance criteria or reference standards exist to support schools in their appraisal approaches.

As the employing authorities for teachers, the school owners (counties and municipalities) are free to establish their own frameworks for teacher appraisal. The City of Oslo, for example, has implemented a systematic approach to teacher appraisal in which school leaders are required to observe classrooms, and students at the upper secondary level are asked to evaluate their teachers. The implementation of the system is supervised and followed closely by the area directors of Oslo municipality. Many school owners, however, delegate the responsibility for personnel matters, including teacher appraisal, to the school leaders.

The most common source of feedback for teachers across Norway is the annual employee dialogue that school leaders are required to conduct with all teachers every year. This performance review typically takes the form of a conversation between the school leader and the individual teacher in which issues related to teachers' responsibilities, working conditions and professional development are discussed. Actual teacher appraisal practices are poorly documented in Norway but they seemed to be based on a culture where school leaders show confidence in their teachers, appraisal is taken as a dialogue with the school leader and procedures are defined in collaboration with the teachers. The idea is that each school defines its own procedures, following municipality requirements or guidelines where they exist.

Other forms of feedback to teachers

While there is no obligation nationally for school leaders to observe teachers' classroom practices, the OECD review team saw evidence in some schools of principals practicing what they called "management by walking around". This included visiting classrooms and providing feedback to teachers, often based on shared criteria developed at the school or municipality level. Some school owners, such as the City of Oslo (as a county authority), have made feedback processes systematic across all their schools. However, these practices are not universal across Norway. In the OECD's Teaching and Learning International Survey (TALIS)¹, only 56% of Norwegian teachers responded that

they were appraised by their principal at least once a year (8th lowest figure, against a TALIS average of 64%).

Informal conversations with colleagues are another potential source of feedback for teachers. In Norway's larger primary schools, team teaching is quite prevalent. According to the Norwegian Ministry of Education and Research (2010), it is less common in Norway to have only one teacher in a full class than in most other OECD countries. This provides a context in which staff can engage in giving informed feedback to each other. It is unclear, however, in how far teachers make use of this team teaching environment to exchange feedback on effective teaching practice. According to TALIS, 59% of Norwegian teachers indicated that they received appraisal / feedback from other teachers or members of the school at least once a year (8th lowest figure, against a TALIS average of 72%).

Student feedback also plays an important role in teacher appraisal in Norway. Based on interviews with stakeholder groups, the OECD review team formed the impression that student surveys are used more frequently in Norway than in many other OECD countries. Individual teachers, schools and municipalities may prepare their own student surveys to gather feedback about the learning environment in classrooms. The national Pupil Survey, which is distributed annually, also includes two questions on teacher practices. While there are different views about how and by whom student survey results should be used, the value of receiving student feedback on teaching practice appeared widely accepted among practitioners and stakeholder groups in Norway (more on this below).

Competencies to undertake teacher appraisal

The key role in teacher appraisal is exercised by school leaders. School leaders are typically former experienced teachers who apply for the position through open competitions. The school owners are responsible for advertising school leadership positions, as well as appointing, developing and dismissing school leaders. In recent years, there has been an increasing concern about shortages of qualified candidates for school leader positions. Some school owners have advertised vacancies over a lengthy period and others have assigned the principal post in a compulsory manner (Norwegian Directorate for Education and Training, 2007). It is the responsibility of school owners to ensure that school leaders have the necessary knowledge and skills for the job. The universities are expected to develop training options for school leadership in line with requirements of school owners (Norwegian Directorate for Education and Training, 2007).

Traditionally, there have not been any national requirements to follow specific training for school leadership, but a new national education for principals has been introduced in 2009. The education programme is initially targeted at newly employed principals who have been in the position for less than two years. It will then be extended for more long-standing principals who have not received such an education. The overall aim of this new initiative is to better equip principals for their role as leaders, and in particular for taking a stronger role in guiding the teaching and learning processes at school (Norwegian Ministry of Education and Research, 2010). It is expected that as principals are become better prepared for pedagogical leadership, they will also become more confident in appraising and providing feedback to their teaching staff. It is hoped that this will also help increase the acceptance among teachers of school leaders observing classrooms and evaluating teaching performance.

Using appraisal results

Teacher appraisal in Norway is essentially used with formative purposes. To some extent, the employee dialogue is expected to inform professional development activities of the teacher, ideally in close linkage to the needs of the school. No consequences for teacher career advancement or salary are contemplated. If an underperforming teacher is identified, it is expected that the school leader finds a solution. School owners can dismiss a teacher on the grounds of underperformance. However, this tends to happen only in exceptional cases.

Box 4.1 The teaching profession in Norway – main features

Employment status, salary and career structure

Teachers working in the public sector are salaried employees of municipalities. The large majority of teachers (89.9% according to TALIS) are permanently employed, which means that they can only be dismissed on grounds covered by legislation. In 2003, the responsibility to negotiate teacher salaries with the teacher unions has been transferred from the state to the Association of Local and Regional Authorities (KS). Traditionally, salary progression has been determined by the teacher's level of education and seniority, with fixed additions for certain extra tasks and responsibilities. Over the past decade, however, the agreements regulating salaries and working hours for teachers have become somewhat more flexible. This provides some room for the local level to provide salary increases for certain extra tasks or achievements.

Prerequisites to become a teacher

While in the past a school leaving certificate from upper secondary education was sufficient to be admitted into teacher education, a range of minimum requirements were introduced in 2005. The new requirements establish a minimum overall grade and minimum grades in Norwegian and mathematics that new entrants into teacher education must have obtained. While the admission requirement still is relatively low, its introduction resulted in a significant decrease in the number of qualified applicants.

Initial teacher education

There are several pathways into teaching in Norway. The most common pathway is to take the state's four-year General Teacher Education or to participate in teacher education at a university. It is also possible to take a one-year post-graduate programme of education following university or vocational studies in a subject relevant to teaching. Among lower secondary teachers, 76.5% of the teachers participating in TALIS indicated that they had a Bachelor's degree and 22.5% had a Master's degree (OECD, 2009b). A new structure for initial teacher education for compulsory school was introduced in autumn 2010. Teacher students now have the possibility to choose between two different types of programmes qualifying to teach either in Years 1-7 or in Years 5-10. The main objective of the reform was to strengthen the emphasis on subject knowledge and teaching skills as well as the research orientation of teachers. The new teacher education includes more practical training and more academic in-depth work in fewer subject areas. The focus on education science was also expanded.

Box 4.1 The teaching profession in Norway – main features (continued)

Professional development

It is the responsibility of school owners to develop the competence of their staff including school leaders and teachers. Teachers are required to spend five days of the school year on continuing professional development (CPD). These five days of training are typically provided as wholeschool professional development for all teachers of a school on a specific topic determined by the school leader, often in collaboration with the school owner and / or the teaching staff. There has also been a new agreement in 2010 between the Ministry of Education and Research and the Association of Local and Regional Authorities (KS) that newly employed teachers shall receive induction and mentoring. In recent years, the central government has contributed substantially to financing teacher professional development. The main objective of the national authorities is to ensure that all teachers have qualifications in the subject that they teach.

A new initiative called "Competence for Quality" was set up in collaboration between the Ministry of Education and Research, KS, teacher organisations and the National Council for Teacher Education. The initiative aims to create a permanent system for teachers' continuing professional development. The continuing professional development should allow participants to take an education worth 60 ECTS credits in a specific subject, with a view to ensuring that all teachers have qualifications in the subject that they teach. The CPD provided through "Competence for Quality" should also be targeted towards particular nation-wide priority topics. While the central government covers the cost of the course, the cost for the replacement teacher is covered to 40% by the central government, 40% by the municipality and 20% by the individual teacher.

Raising the status of the teaching profession

The government has entered into a binding partnership with key stakeholder groups to improve the status of the teaching profession. The partnership called GNIST (Norwegian for "spark") brings together the teacher training institutions, school owners, school leader and teacher unions, the social partners and the national authorities. The co-operation was set up in 2008 and is running over five years. The main objective is to increase the status and quality of the teaching profession. The key elements of the partnership are a major recruitment campaign, improved teacher training and upgrading of the competence of teachers and school leaders. The different partners involved in GNIST have agreed on a set of 23 indicators to monitor and evaluate progress towards achievement of the key goals.

Strengths

Teachers are trusted professionals and appreciate feedback on their work

The OECD review team formed the view that Norwegian teachers are generally perceived as trusted professionals among the different stakeholders. This is reflected in the extensive professional autonomy from which they benefit in the exercise of their duties. Teachers are generally free to decide on teaching content, materials and methods. The OECD review team formed the view that teachers are given considerable scope to exercise their professionalism and benefit from good levels of trust among students, parents and the communities in general. There seems to be a consensus around the importance of building a trusting rather than a controlling environment for teachers. This

was evident, for example, in the decision to change the date of national tests so as to ensure that they are used for formative purposes rather than to evaluate teachers (Chapter 3).

One of the consequences of being perceived as trusted professionals is that teachers in Norway are generally eager and willing to receive feedback. Teachers interviewed by the OECD review team generally conveyed that they appreciated it when the school leader took the time to provide them with feedback. In many cases, teachers were eager to have more opportunities to discuss their practice. Where it occurs, the appraisal of teachers by school leaders seems generally well accepted. According to TALIS, 75.0% of the Norwegian teachers who were appraised agreed or strongly agreed that the appraisal/feedback was helpful in the development of their work as a teacher in the school (against a TALIS average of 78.6%). Also, 84.0% of teachers agreed or strongly agreed that the appraisal/feedback was a fair assessment of their work as a teacher in the school (against a TALIS average of 83.2%). Some teachers were also actively seeking feedback from their students (more on this below).

School leaders are receiving training related to teacher appraisal

For teacher appraisal to be effective, it is important to build the capacities of school leaders to provide effective feedback. The recent introduction of a new training programme for school leaders is a very positive and promising development (Chapter 1). It has the potential to contribute considerably to the professionalisation of school leadership and can help school leaders focus on guiding the teaching staff to achieve better learning outcomes for students.

The framework for school leader competences defines four main competence areas and emphasises that the first area should be given the largest emphasis: (1) The pupils' learning results and the learning environment; (2) Direction and administration; (3) Establishing co-operation, building an organisation and guiding teachers; and (4) Development and change. The appraisal of staff is not included as an explicit competence area, but it is at the core of competence area one ("the pupils' learning results and the learning environment"). Under this heading, the competence framework points out that "the head teacher's ability to lead the learning process and guide teachers in this process will be decisive" (Norwegian Directorate for Education and Training, 2008). Among the skills and attitudes principals should be able to master in this area, many relate to appraising and guiding teachers' practices:

- Setting goals for teaching work;
- Setting standards for quality in working processes and being able to enforce these;
- Following up on and giving feedback to individual co-workers;
- Creating pride, aspirations and a desire to achieve results in teachers;
- Guiding and giving feedback to teachers;
- Challenging teachers and setting definite demands on quality.

More attention is given to mentoring and guidance for newly-employed teachers

In a recent agreement between the Ministry of Education and Research and the Association of Local and Regional Authorities (KS), it was established that all new teachers entering schools should be offered induction and mentoring as of 2010. This is intended to ease the transition between teacher education and working life in schools. In the past, it was voluntary for municipalities to implement induction programmes for incoming teachers. The intention of the new programme is to roll out participation to cover all new teachers. Guidance will be provided to new teachers by more experienced teachers from the same school. The participating experienced teachers will receive training to prepare them for their role as mentors.

This new induction scheme has the potential to encourage more appraisal and feedback for teachers who are new to a school. However, it is important to note that across TALIS countries, there is no quantitatively important relationship between the existence of a formal induction / mentoring process and the frequency of appraisal and teachers in their first two years at school (OECD, 2009b). If the purpose of induction is to strengthen appraisal and feedback mechanisms for newly employed teachers, it is important to design the programme in a way that it focuses explicitly on observing and discussing teachers' classroom practices.

Feedback from students is seen as an important element of formative teacher appraisal

Many of the practitioners we spoke to saw student views as key information for their own self-appraisal and improvement of their practice. Some teachers designed their own student surveys in order to obtain feedback on their teaching practices and their students' learning progress. These surveys are organised by the concerned teacher sometimes in consultation with the students. Quite appropriately, these student surveys are generally not reported to higher levels of the school administration and are generally used only for improvement purposes following the judgement of the concerned teacher.

A number of political parties and youth organisations at the upper secondary level are advocating for the use of student surveys to appraise teachers in a more systematic way. Several organisations have made recommendations on ways to introduce teacher appraisal by students in upper secondary education. As a result, some counties have decided to introduce systematic evaluations of teachers by their students and many of them have piloted questionnaires on teaching practice.

In a national-level initiative, the Norwegian Student Organisation and the Union of Education Norway (the largest union for teachers and school leaders in Norway) have been working together in recent years to develop principles and guidelines for teacher appraisal by students. Their aim is to propose a common system that can easily be used and adapted for individual subjects by schools across Norway. They have suggested several features which, in their view, could help ensure that the student feedback for teachers will be useful to improve teaching and learning (Box 4.2). Not all stakeholder groups agree with the principles that emerged from this co-operation, but the general idea that student views are an important source of feedback for teachers to improve their practice seems widely accepted.

Box 4.2 Recommendations by the Norwegian Student Organisation and the Union of Education Norway concerning student feedback to teachers

Following several years of collaboration the Norwegian Student Organisation and the Union of Education Norway have developed a number of recommendations for teacher appraisal. The purpose of their collaboration was to develop a set of agreed principles that can form the basis for a student survey on teaching in particular classes, with the possibility of adapting it locally. Following their recommendations, the survey should:

- Focus on teaching practice rather than the teacher as an individual;
- Include the students' own self-assessment and assessment of peers so as to allow for analysis of how student effort and motivation influence the learning environment;
- Feature questions on teaching approaches that are relevant for student learning such as adapted education and feedback to students as well as questions on the general framework for teaching such as materials and physical conditions;
- Be carried out anonymously so as to ensure students give honest answers;
- Be analysed by the teacher and students together with a view to improve the classroom
 environment and learning outcomes. This should be followed up with a joint report by
 the teacher and student group on their analysis of results and agreed future changes.
 This report, together with relevant data, should be submitted to the teachers' closest
 supervisor.

Source: Norwegian Directorate for Education and Training (2011).

In 2010, the Directorate for Education was tasked with the formation of a working group bringing together key stakeholders to develop a handbook with guidelines for "teaching appraisal". The handbook will include examples of specific questions that can be used in the appraisal of teaching in particular subjects. The use of these guidance documents and the implementation of teaching appraisal will remain voluntary for schools. The working group will also consider the various legal and confidentiality issues related to the implementation and use of student surveys concerning individual teachers. This work is to be completed in 2011.

Challenges

There is no shared understanding of what constitutes high quality teaching

Currently, the Norwegian education system does not have a national framework or professional standards for the teaching profession. There is no clear and concise statement or profile of what teachers are expected to know and be able to do. At the national level, there are no uniform performance criteria or reference frameworks against which teachers should be appraised and school owners differ in their approaches to teacher appraisal.

Professional standards are essential to guide any fair and effective system of teacher appraisal given the need to have a common reference of what counts as accomplished teaching (OECD, 2005). The lack of such a framework weakens the capacity of school leaders to effectively appraise teachers in the annual performance reviews. While some

municipalities and individual school leaders have engaged in developing their own criteria based on local practice, for teacher appraisal to be effective across the system it would be important that all school leaders have a shared understanding of high quality teaching and the level of performance that can be achieved by the most effective teachers.

Teacher appraisal is not systematic across the school system

While the school owners are the employers of teachers, most delegate pedagogical and personnel matters, including the appraisal of teachers, to the school leaders. Few school owners have evaluation frameworks in place to monitor the quality of teaching provided by their schools or to appraise the quality of teachers' practice. This limits the possibilities for teachers to receive professional feedback from their employer and a validation of their work by an external entity. Over three-quarters (77.8%) of teachers in Norway reported that they had never received appraisal or feedback from an external individual or body, a proportion way above the TALIS average (50.7%), and third-highest among TALIS countries. The OECD review team also formed the impression that there was little confidence among teachers in the capacity of outside agents to provide them with useful feedback.

Despite the national requirement for school administrations to appraise teachers annually, there is no guarantee that all teachers actually receive professional feedback from their school leaders. According to TALIS, 26.2% of Norwegian teachers never received any appraisal / feedback from their principal about their work in the school (7th highest figure, against a TALIS average of 22.0%). School leaders in Norway generally spend more time on administrative tasks than on pedagogical leadership and tend to be less well prepared for tasks related to the coaching, mentoring and appraisal of teachers (OECD, 2009b; Norwegian Ministry of Education and Research, 2010). The existing teacher appraisal practices are the initiative of individual schools (in some cases in the context of municipality programmes or requirements) and largely depend on the leadership style of the school leader and the evaluation ethos of the school. The hierarchy in Norwegian schools has traditionally been very flat and democratic, with the school leader being perceived as first among equals. Within these highly democratic working traditions, having ambitions for strong pedagogical leadership including classroom observation may not always be well regarded by teachers and school leaders may be hesitant to exercise such leadership (Norwegian Directorate for Education and Training, 2007).

The frequency and extent of professional exchange and feedback among colleagues is also variable across schools. According to the Norwegian Ministry of Education and Research (2010), while teachers at the compulsory school level frequently teach in teams, their collaboration tends to focus on planning rather than improvement of teaching practices. According to TALIS, 28.1% of teachers had never received any feedback from other teachers or members of the school management team about their work in the school (12th highest figure, close to the TALIS average of 28.6%). A 2009 qualitative study of lower secondary schools found that open professional discussions among teachers on concrete classroom challenges and teaching practices were relatively rare (Munthe, 2007, in Norwegian Ministry of Education and Research, 2010).

Improving the quality of teaching is not at the centre of teacher appraisal

If they are well designed, systems of teacher appraisal and feedback can be powerful levers to increase teacher effectiveness and achieve better student learning outcomes. However, if they are not linked to better classroom teaching and teacher development, teacher appraisal processes may become mere administrative exercises with little impact on education outcomes (Jensen and Reichl, 2011). In order to develop teacher appraisal processes that can help improve student learning, it is essential to evaluate systematically the teaching and learning that occurs in individual classrooms.

Developing such a teacher appraisal system constitutes a challenge in Norway, where classroom observations by school leaders or even teacher peers still seem to be relatively occasional. Teachers have a high level of autonomy in their classroom and are generally left alone unless major problems arise. According to TALIS, only 48% of the Norwegian teachers who were appraised indicated that direct evaluation of classroom teaching had a high or moderate importance in the appraisal/feedback they received (second lowest figure, against a TALIS average of 74%). Similarly, only 40% of those who were appraised indicated that innovative teaching practices were considered with high or moderate importance in their appraisal / feedback (second lowest figure, against a TALIS average of 71%).

There is much room to strengthen the links between the appraisal of teachers and the improvement of teaching practices. Of those teachers who were appraised in Norway, only 28.2% indicated that the appraisal/feedback contained suggestions for improving certain aspects of their work – this was the lowest proportion across the 23 participating TALIS countries (against a TALIS average of 58.0%). Also, among all TALIS countries, Norway had the highest proportion of teachers (64.9%) who agreed or strongly agreed that the review of teachers' work has little impact upon the way teachers teach in the classroom (against a TALIS average of 49.8%).

Teacher appraisal should be more closely linked to teacher professional development and school development

Even though the importance of professional development is clearly recognised in national requirements, its provision appears still fragmented and not systematically linked to teacher appraisal. The OECD review team formed the impression that there was little focus in teacher appraisal on identifying individual strengths and professional development needs of teachers. Without a clear link to professional development opportunities, the impact of teacher appraisal and performance review processes on teacher performance will be relatively limited. As a result, the appraisal process may not be taken seriously or encounter mistrust or apathy by the teachers being appraised (Danielson, 2001; Milanowski and Kimball, 2003; Margo *et al.*, 2008).

Norway does not have a system to ensure that individual weaknesses will be picked up and robustly addressed with suitable professional development action. According to school leaders' reports in TALIS, only 37.4% of Norwegian lower secondary teachers were in schools where the identification of a specific weakness in teacher appraisal will always (9.4%) or most of the time (28.0%) lead to establishing a professional development plan for the teacher (3rd lowest figure, against a TALIS average of 56.5%). In most cases, weaknesses identified in teacher appraisal are addressed in more informal ways: 80.2% of teachers were in schools where the principal always (32.4%) or most of the time (47.8%) ensured that measures to remedy the weakness were discussed with the teacher. However, this was still the second lowest figure across TALIS countries, against a TALIS average of 89.6%.

Norwegian research indicates that teachers are motivated for professional development but that they lack the tools and institutional support to update themselves in a systematic and continuous way (Norwegian Ministry of Education and Research, 2010). Results from TALIS revealed that Norwegian teachers participated less in professional development than their counterparts across TALIS countries. While 86.7% of Norwegian teachers had taken professional development over past 18 months (close to the TALIS average of 88.5%), the average number of days of professional development taken was only 9.2 days, compared to 15.3 days on average across TALIS countries. There was also a very high unsatisfied teacher demand for professional development: 70.3% of Norwegian teachers would like to obtain more professional development than they did in the previous 18 months (6th highest figure, against a TALIS average of 54.8%).

There is also scope to better link teacher professional development to school development and improvement. School leaders interviewed by the OECD review team rarely tracked their teachers' professional development activities and the extent of strategic planning for professional development appeared limited. The weak linkage between teacher appraisal, teacher professional development and school development is partly due to the limited time school principals invest in pedagogical leadership. It is certainly also related to the fact that teacher appraisal is not considered to be part of the national quality assessment system and is not explicitly linked to school evaluation in national guidance documents. The new statutory requirement for school owners to provide an annual status report (Chapter 5) has not resulted in all school owners ensuring that their schools have robust teacher appraisal systems in place.

The absence of career opportunities and recognition for effective teachers undermines the role of teacher appraisal

There does not seem to be a career path for effective teachers. At the national level, there is no clearly designed career structure and there are few opportunities for promotion, greater recognition or increasing responsibility within or beyond the school. The organisational structure in schools is typically flat with few promoted posts and few explicit means of giving teachers significant whole-school lead responsibilities. This is likely to undermine the potentially powerful links between teacher appraisal, professional development and career development. In TALIS, only 6.9% of lower secondary teachers indicated that the appraisal/feedback they received led to a moderate or large change in the likelihood of their career advancement (6th lowest figure, against a TALIS average of 16.2%). Similarly, only 14.5% of lower secondary teachers reported that it led to changes in work responsibilities that made the job more attractive (3rd lowest figure, against a TALIS average of 26.7%).

Teacher appraisal in Norway is not perceived as an instrument to reward effective teachers. While school owners have some room for pay differentiation between teachers, it seems unclear at the school level how such differentiation is determined. Salary differences seem disconnected from actual performance or commitment. This can undermine the school leaders' possibilities to incentivise good performance. The OECD review team saw anecdotal evidence of this in an upper secondary school, where the principal was very frustrated by the way the county authorities awarded salary increments without considering the principal's recommendations for the distribution of salary increments among teachers. According to TALIS, only 6.2% of teachers agree or strongly agree that they will receive increased monetary or non-monetary rewards if they improve the quality of their teaching (2nd lowest figure, against a TALIS average of 25.8%).

More informal means of recognition seem to be slightly more frequent but are still not widespread. According to TALIS, 25.6% of lower secondary teachers indicated that the appraisal/ feedback they received led to a moderate or large change in the public recognition they received from the principals and / or their colleagues (8th lowest figure, against a TALIS average of 36.4%).

Teacher appraisal could be more effective in addressing underperformance

An important feature of teacher appraisal systems internationally is to provide a mechanism to identify weaknesses and ensure that underperformance is adequately addressed. In Norway, like in most other TALIS countries, principals tend to report the outcome of a teacher appraisal that identifies weaknesses to the teacher concerned and engage in discussions on how to remedy the weaknesses. Similarly to other TALIS countries, it was much less frequent for school leaders to report underperformance to another external body to take action -60% of teachers were in schools where the principal indicated that he/she would never report a teachers' underperformance to another body to take action (9th highest figure, against a TALIS average of 51.0%).

There seems to be a strong perception among teachers that sustained underperformance is not necessarily addressed. According to TALIS, 58.2% of teachers agreed or strongly agreed with the statement that in their school the sustained poor performance of a teacher would be tolerated by the rest of the staff (2nd highest figure, against a TALIS average of 33.8%). In addition, only 7.5% of teachers agree or strongly agree that the school principal in their school takes steps to alter the monetary rewards of a persistently underperforming teacher (5th lowest figure, against a TALIS average of 23.1%). Similarly, only 10.7% of teachers agreed or strongly agreed that in their school teachers will be dismissed because of sustained poor performance (4th lowest figure, against a TALIS average of 27.9%). School leaders the OECD team spoke to reported that they have no possibility to dismiss teachers who show sustained poor performance.

There is a risk of over-reliance on pupil views as the main source of feedback for teachers

While student surveys can yield useful insights, cautions have to be taken regarding the ways in which the results of surveys focussing on individual teachers are used. The OECD review team is of the view that students' surveys on their teachers' practices are more relevant for teachers' own self-appraisal and should have a formative purpose only. Students are not pedagogical experts and may not necessarily value the aspects which are more likely to enhance student learning (Peterson et al., 2000). Student feedback cannot draw a direct line to improved student performance (Jensen and Reichl, 2011). Therefore, the use of student surveys is not recommended for accountability purposes in teacher appraisal. Student surveys provide more valuable insights for whole-school evaluation and their use for that purpose should be strengthened (Chapter 5). On a related issue, parent surveys are also more relevant for whole-school evaluation – as they appear to be used in Norway – than for individual teacher performance appraisal (Isoré, 2009). Moreover, while student feedback can help identify certain problems in teachers' practices, students do not have expertise regarding the most adequate ways of addressing such problems. Student feedback cannot replace relevant professional advice and support by teaching experts. There is a need to diversify sources of feedback and advice so as to enable teachers to act upon feedback and improve their practices.

Policy recommendations

The development of meaningful teacher appraisal is an important aspect of building a comprehensive evaluation and assessment framework in Norway. It can make a substantial contribution to improving teaching and learning processes and raising educational performance. In order to make teacher appraisal more effective in Norway, the OECD review team proposes the following approach (these suggestions are based on the conceptual framework for teacher appraisal developed by Santiago and Benavides, 2009):

- Develop teaching standards to guide teacher appraisal and professional development;
- Strengthen teacher appraisal for improvement purposes (developmental appraisal);
- Further strengthen the role of educational leadership;
- Create a common career structure linked to a more formal appraisal process at key stages of the career;
- Ensure appropriate articulation between teacher appraisal and school evaluation.

Develop teaching standards to guide teacher appraisal and professional development

The development of a clear and concise statement or profile of what teachers are expected to know and be able to do should be a priority in Norway. Teaching standards are a key element in any teacher appraisal system as they provide a shared understanding of accomplished teaching and a credible reference to make judgements about teacher competence (OECD, 2005). The teaching standards should contain quality criteria or indicators for professional teaching practice and should be applied in individual performance appraisals. They should be framed in the context of the overall objectives for schooling. Teachers' practices and the competencies that they need to be effective should reflect the student learning objectives that the school system is aiming to achieve.

The teaching standards should provide a common basis to guide key elements of the teaching profession such as initial teacher education, teacher professional development, career advancement and, of course, teacher appraisal. Clear, well-structured and widelysupported professional standards for teachers can be a powerful mechanism for aligning the various elements involved in developing teachers' competencies (OECD, 2005).

In Norway, the development of competence aims for teacher education by the Ministry of Education and Research in 2010 was an important step into the direction of establishing a common understanding of key competencies necessary for effective teaching. The development of teaching standards could build on these to establish more explicit criteria of high performance and to describe different levels of expertise expected to be developed while on the job. To this end, teaching standards could express different levels of performance such as beginning teacher, established teacher and expert teacher, reflecting different stages of a teacher's career. Teacher standards need to be informed by research and express the sophistication and complexity of what effective teachers are expected to know and be able to do. A reference contribution in this area is Danielson's Framework for Teaching (Box 4.3).

For the teaching standards to be relevant and "owned" by the profession, it is essential that the teaching profession takes the lead in developing and taking responsibility for them. There are different options in which the national agencies could support this work, such as (1) collecting examples of teacher quality criteria that are currently used in some schools and municipalities, (2) conducting a thematic inspection on teacher quality to define elements of quality in teaching practice, and (3) including teacher appraisal as a category in the Template for status reports prepared by school owners so as to give some direction on national expectations regarding teacher appraisal practice.

It is also important that teacher appraisal takes account of the school context. Schools have to respond to different needs depending on the local context and face different circumstances, especially in a system as decentralised as Norway. National teaching standards should not be seen as a template or checklist against which teachers are to be appraised (Jensen and Reichl, 2011). Otherwise, the appraisal process might become a purely administrative exercise without real impact on local practice. Rather, the national standards can be a point of departure for reflection at the school level of what constitute locally relevant criteria in relation to national reference points.

Box 4.3 Danielson's Framework for Teaching

Danielson's Framework is articulated to provide at the same time "a 'road map' to guide novice teachers through their initial classroom experiences, a structure to held experienced professionals become more effective, and a means to focus improvement efforts". It groups teachers' responsibilities into four major areas further divided into components:

- Planning and Preparation: demonstrating knowledge of content and pedagogy; demonstrating knowledge of students; selecting instructional goals; designing coherent instruction; assessing student learning.
- The Classroom Environment: creating an environment of respect and rapport; establishing a culture for learning; managing classroom procedures; managing student behaviour and organising physical space.
- Instruction: communicating clearly and accurately; using questioning and discussion techniques; engaging students in learning; providing feedback to students; demonstrating flexibility and responsiveness.
- Professional Responsibilities: reflecting on teaching; maintaining accurate records; communicating with families; contributing to the school and community; growing and developing professionally; showing professionalism.

Danielson's framework can be used for many purposes. It has been developed mainly as a guiding foundation for professional conversations among practitioners. It has influenced a large number of teacher appraisal systems around the world. An example can be found in the *Professional Standards for Teachers* in England (TDA, 2007). These standards cover all aspects grouped into "professional attributes", "professional knowledge and judgment" and "professional skills". Moreover, the standards differentiate in several stages from what can be expected of the newly qualified teacher to the standard expected of excellent and advanced skills teachers (see Santiago *et al.*, 2009, for further details).

Source: Danielson (1996; 2007).

Strengthen teacher appraisal for improvement purposes (developmental appraisal)

Meaningful teacher appraisal should aim at teacher development and improvements in teaching and learning processes. 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. Teacher evaluation for improvement purposes is likely to benefit from a non-threatening evaluation context, a culture of mutually providing and receiving feedback, clear individual and collective objectives, simple evaluation instruments, supportive school leadership, opportunities for professional development and close linkages to school self-evaluation (Santiago and Benavides, 2009).

The OECD review team formed the view that there is much room in Norway to further develop teacher appraisal for improvement purposes. The main purpose of this process should be continuous improvement of teaching practice. It should be an internal process carried out by line managers, senior peers and the school leader with a focus on teachers' practices in the classroom. The main outcome would be feedback on teaching performance and contribution to school development, which should lead to a plan for professional development. It can be low-key and low-cost and include a mix of methods appropriate to the school. Some of the elements should be individual goal-setting linked to school goals, self-appraisal, peer appraisal, classroom observation, structured conversations with the school leader and peers. It could be organised annually for each teacher, or less frequently depending on the outcomes of the previous appraisal. There should also be more regular informal feedback from peers and the school leader.

For teacher appraisal to have an impact on learning outcomes in the school, it needs to be closely connected to professional development and school development. The focus of teacher appraisal should be to contribute to a knowledge-rich teaching profession in which teachers engage actively with new knowledge and benefit from support structures to generate improvement (Santiago and Benavides, 2009). Appraisal is unlikely to produce effective results unless it is appropriately linked to professional development. In order to meet the school's needs, the professional development opportunities of an individual teacher should also be aligned with the school's development plan.

To ensure that developmental appraisal conducted by school leaders is systematic and coherent across Norwegian schools, it would be important that an external body provides a validation of school level processes for teacher appraisal, holding the school leader accountable as necessary. The school owners can play an important role of support ensuring that schools develop ambitious appraisal processes. Teacher appraisal could also be included in the existing Template for municipal status reports so as to encourage schools and municipalities to document their appraisal processes.

Further enhance the role of educational leadership

Effective teacher appraisal depends to a large extent on the way school leadership is established in schools. Given their familiarity with the context in which teachers work, their awareness of the school needs and their ability to provide rapid feedback to the teacher, the principal and/or other teachers in the school are well placed to play the key role in teacher appraisal. School leaders can play an essential role in making performance improvement a strategic imperative and to promote teacher appraisal as being key to teacher development and broader school policies.

However, most practicing principals in Norway do not have prior training in teacher appraisal methods and might not have any content expertise relevant to the teaching areas of the teacher being evaluated. The steps to set up a national education for school principals are a very positive development that can support principals in taking a stronger educational leadership role including the appraisal and development of staff. Going further, it would be important to scale up this programme and provide training opportunities that are relevant for school leaders at different stages of their careers (Chapter 2).

Given the wide range of other budgetary, administrative and human resource management tasks school leaders are responsible for, it is challenging for them to make time for the thorough appraisal of each teacher in the school. Distributing leadership more among senior and middle management functions can help reduce the burden of school principals and foster leadership capacity across the school (Pont *et al.*, 2008). Hence, it might prove valuable to build capacity in appraisal and evaluation methods at the school level by preparing not only school principals but also members of the management group and accomplished teachers to undertake specific appraisal and evaluation functions in the school. In this context, the provision of school leadership training could be scaled up to include offers for a wider group of school staff including middle leaders, deputy principals and members of the leadership team. To ensure that high quality candidates are attracted to leadership positions, it is also important to pay attention to professionalise recruitment processes and provide adequate salary levels and career development opportunities for school leaders (Pont *et al.*, 2008).

Create a common career structure linked to a more formal appraisal process at key stages of the career

The teaching profession in Norway would also benefit from a more formal process of teacher appraisal for accountability purposes at key stages in their career. Such appraisal would be more summative in nature and would formalise the principle of advancement based on high performance associated with career opportunities for effective teachers. It can provide incentives for teachers to perform at their best, bring recognition to effective teachers, support career progression and help recognise and spread good practice more widely. It should also open up possibilities to move on consistently underperforming teachers who have not responded to development opportunities (Jensen and Reichl, 2011).

The OECD review team noted that the absence of career opportunities for effective teachers in Norway may undermine this function of teacher appraisal. Schools and teachers would benefit from a career structure for teachers that comprises several stages such as competent teacher, established teacher and accomplished / expert teacher. The different career steps should match the different levels of expertise reflected in teaching standards (see above). Each career stage should be associated with certain pay levels to be agreed nationally between the employers and teacher unions. This would ensure a link between teacher appraisal results and career progression, therefore establishing an indirect link with pay levels. This is a desirable option given that direct links between teacher performance and pay have produced mixed results, according to the research literature (Harvey-Beavis, 2003; OECD, 2005).

Advancement in the teaching career could be organised through a system of teacher registration or certification at key stages in the career. While the process should be mostly school-based, led by the school leadership team, there would need to be a stronger component external to the school to validate the process and ensure that

practices are consistent across Norway. This element of externality could be introduced via an accredited external evaluator, typically a teacher from another school with expertise in the same area as the teacher being appraised. It is important that external evaluators receive specific training for this function, in particular in standards-based methods for appraising evidence of teacher performance. Evaluators should also be trained to provide constructive feedback to teachers. It is also essential that teachers are provided with support to understand the appraisal procedures and benefit from appraisal results.

Teacher appraisal for registration/certification could rely on three core instruments: classroom observation, self appraisal and documentation of practices in a simplified portfolio. It should also involve an opportunity for teachers to express their own views about their performance, and reflect on the personal, organisational and institutional factors that had an impact on their teaching. The portfolio should allow teachers to mention specific ways in which they consider that their professional practices are promoting student learning, and could include elements such as: lesson plans and teaching materials, samples of student work and commentaries on student assessment examples, teacher's self-reported questionnaires and reflection sheets (see Isoré, 2009). Given the high stakes of appraisal for certification, decisions must draw on several types of evidence, rely on multiple independent evaluators and should encompass the full scope of the work of the teacher.

Teacher appraisal for registration/certification would have as its main purposes providing public assurance with regard to teachers' standards of practice, determining advancement in the career, and informing the professional development plan of the teacher. This approach would convey the message that reaching high standards of performance is the main road to career advancement in the profession. Access to levels of certification beyond "competent" level could be through a voluntary application process and teachers should be required to periodically maintain their certification status when not applying to a promotion.

Ensure appropriate articulation between teacher appraisal and school evaluation

Analysis from TALIS (OECD, 2009b) suggests that school evaluations can be an essential component of an evaluative framework which can foster and potentially shape teacher appraisal and feedback. Given that the systems of school evaluation and teacher appraisal and feedback have both the objective of maintaining standards and improving student performance, there are likely to be great benefits from the synergies between school evaluation and teacher appraisal. To achieve the greatest impact, the focus of school evaluation should either be linked to or have an effect on the focus of teacher appraisal (OECD, 2009b).

This indicates that the external review of schools should comprise the monitoring of the quality of teaching and learning (Chapter 5). Also, as indicated above, school review should comprise the external validation of the processes in place to organise developmental appraisal, holding the school principal accountable as necessary. Linkages between school evaluation and teacher appraisal would also greatly benefit from the improvement of skills and competencies for evaluation within municipalities (Chapters 5 and 6).

The appraisal of teaching quality and the appraisal of individual teachers should also play a central role in school self-evaluation. The quality of teaching and learning results at the school should be regarded as a responsibility of groups of teachers or of the school as a whole. In this light, school self-evaluation needs to put emphasis on evaluating and documenting the school's mechanism for both for internal developmental appraisal and for following up on the results of appraisal for certification.

Notes

1. The OECD's Teaching and Learning International Survey was implemented in 2007-08, covering lower secondary education and with the participation of 23 countries (OECD, 2009a). The results derived from TALIS are based on self-reports from teachers and principals and therefore represent their opinions, perceptions, beliefs and their accounts of their activities. Further information is available at www.oecd.org/edu/talis. TALIS results for Norway are provided in Annex D.

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Chapter 5

School evaluation

School self-evaluation is the primary method of delivering school evaluation in Norway. There is a statutory requirement for schools to undertake self-evaluation, using the data provided to them through the School Portal. The Directorate for Education and Training has developed methodological analysis tools for schools to help them review their practice. The school owners are required to implement a quality framework and ensure that their schools have self-evaluation processes in place. While practices vary, school owners tend to operate an approach whereby they monitor results, require schools to submit annual plans and occasionally visit schools to conduct a "quality dialogue" and check compliance of school policies with regulations. There are no national systematic inspections or external reviews of individual schools. While there has been increasing focus on quality work at the school level, the extent, rigour and quality of evaluation across schools in Norway is variable. Many schools and school owners struggle to use data effectively for improvement and there was insufficient focus on observing and evaluating actual teaching and learning practice. There was a lack of advice on methodologies or quality standards that school leaders could use to develop a systematic view of the quality of teaching and learning across the school.

This chapter considers how evaluation at the level of the individual school has been developed as one element within the overall approach to quality improvement in Norway. In so doing, it considers the extent to which both internal self-evaluation and external approaches to evaluation have been promoted and deployed, and the nature of the balance being struck between the two.

Context and features

A strong focus on school self-evaluation

In Norway's highly decentralised education system, the national government has relied heavily on promoting self-evaluation within schools as the primary method of delivering whole-school evaluation and improvement. School self-evaluation has been promoted since the 1970s, although initially with little national guidance on how it should be done. Over the course of the last decade the Norwegian government has increasingly developed stronger expectations of schools with regard to their self-evaluation. While overall the amount of guidance and support remains limited, the government has also provided some stronger elements of support, in an effort to achieve a more consistently effective process.

Whilst setting out expectations with regard to self-evaluation at school level, national government does not monitor or test the extent to which it is happening on the ground in any direct way. There has been no tradition of external education inspections by a national inspectorate, for example, undertaking programmes of regular external evaluation and reporting on each school. Centralised accountability mechanisms of that sort were clearly seen as incompatible with the broad philosophy of school autonomy and highly localised governance.

Rather than establishing external school evaluation by a central inspectorate, the national strategy has been to place a high level of responsibility on school owners to ensure that their schools undertake self-evaluation activities. Each school owner is required to establish and maintain a "quality framework" for its schools to ensure their schools are undertaking self-evaluation and improvement planning effectively.

Central regulations and support for school self-evaluation

Over the past decade, there has been an increasing focus on school self-evaluation and this has been supported by statutory regulation. All schools are now required to undertake self-evaluation as a result of regulations attached to the Education Act. This is interpreted as meaning that the school shall regularly evaluate the extent to which the organisation, facilitation and delivery of teaching are contributing to the objectives laid down in the National Curriculum for Knowledge Promotion.

With regard to developing national support for school self-evaluation, the most significant development in recent times was the establishment of the national quality assessment system, known as the NKVS, in 2004. The NKVS is intended to support evaluation and accountability at all levels of the system, from national level to the level of the individual school. With regard to school-level evaluation it provides schools with guidelines regarding the evaluation tools they can use and the aspects that should be evaluated. NKVS is designed to give schools access to nationally standardised analyses of data, which they can use to benchmark aspects of their performance.

These data analyses are communicated to schools through the web-based School Portal (Chapter 2) which gives schools and school owners access to information about their own results, benchmarked against national and regional averages. The standardised data analyses which are organised nationally and then presented back to schools through the School Portal include three key sources of performance information:

- National test results from Years 5, 8 and 9 of compulsory school covering mathematics, reading (Norwegian) and English.
- Examination results from Year 10 and each year of upper secondary school as well as teacher-assigned overall achievement marks for Year 10 and each year of upper secondary school.
- Results from the nationally administered Pupil Survey, which is undertaken in all schools in Years 7 and 10 and in the first year of upper secondary education.¹

In addition, the School Portal contains a range of basic data about resources (personnel, finance etc.), completion rates for upper secondary education and basic demographic data such as the pupil roll and number of staff.

Aggregated national test results are made publicly available at regional and national level, which introduces an element of more explicit public accountability for results. However, the ways the analyses are presented on the School Portal are deliberately designed to minimise any possibility of school "league tables" of individual schools being compiled and reported publicly. The available data allows schools to compare the performance of their pupils in the different assessments to regional and national performance levels, but they cannot see the results of other schools. However, the test results of individual schools are published by the media every year. Hence, these results are de facto also used by the media and some parents as a measure of school quality (more on this below).

The role of school owners in moderating school self-evaluation

The school owners are responsible for ensuring that their schools have self-evaluation processes in place. Each school owner is required to implement a quality framework to ensure that school evaluation and improvement planning are firmly established. As a result of growing concerns that many school owners lacked effective systems to implement their frameworks, revision was made to the Education Act in 2009. This placed a statutory responsibility on school owners to prepare an annual status report which draws on the outcomes of their quality system and forms the basis of a programme of quality improvement and development activities for the year ahead.

School owners provide these status reports to local politicians. The reports are not designed as a tool to drive accountability towards parents and the general public. A standard Template has been developed nationally for school owners to use, if they wish to do so. The Template contains both mandatory and suggested indicators to evaluate the quality of the local school system. To assist them in evaluating the performance of their schools relative to other school owners and the national picture, national data analyses of test results, user survey results and some other data are available to school owners through the School Portal.

While school owners vary in their approaches to local evaluation, it appears that they typically operate an approach whereby they monitor results, in some cases require schools to submit annual strategic plans and/or improvement plans and occasionally visit the school to interview senior staff and check compliance with legislation and their quality system. However, school owners do not generally undertake more in-depth school reviews or inspections involving the direct observation and evaluation of the quality of teaching and learning. County Governors similarly monitor results and legislative compliance amongst the school owners in their areas, but again this is primarily a process of checking compliance at an administrative level and it does not involve systematic, first-hand assessment of the quality of front-line provision in schools (Chapter 6).

Some emerging elements of external school evaluation

In the absence of national school inspections or systematic external school reviews by regional or local authorities, some other more limited opportunities for schools to access an external review of their provision have begun to emerge. Participation in national programmes such as the "Word to Deed" and the "Guidance Corps" organised by the Directorate have been such opportunities. In association with such projects, or through their own initiative some schools have also developed relationships with local universities or teacher education institutions which has given them access to an element of external evaluation of their work. Some municipalities have developed regional co-operation on external school evaluation. In these cases, pairs or groups of schools in local areas, within or across municipalities, have become involved in undertaking mutual peer reviews, giving each of them access to external view of selected aspects of their provision.

Labour inspections

The Norwegian Labour Inspectorate is responsible for inspecting health, environment and safety in Norwegian schools. To this end, the Labour Inspectorate can conduct inspections at the school or school owner level. It does not focus on the education provided in schools or the quality of teaching and learning. Key themes for labour inspections are issues involving violence, threats, conflicts, restructuring processes or the indoor climate. The Labour Inspectorate can set fines or close schools where severe problems are identified.

Strengths

There is a strong sense amongst schools of taking responsibility for their own agenda

The long tradition of decentralised management of schools, outlined in the section above, leads to a major strength in the extent to which school owners, individual schools, their staff and their communities feel strong ownership of their own agenda for school improvement. There is a strong emphasis, across the entire education system, on keeping responsibility for school improvement firmly with the schools and school owners. This means that schools and their owners do readily accept a high degree of accountability for the quality of what they are providing. Schools tend not to work on the assumption that they are simply technicians who deliver education in accordance with prescriptive national guidance, with the diminution of local responsibility that this would entail. While the mechanisms for making that local accountability more effective need further development, there is certainly a fertile foundation for building stronger practice in

school-led self-evaluation and improvement, and the government is right to be careful to avoid undermining that autonomy through excessively prescriptive central direction.

A broad range of evidence is available to support school self-evaluation

Over the last few years, through the national quality assessment system (NKVS), Norway has established a number of good systems for gathering and disseminating data, which have the potential of being very valuable sources of evidence for whole-school self-evaluation. Most elements of the NKVS aim to provide information on school quality that can be used for evaluation at the level of schools, school owners or regions.

To encourage use of these sorts of data sources, the government has taken a positive step in developing the School Portal as a web-based approach to giving schools and school owners access to analyses of the results. The school Portal has a public area and a restricted access area where school owners can access more detailed information about their schools. This approach holds promise for encouraging a more systematic and well-integrated way of using analyses of data in the process of self-evaluation and improvement planning.

Data from the national tests taken in Years 5, 8 and 9 form an important source of data for primary and lower secondary schools. This national test data is collected and analysed centrally and then fed back to schools in ways which allow them to compare the attainment of pupils in their school against local and national averages. When they were first introduced, these national tests were very controversial and there was much anxiety about how the results might be used, for example to create "high stakes" performance league tables of schools. After the suspension and revisions made to the original methodology however, these attainment tests seem now to be well accepted in the system and are managed in a way which mitigates the risk of perverse incentives becoming problematic. For upper secondary schools, the results from examinations and overall achievement marks are also available to schools and school owners. Similarly to the results for compulsory education, schools can use this information to compare their own results with the regional or national average, or to track their own development over time.

The availability of good data on user views is a particular strength of the Norwegian system. In contrast to some other countries where a heavy focus on learner feedback might be considered rather contentious, it was quite striking to the OECD review team how broadly a strong reliance on user feedback data, even from primary-aged children, was accepted as being appropriate and valuable. All schools are required to participate in pupil surveys which take place annually in the spring, covering Year 7, 10 and Vg1. These surveys ask pupils for their views on a range of issues relating to their educational and social experience. In addition, schools can opt in to additional parent surveys and teacher surveys. Again, the results are provided back to schools and school owners in a way that allows them to compare themselves to local and regional averages. The fact that schools or school owners can add additional elements to the minimum core set of surveys is a strong feature, which very much reflects the Norwegian emphasis on respecting the autonomy of schools rather than managing the system through directive central control.

While there is room to make the use of survey results more consistent across schools in Norway, there are indications that many schools are using the surveys in their school development processes. An evaluation of NKVS indicated that about half of all school owners, principals and teachers felt they have been following up on the results from the Pupil survey in a systematic way, and very few thought that this had been done only to a little degree. The evaluation also revealed that the results from the surveys are typically discussed within the school by teacher teams. The key value of the surveys was seen as being able to identify major problems or shortcomings in the school that could then be adequately addressed (Allerup *et al.*, 2009, in Norwegian Directorate for Education and Training, 2011).

Methodological tools have been developed to support school self-evaluation

In addition to data analyses, two methodological tools have been designed very recently and made available to schools to support their self-evaluation activities. Guidance on their use is being developed and disseminated. They comprise a "point-of-view analysis" tool which helps schools structure a systematic review of its teaching practice and results, and an "organisational analysis" tool which helps schools review the school as a workplace for its staff, with a view to identifying which aspects may impact on the delivery of a quality learning experience for pupils. This development towards providing schools with a practical "tool-kit" of methods and approaches for structuring systematic self-evaluation activities is a very positive step, and one which should be taken further.

The legal and policy requirements for locally-driven accountability have been strengthened

The basis for a degree of external accountability at the school level has been established through the requirement, under the Norwegian Education Act, for school owners to evaluate their own activities and prepare an annual status report that forms the basis for planning improvement of their own schools. Individual schools typically produce an annual strategic plan, which provides a basis for systematic improvement planning. These vary greatly in quality, however, and they are often not clearly linked to a systematic and structured whole-school self-evaluation process of a comprehensive nature.

School owners are expected to provide an element of external review as they monitor the performance of their schools. In addition, they have been given a statutory duty to develop a quality framework for the schools that they run. However, in most municipalities this monitoring simply relates to basic compliance with legislation and in almost none does it extend into any deeper form of professional evaluation of the quality of teaching practice.

County Governors, who are the regional representatives of central government, are required to hold the school owners in their regions accountable with regard to their duty to have effective quality frameworks for their schools. All County Governors have systems in place to do this, however their monitoring of school owners' quality improvement activities has traditionally been a very limited process of checking legal compliance through paperwork. It has not generally involved first-hand independent evaluation of the quality of practice in the schools themselves.

There are developments to bring an element of external review to complement self-evaluation

An awareness of the potential benefits of introducing a stronger element of external review to moderate and support self-evaluation has been growing recently. Whilst the Norwegian approach to quality improvement has been developed with a very strong reliance on encouraging the "bottom-up" development of self-evaluation within schools, the benefits of introducing some element of externality into the process has been recognised more recently. As a result of this growing awareness, some promising initiatives have been introduced to strengthen the extent to which schools could benefit from direct external evaluation of their practice.

National and regional initiatives

At national level the Directorate has been running an educational programme called "Word to Deed" which is intended to help schools in implementing the new Knowledge Promotion curriculum through engaging input from external assistance in reviewing their practice. This promising project has involved around 250 schools thus far, and enables schools and their owners to engage external expertise, typically from higher education, to complement their own self-evaluation. To structure its activities, the project developed the "point-of-view" analysis tool and the "organisational analysis" tool, which schools and school owners are now being encouraged to use in their own self-evaluation and local improvement activities. The project organised reviews which would typically involve a school being visited by senior staff from schools in another area, reviewing practice along with the host school on some key issues they had selected, and then concluding by producing a public report. School leaders, in particular, seemed to welcome these reviews as a very positive source of support for them in taking forward their own school's improvement agenda.

Another piece of national activity which is beginning to provide an element of external review for some individual schools is the national thematic inspection work undertaken by the Directorate (Chapter 6). In the past, these types of reviews tended to evaluate progress by taking evidence from school owners and County Governors but without going in to see practice in schools at first hand. In the most recent national thematic inspection, however, the Directorate was arranging visits to individual schools as part of the methodology. This had the effect of providing a number of schools with a potentially helpful consultation with external experts on this aspect of their provision.

At a more regional level, the review team also saw evidence of some promising pilot work through which one of the County Governors' offices, the office for Nordland, was developing a new approach to assessing the quality frameworks operated by the school owners in their areas. This new approach involved going beyond checking basic compliance with the legislation in terms of desk analysis paperwork and policies, to checking out the operation of these policies on the ground by visiting individual schools. It was therefore introducing another dimension of external review of school practice, albeit this was limited to management issues and results at the present time and did not involve direct evaluation of teaching practice.

Local initiatives

At the local level, the OECD review team saw some examples of schools engaging external expertise on their own initiative to feed into their school development work, typically from local universities or teacher education institutions and sometimes from abroad. There were also examples of schools visiting other schools, again sometimes looking beyond Norway, to help broaden their own perspective and explore possible avenues for improving their practice.

Indeed some municipalities, working in partnership with neighbouring school owners, have taken the initiative in setting up systematic frameworks for giving their schools access to external reviews. For example, eight municipalities in the Hardanger/Voss region are collaborating to ensure that all 48 of their schools receive an external "critical friend" review over a period of six years. In Malvik, the schools in the municipality had worked together to produce guidance for themselves on aspects of self-evaluation, such as the effective use of attainment data and learner survey results.

Challenges

School evaluation is not systematically undertaken in all Norwegian schools

While there has been increasing focus on quality work at the school level, the extent to which school evaluation is undertaken across Norway is still variable. By 2000, just under half of all Norwegian schools and school owners had implemented systematic forms of school self-evaluation and little information is available as to the progress in engaging the other half in such quality processes (Norwegian Directorate for Education and Training, 2011). According to TALIS in 2007/08, 25.5% of Norwegian teachers were in schools that had never conducted a school self-evaluation in the past five years (against a TALIS average of 20.2%). Similarly, 35.6% of teachers were in schools that had never had an external evaluation in the past five years (against a TALIS average of 30.4%).

The quality and rigour of self-evaluation and external evaluation approaches are variable

The development and maintenance of some commonality and comparability of standards across the system is a clear challenge for the Norwegian approach to school level evaluation. Currently, there are no national guidelines for self-evaluation and no consistent quality criteria or reference standards to evaluate school quality and progress.

Self-evaluation within schools has grown in a very "bottom-up" fashion, with a minimum of external guidance on the quality standards or performance levels that should apply and without the kind of moderating influence that a national inspection or review system might exercise. Hence, there is considerable inconsistency in the nature and rigour of the kind of judgements made at school level. Many schools are coming to their own judgements in isolation with the consequent danger that they might be out-of-line and perhaps too limited in expectation in comparison with standards being applied in the best performing schools.

For school-level evaluation to be effective in driving up quality and standards across the whole system it is vital that all schools have a clear understanding of the level of performance that can be achieved by the most successful schools, and are able to accurately assess how their performance stands in comparison.

Many schools and school owners struggle to use data effectively for school improvement

Within that broad challenge of improving the quality of school-level self-evaluation, making better use of the data available in the Norwegian system is a specific challenge worthy of priority attention. As has been indicated earlier, there certainly are some

potentially valuable data sources available on a consistent national basis. This includes test data on pupil performance and national survey data on pupils' views.

There is more that could be done, however, to analyse these data in more sophisticated ways to encourage effective benchmarking. Some limited analysis is presented nationally, for example comparison of the school's results against national averages. The School Portal has been developed in an effort to give school staff easier access to results for their own school. However, the OECD review team encountered very limited awareness and use of the School Portal among school leaders, suggesting that it was not yet being seen as a primary and significant source of support for school evaluation processes. It was also notable that even when schools had good awareness of the School Portal, they often made very limited use of the data available through the Portal for whole-school benchmarking of their performance against others. Schools tended simply to pass the results to teachers to inform their own individual self-reflection or discussions with individual students and parents.

The limited use of data provided through the School Portal can be explained by a number of reasons. In part, it seems to be the result of a lack of trust in the data. Some teachers feel that there is a need for stronger moderation of results before the results would be reliable enough to support robust benchmarking (Chapter 3). Moreover, the way data is analysed and presented does not encourage and support more sophisticated and insightful forms of benchmarking, for example analysis that allows to compare the performance of schools with similar socio-economic profiles or which highlight the "value added" in terms of pupil learning between stages. Such analyses do promote good use of data, not least because they are more likely to be seen as genuinely "fair" comparisons by school staff, but also because they can act as a catalyst for networking among schools facing similar problems and issues in their local environments.

The capacity of school owners to support schools in their evaluation work is also highly variable. In some areas, there was stronger evidence of good data use which could be built on. In some cases, more typically in the larger municipalities like Oslo and Bergen, the local authority provides more customised analyses of the performance of their schools. This helps promote better use of data to inform improvement activities and provides a stronger basis for the municipalities' annual dialogues about performance with each of their schools. In many of Norway's 430 municipalities, however, there was no such capacity to provide additional analyses and the extent to which performance data is used to inform quality management of their schools is very limited. School owners typically do not require much significant self-evaluation reporting from schools and they vary in the extent to which they request schools to produce an improvement plan.

The relatively low level of data use in schools also seems to be partly due to a lack of relevant skills and experience amongst school leaders. Many school leaders appear to have had little training in the interpretation and use of data are not confident in dealing with the data that is presented to them through the Portal.

Potential unintended consequences of the publication of individual schools' raw national test results

While the national tests are primarily designed to provide monitoring information for the school, school owner and national level, they are de facto also used by the media and some parents as a measure of school quality. The national authorities currently do not publish results of individual schools on the open part of the School Portal website, but the Norwegian Freedom of Information Act provides that the press can access individual school results upon request. As a result, while the Directorate only publishes the national test results at the school owner level, the results of individual schools are generally published in the media. Studies in other countries have shown that teachers may view such public league tables as carrying high stakes even when the results are used only to identify areas for improvement and are not linked to rewards or sanctions. Consequently, teachers will work to avoid the public stigma of poor results, and this may have unintended consequences on classroom teaching and assessment (Corbett and Wilson, 1991; Madaus, 1988; McDonnell and Choisser, 1997). Such unintended consequences may include curriculum narrowing, teaching to the test and emphasising basic knowledge and skills that are easily measurable (see also Chapter 3).

There is a need to focus school evaluation more strongly on the quality of learning and teaching

In order to develop a comprehensive and rounded approach to school self-evaluation, it is important to develop ways of systematically evaluating the quality of learning and teaching that is happening in each individual classroom across the school. It is only with such evidence that school leaders can accurately identify strengths as well as aspects of practice that may be worthy of priority attention in the school development plan. There is strong evidence from international studies to support the statement that the most effective way of improving school performance in any school system is through focusing on improving the quality of instructional practice (OECD, 2005; McKinsey and Company, 2007; Pont *et al.*, 2008).

While some indirect evidence about what is happening in individual classrooms is available from pupil surveys and tests results to inform whole-school self-evaluation and development planning, this only relates to a few specific stages in the school and is not a substitute for direct observational analysis of learning and teaching throughout the school. This presents a challenge for Norwegian schools in that the prevailing culture is not one in which school leaders, or even teacher peers, are routinely expected to be involved in regular observation of teachers with an evaluative or professional development focus. Teachers are generally left very much to their own devices unless major problems have arisen. School leaders take a relatively non-interventionist stance in relation to the professional practice of their colleagues (Chapter 4).

While there are good examples of schools where a more direct approach is being developed, these are clearly not widespread in the system and there would be a major challenge in scaling them up across the country. The OECD review team encountered some instances where the design of schools resulted in pairs or small groups of teachers working together to jointly plan teaching for each year group. But, even in these schools, there was little evidence of whole-school analysis of learning and teaching practice on a systematic and strategically focused basis.

School owners typically visit their schools annually to discuss their performance in a quality dialogue. This is however, for the most part, a purely paper exercise which would generally, at best, result in an annual visit to the principal's office. The staff employed at school owner level do not necessarily have any background in the education field and might therefore have very limited capacity to evaluate practice in depth.

This challenge also links back to the previous weakness around common quality standards: even where school leaders were trying to develop a systematic view of the quality of learning and teaching across the school, there was a lack of advice on methodologies or quality standards that they might apply to help them do this effectively. Some approaches were potentially being developed through the national projects such as Knowledge Promotion - From Word to Deed (see above), but there is not a comprehensive national toolkit of support for school level evaluation in this area, available for all schools to draw on.

School leadership could play a stronger role in driving quality improvement in schools

While there was certainly a strong feeling of schools being relatively autonomous and closely linked to their local communities (see above), it was also clear, as has been highlighted in the previous chapter, that this was not generally accompanied by a tradition of strong educational leadership from school leaders. Rather the role of school leaders appears to have traditionally been focused on administration rather than on driving quality improvement through directly engaging with staff on the quality of their day-to-day classroom practice, a point highlighted through Norway's participation in the recent TALIS survey (OECD, 2009; see also Chapter 4). There is also no guarantee that principals receive any professional feedback or appraisal of their performance as school leaders. Whether school leadership appraisal takes place and the criteria used in the process are at the discretion of school owners (Pont et al., 2008). There is not a strong tradition of holding school leaders accountable for school processes and outcomes.

Even though examples of school leaders exemplifying strong "leadership for learning" certainly do exist, there is a clear challenge for the Norwegian system in building up the role and capacity of their full cohort of school leaders. In many areas the historical pattern has been for school leaders to operate as "first amongst equals" who took on management functions but did not take a strong role with regard to directly influencing the day-to-day professional practice in their colleagues' classrooms. If they are to drive up the quality of outcomes for learners they do need to develop the skills, competence and authority to influence practice in this way, and this needs to happen consistently across the system.

The Directorate has recognised this challenge. As a starting point, they have established a national education programme for school leadership for principals from across Norway (Chapters 1 and 4). This programme is well regarded and is providing a firm basis for developing a clearer and more ambitious set of national expectations about the role and competence of school leaders. The number of individuals directly benefiting from the programme is limited as yet. There is a need to build on the programme and ensure that its influence extends beyond those directly involved. Its work should be used to inform and guide a much wider national roll-out of new standards for school leadership, and ways of involving a much larger number of leaders in appropriate development at local or national level should be sought.

Policy recommendations

In order to achieve progress in improving school level evaluation, in a way which capitalises on current strengths whilst also tackling the challenges highlighted above, the OECD review team recommends the following priorities for action:

- Develop a set of national quality standards for guiding the evaluation of key processes;
- Establish stronger national capacity for the external review of schools;
- Establish regional school improvement services throughout the country;
- Build a comprehensive set of national tools and advice for undertaking school evaluation;
- Improve the use of data for school level evaluation;
- Enhance the role and competence of school leaders.

Develop a set of national quality standards for guiding the evaluation of key processes

As indicated earlier in this chapter, there is lack of any nationally agreed quality criteria to help structure the evaluation of core school processes such as teaching and learning, assessment, curriculum management and leadership and management. When schools are seeking to evaluate these aspects of provision, they often struggle to create their own frameworks and quality criteria in isolation, resulting in huge variation in the quality of judgements, the rigour of evaluative processes and the comparability of judgements between and across schools. The same is true of school owners in so far as they attempt to evaluate overall school quality and performance.

In order to address this challenge, a national programme should be established to develop an agreed framework of process quality indicators, which could then be made widely available to schools and school owners to use in their own evaluative processes.

Establish stronger national capacity for the external review of schools

In the Norwegian context, one very appropriate way of taking forward the development of a clearer set of national quality standards for school evaluation would be to extend, enhance and to some extent re-focus the nationally-sponsored programme promoting external reviews for schools.

The EC-funded Effective School Self-Evaluation project, which analysed how 14 European countries or regions were promoting and supporting the development of self-evaluation in their schools, concluded that self-evaluation will not develop effectively without some key elements of national infrastructure to support it, including an element of external review (SICI, 2003) (see Box 5.1).

Box 5.1 Outcomes of SICI's Effective School Self-Evaluation project

The Effective School Self-Evaluation project, undertaken by the Standing International Conference of Inspectorates of Education (SICI) with European Commission funding, involved analysis of the quality and effectiveness of self-evaluation in fourteen member states within the European Union. The project concluded that self-evaluation required a number of elements of national support if it was to be fully effective as a driver for improvement. Four main elements of this national support were highlighted:

- The provision of high quality data on pupil outcomes and key processes, analysed and presented to schools in ways which make it easy for them to benchmark themselves appropriately against similar schools.
- The development and maintenance of a common set of quality indicators, along with tools and guidance to support their use, establishing a shared language and shared criteria for evaluation.
- Programmes of professional development and other support for teachers and school leaders which equip them with the skills to undertake self-evaluation and improvement effectively.
- National or regionally organised programmes of occasional external reviews or inspections to moderate and calibrate self-evaluation consistently across the country and provide the basis for the development of national indicators and tools.
- A coherent national framework of legislation, policies and advice that places appropriate duties and responsibilities on schools to evaluate and improve their provision.

Source: SICI (Standing International Conference of Inspectorates) (2003).

It would seem natural for the Directorate to take the leadership in this development, perhaps taking a stronger direct role in establishing and managing a national sample programme of external reviews of schools. This could be done working in partnership with school owners and County Governors across Norway. Through such a programme of reviews, the Directorate could design, trial and refine an agreed national quality indicator framework. Such a programme could both develop and refine the quality indicators required while also building capacity and skills for more rigorous self-evaluation within municipalities and the schools involved. Cross-fertilisation through involving a wide range of school leaders in reviews of other schools in their local area would help maximise the positive impact of this programme as well as helping to ensure the validity and usefulness of its products.

The focus of this programme should be very strongly on capacity building and strengthening self-evaluation practice across the country. While this may involve a carefully balanced sample of nationally organised external reviews or inspections of schools, the proposal is not for the whole-scale introduction of regular inspections of every individual school on a national basis. In the Norwegian context, that is not judged to be appropriate as it may result in a diminution of the autonomy and sense of local responsibility for the curriculum and pedagogical practice which currently exists at school level. Mourshed et al. (2010) suggest that, whilst frequent high-stakes inspection of every individual school may be an appropriate strategy for systems seeking to raise themselves

up from a relatively poor level of performance, systems that are seeking to move from good levels of performance to achieve yet higher levels should focus the way the develop national support and external intervention on driving more effective self-evaluation.

A broader national programme of external reviews, organised on this basis, could also act as a catalyst for the identification and dissemination of the most effective practice which has been developed at local level, in individual schools or groups of schools around Norway. The national programme could highlight such growing points of excellence and, through showcasing them nationally, give others across the whole country easy access to a range of stimulating case studies which help them develop their own practice in ways which suit their own particular context.

Consider to set up a regional school improvement service throughout the country

Over and above an extended national programme of external reviews, consideration should also be given to ensuring that more local mechanisms are developed which ensure that all schools, consistently across Norway, can more easily access external support for their own evaluation and improvement activities as and when they require it.

The County Governors offices, in collaboration with regional offices of the Directorate should take a pro-active role in promoting and supporting the development of strategic partnerships between school owners and key potential sources of support. This could include university education departments, teacher training institutions and any other potential providers in their regions. In most parts of Norway, it is unrealistic to expect that individual school owners would be able to acquire and sustain the expert capacity to mount an effective school improvement service on their own. It is likely to make more sense to build larger scale "shared service" approaches, which offer school improvement services, including external evaluation, coaching and consultancy, to groups of school owners across a region.

Build a comprehensive set of national tools and advice for undertaking school evaluation

Building on the developments proposed above, and building also on the good work that has already been done in developing a "point-of-view analysis" tool and an "organisational analysis" tool, there is scope for creating a much more comprehensive and integrated package of resources designed to give school leaders a practical toolkit for structuring any or all aspects of school self-evaluation.

The development of a comprehensive national toolkit for school self-evaluation does not necessarily preclude the possibility that individual schools or whole municipalities might elect to use their own alternative approaches, or perhaps adapt and customise the national approach to suit their own circumstances. At the present time, however, too many schools and municipalities do not have a good quality approach to self-evaluation in place and it is clear that they do not have the internal capacity to invent high quality methodologies on their own. Providing a national toolkit, perhaps also accompanied by a programme of national training to promote its effective use, could make a major contribution to addressing this issue. Experience from Scotland can provide some examples (Box 5.2).

Box 5.2 Tools for school self-evaluation in Scotland

The Scottish education inspectorate (HM Inspectorate of Education) has developed a national web-based resource which provides schools and school managers with a comprehensive set of tools which they can use to structure effective school-level evaluation. This resource, known as Journey to Excellence has grown and developed over two decades and can be traced back to the publication of *How Good is our School?* in the late 1980s.

The complete Journey to Excellence package now includes the following parts:

- Part 1: Aiming for Excellence; explores the concept of excellence, what is meant by "learning" and "barriers to learning" and introduces ten dimensions of excellence.
- Part 2: Exploring Excellence; explores the ten dimensions in detail, giving practical examples from real schools which show the journey from "good" to "great".
- Part 3: How Good is our School? and The Child at the Centre present sets of quality indicators for use in the self-evaluation of schools and pre-school centres respectively, along with guidance on their use.
- Part 4: Planning for Excellence provides a guide for improvement planning in schools and pre-school centres.
- Part 5: Exploring Excellence in Scottish Schools consists of an on-line digital resource for professional development containing multi-media clips exemplifying aspects of excellence across a wide range of educational sectors and partner agencies. It also contains short videos from international education experts and researchers.

Plans are underway to enhance the resource further with new resources to support schools in the process of developing long-term strategic thinking and managing major change in a school

The package is very widely used by schools across the country and by all Scotland's 32 local authorities and most independent schools. The framework of quality indicators at the heart of the package are also used by inspectors for external review of schools. They were built on the criteria inspectors developed for their inspections and they are regularly refreshed and updated on the basis of developing understanding of the characteristics of effective practice.

Source: HMIE website (www.hmie.gov.uk/generic/journeytoexcellence).

Improve the use of data for whole-school evaluation

While Norway has developed some good national data sources which could have great value in informing whole-school self-evaluation and improvement activities, their full potential is not currently being realised as a result of limitations in the way the data is analysed and presented, combined with the relatively low level of skills and competence in the use of data amongst staff in many schools.

In order to improve the analysis and presentation of data, the Directorate should consider taking a number of steps. The School Portal is clearly a step in the right direction in that it potentially provides a flexible, interactive method of giving every school in Norway easy access to data relevant to the school's own performance. However, the Portal is under-used and is only having a limited impact at present.

The Directorate should now establish a development programme designed to substantially raise the awareness and impact of the Portal and the data it contains. In order to achieve this, the Directorate should develop ways of presenting analyses in more user-friendly ways, designing interfaces and presentational approaches which give non-technical users more help with the interpretation and use of specific analyses. Careful consideration should also be given to the timing at which data analyses are made available to schools, with a view to ensuring that they come at a time which is well matched to the sort of annual review and planning cycle which schools are undertaking. Box 5.3 provides some examples of how Australia and Denmark have encouraged greater use of national results and analysis by schools and teachers.

Box 5.3 National feedback systems to support school evaluation and improvement in Australia and Denmark

In **Australia**, the states and territories enjoy primary responsibility for education and many have invested in efficient information systems and feedback systems to heighten the use of results at the school level (see Santiago *et al.*, 2011). For example, the School Measurement Assessment and Reporting Toolkit (SMART) is used in New South Wales, the Australian Capital Territory and South Australia and allows extensive analysis of performance on the national tests (NAPLAN) by student, groups of students, class and school. SMART was developed by the New South Wales Department of Education and Training and offers teachers a sophisticated tool to analyse their student performance and understanding of key areas covered in the NAPLAN tests, plus is a useful resource of teaching strategies and related worksheets for teachers and sometimes students. In Western Australia, the "Student Achievement Information System" is an analytical tool for teachers to track and graph individual and group student achievement data over time and can also be used at the school and system level to moderate grades and review courses (Department of Education, 2010).

In **Denmark**, the national tests are entirely computer based and teachers receive the results the next day (see Shewbridge *et al.*, 2011). The timeliness of feedback of course heightens the relevance to use of results to monitor student progress and adjust teaching strategies. However, a major feature here is the possibility for teachers to make use of an analytical package to examine results for teacher designated student groups and also the inclusion of standard forms to print out individual student results for communication with parents.

Sources: Shewbridge et al. (2011); Santiago et al. (2011).

The range of types of analyses should also be broadened with a strong focus being placed on developing benchmarking analyses which are trusted and valued by school leaders and school owners. This means they must be based on reliable data but also that they should facilitate "fair" comparisons between schools. With that in mind, work should be undertaken to explore the potential for giving schools access to "value-added" or "similar schools" comparisons, which help avoid the sometimes unhelpful effects of comparing schools with non-typical learner populations with crude national averages. The national testing data available in Norway, combined with other demographic data available at national level could potentially make both of these approaches possible.

Alongside creating more user-friendly and sophisticated forms of benchmarking data, made available at the right time and with more help for non-technical users in interpreting it, effort should also be directed towards increasing the skills of school staff in the use and interpretation of data for the purposes of school improvement. In part this may involve providing more national training resources, designed to support and complement good use of the data available through the School Portal. Such national training resources could

be made available through the internet but also disseminated through targeted trained programmes, perhaps working with municipalities, individually or in groups, and/or with universities and teacher education institutions, in order to ensure the training can be cascaded across the whole country. Embedding such support in teacher training, particularly training designed for senior staff and school leaders would also be a potentially effective way of building skills and capacity.

Enhance the role and competence of school leaders

Almost all of the developments described in this chapter place a strong onus on having a strong cohort of highly effective school leaders in place if they are to be effective in raising quality consistently across the whole system. This is especially true in the Norwegian context, where the climate and ethos of public service delivery, in education as in other areas, leans strongly towards respecting a high level of autonomy at a very local level, in individual schools and many small local municipalities. In many respects, this emphasis on school autonomy is a very positive feature. Indeed, it has been argued that developing high levels of autonomy at school level should be seen as a key feature in any strategy for taking an education system which performs reasonably well to higher levels of performance (Mourshed, et al., 2010). However, this means that a requirement for strong, effective school leadership is all the more important in that context and the evidence suggests that this is, as yet, quite far from being the case consistently across Norway.

To make faster progress in addressing this important issue of leadership capacity and skills, the Directorate should enhance and extend the promising leadership programme which it is now operating, and seek to expand its reach and impact on the system (see also Chapters 2 and 4). This may involve scaling up the current programme, but consideration should also be given to how to create a sustainable, long-term strategy for "mainstreaming" higher expectations and stronger competences for school leaders. Alongside extension of access to the national development programme, other elements of a national strategy might include support for regional leadership programmes run by municipalities individually or collectively, more targeted recruitment of school leaders based on a set of core competencies and greater access for school leaders to participate in external reviews and development work together with other schools (Chapter 2). The active involvement of school leaders in the review and evaluation of other schools has the potential not only to make external review processes more efficient but also to contribute to building the capacity of participating leaders through peer learning and knowledge sharing.

Enhancing performance appraisal of school leaders is also important to provide them with external feedback, identify areas of needed improvement and offer targeted support to improve practice. The national agencies could encourage such leadership appraisal by providing support for school owners on how to undertake effective performance review of school leaders against the defined core competences and provide additional support for those school leaders who would benefit from it.

Notes

Schools can opt-in to two other surveys, the Teacher Survey and Parent Survey, but 1. the results of these surveys are not available on the School Portal.

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Chapter 6

Education system evaluation

In recent years, Norway has developed a strengthened structure to monitor the education system. The Directorate for Education and Training is responsible for NKVS and monitors the quality of the school system via a range of statistical indicators and commissioned research studies. The key indicators to measure education system performance are the results from international assessments, the national tests, students' final assessments and the Pupil Survey. The Directorate for Education and Training uses a stable reporting framework to evaluate the Norwegian school system but also augments the basic national information system depending on the availability of results from various measures. Since 2006, there has been a co-ordinated national inspection focused on school owners' systems to assess school compliance with the Education Act. The implementation of national initiatives is monitored and evaluated, and there has also been focus on strengthening monitoring at the local level. However, many municipalities lack self-evaluation capacities and the external monitoring of municipalities by County Governors' offices remains rather light. A key challenge in national system monitoring is the lack of outcome measures that would allow the monitoring of changes over time.

This chapter looks at system evaluation within the Norwegian evaluation and assessment framework. System evaluation refers to approaches to monitor and evaluate the performance of local education systems (*i.e.* school owners) as well as the education system as a whole. The main aims of system evaluation are to provide accountability information to the public and to improve educational processes and outcomes.

Context and features

Responsibilities for evaluation of Norwegian primary and secondary education

Monitoring primary and secondary education in Norway

The Directorate for Education and Training has the major responsibility for monitoring primary and secondary education in Norway. The Directorate is responsible for the NKVS quality assessment system (see Chapter 2) and monitors quality via a range of key statistical indicators and commissioned research studies and the inspection of school owners to ensure they "comply with legislation, and that they implement adequate measures to deal with challenges" (Norwegian Directorate for Education and Training, 2011). School owners should be responsible for quality monitoring at the local level. Part of the Directorate's role, therefore, is to ensure that school owners have adequate access to national monitoring results.

County Governors are responsible for conducting national and local inspections of the public school owners and the Directorate is responsible for the inspection of private school owners (see below).

Providing evidence on the performance of the primary and secondary education system

The Directorate for Education and Training has the overall responsibility for national education statistics, including the production, reporting and analysis of results and it also conducts research and evaluation studies. Evaluation of national strategies and measures is an important part of the studies. As part of these responsibilities, the Directorate manages a Compulsory School Information System (GSI) which contains basic descriptive statistics on school demographics, resources and organisation.

For upper secondary education, the Directorate draws on statistical information provided by partner organisations. The county authorities manage a central database on upper secondary education statistics (VIGO), which is the source for indicators compiled by the Directorate as part of its monitoring system. Statistics Norway (SSB) collects individual student data on participation and completion of upper secondary education and training.

The Ministry for Education and Research has the major responsibility for developing international indicators on the primary and secondary education system, as part of the joint UNESCO-OECD-EUROSTAT annual data collection on enrolment, graduation, finance and personnel.

Statistics Norway provides data series (by individual student using their national identification number) on student's gender and background characteristics (*e.g.* parental occupation and educational level, migrant background, etc.) that can be used by the Directorate to analyse national outcome measures in primary and secondary education.

Further, SSB also compiles economic and demographic data on Norwegian municipalities which can be used to interpret national outcomes measures at the municipal level.

Major tools to measure performance in education

National tests of student performance

Since 2007, Norway has conducted full-cohort national tests of basic skills in reading (Norwegian), mathematics and English at the start of Years 5 and 8. With the exception of the English test, the national tests are designed to measure cross-cutting competencies against competency aims in several subjects in Years 4 and 7. The emphasis here, therefore, is to monitor students' basic skills that should aid students' learning and development in all areas of compulsory education. In 2009 the tests in English and mathematics were administered electronically for the first time, although reading (Norwegian) tests remained paper based (Norwegian Directorate for Education and Training, 2010). Since 2010, there are also national tests in Year 9.

Results are reported in the annual summative report on education in Norway (the Education Mirror) and are used to compare the performance of counties and different student groups (see Box 6.1).

Overall achievement and performance on examinations in Year 10 and upper secondary education

Since 2002, overall achievement marks are reported for students in Year 10. These are teacher-awarded grades that respect a common 6-point grading scale. Further, each student is selected to sit two final examinations, one written and one oral. The written examination is centrally set and can be in first or second choice Norwegian, English or mathematics. Oral examinations are locally set and are offered for a broader subject selection. All these results form the basis of an indicator on achievement in lower secondary education as part of the national monitoring system (see Box 6.1). There is a similar system of overall achievement marks and selection of students for examinations in upper secondary education, but the national monitoring system mainly focuses on results in "common core subjects" for which more students are selected in examinations. Results are also reported for major subjects in general and vocational programmes. However, there is no overall national indicator for upper secondary achievement.

Measures of the teaching and learning environment

Norway introduced a pupil survey in primary and lower secondary education in 2002/03 and this has been compulsory in both public and private schools since spring 2004 in Years 7 and 10, plus the first year of upper secondary education (Norwegian Directorate for Education and Training, 2007). It can also be administered in other years. In 2009, 330 000 students in Years 5 to VG3 responded (Norwegian Directorate for Education and Training, 2010). Norway reissued a suite of surveys in 2007 to match the Knowledge Promotion, including the compulsory Pupil Survey and voluntary surveys for teachers and parents. The three surveys are thematically co-ordinated to allow comparison of answers from pupils, teachers and parents. The surveys provide insight to student well-being, motivation, co-operation and opportunity for student voice, classroom climate and physical learning environment, plus perceptions of adapted teaching and teacher follow-up. The Pupil Survey can be completed on line in autumn (October to December) or spring (mid-January to end April).

Norway also participates in the OECD's Teaching and Learning International Survey (TALIS) which provides information on teachers' perceptions of various aspects of the school environment.

Box 6.1 Reporting of national outcome data

The major vehicles for reporting results from the national monitoring system are the Directorate for Education and Training's annual summative report on education in Norway (the *Education Mirror*) and the web-based School Portal (*Skoleporten*). Both respect a common structure: learning outcomes; learning environment; completion rates in upper secondary education; resources; and school facts. Each edition of the *Education Mirror* will present a different selection of results in each area depending on the analytical interest and also includes both a special introductory chapter providing examples of schools participating in national initiatives and a final chapter on "Quality development" providing information on national research and initiatives to promote better local monitoring of quality. Results may be augmented by periodic national survey results, but the major outcome measures are presented in the *Education Mirror* as follows:

- **Learning outcomes primary and lower secondary education**: results from international studies where available, national tests and Year 10 overall achievement and examination marks.
 - National test results are reported by different "mastering levels" (three for Year 5 and five for Years 8 and 9) and by the 19 counties and also in the password-protected part of the School Portal only by school. In the 2009 edition of the *Education Mirror* results were also reported by migrant background and by level of parental education (standardised results for years 2007 to 2009).
 - Year 10 average overall achievement marks in 14 subjects (teacher awarded grades 1 to 6, where 6 is the highest), plus examination marks (each student is selected to sit two final examinations, one written, centrally set and one oral, locally set). An indicator of "lower secondary points" is derived from the 14 overall achievement marks and the two final examination marks (total of 16 marks), comprising all results for students with at least 8 marks. This indicator is reported in the *Education Mirror* by type of school and by migrant background. The *Education Mirror* also provides analysis of differences between overall achievement marks and examination marks.
 - Orderliness and conduct grades (good, fair or poor).
- **Learning outcomes upper secondary education**: the overall achievement and examination marks in 12 education programmes following the Knowledge Promotion (1 to 6, with 2 being the minimum pass mark). The *Education Mirror* reports:
 - Average marks in the common core subjects (Norwegian, English, practical and theoretical mathematics, natural sciences) by general and vocational programmes and by gender.
 - Average overall achievement marks and marks in written examinations in selected subjects in general upper secondary programmes and overall marks and marks in interdisciplinary examinations for vocational programmes. This allows analysis of differences between overall achievement marks and examination marks in both general and vocational programmes.
 - The percentage of apprentices "failing", "passing" or "passing with distinction" the Craft of Journeyman's examinations.
- **Learning environment**: results from the annual national pupil survey and international studies where available.

Source: Norwegian Directorate for Education and Training, 2007, 2008, 2009 and 2010.

Participation in international student surveys

Norway attributes much importance to international benchmarks of student performance and has participated in most major international studies providing trend data on outcomes at different stages of compulsory education in Norway since 1995. Norway has administered tests to students in Grades 4 and 8 as part of the International Association for Educational Achievement's (IEA) Trends in Mathematics and Science Skills (TIMSS) studies in 1995, 2003 and 2007. Participation in the IEA's Progress in Reading Literacy Skills (PIRLS) study also provides an international benchmark for Grade 4 students' reading literacy over time, with a study in 2010 and the next in 2012. Further, Norway has participated in the OECD's Programme for International Student Assessment of 15-year-old students since its inception in 2000, testing students' knowledge and skills in reading, mathematics and science at the end of lower secondary education. At the upper secondary level, the IEA's TIMSS advanced study in 2008 provided information on student performance in mathematics and physics. As such, Norway has a wealth of information on students' core skills in reading, mathematics and science at three major points in compulsory education to compare the system internationally. Norway also supports international comparisons on non-cognitive outcomes, including its participation in the recent IEA International Civic and Citizenship Education Study (ICCS 2009).

Results from international studies have heavily influenced policies in Norwegian education and have "contributed to putting basic skills on the national agenda", "stimulated debates on how changes to teaching, curricula and teacher training can explain changes in the performance of Norwegian students" and provided "a significant knowledge platform for a number of key documents, such as the Reports to the Storting (White Papers) and political strategies" (Norwegian Directorate for Education and Training, 2011).

National inspections of school owners' monitoring systems

There is legal provision for the inspection of school owners' local monitoring systems. The main legal basis for inspections is the requirement for school owners to have a system in place to assess and subsequently follow up school compliance with legal requirements as defined in the Education Act and the Private Schools Act (Norwegian Directorate for Education and Training, 2008). The Directorate for Education and Training conducts inspections of private schools, but the 18 County Governor offices are responsible for the inspection of public school owners. However, the Directorate has developed a standard manual on inspection methodology that County Governors should follow. An inspection report is published following each inspection and County Governors' produce annual reports which include some information on inspections undertaken.

Since 2006, there has been an annual co-ordinated national inspection with the principal theme of checking "routines, procedures, competence, communication and clarification of the school owner's role" (Norwegian Directorate for Education and Training, 2011). The focus of the 2010 and 2011 national inspections is on the students' psycho-social environment. National inspections do not specifically examine learning outcomes. County Governors may - and do - undertake other inspections of school owners, besides the co-ordinated annual national inspection.

Since 2009, there has been a requirement for school owners to produce an annual report on the quality of their school(s). In 2010, a new standard report Template (the status report) was made available for school owners on the School Portal. The status report tool includes automatically completed data entries for the specific school(s) on a set of compulsory indicators, as well as some suggested indicators.

Strengths

Strengthened structure to monitor the education system

The creation of the Directorate for Education and Training in 2004 gave more prominence and coherence to the national monitoring system. The Directorate has overall responsibility for reporting on educational statistics and as such can map out information needs and prioritise statistical/reporting development areas. For example, this has led to the introduction of national tests to provide outcomes data during primary and lower secondary education. Further, the Directorate has worked with County Governors to develop a common framework for inspection of school owners and the introduction of an annual national inspection on a common theme has brought more cohesion to this process.

National monitoring of equity, the learning environment and priority areas

Norway is in a strong position to monitor the equity of education outcomes, with robust information on individual student characteristics and economic and demographic data aggregated to the municipal level. This allows the possibility to monitor outcomes for males and females, as well as different socio-economic and migrant groups.

Norway also collects evidence of student views on their learning environment and offers the tools to complement this with teacher and parent views. Such information is analysed and reported on in the *Education Mirror* and feeds into the policy debate in the key thematic areas, for example adapted teaching. The pupil surveys provide important measures of students' views on their well-being, motivation and co-operation. Confident and motivated students are more likely to go on to follow further education and to continue learning during their lives. Knowing how to collaborate with others is also of key importance in students' future educational and professional pathways, as are the behavioural aspects of orderliness and conduct. As such, the Pupil Survey and relevant teacher grades provide information in these key areas and complement the national tests of basic skills, as well as the derived measures of student performance in 14 subject areas at the end of compulsory education. The attempt to report nationally on a broad set of outcomes is a strong signal of the expected outcomes from Norwegian education.

Norway also makes use of periodic monitoring of priority policy areas. A recent example is the indicator system to monitor quality in teacher education and in the 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/progression. The basic approach is to make use of existing information available nationally, but to highlight this in a coherent set of indicators. At the same time, GNIST has used some firsthand research, *e.g.* via the administration of surveys to teacher educators, school leaders and teachers on their perception of quality in education.

Strong summative reporting on the system drawing on a wide evidence base

A stable reporting framework

The Norwegian Directorate for Education and Training uses a stable and common reporting framework to evaluate the Norwegian school system. The framework includes five core areas: learning outcomes; learning environment; completion rates in upper secondary education; resources; and school facts (see Box 6.1). This systematic approach clarifies the national reporting process and ensures harmony across different reporting mechanisms (e.g. the Education Mirror annual summative report and the Skoleporten electronic platform). Further, the fact that the Directorate has primary responsibility for statistical reporting on the education system ensures a coherent overview of results from different reporting systems (e.g. VIGO and SSB databases). It also ensures a way to monitor the reporting/statistical development needs at all levels of education and to prioritise areas for improvement.

Inclusion of national and international evidence and case studies

At the same time, this approach allows the basic national information systems to be augmented at different stages depending on the availability of results from various measures, e.g. "learning outcomes" may include international results from cyclical surveys when they are available, or from different research studies. The Directorate has its own research portfolio, as well as drawing on results from research commissioned by the Ministry of Education and Research and academic research in general (Norwegian Directorate for Education and Training, 2011). Equally, this basic reporting framework as applied in the Education Mirror includes evidence from evaluation studies conducted in other countries (e.g. evaluations undertaken by the Swedish National Agency for Education).

The Education Mirror also includes a chapter on "Quality Development" which provides evidence from international qualitative studies and policy reviews, e.g. the OECD Improving School Leadership policy review in the 2006 report, and may present case studies or approaches used in other countries, e.g. the national tests systems in Denmark and Sweden (Norwegian Directorate for Education and Training, 2007).

New "thematic" focus for nationwide inspections

Inspections are becoming increasingly relevant to the national monitoring system. The first "national inspections" were launched in 2006 and have so far primarily focused on school owners' systems to assess school compliance with the Education Act and to follow up on results. 2010 saw the introduction of a thematic nationwide inspection, with a focus on the students' psycho-social environment. In theory, this new approach holds great potential for inspections to go beyond a focus on whether or not there is a monitoring system in place, to actually look into the different aspects that are monitored. However, "quality" will only be captured to the extent that the law addresses this, for example, in the case of the 2010 inspection students are legally entitled to attend a school with a secure, positive learning environment. Nonetheless, this should lead to a greater reach into schools and indeed, during the 2010 national inspection, inspectors went into schools. In designing the national inspection, key stakeholders were consulted including the Norwegian Student Organisation that contacted its regional members in preparation for the inspection. The Directorate and County Governors are preparing guidelines on the number of municipalities and/or schools that each County Governor must inspect during the national inspection (Norwegian Directorate for Education and Training, 2011).

Basic philosophy to monitor and evaluate the implementation of national initiatives

The Directorate takes the basic approach to monitor the implementation of national initiatives. The aim of such evaluations is to determine how well national strategies and plans actually function in practice and to enable the Directorate to draw lessons from such experience to either refine particular measures or strategies or to better design future initiatives. In the case of national measures, such as the national tests and the final examinations, evaluation is conducted on a regular basis (Norwegian Directorate for Education and Training, 2011). Also, a sample is taken of results from the mapping tests offered to schools for student assessment in order to further improve and develop the mapping tests. Other, broader and periodic initiatives are also evaluated such as the national strategies for science and reading (2003-2007). Evaluation results are presented and analysed in the Education Mirror chapter on "Quality development" (see for example the discussion of the Better Assessment Practices project in Norwegian Directorate for Education and Training, 2009). Often evaluations seek to judge how effectively national measures are used at the school and municipal levels. For example, in the autumn of 2009, a survey was conducted to ascertain the extent of implementation and follow-up of the Pupil Survey by school leaders and school owners and found that larger schools tended to follow up more on the results, e.g. discussing these with the community, including pupils' parents and sometimes in teacher performance discussions (Norwegian Directorate for Education and Training, 2010).

Approaches to streamline and prioritise national monitoring and reporting

The Directorate has established a multi-year framework for administering sample-based user surveys to ensure a cyclical coverage of key topics, while limiting demands on users to complete surveys. The regular collection will allow monitoring and reporting on seven key areas, but will ensure that school leaders and municipalities only complete a survey once every 18 months (Norwegian Directorate for Education and Training, 2011). Also, key information on education regulations is now presented in a more accessible and coherent manner on the Directorate website.

Requirements for local system monitoring and efforts to build evaluation capacity at the local level

There has been a two-fold national approach to strengthening monitoring at the local level. First, school owners are legally required to have a system in place to monitor school compliance with legal requirements. This was reinforced in 2009 by a requirement for school owners to produce an annual report on "the state of basic education" in their school(s). This status report must include a compulsory set of indicators designed to monitor national goals. The Directorate, via the School Portal, has provided since 2010 a Template tool for school owners to complete such reports, which includes data for both compulsory and suggested indicators (it is up to school owners whether or not they report on the latter). The Directorate reports that this Template tool has been well received by municipalities. This reflects a general move by the Directorate to provide tools to help municipalities with implementing effective evaluation and assessment policies.

Second, the Directorate also provides capacity building and support offers for municipalities facing challenges related to the quality of their local systems. Notably, the Directorate has recently established a "Guidance Corps" of exemplary school leaders who will intervene in municipalities that have been targeted as needing help with capacity development (amongst others the municipalities from the "K-40" project). The "K-40 project" is a voluntary support offered to municipalities by the Directorate and seems to be a welcome initiative – of the 40 municipalities contacted, 31 decided to participate.

In addition, there have been initiatives by many municipalities to build local evaluation capacity, e.g. municipal networking to build capacity/competencies for quality assurance. Efforts range from official networks that are initiated via KS - some of which focus on evaluation and assessment - to local initiatives that are deemed useful and adopted by other municipalities. For example, Malvik is a small municipality that has developed an online guidance system offering information to schools to use in their own evaluation. The system includes guidelines for schools on how to work with national measures and requirements and was developed in collaboration with school leaders. Malvik's online guidance system has been adopted by other municipalities.

Since 2005, KS has launched different municipal "efficiency" networks and offers quality monitoring tools for municipal use (Norwegian Directorate for Education and Training, 2011). In general, networks consist of between four to eight municipalities and run for four to five meetings and then disband (see also Chapter 2). There are many different regional networks, plus one network with the 10 largest municipalities which focus very much on benchmarking style exercises. Oslo is the biggest municipality and has a well developed monitoring system for its schools with clear benchmarks and targets (see Box 6.2).

Box 6.2 Monitoring education outcomes in Oslo

Oslo is the largest school owner in Norway and is in the singular position of being responsible for both primary and lower secondary schools (as a municipality) and upper secondary schools (as a county). There are eight school group areas in Oslo, each with an area director and about 30 schools. Area directors sit in the Oslo Education Department and will visit schools at least once a year to discuss school results with the school leaders. Each area also has its own services for educational and psychological counselling and speech therapy.

Performance management using both national and local measures and local goals

Oslo uses a well developed performance management system and complements national outcome measures with local measures of science and ICT competence at the end of Grade 4 and at entrance to upper secondary (Grade 11). Oslo also chooses to run the national pupil survey in Grades 5, 6 and 7 of primary school and conducts a phone-based parent survey that is also offered in selected languages used by the major immigrant groups in Oslo.

There is a clear use of benchmarking and Oslo sets 125 goals overall. Each school is responsible for reporting back on progress against these, but can prioritise particular goals that are most relevant to the school context. Further, Oslo sets six compulsory areas of school improvement/development and Oslo schools are expected to develop a strategic school improvement plan with clear targets.

There is an information system including data on individual students from Grades 1 to 10 although in the case that students change school, it is their right to not carry on information regarding their earlier school career.

Box 6.2 Monitoring education outcomes in Oslo (continued)

Local inspection of priority areas

In Oslo, there is a well developed local inspection system including the inspection of curriculum which involves school visits and discussions with teachers. In this context, the inspectors will examine teaching plans and criteria for assessment in different subjects and may also interview teachers and students. However, inspectors do not observe lessons.

There are support structures in place to follow up schools in need of improvement. Oslo offers advisors in mathematics, science, reading and assessment. A team of advisors and/or experts from universities or qualified consultancy business will go to schools to work with the school management team. There is also a system of targeted improvement (the Oslo Programme for Improvement) with a current focus on students in lower secondary schools.

Source: Interviews with the Oslo Education Department.

Challenges

National outcome measures do not allow the monitoring of changes over time

Monitoring changes in performance from year to year

Currently, Norway does not have national measures to indicate performance changes over time. It is not possible to measure improvement over time with the national tests, as all questions and tasks used in the tests are publically released and they "have a somewhat unequal distribution on the scale for the different skills, and the degree of difficulty can vary somewhat from year to year" (Norwegian Directorate for Education and Training, 2010). That is to say that there is no stable, confidential item bank to allow the linking of results across years and the need to create new items also leads to a variation in the actual overall difficulty of each test.

Monitoring performance differences among municipalities

The School Portal presents results of student final grades and final examinations nationally, by county, by municipality and by school. However, only a sample of students is randomly selected to sit final examinations. As officially noted on the Directorate's website, this is meant to be a nationally representative sample and will not be a representative sample for municipalities or schools. There is a further note of caution about using school and local level results for quality monitoring. In the case of both overall grades and final examinations there is a lack of stability at the school and municipal levels across years. Regarding the overall grades, the Directorate cautions that these should be interpreted with care at the school level.

Further, there is some question as to the consistency and fairness of grades awarded by teachers across schools and municipalities (see Chapter 3). Analysis in the *Education Mirror* shows great discrepancy in particular among the locally set oral examinations.

Light monitoring of municipalities

The County Governors have responsibility for conducting local and national inspections of public school owners. However, "there are great differences in how inspections are carried out by the County Governors' offices" (Norwegian Directorate for Education and Training, 2011). There have been efforts to address this by collaboratively developing inspection guidelines at the national level, but there are no national competency profiles for inspectors or a national understanding of their tasks. Further, the current approach for inspection activities is to monitor school owners' compliance with laws and regulations. As such, this approach does not address the quality of teaching and learning.

In general, it is not clear to what extent the Directorate systematically monitors and follows up on major outcome measures in the national monitoring system. The Education Mirror presents some analysis on the 2007 and 2008 national test results, which shows "that the smallest municipalities with fewer than 2500 inhabitants are falling behind on the tests" (Bonesrønning and Iversen, 2010, in Norwegian Directorate for Education and Training, 2010). While the new requirement for municipalities to draw up an annual status report has been launched with a view to simplifying the municipal reporting task (i.e. by offering Template reports with both mandatory and suggested indicators), it is not clear to what extent this information from the completed reports will be systematically reported on or analysed at the national level. Similarly, while there are many examples of municipal networking initiatives and professional sharing of approaches, the national level does not seem to have an overview of different municipal quality assurance systems.

Many municipalities lack evaluation capacity

During the OECD review, the County Governors reported that there are many smaller municipalities that lack the capacity to develop robust quality assurance systems, to manage these and monitor schools effectively and to follow up with schools accordingly. Indeed, several municipalities do not have a structure in place that allows a solid system for internal control and "are less capable of following up the results of schools" (Norwegian Department of Education and Training, 2011). Further, the background and qualifications of municipal officials responsible for school evaluation vary significantly (Chapter 2).

System-level data are not fully exploited

While the School Portal offers a rich information system on teacher resources, student results and student enrolment and allows users much flexibility in selection of information, this is still not optimal from a local management perspective. In the School Portal, it is currently not possible for municipalities to have an overview of the indicators aggregated to the municipal level or indeed to show indicators for all schools within a given municipality. Municipal managers would need to extract information by indicator and by school. During the OECD review, some representatives from the municipal level expressed frustration that there is limited access for teachers to discrete areas of the School Portal and that there is not an overview of the school results as a whole. Also, the feedback of results from the national monitoring system is not yet optimal for school and municipal use. During the OECD review, school leaders reported that it would be helpful to have some idea of "benchmarking" or "how good" the results for a particular school are in comparison to national results.

Policy recommendations

The OECD review team commends the introduction of the national quality system that has provided key national measures on cognitive and non-cognitive outcomes and the basis to improve quality assurance throughout the system. The OECD review team suggests the following potential policy recommendations to both capitalise on and further develop the evaluation of Norwegian primary and secondary education:

- Consider ways to strengthen national measures to monitor improvement;
- Optimise the reporting and use of system-level data;
- Strengthen efforts to both monitor and promote municipal evaluation capacity.

Consider ways to strengthen national measures to monitor improvement

Currently, Norway benefits from its participation in several international assessments to provide information on how learning outcomes in different areas evolve over time. However, Norway could consider ways to capitalise on existing national measures to provide measures of progress against national goals. In particular, the OECD review team sees potential to more fully exploit the national tests to give useful information at the system level. The shift to an electronic format provides a welcome opportunity to revisit the design of the tests.

Changes over time

First, it would be useful to ensure the comparability of results over time by keeping a stable element of items in the tests and releasing only a small proportion of the items for use by teachers after the tests. As such, the OECD review team commends the decision to have the Directorate examine ways to develop the national tests to this end. Importantly, there should be a strategic releasing of items distributed at different difficulty levels and a replacement with new items at the same levels of difficulty. With a stable difficulty level for each test from year to year, national tests results would provide a useful indicator on changes in student performance over time – one which will complement the international trend measures.

This would also be the occasion to review and refine the setting of different performance bands (what is referred to as mastering levels in Norway) in the suite of national tests. With a more stable bank of testing items, it would be possible to set standard performance bands which can be used more meaningfully throughout the system as benchmarks of student performance and improvement.

Progress of particular student cohorts through compulsory education

Second, a more strategic use of the national test results could provide indicators on the progress of particular student cohorts through compulsory education. With the individual student identification numbers, results from the national tests could be linked across cohorts to report on the success of a given cohort on national tests in Years 5, 8 and 9. For example, an annual summative report published by the Ontario Education Quality and Accountability Office in Canada presents overall results in provincial standardised assessments for current cohorts and tracks their progress against their performance in earlier assessments. For example, in the 2010 report, the current Grade 9

cohort's performance in academic and applied mathematics is reported in terms of their progress since the Grade 3 and Grade 6 assessments (see EQAO, 2010). Similarly, on a confidential website, individual reports are generated for each school tracking cohort progress in the provincial assessments. There is a simple reporting of the percentage of students who were either successful or not successful on the current year's test, according to their performance level in the earlier test. "Successful" is commonly defined in each assessment as performance at a given level or above, as student performance is assessed against agreed standards. In this format, results are only presented for the students who sat the assessments at both points in time, i.e. if a student in the current Grade 9 cohort did not sit the assessment in Grade 6 his or her performance is not considered in the cohort tracking reports. Given student movements, including new arrivals to the system, descriptive statistics are provided on the absolute number and proportion of students who sat each of the assessments. Further, results and descriptive statistics are presented for the given school, the school board (equivalent to the Norwegian municipalities) and the province (equivalent to the Norwegian counties).

Australia provides an example of building in the measure of progress in the design of the national test measurement scale. A set of standardised national tests in literacy and numeracy was introduced in 2008. The major feature of the National Assessment Plan -Literacy and Numeracy (NAPLAN) tests is the fact that items are linked on a common scale of difficulty to allow documentation of student progression in each of the core areas (reading, writing, language conventions [spelling, grammar and punctuation]) across the four key educational stages that each student sits the test (Years 3, 5, 7 and 9). In this way, it is possible to gauge student progress in the national tests on a subsequent year, for example, it will be possible to see how well a student performs on the common NAPLAN reading scale at four different stages of his or her schooling (in Years 3, 5, 7 and 9). Results from 2010 on will be aggregated to show progress at the state and territory and national levels (for further details see Santiago et al., 2011). As a basis for such consideration, the Norwegian Directorate for Education and Training may want to review and analyse the performance distribution of students on the national tests. Internationally, Denmark shares a similar profile to Norway with the major performance differences observed within schools (e.g. OECD 2010). In developing the Danish national tests, a test for a given grade was administered to different grade levels and this revealed striking heterogeneity in student performance within each grade (Wandall, 2010). In such a context, it would be of considerable use to educators to be able to judge student progress on a common scale.

Linking information to follow student progress

As is done in Oslo, the national authorities could explore ways to link information for individual student progress through primary and lower secondary as well as upper secondary. The eventual use of a student identifier in primary and lower secondary education could encourage more longitudinal studies of student progression and transition to upper secondary education. Further, this would allow analysis of earlier educational pathways in identifying success and risk factors for students in upper secondary education.

Optimise the reporting and use of system-level data

Norway, over a short period of time, has put in place a national monitoring system with new national measures of outcomes (the national tests and the Pupil Survey) and an electronic platform to report and share the results from the system (the School Portal).

The OECD review team commends the Directorate on this strengthening of tools to aid system evaluation. At this stage, the Directorate should devise a strategy to optimise the use of such system-level data by key stakeholders throughout the system, notably the County Governors, municipalities and schools. This should be done in tandem with efforts to secure national tests as a monitor of changes over time (see above) and capitalise on the opportunities offered by administering the national tests electronically.

Feedback to municipalities for local monitoring

The OECD review team commends the Directorate on the School Portal as a tool to make accessible the major results from the national monitoring system. This is an intuitive, easy-to-use system that includes clear documentation on how to interpret the results. Further, the use of different secure access areas for different users offers the possibility to provide a better adapted set of results to each user's needs. While the OECD review team can only access the public areas of the School Portal, feedback from school owners during the review indicates that there may be ways to further capitalise on these particular user access areas within the School Portal. For public school owners, in particular, it is of keen interest to have an easy overview of all indicators for their municipality. Further, there is demand from school owners to see major indicators for all schools within a municipality. Reporting results in a useful format for municipalities would be an effective way to avoid the repetition of basic statistical tasks throughout the system and the Directorate could consult with KS and school owners in designing a suitable reporting format. To encourage the use of such information systems for monitoring progress at the local level, such a system may include some benchmarks set nationally to serve as a springboard for municipalities to set their own local objectives and targets. Within Norway, Oslo and other municipalities demonstrate use of results from the national monitoring system to monitor performance and to set local goals and importantly on how to follow up with schools on these and to ensure schools develop improvement plans. Optimising the provision of national monitoring results for use at the municipal level is a critical step toward securing the effective use of such results for school improvement at the local level. However, the use of such results for improvement depends on type/extent of municipal monitoring, analysis and follow-up, and this may require capacity development (see below).

Feedback to schools for self-evaluation and teacher use

With the suggested strengthening of the national tests as a system level measure (see above), there is also an opportunity to encourage greater use by schools and teachers of the results for improvement. This implies improving the feedback to schools on their performance in the national tests. Chapter 5 provides more details on how national results and analyses could be presented in a more user-friendly way to support the use of data within schools.

Strengthen efforts to both monitor and promote municipal evaluation capacity

In determining how to prioritise national and county inspections, the OECD review team sees a critical role for the national monitoring system. Both the Directorate and County Governors should systematically monitor municipal performance on key outcome indicators (national tests, Pupil Surveys, final grades and examinations). While there may be some fluctuations among schools and municipalities on final grades and examinations

measures, the full-cohort national tests serve in their current format as a robust measure to compare performance relative to other schools and municipalities, and with further development (see above) can serve as indicators of performance changes over time. Careful monitoring of such results can aid investigation into both potential performance concerns and examples of performance improvement. It follows that this would be critical information in prioritising national and county inspections.

The OECD review team suggests a strengthened role for the Directorate in promoting the external evaluation of schools and also sees room to establish regional improvement networks (see Chapter 5). In monitoring and promoting municipal evaluation capacity, the Directorate should evaluate the value and impact of the recent requirement for municipalities to draw up an annual status report. In this context, there is room for the Directorate in collaboration with KS to promote an exchange of different approaches to use and follow-up of results in the reports. For example, the Danish School Agency provides information exchange among municipalities on their different approaches to using the annual municipal quality reports - which have been required since 2006 (see Shewbridge et al., 2011). A national electronic portal provides a central reference point to record different municipal approaches to quality assurance and development. Plus, the Danish School Agency has organised conferences to stimulate municipal exchange and partnerships. At the local government level, Local Government Denmark (KL) ran a two-year partnership involving 37 municipalities which focused on municipal quality assurance as one of three priority areas for development and included use of a suite of key indicators - measured via questionnaires administered to school principals, teachers, parents and students at both the start and end of the partnership - to shed light on the impact of the partnership. Results revealed both a greater focus on results and better use of the mandatory municipal quality reports (see KL, 2009).

The Directorate could also promote and, if necessary further develop in collaboration with KS, the KS competency matrix for employees responsible for education networks. In Ontario, Canada, there is a shared research-based leadership framework for school principals and school district supervisory officers, which was developed collaboratively by the Ministry of Education and professional associations for school principals and school districts. The five major areas for leadership competencies in the framework are: setting directions; building relationships and developing people; developing the organisation; leading the instructional program; and securing accountability (see www.education-leadership-ontario.ca/content/framework).

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Conclusions and recommendations

Education system context

A high level of decentralisation and local ownership

Norway has a well-established tradition of school autonomy, with a strong sense of individual schools being "owned" by their local communities and accountable to them rather than more distant national bodies. This decentralisation is especially marked in the case of primary and lower secondary education, where, with the exception of a small private sector, schools are run by the 430 municipalities. Many of these, particularly in the more rural areas, are very small and are only responsible for a few schools each. In the case of upper secondary education, schools are run by the 19 counties with the only exception being Oslo, the largest local authority, which runs both primary and both levels of secondary schools. The 2006 Knowledge Promotion curriculum focuses strongly on basic skills and outcome-based learning, leaving it up to the school owners to adapt and implement more detailed curricula at the local level. In addition to granting school owners a high level of curricular autonomy, legislation has recently given them greater freedom to make their own decisions regarding organisational and funding aspects of schooling.

Strong school autonomy and a focus on building the capacity of principals and teachers

> Schools also benefit from a high degree of autonomy. School owners typically delegate a range of tasks including budget allocation, recruitment of staff and development of pedagogical plans to the school level. Principals and teachers are generally in charge of setting more specific learning goals and deciding on the content, methods and organisation of teaching. There is a growing recognition that the high level of school autonomy requires strong and effective school leadership. To build the capacity of new school leaders, a national principal education programme was introduced in 2009 to support principals in becoming educational leaders capable of guiding the core processes of teaching and learning in schools. In addition, a range of measures were introduced to raise the status, capacity and performance of the teaching profession. These included enhanced admission requirements for entry into teacher training, a re-organisation of initial teacher education, mentoring and induction for new teachers and a broad offer of continuing professional development.

A sustained focus on raising quality and equity in education

While Norway's results in the OECD's Programme for International Student Assessment (PISA) 2009 are at or above the OECD average depending on the subject, the number of top performers is small. The relatively modest overall performance is not considered satisfactory, especially given that Norway's annual expense per student is well above the OECD average. Even though Norway achieves a high level of equity among students from different socio-economic backgrounds, there are also concerns about the consistently low performance of certain groups such as first-generation immigrant students. Another key challenge for Norway is to raise upper secondary completion rates, as currently about one-fifth of students over 16 do not complete their education. The Ministry of Education and Research has set three core objectives for education, namely (1) all students leaving compulsory education with the necessary basic skills, (2) all youngsters who are able to do so completing upper secondary education, and (3) all students experiencing inclusion and a sense of mastery in education.

Strengths and challenges

Norway is working towards a comprehensive evaluation and assessment system, but it is still incomplete

With the launch of a national quality assessment system (NKVS) in 2004, the Norwegian authorities set out to build a multi-faceted framework for evaluation and assessment. In less than a decade, Norway has come far in developing a range of tools intended to help schools, school owners and education authorities evaluate their performance and inform strategies for improvement. Taken together, the different elements of NKVS have the potential to provide the sector with a powerful and comprehensive toolkit to support a decentralised system of evaluation and assessment. Norway deserves credit for the initiative to create a balanced evaluation and assessment framework that provides monitoring information at different levels and aims to achieve both accountability and improvement purposes. So far, however, NKVS has not been well communicated with a clear and consistent vision for evaluation and assessment. There is no policy document providing an overview of all the different elements that form part of NKVS. Some key components of a comprehensive evaluation and assessment framework are currently still underdeveloped and the articulations between them need to be strengthened.

Decentralisation helps build local ownership, but the evaluation capacities of municipalities are variable

Policy making in Norway is characterised by a high level of respect for local ownership and this is evident in the development of the national evaluation and assessment framework as well. School owners and schools have a high degree of autonomy regarding school policies, curriculum development and evaluation and assessment. There is a shared understanding that democratic decision-making and buy-in from those concerned by evaluation and assessment policy are essential for successful implementation. Networking among schools and municipalities is frequently used as a means to share responsibility and build capacity through mutual learning. However, in

several parts of Norway, especially in the smaller and more rural municipalities, it seems unrealistic to expect that individual school owners would be able to acquire and sustain the expert capacity to design effective curricula and mount a comprehensive school evaluation and improvement system on their own. Despite the fact that many municipalities are very small and losing population, there have been few mergers of municipalities. Further, the background and qualifications of municipal officials responsible for school evaluation vary significantly and some municipalities have actually downsized their educational expertise in recent years.

While the strong focus on outcomes is commendable, there is a need for clearer reference points and assessment criteria

> The launch of the national quality assessment system reflects an intention to move the policy focus away from inputs and processes to pay more attention to the outcomes of education. In parallel to the introduction of NKVS, work was undertaken to clarify the expected learning outcomes for the education system. The Knowledge Promotion reform in 2006 introduced a new outcomes-based curriculum with competence goals for key stages of education. While the focus on outcomes is commendable, the competence goals are only defined for certain years of education and there are indications that teachers find it difficult to translate national competence aims into concrete lesson plans and objectives. There seems to be a need for more visible reference points for a substantial number of teachers. Classroom-based assessment would also benefit from clearer rubrics that detail assessment criteria to provide achievable targets for students. There seems to be little shared understanding regarding what constitutes adequate, good and excellent performance in different subject areas and year levels.

Norway is developing a balanced approach to student assessment and needs to be clear about the distinct purposes of different types of assessment

> Norway has engaged in developing a balanced approach to student assessment with a range of different internal and external assessment formats aiming to provide a broad picture of student learning. Taken together, classroom assessment, national testing and selection for central and oral examinations cover a broad base of purposes, subjects and forms of assessment that are fit for different purposes. However, there is a risk that the national tests could become more "high stakes" than others and shift the balance that is currently in place. The communication around the purposes of large-scale assessments in Norway has not always been sufficiently clear. Although the Norwegian system in recent years has intentionally worked to ensure that they are not used for teacher appraisal, there was considerable interest in using the results from the national tests in the classroom and, to some extent, they are also used by the general public to judge school quality. As the raw test results of individual schools are published by the media, it is likely that teachers will work to avoid the public stigma of poor results, which may have unintended consequences such as curriculum narrowing, teaching to the test and emphasising basic knowledge and skills that are easily measurable.

A range of professional development opportunities have emerged, but assessment capacities are still variable across schools

As assessment has become a central part of the Norwegian educational landscape, a range of approaches to professional development and learning have been emerging for school leaders and teachers at the national, regional and local level. Professional development also takes place around teachers' marking of central examinations and in moderated grading of oral examinations. The focus on professional learning is commendable and needs to be further enhanced. There is much room to strengthen the capacity of school leaders and teachers to use evaluation and assessment data in a purposeful and systematic way to direct changes in schools and classrooms. Teachers still vary in their capacity to implement multi-faceted assessment approaches, make consistent judgements of student performance and provide effective feedback to students and parents. School leaders have little tradition and training in using assessment data for whole-school self-evaluation. The use of data is often ad hoc at the particular point of time that test results are received by the schools, but there is not yet much sense of using data in a holistic way, pulling together data from different sources to inform strategies at the school and classroom level

Norway's strong focus on formative assessment is commendable and needs to be further sustained

Formative assessment or "assessment for learning" has gained increasing prominence in both policy and practice in Norway. A statutory requirement has been introduced for schools to implement formative assessment and the Directorate has created a website with tools and materials to support teachers in fulfilling this requirement. Formative assessment has also been identified as a priority for professional learning and the Directorate has launched a four-year Assessment for Learning programme. Norway's long-standing tradition of teacher-based assessment provides a good basis for a stronger focus on formative assessment. However, there is a risk that the national focus on formative assessment is being accepted by teachers as just another name for what they already do. Assessment for learning requires a major shift in mindset for teachers, as well as changes in assessment practices. Assessment is considered as formative only if it actually shapes subsequent teaching and learning, i.e. if teachers use the assessment to identify misunderstandings, misconceptions or missing elements of student learning, provide detailed feedback, and change teaching practices.

There is little national support or guidance to ensure consistently effective teacher appraisal across Norway

Teacher appraisal is not considered to be part of the national quality assessment system (NKVS). While regulations state that teacher appraisal must be implemented by school administrations, the processes for appraisal are not regulated by law and there are no national performance criteria or reference standards to guide the process. As the employing authorities for teachers, school owners are free to establish their own frameworks for teacher appraisal but few of them have systematic frameworks in place to appraise the quality of teachers' practice. This limits the possibilities for teachers to receive professional feedback from their employer and a validation of their work by an external entity. Despite the national requirement for school administrations to appraise

teachers annually, there is no guarantee that all teachers actually receive professional feedback from their school leaders. Over a quarter of the Norwegian teachers surveyed in the OECD's Teaching and Learning International Survey (TALIS) reported that they never received any appraisal from their principal about their work in the school.

There is little tradition for educational leadership, but principals are now receiving training related to teacher appraisal

> The existing teacher appraisal practices are the initiative of individual schools (sometimes in the context of municipality programmes) and largely depend on the leadership style of the principal. The most common form of feedback for teachers is an annual employee dialogue with the school leader. However, the historical pattern has been for school leaders to operate as "first among equals" focussing on administration and management rather than influencing the day-to-day professional practice in their colleagues' classrooms. There is little tradition in Norway for school leaders or even teacher peers to routinely observe classroom teaching with an evaluative focus and follow-up with coaching and mentoring of teachers. According to TALIS, of those teachers who were appraised, less than 30% indicated that the appraisal contained suggestions for improving certain aspects of their work. The recent introduction of a training programme for school leaders has the potential to contribute considerably to the professionalisation of school leadership and can help school leaders focus on appraising and guiding the teaching staff to achieve better learning outcomes for students.

There is room to strengthen the links between teacher appraisal, teacher development and school development

> Without a clear link to professional development opportunities, the impact of appraisal on teacher performance will be quite limited. Even though the importance of professional development is clearly recognised in Norway, its provision appears still fragmented and not systematically linked to teacher appraisal. There is also scope to better link teacher professional development to school development and improvement. Another challenge is that there are hardly any links between teacher appraisal and greater recognition or increasing responsibility for teachers. At the national level, there is no clearly designed career structure for teachers and the organisational structure in schools is typically flat with few promoted posts and few explicit means of giving teachers significant wholeschool lead responsibilities. This is likely to undermine the potentially powerful links between teacher appraisal, professional development and career development. Salary differences also seem disconnected from actual performance or commitment which reduces the school leaders' possibilities to incentivise good performance.

Schools' self-evaluation is supported by a range of tools and data, but the extent and quality of self-evaluation is variable across schools

> There is a strong emphasis on keeping responsibility for school evaluation and improvement firmly with the schools and school owners. The web-based School Portal gives schools access to nationally standardised analyses of data they can use to evaluate aspects of their performance. These include national test results, examination results and results from the national Pupil Survey. The availability of good data on user views is a

particular strength of the Norwegian system. In addition to data analyses, two methodological analysis tools have been designed to support schools' self-evaluation activities. While there has been increasing focus on quality work at the school level, the extent to which school self-evaluation is undertaken across Norway is still variable. There appeared to be limited awareness and use of the School Portal, which may be explained partly by a lack of trust in the data and partly by a lack of capacity for effective data use at the school level. The development and maintenance of some commonality and comparability of standards in school self-evaluation is also a clear challenge for Norway as there are no national guidelines for self-evaluation and no consistent quality criteria or reference standards to evaluate core processes such as teaching and learning, assessment, curriculum management and leadership.

Recent developments to introduce elements of external review have the potential to complement and enhance schools' self-review practices

Whilst the Norwegian approach to quality improvement has been developed with a very strong reliance on encouraging the "bottom-up" development of self-evaluation within schools, the benefits of introducing a stronger element of external review have been recognised more recently. As a result of this growing awareness, some promising initiatives have been introduced nationally, regionally and locally to strengthen the extent to which schools could benefit from direct external evaluation of their practice. Participation in national programmes such as the "Word to Deed" and the "Guidance Corps" organised by the Directorate have been such opportunities. In association with such projects, or through their own initiative, some schools have also developed relationships with local universities or teacher education institutions which has given them access to an element of external evaluation of their work. Some municipalities have developed regional co-operation on external school evaluation.

Local system monitoring has been strengthened, but the provision of data is not optimal for use by municipalities

There have been a number of approaches to strengthening monitoring at the local level. School owners are obliged to have a system in place to monitor school compliance with legal requirements. This was reinforced in 2009 by a requirement for school owners to produce an annual report on "the state of basic education" in their school(s). The Directorate, via the School Portal, has provided since 2010 a Template tool for school owners to complete such reports, which includes data for both compulsory and suggested indicators. The Directorate and the Norwegian Association of Local and Regional Authorities (KS) also provide capacity building and support offers for municipalities facing challenges related to the quality of their local systems. While the School Portal offers a rich information system on teacher resources, student results and student enrolment and allows users much flexibility in selection of information, it is still not optimal from a local management perspective. For example, it is currently not possible for municipalities to have an overview of the indicators aggregated to the municipal level or indeed to show indicators for all schools within a given municipality.

Norway has a strong framework for education system evaluation, but cannot monitor changes over time

The Directorate for Education and Training uses a well-established reporting framework to evaluate the Norwegian school system, based on key indicators including the results from international assessments, national tests, students' final assessments and the Pupil Survey. Norway also monitors the equity of education outcomes, with robust information on individual student characteristics and economic and demographic data aggregated to the municipal level, and collects evidence of student views on their learning environment. Such information is analysed and reported on in the Education Mirror and feeds into the policy debate in the key thematic areas. Currently, however, Norway does not have national measures to indicate performance changes over time. The national tests do not allow measuring improvement over time, as all questions and tasks used in the tests are publically released and the level of difficulty may vary from year to year. There is a further note of caution about using school and local level results for quality monitoring as there is a lack of stability of both overall grades and final examinations at the school and municipal levels across years.

There is a new thematic focus for nationwide inspections, but the monitoring of municipalities' local school systems remains relatively light

> Inspections are becoming increasingly relevant to the national monitoring system. The first "national inspections" were launched in 2006 and have so far primarily focused on school owners' systems to assess school compliance with the Education Act and to follow up on results, 2010 saw the introduction of a thematic nationwide inspection, with a focus on the students' psycho-social environment. In theory, this new approach holds great potential for inspections to go beyond a focus on whether or not there is a monitoring system in place, to actually look into the different aspects that are monitored. However, the current approach for inspection activities is to monitor school owners' compliance with laws and regulations and the quality of teaching and learning will only be captured to the extent that the law addresses this. There are also concerns about large differences in how inspections are carried out by the County Governors' offices. There have been efforts to address this by collaboratively developing inspection guidelines at the national level, but there are no national competency profiles for inspectors or a national understanding of their tasks.

Policy recommendations

Complete the evaluation and assessment framework and strengthen coherence between its components

> The establishment of NKVS and its various elements provides Norway with a strong basis to develop a comprehensive national system for evaluation and assessment. To go further, it would be important to develop a strategic plan that sets out to complete the evaluation and assessment framework and to strengthen coherence between its different elements. This should involve a mapping of all the existing elements of evaluation and assessment in Norway, including those that are currently not perceived as being part of NKVS. The framework should cover the key elements of evaluation and assessment –

student assessment, teacher appraisal, school evaluation and system evaluation. It should emphasise that a comprehensive framework includes both formative and summative elements, and school-internal as well as external components. For each of the key components of the evaluation and assessment framework, the national authorities could describe and provide links to the relevant reference standards and existing tools to support implementation. Starting from the mapping exercise, the Directorate together with key stakeholders should work to identify the components that are still underdeveloped in the current framework and prioritise steps for further development. To make the system coherent, it is important that the learning goals to be achieved are placed at the centre of the framework and that all other evaluation and assessment activities align to work towards these goals.

Develop clearer and more visible learning goals and criteria to guide student assessment

The Knowledge Promotion curriculum is still relatively recent and there is room to further build on and deepen it by creating more specific learning objectives and learning progressions that describe the way that students typically move through learning in each subject area. This would provide teachers and other stakeholders with concrete images of what to expect in student learning, with direct links to the curriculum. Learning progressions can provide a picture from beginning learning to expertise, and enable students, parents, teachers, and the public to see student progress over time. Teachers can use such learning progressions or roadmaps to identify the set of skills and knowledge that students must master en route to becoming competent in the complex and multi-faceted outcomes that make up the curriculum. To assist teachers in their practical assessment work against competence goals, the Directorate should also engage with stakeholder groups to facilitate the development of scoring rubrics listing criteria for rating different aspects of performance and exemplars illustrating student performance at different levels of achievement. Teachers also need to develop skills to create their own specific objectives and criteria and should be encouraged to share and co-construct assessment criteria with students so that they understand different levels of quality work.

Enhance focused professional learning on student assessment

Norway has already taken various steps to increase the offer of professional development opportunities related to student assessment. These steps are commendable and need to be sustained to further reduce variations in the quality and effectiveness of practices at the local and school level. School professionals not only need to strengthen their capacity to use, interpret and follow up on results obtained from national tests and mapping tests, but also to develop valid and reliable assessment tools to meet their own specific local needs. This concerns in particular the subjects other than reading, mathematics and English where there are no national tests or mapping tests available, and those subjects where there are no central examinations. Schools should also learn to develop assessment strategies and materials particularly in areas where school results are problematic and where more information is needed on sub-groups of students. To focus the offer of professional learning opportunities for teachers, the Ministry of Education and Research and the Directorate for Education and Training should consider engaging universities and stakeholders in a process to define a set of teacher competencies related to assessment that can be integrated in overall teaching standards.

Strengthen clarity in the communication about purposes and uses of national assessments

Because national testing is a relatively new phenomenon in Norway, it is important to be clear about its purposes, to develop the tests over time to be able to accommodate the purposes that are reasonable, point out inappropriate uses and provide guidance for the way in which the tests can be used. The role of the national tests should be clearly fixed and the tests should be continually developed, reviewed and validated to ensure that they are fit for purpose. The national authorities should continue to be clear in their communication that raw national test results are not fulsome measures of student achievement or progress, and even less so of teacher or school quality. Particular attention should be paid to ensuring that the breadth of curriculum and learning goals is maintained in student assessment by ensuring that all subject areas and objectives are given certain forms of attention. As the national tests results are published by the media, teachers are likely to devote more time to what is measured in them. To prevent teaching to the tests and curriculum narrowing, multiple measures of student performance should be used to measure achievement and progress.

Continue to support formative assessment in schools, with particular focus on feedback and student engagement

> Assessment for learning requires a fundamental shift in thinking about how teachers and students interact and use the assessment experiences to promote learning, independent of the requirement to accredit performance. In order to help teachers gain a deeper understanding of the purposes and practice of formative assessment, professional learning offers should help them to systematically incorporate formative assessment methods in their course planning. In particular, teachers need to develop their competencies to give specific and detailed feedback to students and to work with students so that they can develop self-monitoring skills and habits. The Directorate could use "feedback for learning" as an intensive and widespread national professional learning focus, with resources, pre-service and in-service sessions, forums and conferences, as well as incentives to municipalities and counties to participate and to share.

Develop teaching standards to guide teacher appraisal and professional development

The development of a clear and concise statement or profile of what teachers are expected to know and be able to do should be a priority in Norway. Teaching standards are a key element in any teacher appraisal system as they provide a shared understanding of accomplished teaching and a credible reference to make judgements about teacher competence. The teaching standards should provide a common basis to guide key elements of the teaching profession such as initial teacher education, teacher professional development, career advancement and, of course, teacher appraisal. They should build on the competence aims developed for initial teacher training to establish more explicit criteria of high performance and to describe different levels of expertise expected to be developed while on the job.

Support school leaders to embed effective teacher appraisal for improvement purposes in regular school practices

Meaningful teacher appraisal should aim at teacher development and improvements in teaching and learning processes. 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. Teacher appraisal for improvement should be an internal process carried out by line managers, senior peers and the school leader with a focus on teachers' practices in the classroom. It can be low-key and low-cost and include a mix of methods appropriate to the school. Distributing leadership more among senior and middle management functions can help reduce the burden of principals and foster leadership capacity across the school. The provision of school leadership training could be expanded and scaled up to include offers for a wider group of school staff including middle leaders, deputy principals and members of the leadership team. To ensure that such internal appraisal is systematic and coherent across Norwegian schools, it would be important that an external body provides a validation of school level processes for teacher appraisal, holding the school leader accountable as necessary.

Create a common career structure for teachers, linked to a more formal appraisal process at key stages of the career

In addition to the developmental appraisal described above, the teaching profession in Norway would also benefit from a more formal process of teacher appraisal for accountability purposes at key stages in their career. Such appraisal would be more summative in nature and would formalise the principle of advancement based on high performance associated with career opportunities for effective teachers. It can provide incentives for teachers to perform at their best, bring recognition to effective teachers, support career progression and help recognise and spread good practice more widely. Advancement in the teaching career could be organised through a system of teacher registration or certification at key stages in the career. While the process should be mostly school-based, led by the school leadership team, there would need to be a stronger component external to the school to validate the process and ensure that practices are consistent across Norway. This element of externality could be introduced via an accredited external evaluator, typically a teacher from another school with expertise in the same area as the teacher being appraised.

Develop a set of national quality standards for school evaluation and extend capacity for external review and support

To help structure the evaluation of core school processes such as teaching and learning, assessment, curriculum and leadership, it is essential to develop a set of nationally agreed quality criteria for school evaluation. A national programme should be established to develop an agreed framework of process quality indicators, which could then be made widely available to schools and school owners to use in their own evaluative processes. In the Norwegian context, one very appropriate way of taking forward the development of a clearer set of national quality standards for school evaluation would be to extend, enhance and to some extent re-focus the nationally-sponsored programme promoting external reviews for schools. The Directorate, in partnership with school owners and County Governors across Norway,

could take the lead in this development, perhaps taking a stronger direct role in establishing and managing a national sample programme of external school reviews. Through these reviews, the Directorate could design, trial and refine an agreed national quality indicator framework, while also building capacity and skills for more rigorous self-evaluation within municipalities and the schools involved.

Build a comprehensive set of national tools and advice for undertaking school evaluation

> Building on the methodological tools already available and on the developments of a set of process indicators (see above), there is scope for creating a more comprehensive and integrated package of resources designed to give school leaders a practical toolkit for structuring the different aspects of school self-evaluation. The School Portal is clearly a step in the right direction in that it potentially provides a flexible, interactive method of giving every school access to data relevant to the school's own performance. The Directorate should now establish a development programme designed to substantially raise the awareness and impact of the Portal. The range of types of analyses should also be broadened with a strong focus being placed on developing benchmarking analyses which are trusted and valued by school leaders and school owners. Alongside creating more userfriendly and sophisticated forms of benchmarking data with more help for non-technical users in interpreting it, effort should also be directed towards increasing the skills of school staff in the use and interpretation of data for the purposes of school improvement.

Continue to build capacity and partnerships to support evaluation and improvement at the local level

> More local mechanisms should be developed to ensure that all school owners and schools, consistently across Norway, can more easily access external support for their own evaluation and improvement activities as and when they require it. For school owners, an area of particular importance is to develop the capacity to understand, interpret and make decisions based on evaluative information from their schools. The County Governors offices, in collaboration with regional offices of the Directorate should take a pro-active role in promoting and supporting the development of strategic partnerships between school owners and key potential sources of support. This could include university education departments, teacher training institutions and any other potential providers in their regions, Rather than expecting each school owner to develop school improvement services on their own, Norway should consider building "shared school improvement services" offering regional support to a larger group of school owners. Such larger scale approaches could offer shared services such as external evaluation, coaching and consultancy, to groups of school owners across a region.

Strengthen efforts to monitor the results and evaluation capacity of municipalities

> Both the Directorate and County Governors should systematically monitor municipal performance on key outcome indicators. Careful monitoring of municipality results can aid investigation into both potential performance concerns and examples of performance improvement. It follows that this would be critical information in prioritising national and county inspections. In monitoring and promoting the evaluation capacity of municipalities, the Directorate should evaluate the value and impact of the recent

requirement for municipalities to draw up an annual status report. In this context, there is room for the Directorate in collaboration with KS to promote an exchange of different approaches to use and follow-up of results in the reports.

Optimise the reporting and use of system-level data

Norway, over a short period of time, has put in place a national monitoring system with new national measures of outcomes (the national tests and the Pupil Survey) and an electronic platform to report and share the results from the system (the School Portal). At this stage, the Directorate should devise a strategy to optimise the use of such system-level data by key stakeholders throughout the system, notably the County Governors, municipalities and schools. Optimising the provision of national monitoring results for use at the municipal level is a critical step toward securing the effective use of such results for school improvement at the local level. For public school owners, in particular, it is of keen interest to have an easy overview of all indicators for their municipality. Further, there is demand from school owners to see major indicators for all schools within a municipality. Reporting results in a useful format for municipalities would be an effective way to avoid the repetition of basic statistical tasks throughout the system and the Directorate could consult with KS and school owners in designing a suitable reporting format.

Consider ways to strengthen national measures to monitor improvement

There is potential to more fully exploit the national tests to give useful information at the system level. The shift to an electronic testing format provides a welcome opportunity to revisit the design of the national tests. First, it would be useful to ensure the comparability of results over time by keeping a stable element of items in the tests and releasing only a small proportion of the items for use by teachers after the tests. Second, a more strategic use of the national test results could provide indicators on the progress of particular student cohorts through compulsory education. With the individual student identification numbers, results from the national tests could be linked across cohorts to report on the success of a given cohort on national tests in Years 5, 8 and 9. As is done in Oslo, the national authorities could explore ways to link information for individual student progress through primary and lower secondary as well as upper secondary education.

Annex A: The OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes

The OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes is designed to respond to the strong interest in evaluation and assessment issues evident at national and international levels. It provides a description of design, implementation and use of assessment and evaluation procedures in countries; analyses strengths and weaknesses of different approaches; and provides recommendations for improvement. The Review looks at the various components of assessment and evaluation frameworks that countries use with the objective of improving student outcomes. These include student assessment, teacher appraisal, school evaluation and system evaluation. The Review focuses on primary and secondary education.

The overall purpose is to explore how systems of evaluation and assessment can be used to improve the quality, equity and efficiency of school education.² The overarching policy question is "How can assessment and evaluation policies work together more effectively to improve student outcomes in primary and secondary schools?" The Review further concentrates on five key issues for analysis: (i) Designing a systemic framework for evaluation and assessment; (ii) Ensuring the effectiveness of evaluation and assessment procedures; (iii) Developing competencies for evaluation and for using feedback; (iv) Making the best use of evaluation results; and (v) Implementing evaluation and assessment policies.

Twenty-four countries are actively engaged in the Review. These cover a wide range of economic and social contexts, and among them they illustrate quite different approaches to evaluation and assessment in school systems. This will allow a comparative perspective on key policy issues. These countries prepare a detailed background report, following a standard set of guidelines. Countries can also opt for a detailed review, undertaken by a team consisting of members of the OECD Secretariat and external experts. Eleven OECD countries have opted for a country review. The final comparative report from the OECD Review, bringing together lessons from all countries, will be completed in 2012.

The project is overseen by the Group of National Experts on Evaluation and Assessment, which was established as a subsidiary body of the OECD Education Policy Committee in order to guide the methods, timing and principles of the Review. More details are available from the website dedicated to the Review: www.oecd.org/edu/evaluationpolicy.

Notes

- 1. The scope of the Review does not include early childhood education and care, apprenticeships within vocational education and training, and adult education.
- 2. The project's purposes, design and scope are detailed in the OECD 2009 document entitled "OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes: Design and Implementation Plan for the Review", which is available from the project's website www.oecd.org/edu/evaluationpolicy.

Annex B: Visit itinerary (8-15 December 2010)

Wednesday 8 December 09.00-11.00 Ministry of Education and Research Norwegian Directorate for Education and Training 11.00-13.00 14.15-15.15 County Governors' Education Offices 15.15-16.15 National Council for Teacher Education and Norwegian Network for Student and Apprentice Assessment 16.15-17.30 Norwegian Association of Local and Regional Authorities and school owners **Thursday 9 December** 09.00-10.00 National Support System for Special Needs Education and Advisory Council for Inclusive Education at the Norwegian Directorate for Education and Training 10.00-11.00 Union of Education Norway, Norwegian Association of Graduate Teachers and Norwegian Union of School Employees National Parents' Committee for Primary and Secondary Education and Parents' 11.00-11.45 Council of Drammen municipality 11.45-12.30 Statistics Norway Norwegian Student Organisation 12.30-13.20 14.00-16.30 School visit 1 Oslo – primary school (1-7) Oslo Education Authority 16.30-17.30 Friday 10 December 09.30-12.00 School visit 2 Ås – primary school (1-7) School visit 3 Oslo – upper secondary school (college preparatory education) 14.00-16.30 Monday 13 December 09.00-10.00 Municipal Education Authority in Trondheim School visit 4 Trondheim – primary and lower secondary school (1-10) 10.00-12.30 School visit 5 Trondheim – upper secondary school (college preparatory education and 14.00-16.30 vocational education and training) 16.30-17.30 County Education Authority in Trondheim **Tuesday 14 December** 09.00-11.30 School visit 6 Malvik – lower secondary school (8-10) Confederation of Norwegian Enterprises and Norwegian Confederation of Trade 16.30-17.30 Unions 17.30-19.30 Review team meeting

Wednesday 15 December

08.30-11.00	Research seminars
11.15-12-15	Audit Office and Labour Inspectorate
12.15-13.00	Norwegian Association of School Leaders
14.00-15.00	Waldorf School Association, Norwegian Montessori Association, Association of
	Christian Independent Schools in Norway and school leaders
15.00-16.00	Ministry of Education and Research and Directorate for Education and Training – final
	delivery by the review team

$\label{eq:conditional} \textbf{Preliminary visit undertaken by the OECD Secretariat}$

(16-17 September 2010)

Thursday 16 September

09.00-09.45	National Co-ordinator Norway
09.45-11.00	Norwegian Association of Local and Regional Authorities
12.00-13.15	Officials from the Norwegian Directorate for Education and Training
13.15-14.15	National Parents` Committee for Primary and Secondary Education
14.15-15.45	Authors of the Country Background Report

Friday 17 September

08.30-09.45	Ministry of Education and Research
09.45-10.45	Union of Education Norway and Norwegian Association of Graduate Teachers
10.45-11.30	City of Oslo – the Oslo Education Authority
12.00-13.00	Norwegian Association of School Leaders, Norwegian Union of School Employees and
	Association of Waldorf schools
13.00-13.30	National Co-ordinator Norway

Annex C: Composition of the OECD review team

Lorna Earl, a Canadian national, is Director, Aporia Consulting Ltd., and the president-elect of the International Congress of School Effectiveness and School Improvement. Dr Earl has recently retired from a position as Associate Professor in the Theory and Policy Studies Department and Head of the International Centre for Educational Change at OISE/UT. She has worked for over 20 years in schools, school boards, ministries of education and universities. As a leader in the field of assessment and evaluation, she has been involved in consultation, research, evaluation and staff development with teachers' organisations, ministries of education, school boards and charitable foundations in Canada, England, Australia, New Zealand, Europe and the United States. She is a prolific author and has written books, chapters and articles about assessment, using data for decision making, evaluation methods, knowledge mobilisation, and networking for school improvement. Throughout her career, she has concentrated her efforts on issues related to evaluation of large-scale reform and assessment (large-scale and classroom) in many venues around the world.

William (Bill) Maxwell, a British national, was appointed as Her Majesty's Senior Chief Inspector of Education on 15 February 2010. Dr Maxwell began his career in 1984 working as an educational psychologist in the South-West of Scotland. He became Principal Psychologist in Aberdeen before joining HM Inspectorate of Education (HMIE) in 1994. Dr Maxwell initially worked as an inspector in the North of Scotland, undertaking postings as a District Inspector and Lead Inspector for Quality Standards and Audit, before progressing to head of the Northern Division, head of the secondary education directorate and laterally head of pre-school and independent schools inspection. From 2006 to 2008, he was seconded to The Scottish Government as Head of Education and Analytical Services and in February 2008 he moved south to take up post as Her Majesty's Chief Inspector of Education and Training in Wales on 1 February 2008. He took the Welsh Inspectorate through a major review of its core business and organisational structure before taking up his current post as HM Senior Chief Inspector in Scotland.

Deborah Nusche, a German national, is a Policy Analyst in the OECD Directorate for Education. She is currently working on the OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes. At the OECD, she previously worked on the Thematic Review of Migrant Education and the Improving School Leadership study. She has led country review visits on migrant education and participated in case study visits on school leadership in several countries. She also co-authored the OECD reports Closing the Gap for Immigrant Students (2010) and Improving School Leadership (2008). She has previous experience with UNESCO and the World Bank and holds an M.A. in International Affairs from Sciences Po Paris. She co-ordinates the review of Norway and will act as Rapporteur for the team.

Claire Shewbridge, a British national, is an Analyst in the OECD Directorate for Education and is currently working for the OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes. She most recently worked on the OECD Review on Migrant Education working on country-specific analysis for the Netherlands, Austria and Norway and co-authored the OECD report Closing the Gap for Immigrant Students (2010). For five years, Claire co-ordinated the PISA thematic report series, including reports on student use of computers, success and challenges for immigrant students, student competencies in general problem solving and mathematics and a focus on excellent students. She also led analysis of student attitudes towards science learning and the environment in the PISA 2006 survey. Her earlier statistical work with the OECD included indicators in Education at a Glance, the OECD Employment Outlook and the OECD's Development Assistance Committee Annual Report.

Annex D: Comparative indicators on evaluation and assessment

EDUCATIONAL ATTAINMENT Source: Education at a Glance (OECD, 2010a) ³ % of population that has attained at least upper secondary education, by age group (excluding ISCED 3C short programmes) ⁴ (2008) 81 Ages 25-34 84 Ages 25-34 82 Ages 45-54 78 Ages 45-54 78 % of population that has attained tertiary education, by age group (2008) 36 Ages 25-36 36 Ages 25-34 46 Ages 35-44 32 Ages 35-44 32 Ages 35-64 28 Upper secondary graduation rates (2008) 9 % of upper secondary graduates (first-time graduation) to the population at the typical age of graduation 91 STUDENT PERFORMANCE 91 Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources: Education at a Glance (OECD, 2010a) ³ Expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008) ⁶ Public expenditure on primary, sec	Country Average ¹	Norway's Rank ²
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Ages 25-34 Ages 35-44 Ages 35-44 Ages 35-56-64 28 Upper secondary graduation rates (2008) We of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ Reading literacy Ages 26-26-26-26-26-26-26-26-26-26-26-26-26-2		
Ages 25-34 Ages 35-44 Ages 35-44 Ages 35-56-64 28 Upper secondary graduation rates (2008) We of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ Reading literacy Ages 26-26-26-26-26-26-26-26-26-26-26-26-26-2	28	=7/31
Ages 35-44 Ages 45-54 Ages 55-64 Upper secondary graduation rates (2008) % of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ Reading literacy Science literacy Science literacy Science literacy SCHOOL SYSTEM EXPENDITURE Source: Education at a Glance (OECD, 2010a) ³ Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources 5 1995 2000 3.7 Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008) ⁶ Total expenditure on primary, secondary and post-secondary non-tertiary education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary Primary Primary Primary Post secondary Post secondary Primary Post secondary Primary Post secondary Primary Post secondary Post secondary Primary Post secondary Post secondary Primary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ Post Post post post post post post post post p	35	5/31
Ages 45-54 Ages 55-64 Ages 55-64 Ages 55-64 Soft Upper secondary graduation rates (2008) % of upper secondary graduates (first-time graduation) to the population at the typical age of graduation **STUDENT PERFORMANCE** **Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) **Source: PISA 2009 Results (OECD, 2010d)³* Reading literacy \$503 Mathematics literacy \$503 Mathematics literacy \$500 **SCHOOL SYSTEM EXPENDITURE **Source:** Education at a Glance (OECD, 2010a)³* **Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources³ 1995 \$2000 \$3.7 Public expenditure on primary, secondary and post-secondary non-tertiary as a % of total public expenditure (2008)° Total expenditure on primary, secondary and post-secondary non-tertiary education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (USS)³ Primary \$9922 Lower secondary \$13132 All secondary Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education at a spenditure - composition, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100)³ 1095 Current expenditure - composition, primary, secondary and post-secondary onn-tertiary education, primary, secondary and post-secondary onn-tertiary education, primary, secondary and post-secondary non-tertiary education, primary, secondary and post-secondary onn-tertiary education, primary, secondary and post-secondary onn-tertiary education (2007)*	29	=7/31
Ages 55-64 Upper secondary graduation rates (2008) % of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d)³ Reading literacy 503 Mathematics literacy 498 Science literacy 500 SCHOOL SYSTEM EXPENDITURE Source: Education at a Glance (OECD, 2010a)³ Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources³ 2000 3.8 2007 4.3 2000 3.8 2007 3.7 Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008)6 Total expenditure on primary, secondary and post-secondary non-tertiary education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (USS)7 Primary 9922 Lower secondary 10603 Upper secondary 11907 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education at post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100)5 1995 107 2007 107 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007)8	25	=7/31
Upper secondary graduation rates (2008) % of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d)³ Reading literacy 503 Mathematics literacy 498 Science literacy 500 SCHOOL SYSTEM EXPENDITURE Source: Education at a Glance (OECD, 2010a)³ Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources⁵ 1995 4.3 2000 3.8 2007 4.3 2000 3.8 2007 9.9 Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008)° Total expenditure on primary, secondary and post-secondary non-tertiary meducation from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$)³ Primary 9922 Lower secondary 10603 Upper secondary 11997 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100)⁵ 1995 107 2007 107 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007)8	20	=5/31
% of upper secondary graduates (first-time graduation) to the population at the typical age of graduation STUDENT PERFORMANCE Mean performance in PISA (Programme for International Student Assessment) (15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ Reading literacy 503 Mathematics literacy 500 SCHOOL SYSTEM EXPENDITURE Source: Education at a Glance (OECD, 2010a) ³ Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources ⁵ 1995 4.3 2000 3.8 2007 4.3 2000 3.7 Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008) ⁶ Total expenditure on primary, secondary and post-secondary non-tertiary education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary 9922 Lower secondary 10603 Upper secondary 11997 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107 2007 107		
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Reading literacy		
15-year-olds) (2009) Source: PISA 2009 Results (OECD, 2010d) ³ 2008 2008 2008 2008 2008 2008 2008 2008 2008 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2008 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009 2009		
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Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources ⁵ 1995 4.3 2000 3.8 2000 3.7 Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008) ⁶ Total expenditure on primary, secondary and post-secondary non-tertiary meducation from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary 9922 Lower secondary 10603 Upper secondary 10603 Upper secondary 10603 Upper secondary 107 All secondary 10804 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 1007 1007 1007 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	496	15/34
Expenditure on primary, secondary and post-secondary non-tertiary institutions as a % of GDP, from public and private sources 5 1995 4.3 2000 3.8 2007 3.7 Public expenditure on primary, secondary and post-secondary non-tertiary 9.9 education as a % of total public expenditure (2008) 6 Total expenditure on primary, secondary and post-secondary non-tertiary m education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) 7 Primary 9922 Lower secondary 10603 Upper secondary 13132 All secondary 13132 All secondary 13132 All secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) 5 1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) 8	501	=18/34
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Public expenditure on primary, secondary and post-secondary non-tertiary education as a % of total public expenditure (2008) ⁶ Total expenditure on primary, secondary and post-secondary non-tertiary meducation from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary 9922 Lower secondary 1063 Upper secondary 13132 All secondary 13132 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 107 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	~	12/29
education as a % of total public expenditure (2008) ⁶ Total expenditure on primary, secondary and post-secondary non-tertiary education from public sources (2007) (%) Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary 9922 Lower secondary 10603 Upper secondary 13132 All secondary 11997 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	3.6	=13/29
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Annual expenditure per student by educational institutions, (2007) (US\$) ⁷ Primary 9922 Lower secondary 10603 Upper secondary 13132 All secondary 11997 Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	90.3	m
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Change in expenditure per student by educational institutions, primary, secondary and post-secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	8267	3/28
secondary non-tertiary education, index of change between 1995, 2000 and 2007 (2000 = 100) ⁵ 1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸		
1995 107 2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸		
2007 106 Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	88	=2/22
Current expenditure – composition, primary, secondary and post-secondary non-tertiary education (2007) ⁸	125	22/27
Compensation of tenenters	63.8	m
Compensation of other staff m	14.9	m
Compensation of all staff 74.7	79.2	3/28
Other current expenditure 25.3	20.8	22/28

	Norway	Country Average ¹	Norway' Rank²
SCHOOL STAFF NUMBERS			
SCHOOL STAFF NUMBERS			
Ratio of students to teaching staff (2008) Source: Education at a Glance (OECD,			
2010a) ^{3,9}			
Primary	10.8	16.4	24/27
Lower Secondary	10.1	13.7	=18/24
Upper Secondary	9.9	13.5	21/24
All Secondary	10.0	13.7	25/29
CHARACTERISTICS OF THE TEACHER WORKFORCE (lower secondary education, 2007-08) <i>Source:</i> TALIS (OECD, 2009b) ¹⁰			
Age distribution of teachers			
Teachers aged under 25 years	0.8	3.0	17/23
Teachers aged 25-29 years	8.4	12.1	=15/23
Teachers aged 30-39 years	31.1	28.0	7/23
Teachers aged 40-49 years	19.8	29.6	21/23
Teachers aged 50-59 years	27.9	23.5	=7/23
Teachers aged 60 years and more	12.0	3.9	1/23
Gender distribution of teachers (% of females)	60.4	69.3	18/23
Feachers' educational attainment ⁴	33.1	07.5	10,23
% of teachers who completed an ISCED 5A qualification or higher	99.1	83.7	3/23
Employment status of teachers			
% of teachers permanently employed	89.9	84.5	6/23
TEACHER SALARIES in public institutions Source: Education at a Glance (OECD, 2010a) ³			
Annual teacher salaries (2008) ⁷	29635	28949	13/29
Primary – starting salary (US\$)			
Primary – 15 years experience (US\$)	37023	39426	19/29
Primary – top of scale (US\$)	37023	48022	24/29
Primary – ratio of salary after 15 years experience to GDP per capita	0.66	1.16	29/29
Lower secondary – starting salary (US\$)	29635	30750	15/29
Lower secondary – 15 years experience (US\$)	37023	41927	19/29
Lower secondary – top of scale (US\$)	37023	50649	25/29
Lower secondary – ratio of salary after 15 years experience to GDP per capita	0.66	1.22	29/29
Upper secondary – starting salary (US\$)	31652	32563	13/28
Upper secondary – 15 years experience (US\$)	39016	45850	18/28
Upper secondary – top of scale (US\$)	39016	54717	22/28
Upper secondary – ratio of salary after 15 years experience to GDP per capita	0.69	1.29	28/28
Number of years from starting to top salary (lower secondary education) (2008) Decisions on payments for teachers in public schools (2008) ¹¹	16	24	=19/27
Criteria for base salary and additional payments awarded to teachers in public institutions ■ Base salary/■ Additional yearly payment /Δ Additional incidental payment Years of experience as a teacher	•	•29 ■ 9 Δ8	
Management responsibilities in addition to teaching duties	•	12 ■18 Δ7	
Teaching more classes or hours than required by full-time contract	Δ	●2 ■10 Δ17	
Special tasks (career guidance or counselling)	$ullet$ Δ	●4 ■13 Δ11	
Teaching in a disadvantaged, remote or high cost area (location allowance)	•	●9 ■18 Δ4	
Special activities (e.g. sports and drama clubs, homework clubs, summer schools etc.)	■ ∆	●1 ■ 8 Δ12	
Teaching students with special educational needs (in regular schools)	-	●9 ■11 Δ5	
Feaching courses in a particular field	-	•5 ■ 8 Δ4	
Holding an initial educational qualification higher than the minimum qualification	•=	●18 ■ 9 Δ5	
required to enter the teaching profession Holding a higher than minimum level of teacher certification or training obtained during	•	•15 ∎11 Δ3	
professional life Outstanding performance in teaching	_	•5 •0 A9	
	•	●5 ■9 Δ8	
Successful completion of professional development activities		●10 ■7 Δ4	
Reaching high scores in the qualification examination	•	●4 ■3 Δ3	
Holding an educational qualification in multiple subjects	•	•3 ■4 △3	
Family status (married, number of children)	-	•2 ■ 8 Δ1	
Age (independent of years of teaching experience)	•	●4 ■3 Δ1	
Other	-	●1 ■ 8 Δ2	

	Norway	Country Average ¹	Norway' Rank²
TEACHER PROFESSIONAL DEVELOPMENT (lower secondary education)			
Source: TALIS (OECD, 2009b) ¹⁰			
Too show nowthing tion in professional development (2007.08)			
Teacher participation in professional development (2007-08) % of teachers who undertook some prof. development in the previous 18 months	86.7	88.5	16/23
Average days of professional development across all teachers	9.2	15.3	17/23
Average days of professional development among those who received some	10.6	17.3	17/23
Average % of professional development days taken that were compulsory	55.5	51.0	8/23
Types of professional development undertaken by teachers (2007-08)	70.5	01.2	10/22
Courses and workshops Education conferences and seminars	72.5 40.4	81.2 48.9	18/23 17/23
Qualification programmes	40.4 17.6	24.5	17/23
Observation visits to other schools	17.0	27.6	15/23
Professional development network	35.3	40.0	15/23
Individual and collaborative research	12.3	35.4	22/23
Mentoring and peer observation	22.0	34.9	17/23
Reading professional literature	64.1	77.7	19/23
Informal dialogue to improve teaching	94.0	92.6	10/23
Impact of different types of professional development undertaken by teachers (2007-08)			
% of teachers reporting that the professional development undertaken had a moderate or			
high impact upon their development as a teacher	70.2	90.7	14/23
Courses and workshops Education conferences and seminars	79.3 73.7	80.6 73.9	=14/23 =14/23
Qualification programmes	93.7	73.9 87.2	4/23
Observation visits to other schools	71.9	74.9	15/23
Professional development network	81.1	80.2	13/23
Individual and collaborative research	95.3	89.3	1/23
Mentoring and peer observation	77.9	77.6	=12/23
Reading professional literature	78.1	82.8	=17/23
Informal dialogue to improve teaching	95.7	86.7	1/23
Teachers' high professional development needs (2007-08) % of teachers indicating they have a 'high level of need' for professional development in			
the following areas			
Content and performance standards	12.9	16.0	12/23
Student assessment practices	21.9 7.7	15.7	5/23 16/23
Classroom management Subject field	8.6	13.3 17.0	16/23
Instructional practices	8.2	17.0	=16/23
ICT teaching skills	28.1	24.7	5/23
Teaching special learning needs students	29.2	31.3	12/23
Student discipline and behaviour problems	16.5	21.4	16/23
School management and administration	5.8	9.7	17/23
Teaching in a multicultural setting	8.3	13.9	18/23
Student counselling	7.8	16.7	21/23
FEACHER PERCEPTION OF SELF-EFFICACY (lower secondary education) Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers who 'strongly agree' or 'agree' with the statement "Teachers feel that they	99.4	92.3	1/23
are making a significant educational difference" (2007-08)	//···		1,23
% of teachers who 'strongly agree' or 'agree' with the statement 'Teachers feel that	91.0	82.7	4/23
when they try really hard, they can make progress with even the most difficult and inmotivated students" (2007-08)			
SYSTEM EVALUATION			
Examination regulations, public schools only (2008)			
Source: Education at a Glance (OECD, 2010a) ^{3,12}			
Primary education (Yes/No)			
A standard curriculum or partially standardised curriculum is required	Yes	27/29	
Mandatory national examination is required ¹³ Mandatory national assessment is required ¹⁴	No Vas	4/29	
ivianuatory flational assessment is required	Yes	19/29	

	Norway	Country Average ¹	Norway's Rank ²
Lower secondary education (Yes/No)		11,010,80	
A standard curriculum or partially standardised curriculum is required	Yes	27/29	
Mandatory national examination is required	Yes	10/28	
Mandatory national assessment is required	Yes	18/29	
Potential subjects of assessment at national examinations ¹³			
(lower secondary education) (2006) Source: Education at a Glance (OECD, 2008) ^{3,12}			
National examinations exist (Yes/No)	Yes	8/25	
Mathematics	Yes	9/9	
Science	Yes	7/9	
National language or language of instruction	Yes	9/9	
Other subjects	Yes	8/9	
Compulsory for schools to administer national examinations (Yes/No)	Yes	7/9	
Year/Grade of national examination	10	9.2	
Potential subjects of assessment at national periodical assessments ¹⁴			
(lower secondary education) (2006) Source: Education at a Glance (OECD, 2008) ^{3,12}	Yes	1.4/25	
National periodical assessments (Yes/No) Mathematics		14/25 12/13	
Science	m		
	m	5/13 12/13	
National language or language of instruction	m	6/12	
Other subjects Compulsory for school to administer national assessment (Yes/No)	m	10/13	
Year/Grade of national assessment	m m	10/13	
Possible influence of national examinations (lower secondary education) (2006)			
Source: Education at a Glance (OECD, 2008) ³			
None/Low/Moderate/High ¹⁵			
Performance feedback to the school	m	None:2 Low:1	Moderate:1 High:3
Performance appraisal of the school management	m		Moderate:1 High:1
Performance appraisal of individual teachers	m		Moderate:0 H igh:1
The school budget	None		Moderate:0 High:0
The provision of another financial reward or sanction	None		Moderate:0 High:0
The assistance provided to teachers to improve their teaching skills	m		Moderate:3 High:0
Remuneration and bonuses received by teachers	a		Moderate:0 High:0
Likelihood of school closure	None		Moderate:1 High:0
Publication of results (Yes/No) ¹²	Yes	9/10	
Publication of tables that compare school performance (Yes/No)	No	2/10	
Possible influence of national periodical assessments			
(lower secondary education) (2006)			
Source: Education at a Glance (OECD, 2008) ³			
None/Low/Moderate/High ¹⁵			
Performance feedback to the school	m		Moderate:2 High:
Performance appraisal of the school management	m		Moderate:1 High:
Performance appraisal of individual teachers	m		Moderate:0 High:
The school budget	m		Moderate:0 High:
The provision of another financial reward or sanction	m		Moderate:0 High:
The assistance provided to teachers to improve their teaching skills	m		Moderate:3 High:
Remuneration and bonuses received by teachers	m		Moderate:0 High:
Likelihood of school closure	m		Moderate:0 High:
Publication of results (Yes/No) ¹²	m	7/12	
Publication of tables that compare school performance (Yes/No)	m	2/12	
Existence of national tests (2008-09)	Yes	30/35	
Source: Eurydice (2009) ¹⁶			
Number of national tests (2008-09) (primary and lower secondary education)			
Source: Eurydice, (2009) ¹⁶	4	2.7	2/22
Compulsory tests	4	2.7	3/22
Sample tests Optional tests ¹⁷	-	2.3	-
Optional tests ¹⁷ Years of testing	25010	2.3	-
Number of subjects covered in national tests ¹⁸	2,5,8,10	2 subjects: 14	3 subjects:11
Number of subjects covered in national tests	3	2 subjects:14	3 subjects:11
		3+ subjects:13 Does not appl	
Main aims of nationally standardised tests (2008-09) (primary and lower secondary		Бось посаррі	y.J
education) Source: Eurydice (2009) ^{12, 16} (Yes/No)			
Taking decisions about the school career of pupils	Yes	17/30	
Monitoring schools and/or the education system	Yes	21/30	
Identifying individual learning needs	Yes	12/30	

	Norway	Country Average ¹	Norway's Rank ²
Bodies responsible for setting national tests (2008-09) (primary and lower secondary			
education) <i>Source:</i> Eurydice (2009) ^{11, 16} •Tests for taking decisions about the school career of pupils/■Tests for other			
purposes/\(\Delta\) national tests			
A unit/agency within the ministry of education without external players	-	● 2 ■ 0 Δ5	
A unit/agency within the ministry of education with external players	-	•3 ■10 Δ5	
A public body distinct from the ministry, which specialises in education or educational evaluation	•=	●11 ■16 Δ5	
A private body or university department		●4 ■4 ∆5	
People in charge of administering national tests (2008-09)		- · · <u>-</u> · · <u>-</u> ·	
(primary and lower secondary education) Source: Eurydice (2009) ^{11, 16}			
● Tests for taking decisions about the school career of pupils/■Tests for other			
purposes/ΔNo national tests Class teachers		-10 -15 A5	
Class teachers + external people	•=	●10 ■15 Δ5 ●1 ■3 Δ5	
Other teachers from the same school	_	•3 ■3 Δ5	
Other teachers from the same school + external people	-	●1 ■4 Δ5	
External people alone	-	●3 ■5 ∆5	
Persons in charge of marking national tests (2008-09)			
(primary and lower secondary education) <i>Source:</i> Eurydice (2009) ^{11, 16} ●Tests for taking decisions about the school career of pupils/■Tests for other			
• Tests for taking decisions about the school career of pupils/■ Tests for other purposes/△No national tests			
Class teachers	•=	●7 ■10 Δ5	
Class teachers + external people	-	●4 ■2 Δ5	
Other teachers from the same school	-	●1 ■3 Δ5	
Other teachers from the same school + external persons	-	●0 ■1 Δ5	
External persons alone	-	●8 ■16 ∆5	
Standardisation of test questions (2008-09) (primary and lower secondary education) <i>Source:</i> Eurydice (2009) ^{12, 16} (Yes/No)			
Questions are the same for all pupils taking one national test	Yes	19/30	
Questions are not the same for all pupils taking one national test	No	8/30	
Whether test questions are standardised or not varies depending on type of test	No	2/30	
Data not available	No	1/30	
Use of ICT in national testing (2008-09) (primary and lower secondary education) <i>Source</i> : Eurydice (2009) ^{12, 16} (Yes/No)			
ICT is currently used in national tests	Yes	11/30	
Use of ICT for on-screen testing	Yes	3/30	
Use of ICT for marking tests	No	8/30	
Participation of students with special educational needs (SEN) in national testing			
(2008-09) (primary and lower secondary education) <i>Source:</i> Eurydice (2009) ^{12, 16}			
(Yes/No)	V	27/20	
Pupils with SEN may take part in national testing Participation in national testing for pupils with SEN is compulsory	Yes Yes	27/30 12/30	
Participation in national testing for pupils with SEN is optional	No	9/30	
Participation varies depending on type of test, level of education or type of school	No	5/30	
Data not available	No	1/30	
Communication of the results of national tests to local authorities (2008-09)			
(primary and lower secondary education) <i>Source:</i> Eurydice (2009) ^{12, 16} (Yes/No)	V	17/20	
Local authorities have access to aggregated results for their own area Use of achievement data for accountability (2009) (15-year-olds)	Yes	17/30	
Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³			
% of students in schools where the principal reported that achievement data is used in			
the following procedures			
Posted publicly	58.1	36.4	7/33
Used in evaluation of the principal's performance	52.3	35.5	8/33
Used in evaluation of teachers' performance Used in decisions about instructional resource allocation to the school	50.5 15.9	44.2 32.2	12/33 23/33
Tracked over time by an administrative authority	72.7	65.2	16/33
,	,	00.2	10,00
SCHOOL EVALUATION			
Requirements for school evaluations by an inspectorate			
(lower secondary education) (2006) Source: Education at a Glance (OECD, 2008) ³	2		per 3+ years:5
None/1 per 3+ years/1 per 3 years/1 per 2 years/1 per year/1+ per year	a	1 per 3 years:6 1 per year:1	1 per 2 years:0 1+ per year:1
		i pei year.i	1 - per year.1

	Norway	Country Average ¹	Norway's Rank ²
Possible influence of school evaluation by an inspectorate		8	
(lower secondary education) (2006) <i>Source</i> : Education at a Glance (OECD, 2008) ³			
None/Low/Moderate/High ¹⁵			
Influence on performance feedback		N OI 1M	1 . 1 TF 1 10
Performance feedback to the school Performance appraisal of the school management	a	None:0 Low:1 Mo None:0 Low:2 M	
Performance appraisal of the school management Performance appraisal of individual teachers	a a	None:1 Low:5 M	
Financial and other implications	a	None.1 Low.5 N	loderate.2 Trigit.3
The school budget	a	None:5 Low:2 M	Ioderate:2 High:1
The provision of another financial reward or sanction	a	None:4 Low:4 N	
The assistance provided to teachers to improve their teaching skills	a	None:1 Low:2 M	Ioderate:6 High:2
Remuneration and bonuses received by teachers	a	None:6 Low:1 N	
Likelihood of school closure	a	None:2 Low:3 N	Ioderate:2 High:2
Publication of results (Yes/No) ¹²	a	11/13	
Publication of tables that compare school performance (Yes/No)	a	1/12	
Requirements for school self-evaluations (lower secondary education) (2006)		N. C	1 2. 1
Source: Education at a Glance (OECD, 2008) ³	None	None:6	1 per 3+ years:1
None/1 per 3+ years/1 per 3 years/1 per 2 years/1 per year/1+ per year	None	1 per 3 years:1 1 per year:8	1 per 2 years:0 1+ per year:3
Possible influence of school self-evaluations (lower secondary education) (2006)		1 per year.o	1 per year.5
Source: Education at a Glance (OECD, 2008) ³			
None/Low/Moderate/High ¹⁵			
Influence on performance feedback			
Performance feedback to the school	a	None:1 Low:2 N	Ioderate:1 High:8
Performance appraisal of the school management	a	None:2 Low:2 N	Ioderate:4 High:4
Performance appraisal of individual teachers	a	None:4 Low:4 N	Ioderate:2 High:2
Financial and other implications			
The school budget	a	None:5 Low:2 N	
The provision of another financial reward or sanction	a	None:4 Low:4 N	
The assistance provided to teachers to improve their teaching skills	a	None:3 Low:2 M	
Remuneration and bonuses received by teachers Likelihood of school closure	a	None:5 Low:3 N	
Publication of results (Yes/No) ¹²	a a	4/14	Ioderate:1 High:0
Publication of tables that compare school performance (Yes/No)	a	1/14	
Frequency and type of school evaluations (lower secondary education) (2007-08)			
Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers working in schools where school evaluations were conducted with the			
following frequency over the last five years			
Frequency of school self-evaluation	25.5	20.2	6/22
Never Once	25.5 14.3	20.2	6/23 12/23
2-4 times	18.7	16.2 18.3	12/23
Once per year	33.5	34.9	11/23
More than once per year	7.9	10.3	11/23
Frequency of external evaluation	7.5	10.5	11/23
Never	35.6	30.4	10/23
Once	34.9	30.8	9/23
2-4 times	21.2	20.5	9/23
Once per year	5.9	11.4	17/23
More than once per year	2.5	7.0	=11/23
No school evaluation from any source	17.2	13.8	9/23
Criteria of school evaluations (lower secondary education) (2007-08)			
Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers whose school principal reported that the following criteria were			
considered with high or moderate importance in school self-evaluations or external			
evaluations Student test scores	52.0	76.2	23/23
Retention and pass rates of students	32.0	70.8	23/23 22/23
Other student learning outcomes	51.2	70.8 78.9	23/23
Student feating ducomes Student feedback on the teaching they receive	50.3	72.7	23/23
Feedback from parents	65.1	77.3	20/23
How well teachers work with the principal and their colleagues	64.9	83.7	23/23
Direct appraisal of classroom teaching	31.7	71.1	23/23
Innovative teaching practices	37.4	76.7	23/23
Relations between teachers and students	69.6	87.1	23/23
Professional development undertaken by teachers	65.4	81.5	21/23

	Norway	Country Average ¹	Norway's Rank ²
Teachers' classroom management	68.6	80.7	21/23
Teachers' knowledge and understanding of their main subject field(s)	61.4	78.2	21/23
Teachers' knowledge and understanding of instructional practices in their main subject	48.0	77.5	23/23
field(s)	<i>(5.2)</i>	77.0	20/22
Teaching of students with special learning needs Student discipline and behaviour	65.2 76.3	77.2 83.6	20/23 =19/23
Teaching in a multicultural setting	27.6	52.9	23/23
Extra-curricular activities with students (e.g. school plays and performances, sporting	12.3	74.5	23/23
activities)			
Impacts of school evaluations upon schools (lower secondary education) (2007-08)			
Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers whose school principal reported that school evaluations (external or self-			
evaluation) had a high or moderate level of influence on the following			
Level of school budget or its distribution within schools	26.8	38.0	13/23
Performance feedback to the school	78.3	81.3	16/23
Performance appraisal of the school management	60.8	78.7	20/23
Performance appraisal of teachers	43.1	71.1	22/23
Assistance provided to teachers to improve their teaching	61.2	70.3	16/23
Teachers' remuneration and bonuses Publication of school evaluations (lower secondary education) (2007-08)	7.5	26.1	18/23
Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers in schools where school evaluation results were :			
Published; or	58.2	55.3	12/23
Used in school performance tables	15.4	28.7	18/23
Use of student test results in school evaluation (2008-09) (primary and lower	13.1	20.7	10/23
secondary education) <i>Source</i> : Eurydice (2009) ^{12, 16} (Yes/No)			
Test results may be used for evaluation	No	15/30	
Test results used for external evaluation	No	5/30	
Recommendations or support tools for the use of results during internal evaluation	No	7/30	
Use varies depending on type of test, level of education or type of school	No	3/30	
Publication of individual school results in national tests (2008-09) (primary and			
lower secondary education) Source: Eurydice (2009) ^{12, 16} (Yes/No)			
Individual school results may be published	No	10/30	
Publication organised, or required of schools, by central/local governments	No	9/30	
Publication at the discretion of schools	No	1/30	
Accountability to parents (2009) (15-year-olds) Source: PISA Compendium for the			
school questionnaire (OECD, 2010b) ³			
% of students in schools where principals reported that their school provides parents			
with information on: This child's academic performance relative to other students in the school	39.0	46.1	=18/32
This child's academic performance relative to other students in the school This child's academic performance relative to national or regional benchmarks	72.8	46.8	7/33
This child's academic performance of students as a group relative to students in the	48.0	23.1	4/33
same grade in other schools	40.0	23.1	7/33
Sume grade in outer sensors			
TEACHER APPRAISAL			
Frequency and source of teacher appraisal and feedback (lower secondary			
education) (2007-08) <i>Source:</i> TALIS (OECD, 2009b) ¹⁰ % of teachers who reported having received appraisal and/or feedback on their work			
with the following frequency from the following sources			
Feedback received from the principal			
Never	26.2	22.0	7/23
Less than once every two years	12.8	9.2	5/23
Once every two years	5.4	4.5	=7/23
Once per year	28.2	22.8	5/23
Twice per year	9.4	12.3	16/23
3 or more times per year	11.1	17.1	21/23
Monthly	3.8	6.6	=17/23
More than once per month	3.1	5.4	16/23
Feedback received from other teachers or members of the school management team			
Never	28.1	28.6	12/23
Less than once every two years	11.1	6.9	3/23
Once every two years	2.0	2.6	=15/23
Once per year	10.2	13.3	16/23
Twice per year	6.4	9.7	19/23
3 or more times per year	17.3	19.3	=13/23

	Norway	Country Average ¹	Norway's Rank ²
Monthly	12.6	10.4	=6/23
More than once per month	12.4	9.1	4/23
Feedback received from an external individual or body (e.g. external inspector)			
Never	77.8	50.7	3/23
Less than once every two years	11.8	19.0	15/23
Once every two years	1.3	5.4	22/23
Once per year	4.2	13.2	21/23
Twice per year	2.1	5.4	=16/23
3 or more times per year	2.1	4.3	17/23
Monthly More than once per month	0.5 0.3	1.2 0.8	=16/23 =18/23
More than once per month Criteria for teacher appraisal and feedback (lower secondary education) (2007-08)	0.3	0.8	-10/23
Source: TALIS (OECD, 2009b) ¹⁰			
% of teachers who reported that the following criteria were considered with high or			
moderate importance in the appraisal and/or feedback they received			
Student test scores	47.3	65.0	20/23
Retention and pass rates of students	41.6	56.2	19/23
Other student learning outcomes	55.8	68.4	19/23
Student feedback on the teaching they receive	59.9	72.8	19/23
Feedback from parents	68.2	69.1	13/23
How well they work with the principal and their colleagues	79.3	77.5	7/23
Direct appraisal of classroom teaching	48.4	73.5	21/23
Innovative teaching practices	40.4	70.7	22/23
Relations with students	86.2	85.2	9/23
Professional development undertaken	50.8	64.5	18/23
Classroom management	73.5	79.7	18/23
Knowledge and understanding of their main subject field(s)	72.1	80.0	19/23
Knowledge and understanding of instructional practices in their main subject field(s)	63.1 55.2	78.2 57.2	21/23 13/23
Teaching of students with special learning needs Student discipline and behaviour	72.6	78.2	17/23
Teaching in a multicultural setting	21.0	45.0	23/23
Extra-curricular activities with students (<i>e.g.</i> school performances, sporting activities)	22.3	62.3	23/23
Outcomes of teacher appraisal and feedback (lower secondary education) (2007-08)		02.0	20,20
<i>Source:</i> TALIS (OECD, 2009b) ¹⁰			
% of teachers who reported that the appraisal and/or feedback they received let to a			
modest or large change in the following aspects of their work and careers			
A change in salary	7.0	9.1	12/23
A financial bonus or another kind of monetary reward	3.0	11.1	15/23
A change in the likelihood of career advancement	6.9	16.2	18/23
Public recognition from the principal and/or their colleagues	25.6	36.4	16/23
Opportunities for professional development activities	21.3	23.7	12/23
Changes in work responsibilities that make the job more attractive	14.5	26.7	21/23
A role in school development initiatives (e.g. curriculum development group)	22.4	29.6	17/23
Actions undertaken following the identification of a weakness in a teacher appraisal (lower secondary education) (2007-08) <i>Source:</i> TALIS (OECD, 2009b) ¹⁰			
% of teachers whose school principal reported that the following occurs if an appraisal			
of teachers' work identifies a specific weakness			
The principal ensures that the outcome is reported to the teacher			
Never	2.6	2.6	7/23
Sometimes	12.5	9.5	6/23
Most of the time	41.7	25.8	2/23
Always	43.2	62.1	21/23
The principal ensures that measures to remedy the weakness in their teaching are			
discussed with the teacher			
Never	2.0	1.0	5/23
Sometimes	17.8	9.4	3/23
Most of the time	47.8	30.7	2/23
Always	32.4	58.9	21/23
The principal, or others in the school, establishes a development or training plan for the			
teacher to address the weakness in their teaching	20.4	10.5	2/22
Never	20.4	10.5	3/23
Sometimes Most of the time	42.2	33.0	4/23
Most of the time Always	28.0 9.4	35.9 20.6	21/23 21/23
(ALWA VA	J.4	20.0	41/43

	Norway	Country Average ¹	Norway's Rank ²
The principal, or others in the school, imposes material sanctions on the teacher (e.g.			
reduced annual increases in pay)			
Never	95.0	86.0	8/23
Sometimes	5.0	11.3	12/23
Most of the time	0.0	1.8	=14/23
Always	0.0	0.9	=14/23
The principal, or others in the school, report the underperformance to another body to take action (<i>e.g.</i> governing board, local authority, school inspector)	50.0	~1.0	0.00
Never	60.0	51.0	9/23
Sometimes Most of the time	35.0 5.0	37.3 6.8	13/23 =13/23
Always	0.0	4.9	=13/23 23/23
The principal ensures that the teacher has more frequent appraisals of their work	0.0	4.9	23/23
Never	9.9	9.0	8/23
Sometimes	52.0	34.5	4/23
Most of the time	34.4	41.3	17/23
Always	3.7	15.2	22/23
Teacher perceptions of the appraisal and/or feedback they received (lower secondary education) (2007-08) Source: TALIS (OECD, 2009b) ¹⁰ % of teachers who reported the following about the appraisal and/or feedback they had received in their school			
Appraisal and/or feedback contained a judgement about the quality of the teacher's work	61.8	74.7	21/23
Appraisal and/or feedback contained suggestions for improving certain aspects of teacher's work	28.2	58.0	23/23
Appraisal and/or feedback was a fair assessment of their work as a teacher in this school	- 0		c /2.2
Strongly disagree	6.0	4.4	6/23
Disagree	10.0	12.4	=14/23
Agree	46.7 37.4	63.3 19.9	23/23 2/23
Strongly agree Appraisal and/or feedback was helpful in the development of their work as teachers in this school	37.4	19.9	2/23
Strongly disagree	9.9	5.6	3/23
Disagree	15.1	15.9	12/23
Agree	54.3	61.8	19/23
Strongly agree	20.7	16.8	8/23
Teacher perceptions of the personal impact of teacher appraisal and feedback (lower secondary education) (2007-08) Source: TALIS (OECD, 2009b) ¹⁰ % of teachers who reported the following changes following the appraisal and/or feedback they received in their school the following personal impact from appraisal and feedback Change in their job satisfaction			
A large decrease	1.2	2.5	=19/23
A small decrease	2.8	4.8	20/23
No change	46.3	41.2	9/23
A small increase	43.6	37.3	5/23
A large increase	6.1	14.2	22/23
Change in their job security			
A large decrease	0.8	1.5	20/23
A small decrease	1.8	3.0	18/23
No change	69.8	61.9	10/23
A large increase	19.2	21.8	13/23
A large increase Impact of teacher appraisal and feedback upon teaching	8.4	11.8	13/23
(lower secondary education) (2007-08) <i>Source:</i> TALIS (OECD, 2009b) ¹⁰ % of teachers who reported that the appraisal and/or feedback they received directly led to or involved moderate or large changes in the following			
Classroom management practices	28.5	37.6	14/23
Knowledge or understanding of the teacher's main subject field(s)	23.0	33.9	14/23
Knowledge or understanding of instructional practices	21.1	37.5	20/23
A development or training plan for teachers to improve their teaching	24.0	37.4	17/23
Teaching of students with special learning needs	24.2	27.2	13/23
Student discipline and behaviour problems	28.6	37.2	14/23
Teaching of students in a multicultural setting	7.0 25.7	21.5	22/23
Emphasis placed by teachers on improving student test scores in their teaching	25.7	41.2	18/23

	Norway	Country Average ¹	Norway's Rank ²
Teacher appraisal and feedback and school development			
(lower secondary education) (2007-08) <i>Source:</i> TALIS (OECD, 2009b) ¹⁰ % of teachers who agree or strongly agree with the following statements about aspects of			
appraisal and/or feedback in their school In this school, the school principal takes steps to alter the monetary reward of the persistently underperforming teacher	7.5	23.1	19/23
In this school, the sustained poor performance of a teacher would be tolerated by the rest of the staff	58.2	33.8	2/23
In this school, teachers will be dismissed because of sustained poor performance In this school, the principal uses effective methods to determine whether teachers are performing well or badly	10.7 27.6	27.9 55.4	20/23 23/23
In this school, a development or training plan is established for teachers to improve their work as teachers	42.4	59.7	20/23
In this school, the most effective teachers receive the greatest monetary or non-monetary rewards	11.5	26.2	15/23
In this school, if I improve the quality of my teaching I will receive increased monetary or non-monetary rewards	6.3	25.8	22/23
In this school, if I am more innovative in my teaching I will receive increased monetary or non-monetary rewards	11.5	26.0	18/23
In this school, the review of teacher's work is largely done to fulfil administrative requirements	43.4	44.3	15/23
In this school, the review of teacher's work has little impact upon the way teachers teach in the classroom	64.9	49.8	1/23
Official methods for the individual or collective evaluation of teachers (2006-07)			
Source: Eurydice (2008) 12, 16 Teacher evaluation exists	Yes	30/33	
Teacher inspection on an individual or collective basis	No	22/30	
School self-evaluation	No	14/30	
Individual evaluation by school heads	Yes	16/30	
Individual evaluation by peers	No	5/30	
Methods used to monitor the practice of teachers (2009) (15-year-olds)			
Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³			
% of students in schools where the principal reported that the following methods have			
been used the previous year to monitor the practice of teachers at their school			
Tests of assessments of student achievement	40.1	58.3	29/34
Teacher peer review (of lesson plans, assessment instruments, lessons)	45.3	56.3	24/34
	40.4		28/34
Principal or senior staff observations of lessons Observation of classes by inspectors or other persons external to the school	13.3	68.3 28.0	26/34
Observation of classes by hispectors of other persons external to the school	13.3	26.0	20/34
STUDENT ASSESSMENT			
The influence of test results on the school career of pupils (2008-09) (primary and lower secondary education) <i>Source:</i> Eurydice (2009) ^{11,16} ISCED 1/ ISCED 2 ⁴			
Award of certificates	_	ISCED 1:2 ISC	CED 2:12
Streaming	_	ISCED 1:4 ISC	
	_	ISCED 1:1 ISC	
Progression to the next stage of education		ISCED 1:29 IS	
Progression to the next stage of education No national tests, or no impact on progression	ISCED 1 & 2		CED 2.22
No national tests, or no impact on progression	ISCED 1 & 2	10022 1127 11	
No national tests, or no impact on progression Completion requirements for upper secondary programmes	ISCED 1 & 2	15022 1127 15	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11}	ISCED 1 & 2	100112 1127 113	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number	ISCED 1 & 2	10020 1127 11	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only			
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /∆ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A	■ ∆	•21 ■ 19 Δ19 ♦ 3	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /∆ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B	■ Δ a	•21 ■19 Δ19 ◆ 3 •6 ■8 Δ7 ◆ 0	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /∆ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C	■ ∆	•21 ■ 19 Δ19 ♦ 3	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /∆ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B	■ Δ a ■ Δ	•21 ■19 Δ19 ◆ 3 •6 ■8 Δ7 ◆ 0	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³	■ Δ a ■ Δ	•21 ■19 Δ19 ◆ 3 •6 ■8 Δ7 ◆ 0	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by ability to the school questionnaire (OECD, 2010b) and the schools where principals reported the following on student grouping by ability to the school questionnaire (OECD, 2010b) and the schools where principals reported the following on student grouping by ability to the school questionnaire (OECD, 2010b) and the school ques	■ Δ a ■ Δ	•21 ■19 Δ19 ◆ 3 •6 ■8 Δ7 ◆ 0	=31/33
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by abstudent are grouped by ability into different classes		•21 ■19 Δ19 •3 •6 ■8 Δ7 •0 •17 ■18 Δ17 •1	=31/33 21/33
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by abstract are grouped by ability into different classes For all subjects		•21 ■19 Δ19 •3 •6 ■8 Δ7 •0 •17 ■18 Δ17 •1	
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by abstudent are grouped by ability into different classes For all subjects For some subjects	$ \begin{array}{c} \bullet \ \Delta \\ a \\ \bullet \ \Delta \end{array} $ bility $ \begin{array}{c} 0.5 \\ 23.3 \end{array} $	•21 •19 Δ19 •3 •6 •8 Δ7 •0 •17 •18 Δ17 •1 9.4 37.4	21/33
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /Δ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by abstract are grouped by ability into different classes For all subjects For some subjects Not for any subject Student are grouped by ability within their classes For all subjects	$ \begin{array}{c} \bullet \ \Delta \\ a \\ \bullet \ \Delta \end{array} $ bility $ \begin{array}{c} 0.5 \\ 23.3 \end{array} $	•21 •19 Δ19 •3 •6 •8 Δ7 •0 •17 •18 Δ17 •1 9.4 37.4	21/33 9/33 12/33
No national tests, or no impact on progression Completion requirements for upper secondary programmes Source: Education at a Glance (OECD, 2009a) ^{3, 4, 11} • Final examination /■ Series of examinations during programme /∆ Specified number of course hours and examination / • Specified number of course hours only ISCED 3A ISCED 3B ISCED 3C Student grouping by ability (2009) (15-year-olds) Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³ % of students in schools where principals reported the following on student grouping by abstudent are grouped by ability into different classes For all subjects For some subjects Not for any subject Student are grouped by ability within their classes	■ Δ a ■ Δ bility 0.5 23.3 72.2	•21 ■19 Δ19 •3 •6 ■8 Δ7 •0 •17 ■18 Δ17 •1 9.4 37.4 50.4	21/33 9/33

	Norway	Country Average ¹	Norway's Rank ²
Groups of influence on assessment practices (2009) (15-year-olds)			
Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³			
% of students in schools where the principal reported the following groups exert a direct			
influence on decision making about assessment practices Regional or national education authorities (e.g. inspectorates)	72.2	56.6	8/33
The school's governing board	8.1	29.6	29/33
Parent groups	18.6	17.3	11/33
Teacher groups (e.g. staff association, curriculum committees, trade union)	86.6	58.1	4/33
Student groups (e.g. student association, youth organisation	36.2	23.4	6/33
External examination boards Responsibility for student assessment policies (2009) (15-year-olds)	25.1	45.2	25/31
Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³			
% of students in schools where the principal reported the following groups have			
considerable responsibility in establishing student assessment policies			
Establishing student assessment policies	-0.4		
Principals	60.1	63.5	19/33
Teachers School governing board	52.1 2.6	69.0 26.5	27/33 31/33
Regional or local education authority	18.3	15.5	10/32
National education authority	58.2	24.3	4/33
Frequency of student assessment by method (2009) (15-year-olds)			
Source: PISA Compendium for the school questionnaire (OECD, 2010b) ³			
% of students in schools where the principal reported the student assessment methods			
below are used with the indicated frequency Standardised tests			
Never	4.7	23.7	26/33
1-2 times a year	66.3	51.0	7/33
3-5 times a year	27.6	16.5	6/33
Monthly	0.4	4.3	28/33
More than once a month	0.5	3.4	23/33
Teacher-developed tests			
Never	0.4	2.7	14/33
1-2 times a year 3-5 times a year	0.6 13.2	6.7 30.0	=28/33 25/33
Monthly	43.1	27.6	2/33
More than once a month	42.6	33.3	13/33
Teachers' judgmental ratings			
Never	0.6	6.6	23/33
1-2 times a year	10.2	12.0	15/33
3-5 times a year Monthly	21.6 23.9	22.9 15.7	15/33 4/33
More than once a month	43.3	42.2	16/33
Student portfolios			10/00
Never	44.2	24.1	3/33
1-2 times a year	31.8	34.4	23/33
3-5 times a year	10.8	20.6	27/33
Monthly	10.8	10.4	=9/33
More than once a month Student assignments/projects/homework	1.4	9.3	29/33
Never Never	0.6	1.5	=13/33
1-2 times a year	13.8	12.2	8/33
3-5 times a year	29.6	16.1	3/33
Monthly	24.4	13.6	=1/33
More than once a month	31.2	56.5	30/33
% of students reporting the following on the frequency of homework (2000)			
(15-year-olds) Source: PISA Student Compendium (Reading) (OECD, 2000) ³ Teachers grade homework			
Never	12.6	14.9	14/27
Sometimes	55.5	44.2	5/27
Most of the time	25.7	24.5	14/27
Always	4.6	13.9	22/27
Teachers make useful comments on homework			
Never	29.8	23.5	7/27
Sometimes	52.1	50.1	8/27
Most of the time	14.7	19.2	20/27

	Norway	Country Average ¹	Norway's Rank ²
Homework is counted as part of marking			
Never	8.6	13.7	=15/27
Sometimes	32.4	33.3	16/27
Most of the time	37.2	25.7	4/27
Always	19.2	24.7	17/27
Use of student assessments (2009) (15-year-olds) Source: PISA Compendium for the			
school questionnaire (OECD, 2010b) ³			
% students in schools where the principal reported that assessments of students are used			
for the following purposes			
To inform the parents about their child's progress	98.0	97.5	17/33
To make decisions about students' retention or promotion	1.1	77.1	32/33
To group students for instructional purposes	58.6	49.8	12/33
To compare the school to district or national performance	68.4	53.0	9/33
To monitor the school's progress from year to year	81.5	76.0	21/33
To make judgements about teachers' effectiveness	24.4	46.9	26/33
To identify aspects of instruction or the curriculum that could be improved	69.8	76.7	22/33
To compare the school with other schools	51.6	45.4	14/33
Levels of school autonomy regarding the criteria for the internal assessment of pupils			
(2006-07) (primary and lower secondary education) <i>Source:</i> Eurydice (2008) ^{12, 16}			
Full/Limited/No autonomy	Full	Full:24 Limited	:10 No:0
School decision-makers involved in determining the criteria for the internal			
assessment of pupils (2006-07) (primary and lower secondary education)			
Source: Eurydice (2008) ^{12, 16}			
School responsibility involved	Yes	34/34	
School head	No	0/34	
Teachers individually or collectively	No	13/34	
School management body	No	0/34	
Responsibilities vary depending on level of education	Yes	21/34	
School autonomy in preparing the content of examinations for certified			
qualifications (2006-07) (primary and lower secondary education)			
<i>Source:</i> Eurydice (2008) ^{12,16}			
School responsibility involved/ examinations for certified qualifications exist	Yes	24/34	
Full/Limited/No autonomy	No	Full:5 Limited:	0 No:19
•	autonomy		
School decision-makers who may be involved in preparing the content of			
examinations for certified qualifications (ISCED 2) ⁴ (2006-07)			
<i>Source</i> : Eurydice (2008) ^{12, 16}			
School responsibility involved/ examinations for certified qualifications exist	No	5/34	
School head	No	0/5	
Teachers individually or collectively	No	1/5	
School management body	No	0/5	
Responsibilities vary depending on level of education	No	4/5	

Sources:

Eurydice (2008), Levels of Autonomy and Responsibilities of Teachers in Europe, Eurydice, Brussels.

Eurydice (2009), National Testing of Pupils in Europe: Objectives, Organisation and Use of Results, Eurydice, Brussels.

OECD (2000), PISA Student Compendium (Reading), OECD, http://pisa2000.acer.edu.au/downloads.php/

OECD (2008), Education at a Glance, OECD Indicators 2008, OECD, Paris.

OECD (2009a), Education at a Glance, OECD Indicators 2009, OECD, Paris.

OECD (2009b), Creating Effective Teaching and Learning Environments: First Results from TALIS, OECD, Paris.

OECD (2010a), Education at a Glance, OECD Indicators 2010, OECD, Paris.

OECD (2010b), PISA 2009 Compendium for the school questionnaire, OECD, http://pisa2009.acer.edu.au/downloads.php

OECD (2010c), PISA 2009 Results: What Students Know and Can Do, Volume I, OECD, Paris.

Data explanation:

m Data is not available

a Data is not applicable because the category does not apply

Average is not comparable with other levels of education

= At least one other country has the same rank

The report Eurydice (2009) includes all 32 member countries/education areas of the European Union as well as the members of the European Economic Area (Iceland, Liechtenstein and Norway).

TALIS is the OECD's Teaching and Learning International Survey which was implemented for the first time in 2007-08. The data provided concerns 23 countries. The results derived from TALIS are based on self-reports from teachers and principals and therefore represent their opinions, perceptions, beliefs and their accounts of their activities. Further information is available at www.oecd.org/edu/talis.

PISA is the OECD's Programme for International Student Assessment, which was undertaken in 2000, 2003, 2006 and 2009. 15-year-old students worldwide are assessed on their literacy in reading, mathematics and science. The study included 27 OECD countries in 2000, 30 in 2003 and 2006, and 34 in 2009. Data used in this appendix can be found at www.pisa.oecd.org.

Notes:

- 1. The country average is calculated as the simple average of all countries for which data are available.
- 2. "Norway's rank" indicates the position of Norway when countries are ranked in descending order from the highest to lowest value on the indicator concerned. For example, on the first indicator "population that has attained at least upper secondary education", for the age group 25-64, the rank 9/30 indicates that Norway recorded the 9th highest value of the 30 OECD countries that reported relevant data.
- 3. The column "country average" corresponds to an average across OECD countries.
- ISCED is the "International Standard Classification of Education" used to describe levels of education (and subcategories).

ISCED 1 - Primary education

Designed to provide a sound basic education in reading, writing and mathematics and a basic understanding of some other subjects. Entry age: between 5 and 7. Duration: 6 years

ISCED 2 - Lower secondary education

Completes provision of basic education, usually in a more subject-oriented way with more specialist teachers. Entry follows 6 years of primary education; duration is 3 years. In some countries, the end of this level marks the end of compulsory education.

ISCED 3 - Upper secondary education

Even stronger subject specialisation than at lower-secondary level, with teachers usually more qualified. Students typically expected to have completed 9 years of education or lower secondary schooling before entry and are generally around the age of 15 or 16.

ISCED 3A - Upper secondary education type A

Prepares students for university-level education at level 5A

ISCED 3B - Upper secondary education type B

For entry to vocationally oriented tertiary education at level 5B

ISECD 3C - Upper secondary education type C

Prepares students for workforce or for post-secondary non tertiary education

ISCED 4 - Post-secondary non-tertiary education

Programmes at this level may be regarded nationally as part of upper secondary or post-secondary education, but in terms of international comparison their status is less clear cut. Programme content may not be much more advanced than in upper secondary, and is certainly lower than at tertiary level. Entry typically requires completion of an upper secondary programme. Duration usually equivalent to between 6 months and 2 years of full-time study.

ISCED 5 - Tertiary education

ISCED 5 is the first stage of tertiary education (the second – ISCED 6 – involves advanced research). At level 5, it is often more useful to distinguish between two subcategories: 5A, which represent longer and more theoretical programmes; and 5B, where programmes are shorter and more practically oriented. Note, though, that as tertiary education differs greatly between countries, the demarcation between these two subcategories is not always clear cut.

ISCED 5A - Tertiary-type A

"Long-stream" programmes that are theory based and aimed at preparing students for further research or to give access to highly skilled professions, such as medicine or architecture. Entry preceded by 13 years of education, students typically required to have completed upper secondary or post-secondary non-tertiary education. Duration equivalent to at least 3 years of full-time study, but 4 is more usual.

ISCED 5B - Tertiary-type B

"Short-stream" programmes that are more practically oriented or focus on the skills needed for students to directly enter specific occupations. Entry preceded by 13 years of education; students may require mastery of specific subjects studied at levels 3B or 4A. Duration equivalent to at least 2 years of full-time study, but 3 is more usual.

- 5. For Norway, data refers to public expenditure only.
- 6. Public expenditure includes public subsidies to households for living costs (scholarships and grants to students/households and students loans), which are not spent on educational institutions.
- 7. Expressed in equivalent US\$ converted using purchasing power parities.
- 8. Expenditure on goods and services consumed within the current year which needs to be made recurrently to sustain the production of educational services refers to current expenditure on schools and post-secondary non-tertiary educational institutions. The individual percentage may not sum to the total due to rounding.
- 9. For Norway, only public institutions are included. Calculations are based on full-time equivalents. "Teaching staff" refers to professional personnel directly involved in teaching students.
- 10. The column "country average" corresponds to an average across TALIS countries.
- 11. The column "country average" indicates the number of countries/systems, in which a given criterion is used, for example, regarding the indicator "Decision on payments for teachers in public schools". In the row "Management responsibilities in addition to teaching duties", ●12 ■18 Δ7 indicates that this criterion is used to determine the base salary in 12 countries/systems, to determine an additional yearly payment in 18 countries/systems and to determine an additional incidental payment in 7 countries/systems.
- 12. The column "country average" indicates the number of countries for which the indicator applies. For example, for the indicator "mandatory national examination is required" 4/29 means, that 4 countries out of 29 for which data is available report that mandatory national examinations are required in their countries.
- 13. By "national examination" we mean those tests, which do have formal consequences for students.
- 14. By "national assessment" we mean those tests, which do not have formal consequences for students.
- 15. These measures express the degree of influence on the indicator: None: No influence at all, Low: Low level of influence, Moderate: Moderate level of influence, High: High level of influence. The column "country average" indicates the number of countries/systems, in which one of the given criteria is used.
- 16. For this indicator, the column "country average" refers to Eurydice member countries/areas.
- 17. "Compulsory tests" have to be taken by all pupils, regardless of the type of school attended, or by all students in public sector schools. "Optional tests" are taken under the authority of schools.
- 18. Austria, Belgium-Flemish Community, Ireland, Lithuania, Latvia, Sweden, England, Northern Ireland and Scotland apply several tests at the national level each with a distinct number of subjects. Thus, for these countries no exact number of subjects tested can be provided.

Source Guide

Participation of countries by source

rantcipation of countries by source								
	PISA (OECD, 2000)	Education at a Glance (OECD, 2008)	Education at a Glance (OECD, 2009a)	TALIS (OECD, 2009b)	Education at a Glance (OECD,	PISA Compendium (OECD, 2010b) PISA Results 2009 (OECD, 2010c)	Eurydice (2008)	Eurydice (2009)
Australia							国	国
Austria	•	•	•	•	•	•		
Belgium (Flemish Community)	•	•	•	•	•	•	•	•
Belgium (French Community)		•	•	•	•		•	•
	•	•	•		•	•	•	•
Belgium (German Community)							•	•
Brazil				•				
Bulgaria				•			•	•
Canada	•	•	•		•	•		
Chile					•	•		
Czech Republic	•	•	•		•	•	•	•
Denmark	•	•	•	•	•	•	•	•
Estonia				•		•	•	•
Finland	•	•	•		•	•	•	•
France	•	•	•		•	•	•	•
Germany	•	•	•		•	•	•	•
Greece	•	•	•		•	•	•	
Hungary	•	•	•	•	•		•	
Iceland		1						-
Ireland	•	•	•	•	•	•	•	•
Israel	•	•	•	•	•	•	•	•
						•		
Italy	•	•	•	•	•	•	•	•
Japan	•	•	•		•	•		
Korea	•	•	•	•	•	•		
Latvia							•	•
Lichtenstein							•	•
Lithuania				•			•	•
Luxembourg	•	•	•		•	•	•	•
Malaysia				•				
Malta				•			•	•
Mexico	•	•	•	•	•	•		
Netherlands		•	•		•	•	•	•
New Zealand	•	•	•		•			
Norway	•	•	•	•	•		•	
Poland	•	•	•	•	•		•	•
Portugal		•	•		•			
Romania	_	_	_	_	_	_		•
Slovak Republic					_	-	-	•
Slovenia		•	•	•	•	•	•	•
Spain				•		•	•	•
Sweden	•	•	•	•	•	•	•	•
	•	•	•		•	•	•	•
Switzerland	•	•	•		•	•		
Turkey		•	•	•	•	•		
UK - England							•	•
UK - Wales	_		•					•
UK - Norther Ireland						_	•	•
UK - Scotland							•	•
United States	•	•	•		•	•		
	_	_	_	_	_	_	_	

OECD Reviews of Evaluation and Assessment in Education

Norway

How can student assessment, teacher appraisal, school evaluation and system evaluation bring about real gains in performance across a country's school system? The country reports in this series provide, from an international perspective, an independent analysis of major issues facing the evaluation and assessment framework, current policy initiatives, and possible future approaches. This series forms part of the OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes.

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